

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 / 9/25/20
⁴ API Number 30-025-46787	⁵ Pool Name Sand Dunes; Bone Spring, South	⁶ Pool Code 53805 KZ
⁷ Property Code 327016	⁸ Property Name Purrito 18-19 Fed Com	⁹ Well Number 211H

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
C	18	23S	32E		525	North	1790	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
4	19	23S	32E		102	South	1354	West	Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 9/25/20	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date	SL			

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
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
320009	EnLink Midstream Operating, LP 2501 Cedar Springs Road, Suite 100, Dallas, TX 75201	Oil

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBDT	²⁵ Perforations	²⁶ DHC, MC
2/12/20	9/25/20	20550	20530	10550 - 20513	
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17.5	13.375	1050'	1125 sx CIC; Circ 505 sx		
12.25	9.625	8962'	1655 sx cmt; Circ 0 sx		
8.75 & 8.5	5.5	20,534'	2125 sx cmt; Circ 0 sx		
	Tubing:	0	Squeeze - 1725 sx CIC		

V. Well Test Data

³¹ Date New Oil 10/18/20	³² Gas Delivery Date 10/18/20	³³ Test Date 10/18/20	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure psi	³⁶ Csg. Pressure psi
³⁷ Choke Size	³⁸ Oil 1527 bbl	³⁹ Water 4322 bbl	⁴⁰ Gas 2021 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:		
Title: Regulatory Analyst			Title:		
E-mail Address: Rebecca.Deal@dvn.com			Approval Date:		
Date: 10/21/2020		Phone: 405-228-8429			

Devon

SURVEY REPORT

Purrito 18-19 Fed Com 211H

Patterson 575

I, Deanna Jacobs, certify the surveys supplied on
Purrito 18-19 Fed Com 211H are correct and accurate to the best of my
knowledge and are supported by actual field data.

Deanna Jacobs

Date: 4/9/2020



The **Ultimate Partner** In Wellbore Placement



Devon Energy

Lea County, NM (NAD83 NME)
Purrito 18-19 Fed Com
211H

OH

Design: As Drilled

Standard Survey Report

09 April, 2020



www.scientificdrilling.com





Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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	Purrito 18-19 Fed Com		
Site Position:		Northing:	477,158.17 usft
From:	Map	Easting:	731,667.14 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.310277
		Longitude:	-103.717265
		Grid Convergence:	0.33 °

Well	211H, 2BSSS Upper		
Well Position	+N/-S	0.00 usft	Northing: 477,158.53 usft
	+E/-W	0.00 usft	Easting: 731,697.15 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,579.00 usft
		Latitude:	32.310278
		Longitude:	-103.717168
		Ground Level:	3,555.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	11/14/2019	6.73
			Dip Angle (°) 60.00
			Field Strength (nT) 47,931.60000000

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
			Direction (°) 182.15

Survey Program	Date	4/9/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
208.00	479.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HDGM
570.00	20,550.00	Survey #2 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
208.00	1.12	65.66	207.99	0.84	1.85	-0.91	0.54	0.54	0.00
299.00	1.26	64.79	298.97	1.63	3.57	-1.76	0.16	0.15	-0.96
388.00	0.93	60.65	387.95	2.40	5.08	-2.59	0.38	-0.37	-4.65
479.00	0.97	40.50	478.94	3.35	6.23	-3.58	0.37	0.04	-22.14
570.00	0.94	56.20	569.93	4.35	7.35	-4.62	0.29	-0.03	17.25
662.00	0.92	32.00	661.91	5.40	8.37	-5.71	0.42	-0.02	-26.30
753.00	0.71	32.18	752.90	6.49	9.05	-6.83	0.23	-0.23	0.20
843.00	1.14	30.41	842.89	7.74	9.80	-8.10	0.48	0.48	-1.97
934.00	0.98	25.15	933.88	9.22	10.59	-9.61	0.21	-0.18	-5.78



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
981.00	0.76	36.74	980.87	9.84	10.95	-10.24	0.60	-0.47	24.66
1,154.00	0.41	31.56	1,153.86	11.28	11.96	-11.72	0.20	-0.20	-2.99
1,245.00	0.67	353.18	1,244.86	12.09	12.07	-12.53	0.47	0.29	-42.18
1,336.00	0.54	349.99	1,335.85	13.04	11.93	-13.48	0.15	-0.14	-3.51
1,427.00	0.47	310.52	1,426.85	13.70	11.57	-14.13	0.38	-0.08	-43.37
1,519.00	0.37	301.28	1,518.85	14.10	11.03	-14.51	0.13	-0.11	-10.04
1,609.00	0.20	278.71	1,608.85	14.28	10.63	-14.67	0.22	-0.19	-25.08
1,703.00	0.30	280.92	1,702.85	14.35	10.22	-14.72	0.11	0.11	2.35
1,798.00	0.11	317.46	1,797.85	14.46	9.92	-14.82	0.23	-0.20	38.46
1,894.00	0.22	256.34	1,893.85	14.49	9.68	-14.84	0.20	0.11	-63.67
1,989.00	0.78	305.79	1,988.84	14.82	8.97	-15.15	0.69	0.59	52.05
2,084.00	3.28	321.98	2,083.77	17.34	6.77	-17.58	2.67	2.63	17.04
2,179.00	6.67	321.45	2,178.40	23.80	1.66	-23.85	3.57	3.57	-0.56
2,274.00	8.17	320.73	2,272.60	33.34	-6.05	-33.09	1.58	1.58	-0.76
2,369.00	8.00	320.65	2,366.66	43.68	-14.51	-43.11	0.18	-0.18	-0.08
2,464.00	7.99	320.66	2,460.74	53.90	-22.89	-53.00	0.01	-0.01	0.01
2,560.00	7.33	322.03	2,555.88	63.89	-30.89	-62.68	0.71	-0.69	1.43
2,654.00	7.36	323.05	2,649.11	73.42	-38.20	-71.94	0.14	0.03	1.09
2,749.00	7.16	322.53	2,743.35	82.99	-45.46	-81.23	0.22	-0.21	-0.55
2,844.00	6.80	325.57	2,837.64	92.32	-52.24	-90.30	0.54	-0.38	3.20
2,939.00	6.53	327.40	2,932.00	101.51	-58.33	-99.26	0.36	-0.28	1.93
3,034.00	5.96	328.19	3,026.44	110.26	-63.84	-107.79	0.61	-0.60	0.83
3,129.00	6.67	321.03	3,120.86	118.74	-69.91	-116.04	1.11	0.75	-7.54
3,223.00	7.09	314.88	3,214.19	127.07	-77.45	-124.09	0.90	0.45	-6.54
3,318.00	6.40	313.90	3,308.53	134.88	-85.42	-131.59	0.74	-0.73	-1.03
3,413.00	5.69	311.13	3,403.00	141.65	-92.78	-138.08	0.81	-0.75	-2.92
3,507.00	4.94	310.79	3,496.59	147.36	-99.36	-143.54	0.80	-0.80	-0.36
3,603.00	5.90	309.57	3,592.16	153.21	-106.29	-149.12	1.01	1.00	-1.27
3,696.00	6.52	309.31	3,684.62	159.60	-114.06	-155.21	0.67	0.67	-0.28
3,792.00	6.20	308.77	3,780.03	166.29	-122.32	-161.60	0.34	-0.33	-0.56
3,887.00	6.34	306.62	3,874.46	172.64	-130.53	-167.63	0.29	0.15	-2.26
3,982.00	7.00	305.03	3,968.82	179.09	-139.48	-173.74	0.72	0.69	-1.67
4,078.00	8.34	304.81	4,063.95	186.42	-149.99	-180.67	1.40	1.40	-0.23
4,172.00	6.44	301.58	4,157.17	193.07	-160.08	-186.95	2.07	-2.02	-3.44
4,267.00	7.33	307.26	4,251.48	199.53	-169.44	-193.05	1.18	0.94	5.98
4,362.00	9.66	313.81	4,345.44	208.72	-180.02	-201.84	2.65	2.45	6.89
4,457.00	10.73	311.37	4,438.94	220.08	-192.41	-212.73	1.21	1.13	-2.57
4,552.00	10.19	311.55	4,532.36	231.50	-205.33	-223.65	0.57	-0.57	0.19
4,647.00	8.92	311.17	4,626.04	241.93	-217.16	-233.63	1.34	-1.34	-0.40
4,742.00	8.22	312.10	4,719.98	251.33	-227.75	-242.62	0.75	-0.74	0.98
4,840.00	8.16	312.07	4,816.98	260.68	-238.11	-251.59	0.06	-0.06	-0.03
4,932.00	7.63	311.92	4,908.11	269.14	-247.50	-259.69	0.58	-0.58	-0.16
5,027.00	6.81	312.05	5,002.35	277.13	-256.38	-267.33	0.86	-0.86	0.14



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
5,123.00	6.98	313.00	5,097.66	284.92	-264.87	-274.80	0.21	0.18	0.99
5,218.00	6.84	314.95	5,191.97	292.85	-273.09	-282.42	0.29	-0.15	2.05
5,313.00	6.52	314.20	5,286.32	300.61	-280.96	-289.88	0.35	-0.34	-0.79
5,407.00	7.28	312.92	5,379.64	308.38	-289.15	-297.34	0.82	0.81	-1.36
5,502.00	7.35	312.77	5,473.87	316.61	-298.02	-305.23	0.08	0.07	-0.16
5,596.00	7.02	313.59	5,567.13	324.65	-306.59	-312.95	0.37	-0.35	0.87
5,691.00	6.46	312.71	5,661.47	332.28	-314.73	-320.26	0.60	-0.59	-0.93
5,786.00	5.80	314.86	5,755.93	339.29	-322.06	-327.00	0.74	-0.69	2.26
5,881.00	6.64	310.50	5,850.37	346.24	-329.63	-333.66	1.01	0.88	-4.59
5,976.00	8.04	310.09	5,944.59	354.09	-338.89	-341.15	1.47	1.47	-0.43
6,071.00	7.67	310.40	6,038.70	362.48	-348.80	-349.16	0.39	-0.39	0.33
6,166.00	7.38	311.85	6,132.88	370.66	-358.18	-356.99	0.36	-0.31	1.53
6,262.00	6.88	310.63	6,228.14	378.51	-367.13	-364.50	0.54	-0.52	-1.27
6,357.00	6.41	310.49	6,322.50	385.66	-375.49	-371.34	0.50	-0.49	-0.15
6,452.00	6.22	310.54	6,416.92	392.45	-383.43	-377.82	0.20	-0.20	0.05
6,548.00	6.20	309.94	6,512.36	399.16	-391.36	-384.23	0.07	-0.02	-0.63
6,643.00	6.36	310.98	6,606.79	405.90	-399.26	-390.67	0.21	0.17	1.09
6,738.00	6.05	309.30	6,701.23	412.52	-407.11	-397.00	0.38	-0.33	-1.77
6,834.00	5.93	308.02	6,796.71	418.78	-414.93	-402.96	0.19	-0.13	-1.33
6,929.00	5.21	308.79	6,891.26	424.51	-422.16	-408.41	0.76	-0.76	0.81
7,024.00	4.96	309.19	6,985.88	429.81	-428.70	-413.46	0.27	-0.26	0.42
7,119.00	5.30	307.21	7,080.50	435.05	-435.38	-418.45	0.40	0.36	-2.08
7,214.00	5.21	305.95	7,175.10	440.24	-442.37	-423.37	0.15	-0.09	-1.33
7,319.00	5.30	304.56	7,279.66	445.79	-450.22	-428.62	0.15	0.09	-1.32
7,413.00	4.29	300.86	7,373.33	450.06	-456.81	-432.64	1.12	-1.07	-3.94
7,508.00	4.27	298.37	7,468.07	453.56	-462.98	-435.91	0.20	-0.02	-2.62
7,603.00	4.08	296.75	7,562.82	456.76	-469.11	-438.88	0.24	-0.20	-1.71
7,698.00	4.13	294.73	7,657.57	459.71	-475.23	-441.60	0.16	0.05	-2.13
7,793.00	3.74	293.55	7,752.35	462.38	-481.18	-444.04	0.42	-0.41	-1.24
7,888.00	3.72	291.88	7,847.15	464.77	-486.88	-446.22	0.12	-0.02	-1.76
7,982.00	3.63	291.26	7,940.95	466.98	-492.48	-448.22	0.10	-0.10	-0.66
8,077.00	3.34	291.16	8,035.78	469.07	-497.86	-450.11	0.31	-0.31	-0.11
8,172.00	3.46	291.31	8,130.61	471.11	-503.12	-451.95	0.13	0.13	0.16
8,268.00	3.01	287.44	8,226.46	472.92	-508.22	-453.57	0.52	-0.47	-4.03
8,363.00	3.04	285.66	8,321.32	474.35	-513.02	-454.81	0.10	0.03	-1.87
8,458.00	2.84	287.04	8,416.20	475.72	-517.70	-456.01	0.22	-0.21	1.45
8,554.00	2.84	282.67	8,512.08	476.94	-522.29	-457.05	0.23	0.00	-4.55
8,649.00	2.13	285.73	8,606.99	477.93	-526.29	-457.90	0.76	-0.75	3.22
8,744.00	1.65	272.37	8,701.94	478.47	-529.36	-458.32	0.68	-0.51	-14.06
8,839.00	1.71	270.69	8,796.90	478.54	-532.14	-458.29	0.08	0.06	-1.77
8,910.00	1.87	262.79	8,867.87	478.41	-534.35	-458.07	0.41	0.23	-11.13
9,009.00	2.19	228.04	8,966.81	476.94	-537.36	-456.49	1.26	0.32	-35.10
9,072.00	2.76	204.47	9,029.75	474.76	-538.88	-454.25	1.83	0.90	-37.41



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
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Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)	
9,167.00	3.16	165.52	9,124.63	470.14	-539.17	-449.62	2.11	0.42	-41.00	
9,263.00	2.41	145.41	9,220.52	465.91	-537.37	-445.47	1.27	-0.78	-20.95	
9,358.00	2.55	108.02	9,315.44	463.62	-534.22	-443.29	1.68	0.15	-39.36	
9,453.00	2.44	95.82	9,410.35	462.76	-530.20	-442.58	0.57	-0.12	-12.84	
9,548.00	2.10	85.24	9,505.27	462.70	-526.45	-442.66	0.57	-0.36	-11.14	
9,644.00	1.26	58.80	9,601.23	463.39	-523.80	-443.46	1.17	-0.88	-27.54	
9,739.00	1.67	30.46	9,696.20	465.12	-522.20	-445.25	0.86	0.43	-29.83	
9,769.00	1.76	31.31	9,726.19	465.89	-521.74	-446.04	0.31	0.30	2.83	
9,837.00	1.67	132.70	9,794.17	466.11	-520.47	-446.30	3.90	-0.13	149.10	
9,933.00	14.05	171.97	9,889.11	453.57	-517.80	-433.87	13.33	12.90	40.91	
9,980.00	21.02	175.23	9,933.90	439.51	-516.30	-419.87	14.97	14.83	6.94	
10,027.00	25.94	175.72	9,976.99	420.85	-514.84	-401.28	10.48	10.47	1.04	
10,033.30	26.24	175.67	9,982.65	418.08	-514.63	-398.52	4.85	4.84	-0.75	
Cross 100 FNL - 10033.3 MD 9982.6 TVD										
10,122.00	30.54	175.10	10,060.66	376.05	-511.22	-356.65	4.85	4.84	-0.65	
10,217.00	39.86	175.91	10,138.21	321.52	-506.98	-302.31	9.82	9.81	0.85	
10,312.00	47.49	178.91	10,206.88	256.04	-504.14	-236.99	8.32	8.03	3.16	
10,407.00	55.97	178.03	10,265.66	181.55	-502.11	-162.63	8.96	8.93	-0.93	
10,502.00	63.78	179.13	10,313.31	99.47	-500.11	-80.68	8.28	8.22	1.16	
10,597.00	74.02	177.32	10,347.46	11.01	-497.32	7.62	10.92	10.78	-1.91	
10,692.00	82.06	174.65	10,367.14	-81.61	-490.79	99.93	8.90	8.46	-2.81	
10,788.00	88.39	177.40	10,375.13	-176.99	-484.17	194.99	7.18	6.59	2.86	
10,883.00	87.21	177.39	10,378.77	-271.82	-479.86	289.60	1.24	-1.24	-0.01	
10,979.00	86.67	176.92	10,383.90	-367.57	-475.10	385.10	0.75	-0.56	-0.49	
11,074.00	88.72	175.89	10,387.72	-462.30	-469.15	479.54	2.41	2.16	-1.08	
11,169.00	88.76	176.06	10,389.81	-557.04	-462.48	573.96	0.18	0.04	0.18	
11,265.00	89.16	177.52	10,391.55	-652.87	-457.10	669.53	1.58	0.42	1.52	
11,360.00	89.40	177.64	10,392.74	-747.78	-453.09	764.22	0.28	0.25	0.13	
11,455.00	88.73	177.87	10,394.29	-842.69	-449.37	858.92	0.75	-0.71	0.24	
11,551.00	91.61	178.53	10,394.01	-938.63	-446.36	954.69	3.08	3.00	0.69	
11,646.00	91.58	178.56	10,391.36	-1,033.57	-443.95	1,049.46	0.04	-0.03	0.03	
11,741.00	91.21	178.84	10,389.05	-1,128.51	-441.79	1,144.26	0.49	-0.39	0.29	
11,836.00	91.38	178.91	10,386.90	-1,223.47	-439.93	1,239.08	0.19	0.18	0.07	
11,931.00	91.34	179.32	10,384.65	-1,318.43	-438.46	1,333.92	0.43	-0.04	0.43	
12,027.00	91.11	179.59	10,382.60	-1,414.41	-437.55	1,429.79	0.37	-0.24	0.28	
12,122.00	90.50	180.21	10,381.26	-1,509.40	-437.38	1,524.71	0.92	-0.64	0.65	
12,216.00	90.60	180.16	10,380.36	-1,603.39	-437.68	1,618.65	0.12	0.11	-0.05	
12,311.00	90.30	180.77	10,379.61	-1,698.38	-438.46	1,713.61	0.72	-0.32	0.64	
12,407.00	89.87	181.52	10,379.47	-1,794.36	-440.37	1,809.59	0.90	-0.45	0.78	
12,502.00	89.30	181.45	10,380.16	-1,889.33	-442.84	1,904.58	0.60	-0.60	-0.07	
12,595.00	88.22	181.20	10,382.17	-1,982.28	-444.99	1,997.55	1.19	-1.16	-0.27	
12,689.00	87.18	180.90	10,385.94	-2,076.19	-446.71	2,091.46	1.15	-1.11	-0.32	
12,785.00	89.87	179.89	10,388.42	-2,172.14	-447.37	2,187.37	2.99	2.80	-1.05	
12,879.00	90.50	179.72	10,388.11	-2,266.14	-447.05	2,281.29	0.69	0.67	-0.18	



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
12,974.00	90.64	179.80	10,387.17	-2,361.14	-446.65	2,376.20	0.17	0.15	0.08
13,068.00	91.21	179.51	10,385.65	-2,455.12	-446.08	2,470.10	0.68	0.61	-0.31
13,162.00	91.31	179.56	10,383.58	-2,549.10	-445.32	2,563.98	0.12	0.11	0.05
13,257.00	92.05	179.98	10,380.80	-2,644.05	-444.94	2,658.86	0.90	0.78	0.44
13,353.00	92.72	179.81	10,376.80	-2,739.97	-444.76	2,754.70	0.72	0.70	-0.18
13,447.00	91.44	180.60	10,373.39	-2,833.91	-445.10	2,848.58	1.60	-1.36	0.84
13,543.00	90.44	180.41	10,371.82	-2,929.89	-445.95	2,944.53	1.06	-1.04	-0.20
13,639.00	90.70	179.98	10,370.86	-3,025.88	-446.27	3,040.47	0.52	0.27	-0.45
13,734.00	87.65	179.53	10,372.23	-3,120.86	-445.87	3,135.36	3.25	-3.21	-0.47
13,830.00	87.31	179.75	10,376.45	-3,216.76	-445.27	3,231.18	0.42	-0.35	0.23
13,925.00	86.98	179.67	10,381.18	-3,311.65	-444.79	3,325.97	0.36	-0.35	-0.08
14,019.00	87.28	179.90	10,385.89	-3,405.53	-444.43	3,419.78	0.40	0.32	0.24
14,115.00	87.52	180.14	10,390.24	-3,501.43	-444.47	3,515.61	0.35	0.25	0.25
14,210.00	89.43	179.30	10,392.77	-3,596.39	-444.00	3,610.49	2.20	2.01	-0.88
14,305.00	90.74	179.46	10,392.63	-3,691.38	-442.97	3,705.38	1.39	1.38	0.17
14,400.00	91.81	179.68	10,390.52	-3,786.35	-442.26	3,800.25	1.15	1.13	0.23
14,590.00	91.44	177.91	10,385.13	-3,976.23	-438.27	3,989.85	0.95	-0.19	-0.93
14,685.00	92.11	178.47	10,382.18	-4,071.13	-435.27	4,084.57	0.92	0.71	0.59
14,781.00	90.70	177.79	10,379.83	-4,167.05	-432.14	4,180.31	1.63	-1.47	-0.71
14,876.00	90.40	177.87	10,378.92	-4,261.98	-428.54	4,275.03	0.33	-0.32	0.08
14,972.00	90.03	177.52	10,378.56	-4,357.90	-424.68	4,370.74	0.53	-0.39	-0.36
15,067.00	90.20	178.22	10,378.37	-4,452.83	-421.15	4,465.48	0.76	0.18	0.74
15,161.00	90.30	178.04	10,377.96	-4,546.78	-418.08	4,559.24	0.22	0.11	-0.19
15,258.00	90.40	177.56	10,377.37	-4,643.71	-414.36	4,655.96	0.51	0.10	-0.49
15,353.00	90.54	177.43	10,376.59	-4,738.61	-410.20	4,750.65	0.20	0.15	-0.14
15,447.00	91.38	177.34	10,375.01	-4,832.50	-405.92	4,844.31	0.90	0.89	-0.10
15,543.00	92.08	177.35	10,372.11	-4,928.35	-401.47	4,939.93	0.73	0.73	0.01
15,637.00	90.87	178.70	10,369.69	-5,022.26	-398.23	5,033.65	1.93	-1.29	1.44
15,733.00	91.14	179.20	10,368.01	-5,118.23	-396.47	5,129.49	0.59	0.28	0.52
15,828.00	91.81	178.94	10,365.56	-5,213.19	-394.93	5,224.32	0.76	0.71	-0.27
15,922.00	90.37	179.67	10,363.78	-5,307.16	-393.79	5,318.18	1.72	-1.53	0.78
16,018.00	90.27	179.55	10,363.24	-5,403.16	-393.14	5,414.09	0.16	-0.10	-0.13
16,113.00	88.73	180.71	10,364.07	-5,498.15	-393.36	5,509.02	2.03	-1.62	1.22
16,208.00	89.03	181.07	10,365.93	-5,593.12	-394.83	5,603.98	0.49	0.32	0.38
16,303.00	89.43	180.81	10,367.20	-5,688.10	-396.39	5,698.95	0.50	0.42	-0.27
16,399.00	91.14	180.89	10,366.72	-5,784.08	-397.81	5,794.92	1.78	1.78	0.08
16,494.00	91.98	180.51	10,364.14	-5,879.04	-398.97	5,889.85	0.97	0.88	-0.40
16,613.00	90.20	179.91	10,361.87	-5,998.01	-399.41	6,008.76	1.58	-1.50	-0.50
16,708.00	90.40	179.84	10,361.38	-6,093.01	-399.20	6,103.68	0.22	0.21	-0.07
16,804.00	91.04	179.78	10,360.17	-6,189.00	-398.88	6,199.59	0.67	0.67	-0.06
16,899.00	91.71	179.48	10,357.89	-6,283.97	-398.27	6,294.47	0.77	0.71	-0.32
16,995.00	91.77	179.91	10,354.98	-6,379.92	-397.76	6,390.34	0.45	0.06	0.45
17,090.00	91.47	179.81	10,352.29	-6,474.89	-397.53	6,485.23	0.33	-0.32	-0.11



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
17,184.00	92.08	179.89	10,349.38	-6,568.84	-397.28	6,579.11	0.65	0.65	0.09
17,279.00	89.66	180.77	10,347.94	-6,663.82	-397.83	6,674.04	2.71	-2.55	0.93
17,374.00	89.06	180.74	10,349.00	-6,758.80	-399.08	6,769.01	0.63	-0.63	-0.03
17,468.00	89.16	180.60	10,350.46	-6,852.79	-400.18	6,862.96	0.18	0.11	-0.15
17,563.00	89.53	180.59	10,351.54	-6,947.78	-401.17	6,957.92	0.39	0.39	-0.01
17,659.00	89.46	180.38	10,352.39	-7,043.77	-401.98	7,053.88	0.23	-0.07	-0.22
17,754.00	89.43	180.57	10,353.31	-7,138.76	-402.77	7,148.83	0.20	-0.03	0.20
17,849.00	89.67	180.49	10,354.06	-7,233.75	-403.64	7,243.79	0.27	0.25	-0.08
17,944.00	90.00	180.33	10,354.33	-7,328.75	-404.32	7,338.75	0.39	0.35	-0.17
18,040.00	90.34	180.20	10,354.05	-7,424.75	-404.77	7,434.70	0.38	0.35	-0.14
18,134.00	90.77	180.08	10,353.13	-7,518.74	-405.00	7,528.63	0.47	0.46	-0.13
18,229.00	91.41	180.22	10,351.33	-7,613.73	-405.25	7,623.56	0.69	0.67	0.15
18,324.00	91.81	180.03	10,348.66	-7,708.69	-405.45	7,718.46	0.47	0.42	-0.20
18,420.00	92.28	180.34	10,345.23	-7,804.63	-405.76	7,814.34	0.59	0.49	0.32
18,515.00	90.44	180.20	10,342.98	-7,899.59	-406.21	7,909.26	1.94	-1.94	-0.15
18,610.00	89.06	179.61	10,343.39	-7,994.59	-406.05	8,004.19	1.58	-1.45	-0.62
18,706.00	89.70	179.77	10,344.43	-8,090.58	-405.53	8,100.09	0.69	0.67	0.17
18,801.00	90.20	179.72	10,344.51	-8,185.58	-405.11	8,195.01	0.53	0.53	-0.05
18,896.00	90.74	180.46	10,343.74	-8,280.58	-405.26	8,289.94	0.96	0.57	0.78
18,991.00	90.84	179.94	10,342.43	-8,375.57	-405.59	8,384.88	0.56	0.11	-0.55
19,087.00	90.77	180.71	10,341.08	-8,471.56	-406.14	8,480.82	0.81	-0.07	0.80
19,182.00	90.30	180.05	10,340.19	-8,566.55	-406.77	8,575.77	0.85	-0.49	-0.69
19,277.00	90.27	180.13	10,339.72	-8,661.55	-406.92	8,670.71	0.09	-0.03	0.08
19,372.00	90.10	180.24	10,339.41	-8,756.55	-407.22	8,765.65	0.21	-0.18	0.12
19,466.00	89.77	180.53	10,339.52	-8,850.54	-407.85	8,859.61	0.47	-0.35	0.31
19,561.00	89.63	180.25	10,340.01	-8,945.54	-408.50	8,954.56	0.33	-0.15	-0.29
19,656.00	89.77	178.39	10,340.51	-9,040.53	-407.37	9,049.44	1.96	0.15	-1.96
19,751.00	89.77	178.00	10,340.89	-9,135.48	-404.38	9,144.21	0.41	0.00	-0.41
19,846.00	89.63	178.00	10,341.39	-9,230.42	-401.07	9,238.96	0.15	-0.15	0.00
19,940.00	90.03	178.20	10,341.67	-9,324.37	-397.95	9,332.73	0.48	0.43	0.21
20,035.00	89.46	178.21	10,342.09	-9,419.32	-394.97	9,427.50	0.60	-0.60	0.01
20,130.00	89.77	178.00	10,342.73	-9,514.27	-391.83	9,522.27	0.39	0.33	-0.22
20,225.00	89.93	178.14	10,342.98	-9,609.21	-388.63	9,617.02	0.22	0.17	0.15
20,320.00	89.83	178.32	10,343.18	-9,704.17	-385.70	9,711.80	0.22	-0.11	0.19
20,415.00	90.40	178.88	10,342.99	-9,799.14	-383.38	9,806.62	0.84	0.60	0.59
20,483.00	90.37	179.35	10,342.53	-9,867.13	-382.33	9,874.52	0.69	-0.04	0.69
Last Svy 20483 MD									
20,550.00	90.37	179.35	10,342.10	-9,934.12	-381.57	9,941.44	0.00	0.00	0.00
BH: 102.3 FSL 1353.15 FWL - 20550 MD 9982.7 TVD - PTB 20550 MD									



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,033.30	9,982.65	418.08	-514.63	Cross 100 FNL
10,033.30	9,982.65	418.08	-514.63	10033.3 MD 9982.6 TVD
20,483.00	10,342.53	-9,867.13	-382.33	Last Svy 20483 MD
20,550.00	10,342.10	-9,934.12	-381.57	BH: 102.3 FSL 1353.15 FWL
20,550.00	10,342.10	-9,934.12	-381.57	20550 MD 9982.7 TVD
20,550.00	10,342.10	-9,934.12	-381.57	PTB 20550 MD

Checked By: _____ Approved By: _____ Date: _____



Devon Energy

Lea County, NM (NAD83 NME)
Purrito 18-19 Fed Com
211H

OH

Design: As Drilled

Survey Report - Geographic

09 April, 2020



www.scientificdrilling.com





Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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	Purrito 18-19 Fed Com		
Site Position:		Northing:	477,158.17 usft
From:	Map	Easting:	731,667.14 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.310277
		Longitude:	-103.717265
		Grid Convergence:	0.33 °

Well	211H, 2BSSS Upper		
Well Position	+N/-S	0.00 usft	Northing: 477,158.53 usft
	+E/-W	0.00 usft	Easting: 731,697.15 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,579.00 usft
		Latitude:	32.310278
		Longitude:	-103.717168
		Ground Level:	3,555.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	11/14/2019	6.73
			Dip Angle (°) 60.00
			Field Strength (nT) 47,931.60000000

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
			Direction (°) 182.15

Survey Program	Date	4/9/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
208.00	479.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HDGM
570.00	20,550.00	Survey #2 MWD (OH)	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	477,158.53	731,697.15	32.310278	-103.717168
208.00	1.12	65.66	207.99	0.84	1.85	477,159.37	731,699.00	32.310280	-103.717162
299.00	1.26	64.79	298.97	1.63	3.57	477,160.16	731,700.71	32.310282	-103.717156
388.00	0.93	60.65	387.95	2.40	5.08	477,160.93	731,702.23	32.310284	-103.717151
479.00	0.97	40.50	478.94	3.35	6.23	477,161.88	731,703.37	32.310287	-103.717147
570.00	0.94	56.20	569.93	4.35	7.35	477,162.88	731,704.49	32.310290	-103.717144
662.00	0.92	32.00	661.91	5.40	8.37	477,163.93	731,705.51	32.310292	-103.717140
753.00	0.71	32.18	752.90	6.49	9.05	477,165.02	731,706.20	32.310295	-103.717138
843.00	1.14	30.41	842.89	7.74	9.80	477,166.27	731,706.95	32.310299	-103.717136
934.00	0.98	25.15	933.88	9.22	10.59	477,167.75	731,707.74	32.310303	-103.717133
981.00	0.76	36.74	980.87	9.84	10.95	477,168.37	731,708.10	32.310305	-103.717132



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
1,154.00	0.41	31.56	1,153.86	11.28	11.96	477,169.81	731,709.11	32.310309	-103.717129
1,245.00	0.67	353.18	1,244.86	12.09	12.07	477,170.62	731,709.21	32.310311	-103.717128
1,336.00	0.54	349.99	1,335.85	13.04	11.93	477,171.57	731,709.07	32.310313	-103.717129
1,427.00	0.47	310.52	1,426.85	13.70	11.57	477,172.23	731,708.72	32.310315	-103.717130
1,519.00	0.37	301.28	1,518.85	14.10	11.03	477,172.63	731,708.18	32.310316	-103.717132
1,609.00	0.20	278.71	1,608.85	14.28	10.63	477,172.81	731,707.77	32.310317	-103.717133
1,703.00	0.30	280.92	1,702.85	14.35	10.22	477,172.88	731,707.37	32.310317	-103.717134
1,798.00	0.11	317.46	1,797.85	14.46	9.92	477,172.99	731,707.06	32.310317	-103.717135
1,894.00	0.22	256.34	1,893.85	14.49	9.68	477,173.02	731,706.82	32.310317	-103.717136
1,989.00	0.78	305.79	1,988.84	14.82	8.97	477,173.35	731,706.12	32.310318	-103.717138
2,084.00	3.28	321.98	2,083.77	17.34	6.77	477,175.87	731,703.92	32.310325	-103.717145
2,179.00	6.67	321.45	2,178.40	23.80	1.66	477,182.33	731,698.81	32.310343	-103.717162
2,274.00	8.17	320.73	2,272.60	33.34	-6.05	477,191.87	731,691.10	32.310369	-103.717187
2,369.00	8.00	320.65	2,366.66	43.68	-14.51	477,202.21	731,682.63	32.310398	-103.717214
2,464.00	7.99	320.66	2,460.74	53.90	-22.89	477,212.43	731,674.26	32.310426	-103.717241
2,560.00	7.33	322.03	2,555.88	63.89	-30.89	477,222.41	731,666.26	32.310454	-103.717266
2,654.00	7.36	323.05	2,649.11	73.42	-38.20	477,231.95	731,658.95	32.310480	-103.717290
2,749.00	7.16	322.53	2,743.35	82.99	-45.46	477,241.51	731,651.69	32.310507	-103.717313
2,844.00	6.80	325.57	2,837.64	92.32	-52.24	477,250.85	731,644.91	32.310532	-103.717335
2,939.00	6.53	327.40	2,932.00	101.51	-58.33	477,260.04	731,638.82	32.310558	-103.717355
3,034.00	5.96	328.19	3,026.44	110.26	-63.84	477,268.78	731,633.31	32.310582	-103.717372
3,129.00	6.67	321.03	3,120.86	118.74	-69.91	477,277.26	731,627.24	32.310605	-103.717392
3,223.00	7.09	314.88	3,214.19	127.07	-77.45	477,285.60	731,619.70	32.310628	-103.717416
3,318.00	6.40	313.90	3,308.53	134.88	-85.42	477,293.41	731,611.73	32.310650	-103.717442
3,413.00	5.69	311.13	3,403.00	141.65	-92.78	477,300.18	731,604.37	32.310669	-103.717465
3,507.00	4.94	310.79	3,496.59	147.36	-99.36	477,305.89	731,597.79	32.310684	-103.717487
3,603.00	5.90	309.57	3,592.16	153.21	-106.29	477,311.73	731,590.86	32.310701	-103.717509
3,696.00	6.52	309.31	3,684.62	159.60	-114.06	477,318.12	731,583.09	32.310718	-103.717534
3,792.00	6.20	308.77	3,780.03	166.29	-122.32	477,324.82	731,574.83	32.310737	-103.717560
3,887.00	6.34	306.62	3,874.46	172.64	-130.53	477,331.16	731,566.62	32.310754	-103.717587
3,982.00	7.00	305.03	3,968.82	179.09	-139.48	477,337.61	731,557.67	32.310772	-103.717616
4,078.00	8.34	304.81	4,063.95	186.42	-149.99	477,344.94	731,547.17	32.310793	-103.717650
4,172.00	6.44	301.58	4,157.17	193.07	-160.08	477,351.59	731,537.08	32.310811	-103.717682
4,267.00	7.33	307.26	4,251.48	199.53	-169.44	477,358.05	731,527.72	32.310829	-103.717712
4,362.00	9.66	313.81	4,345.44	208.72	-180.02	477,367.24	731,517.14	32.310854	-103.717746
4,457.00	10.73	311.37	4,438.94	220.08	-192.41	477,378.60	731,504.75	32.310886	-103.717786
4,552.00	10.19	311.55	4,532.36	231.50	-205.33	477,390.02	731,491.83	32.310917	-103.717828
4,647.00	8.92	311.17	4,626.04	241.93	-217.16	477,400.44	731,479.99	32.310946	-103.717866
4,742.00	8.22	312.10	4,719.98	251.33	-227.75	477,409.84	731,469.41	32.310972	-103.717900
4,840.00	8.16	312.07	4,816.98	260.68	-238.11	477,419.20	731,459.05	32.310998	-103.717933
4,932.00	7.63	311.92	4,908.11	269.14	-247.50	477,427.66	731,449.66	32.311021	-103.717964
5,027.00	6.81	312.05	5,002.35	277.13	-256.38	477,435.64	731,440.78	32.311044	-103.717992
5,123.00	6.98	313.00	5,097.66	284.92	-264.87	477,443.43	731,432.29	32.311065	-103.718020
5,218.00	6.84	314.95	5,191.97	292.85	-273.09	477,451.37	731,424.07	32.311087	-103.718046
5,313.00	6.52	314.20	5,286.32	300.61	-280.96	477,459.12	731,416.20	32.311108	-103.718071
5,407.00	7.28	312.92	5,379.64	308.38	-289.15	477,466.90	731,408.01	32.311130	-103.718098
5,502.00	7.35	312.77	5,473.87	316.61	-298.02	477,475.12	731,399.14	32.311153	-103.718126
5,596.00	7.02	313.59	5,567.13	324.65	-306.59	477,483.17	731,390.57	32.311175	-103.718154
5,691.00	6.46	312.71	5,661.47	332.28	-314.73	477,490.79	731,382.44	32.311196	-103.718180
5,786.00	5.80	314.86	5,755.93	339.29	-322.06	477,497.80	731,375.11	32.311215	-103.718204
5,881.00	6.64	310.50	5,850.37	346.24	-329.63	477,504.76	731,367.53	32.311235	-103.718228
5,976.00	8.04	310.09	5,944.59	354.09	-338.89	477,512.60	731,358.27	32.311256	-103.718258
6,071.00	7.67	310.40	6,038.70	362.48	-348.80	477,520.99	731,348.36	32.311280	-103.718290
6,166.00	7.38	311.85	6,132.88	370.66	-358.18	477,529.17	731,338.99	32.311302	-103.718320
6,262.00	6.88	310.63	6,228.14	378.51	-367.13	477,537.03	731,330.03	32.311324	-103.718349



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
6,357.00	6.41	310.49	6,322.50	385.66	-375.49	477,544.17	731,321.68	32.311344	-103.718376
6,452.00	6.22	310.54	6,416.92	392.45	-383.43	477,550.96	731,313.74	32.311362	-103.718401
6,548.00	6.20	309.94	6,512.36	399.16	-391.36	477,557.67	731,305.81	32.311381	-103.718427
6,643.00	6.36	310.98	6,606.79	405.90	-399.26	477,564.41	731,297.90	32.311400	-103.718452
6,738.00	6.05	309.30	6,701.23	412.52	-407.11	477,571.03	731,290.06	32.311418	-103.718478
6,834.00	5.93	308.02	6,796.71	418.78	-414.93	477,577.29	731,282.24	32.311435	-103.718503
6,929.00	5.21	308.79	6,891.26	424.51	-422.16	477,583.02	731,275.01	32.311451	-103.718526
7,024.00	4.96	309.19	6,985.88	429.81	-428.70	477,588.31	731,268.46	32.311466	-103.718547
7,119.00	5.30	307.21	7,080.50	435.05	-435.38	477,593.56	731,261.79	32.311480	-103.718569
7,214.00	5.21	305.95	7,175.10	440.24	-442.37	477,598.75	731,254.80	32.311495	-103.718591
7,319.00	5.30	304.56	7,279.66	445.79	-450.22	477,604.30	731,246.95	32.311510	-103.718617
7,413.00	4.29	300.86	7,373.33	450.06	-456.81	477,608.56	731,240.36	32.311522	-103.718638
7,508.00	4.27	298.37	7,468.07	453.56	-462.98	477,612.07	731,234.19	32.311532	-103.718658
7,603.00	4.08	296.75	7,562.82	456.76	-469.11	477,615.27	731,228.06	32.311541	-103.718677
7,698.00	4.13	294.73	7,657.57	459.71	-475.23	477,618.22	731,221.94	32.311549	-103.718697
7,793.00	3.74	293.55	7,752.35	462.38	-481.18	477,620.89	731,215.99	32.311556	-103.718716
7,888.00	3.72	291.88	7,847.15	464.77	-486.88	477,623.28	731,210.29	32.311563	-103.718735
7,982.00	3.63	291.26	7,940.95	466.98	-492.48	477,625.49	731,204.69	32.311569	-103.718753
8,077.00	3.34	291.16	8,035.78	469.07	-497.86	477,627.58	731,199.31	32.311575	-103.718770
8,172.00	3.46	291.31	8,130.61	471.11	-503.12	477,629.62	731,194.06	32.311581	-103.718787
8,268.00	3.01	287.44	8,226.46	472.92	-508.22	477,631.43	731,188.95	32.311586	-103.718804
8,363.00	3.04	285.66	8,321.32	474.35	-513.02	477,632.86	731,184.15	32.311590	-103.718819
8,458.00	2.84	287.04	8,416.20	475.72	-517.70	477,634.23	731,179.47	32.311593	-103.718834
8,554.00	2.84	282.67	8,512.08	476.94	-522.29	477,635.44	731,174.88	32.311597	-103.718849
8,649.00	2.13	285.73	8,606.99	477.93	-526.29	477,636.44	731,170.88	32.311600	-103.718862
8,744.00	1.65	272.37	8,701.94	478.47	-529.36	477,636.97	731,167.82	32.311601	-103.718872
8,839.00	1.71	270.69	8,796.90	478.54	-532.14	477,637.05	731,165.03	32.311601	-103.718881
8,910.00	1.87	262.79	8,867.87	478.41	-534.35	477,636.92	731,162.82	32.311601	-103.718888
9,009.00	2.19	228.04	8,966.81	476.94	-537.36	477,635.45	731,159.82	32.311597	-103.718898
9,072.00	2.76	204.47	9,029.75	474.76	-538.88	477,633.26	731,158.29	32.311591	-103.718903
9,167.00	3.16	165.52	9,124.63	470.14	-539.17	477,628.65	731,158.00	32.311578	-103.718904
9,263.00	2.41	145.41	9,220.52	465.91	-537.37	477,624.42	731,159.81	32.311567	-103.718898
9,358.00	2.55	108.02	9,315.44	463.62	-534.22	477,622.12	731,162.95	32.311560	-103.718888
9,453.00	2.44	95.82	9,410.35	462.76	-530.20	477,621.27	731,166.97	32.311558	-103.718875
9,548.00	2.10	85.24	9,505.27	462.70	-526.45	477,621.20	731,170.72	32.311558	-103.718863
9,644.00	1.26	58.80	9,601.23	463.39	-523.80	477,621.90	731,173.37	32.311560	-103.718854
9,739.00	1.67	30.46	9,696.20	465.12	-522.20	477,623.63	731,174.97	32.311564	-103.718849
9,769.00	1.76	31.31	9,726.19	465.89	-521.74	477,624.40	731,175.43	32.311567	-103.718848
9,837.00	1.67	132.70	9,794.17	466.11	-520.47	477,624.62	731,176.70	32.311567	-103.718844
9,933.00	14.05	171.97	9,889.11	453.57	-517.80	477,612.08	731,179.37	32.311533	-103.718835
9,980.00	21.02	175.23	9,933.90	439.51	-516.30	477,598.02	731,180.87	32.311494	-103.718831
10,027.00	25.94	175.72	9,976.99	420.85	-514.84	477,579.36	731,182.34	32.311443	-103.718826
10,033.30	26.24	175.67	9,982.65	418.08	-514.63	477,576.59	731,182.54	32.311435	-103.718826
Cross 100 FNL - 10033.3 MD 9982.6 TVD									
10,122.00	30.54	175.10	10,060.66	376.05	-511.22	477,534.57	731,185.95	32.311319	-103.718815
10,217.00	39.86	175.91	10,138.21	321.52	-506.98	477,480.03	731,190.19	32.311169	-103.718803
10,312.00	47.49	178.91	10,206.88	256.04	-504.14	477,414.56	731,193.03	32.310989	-103.718795
10,407.00	55.97	178.03	10,265.66	181.55	-502.11	477,340.07	731,195.06	32.310785	-103.718789
10,502.00	63.78	179.13	10,313.31	99.47	-500.11	477,258.00	731,197.06	32.310559	-103.718784
10,597.00	74.02	177.32	10,347.46	11.01	-497.32	477,169.54	731,199.85	32.310316	-103.718777
10,692.00	82.06	174.65	10,367.14	-81.61	-490.79	477,076.92	731,206.38	32.310061	-103.718758
10,788.00	88.39	177.40	10,375.13	-176.99	-484.17	476,981.55	731,213.00	32.309799	-103.718738
10,883.00	87.21	177.39	10,378.77	-271.82	-479.86	476,886.72	731,217.31	32.309538	-103.718726
10,979.00	86.67	176.92	10,383.90	-367.57	-475.10	476,790.98	731,222.07	32.309275	-103.718712
11,074.00	88.72	175.89	10,387.72	-462.30	-469.15	476,696.26	731,228.02	32.309015	-103.718695



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
11,169.00	88.76	176.06	10,389.81	-557.04	-462.48	476,601.52	731,234.69	32.308754	-103.718675
11,265.00	89.16	177.52	10,391.55	-652.87	-457.10	476,505.69	731,240.06	32.308491	-103.718659
11,360.00	89.40	177.64	10,392.74	-747.78	-453.09	476,410.79	731,244.08	32.308230	-103.718648
11,455.00	88.73	177.87	10,394.29	-842.69	-449.37	476,315.88	731,247.80	32.307969	-103.718638
11,551.00	91.61	178.53	10,394.01	-938.63	-446.36	476,219.94	731,250.81	32.307705	-103.718630
11,646.00	91.58	178.56	10,391.36	-1,033.57	-443.95	476,125.02	731,253.22	32.307444	-103.718624
11,741.00	91.21	178.84	10,389.05	-1,128.51	-441.79	476,030.07	731,255.38	32.307183	-103.718618
11,836.00	91.38	178.91	10,386.90	-1,223.47	-439.93	475,935.12	731,257.24	32.306922	-103.718614
11,931.00	91.34	179.32	10,384.65	-1,318.43	-438.46	475,840.16	731,258.71	32.306661	-103.718611
12,027.00	91.11	179.59	10,382.60	-1,414.41	-437.55	475,744.19	731,259.62	32.306397	-103.718610
12,122.00	90.50	180.21	10,381.26	-1,509.40	-437.38	475,649.21	731,259.79	32.306136	-103.718611
12,216.00	90.60	180.16	10,380.36	-1,603.39	-437.68	475,555.22	731,259.48	32.305878	-103.718614
12,311.00	90.30	180.77	10,379.61	-1,698.38	-438.46	475,460.23	731,258.71	32.305617	-103.718618
12,407.00	89.87	181.52	10,379.47	-1,794.36	-440.37	475,364.25	731,256.79	32.305353	-103.718626
12,502.00	89.30	181.45	10,380.16	-1,889.33	-442.84	475,269.29	731,254.33	32.305092	-103.718636
12,595.00	88.22	181.20	10,382.17	-1,982.28	-444.99	475,176.35	731,252.18	32.304836	-103.718645
12,689.00	87.18	180.90	10,385.94	-2,076.19	-446.71	475,082.44	731,250.46	32.304578	-103.718652
12,785.00	89.87	179.89	10,388.42	-2,172.14	-447.37	474,986.49	731,249.80	32.304315	-103.718656
12,879.00	90.50	179.72	10,388.11	-2,266.14	-447.05	474,892.50	731,250.12	32.304056	-103.718657
12,974.00	90.64	179.80	10,387.17	-2,361.14	-446.65	474,797.51	731,250.52	32.303795	-103.718657
13,068.00	91.21	179.51	10,385.65	-2,455.12	-446.08	474,703.53	731,251.08	32.303537	-103.718657
13,162.00	91.31	179.56	10,383.58	-2,549.10	-445.32	474,609.56	731,251.85	32.303278	-103.718656
13,257.00	92.05	179.98	10,380.80	-2,644.05	-444.94	474,514.61	731,252.23	32.303017	-103.718657
13,353.00	92.72	179.81	10,376.80	-2,739.97	-444.76	474,418.70	731,252.40	32.302754	-103.718658
13,447.00	91.44	180.60	10,373.39	-2,833.91	-445.10	474,324.77	731,252.07	32.302496	-103.718661
13,543.00	90.44	180.41	10,371.82	-2,929.89	-445.95	474,228.79	731,251.22	32.302232	-103.718665
13,639.00	90.70	179.98	10,370.86	-3,025.88	-446.27	474,132.80	731,250.89	32.301968	-103.718668
13,734.00	87.65	179.53	10,372.23	-3,120.86	-445.87	474,037.83	731,251.30	32.301707	-103.718669
13,830.00	87.31	179.75	10,376.45	-3,216.76	-445.27	473,941.92	731,251.90	32.301443	-103.718668
13,925.00	86.98	179.67	10,381.18	-3,311.65	-444.79	473,847.05	731,252.38	32.301182	-103.718669
14,019.00	87.28	179.90	10,385.89	-3,405.53	-444.43	473,753.17	731,252.74	32.300924	-103.718669
14,115.00	87.52	180.14	10,390.24	-3,501.43	-444.47	473,657.28	731,252.70	32.300661	-103.718671
14,210.00	89.43	179.30	10,392.77	-3,596.39	-444.00	473,562.32	731,253.17	32.300400	-103.718671
14,305.00	90.74	179.46	10,392.63	-3,691.38	-442.97	473,467.33	731,254.19	32.300139	-103.718670
14,400.00	91.81	179.68	10,390.52	-3,786.35	-442.26	473,372.37	731,254.91	32.299878	-103.718669
14,590.00	91.44	177.91	10,385.13	-3,976.23	-438.27	473,182.50	731,258.90	32.299356	-103.718660
14,685.00	92.11	178.47	10,382.18	-4,071.13	-435.27	473,087.60	731,261.90	32.299095	-103.718652
14,781.00	90.70	177.79	10,379.83	-4,167.05	-432.14	472,991.69	731,265.03	32.298831	-103.718644
14,876.00	90.40	177.87	10,378.92	-4,261.98	-428.54	472,896.76	731,268.63	32.298570	-103.718634
14,972.00	90.03	177.52	10,378.56	-4,357.90	-424.68	472,800.85	731,272.49	32.298306	-103.718623
15,067.00	90.20	178.22	10,378.37	-4,452.83	-421.15	472,705.92	731,276.02	32.298045	-103.718613
15,161.00	90.30	178.04	10,377.96	-4,546.78	-418.08	472,611.97	731,279.09	32.297787	-103.718605
15,258.00	90.40	177.56	10,377.37	-4,643.71	-414.36	472,515.05	731,282.81	32.297521	-103.718595
15,353.00	90.54	177.43	10,376.59	-4,738.61	-410.20	472,420.15	731,286.96	32.297260	-103.718583
15,447.00	91.38	177.34	10,375.01	-4,832.50	-405.92	472,326.27	731,291.25	32.297002	-103.718571
15,543.00	92.08	177.35	10,372.11	-4,928.35	-401.47	472,230.42	731,295.69	32.296738	-103.718559
15,637.00	90.87	178.70	10,369.69	-5,022.26	-398.23	472,136.52	731,298.93	32.296480	-103.718550
15,733.00	91.14	179.20	10,368.01	-5,118.23	-396.47	472,040.55	731,300.69	32.296216	-103.718546
15,828.00	91.81	178.94	10,365.56	-5,213.19	-394.93	471,945.60	731,302.23	32.295955	-103.718543
15,922.00	90.37	179.67	10,363.78	-5,307.16	-393.79	471,851.63	731,303.37	32.295697	-103.718541
16,018.00	90.27	179.55	10,363.24	-5,403.16	-393.14	471,755.64	731,304.03	32.295433	-103.718540
16,113.00	88.73	180.71	10,364.07	-5,498.15	-393.36	471,660.65	731,303.81	32.295172	-103.718543
16,208.00	89.03	181.07	10,365.93	-5,593.12	-394.83	471,565.69	731,302.34	32.294911	-103.718549
16,303.00	89.43	180.81	10,367.20	-5,688.10	-396.39	471,470.72	731,300.78	32.294650	-103.718556
16,399.00	91.14	180.89	10,366.72	-5,784.08	-397.81	471,374.74	731,299.35	32.294386	-103.718563



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
16,494.00	91.98	180.51	10,364.14	-5,879.04	-398.97	471,279.78	731,298.19	32.294125	-103.718568
16,613.00	90.20	179.91	10,361.87	-5,998.01	-399.41	471,160.82	731,297.76	32.293798	-103.718572
16,708.00	90.40	179.84	10,361.38	-6,093.01	-399.20	471,065.82	731,297.96	32.293537	-103.718573
16,804.00	91.04	179.78	10,360.17	-6,189.00	-398.88	470,969.84	731,298.28	32.293273	-103.718574
16,899.00	91.71	179.48	10,357.89	-6,283.97	-398.27	470,874.87	731,298.90	32.293012	-103.718573
16,995.00	91.77	179.91	10,354.98	-6,379.92	-397.76	470,778.92	731,299.41	32.292748	-103.718573
17,090.00	91.47	179.81	10,352.29	-6,474.89	-397.53	470,683.96	731,299.64	32.292487	-103.718574
17,184.00	92.08	179.89	10,349.38	-6,568.84	-397.28	470,590.02	731,299.88	32.292229	-103.718575
17,279.00	89.66	180.77	10,347.94	-6,663.82	-397.83	470,495.04	731,299.34	32.291968	-103.718579
17,374.00	89.06	180.74	10,349.00	-6,758.80	-399.08	470,400.06	731,298.09	32.291707	-103.718585
17,468.00	89.16	180.60	10,350.46	-6,852.79	-400.18	470,306.08	731,296.99	32.291449	-103.718590
17,563.00	89.53	180.59	10,351.54	-6,947.78	-401.17	470,211.10	731,296.00	32.291188	-103.718595
17,659.00	89.46	180.38	10,352.39	-7,043.77	-401.98	470,115.11	731,295.19	32.290924	-103.718599
17,754.00	89.43	180.57	10,353.31	-7,138.76	-402.77	470,020.12	731,294.40	32.290663	-103.718604
17,849.00	89.67	180.49	10,354.06	-7,233.75	-403.64	469,925.13	731,293.52	32.290402	-103.718608
17,944.00	90.00	180.33	10,354.33	-7,328.75	-404.32	469,830.14	731,292.84	32.290140	-103.718612
18,040.00	90.34	180.20	10,354.05	-7,424.75	-404.77	469,734.15	731,292.40	32.289877	-103.718615
18,134.00	90.77	180.08	10,353.13	-7,518.74	-405.00	469,640.16	731,292.17	32.289618	-103.718618
18,229.00	91.41	180.22	10,351.33	-7,613.73	-405.25	469,545.18	731,291.92	32.289357	-103.718621
18,324.00	91.81	180.03	10,348.66	-7,708.69	-405.45	469,450.22	731,291.71	32.289096	-103.718623
18,420.00	92.28	180.34	10,345.23	-7,804.63	-405.76	469,354.29	731,291.40	32.288833	-103.718626
18,515.00	90.44	180.20	10,342.98	-7,899.59	-406.21	469,259.33	731,290.95	32.288572	-103.718629
18,610.00	89.06	179.61	10,343.39	-7,994.59	-406.05	469,164.34	731,291.11	32.288310	-103.718630
18,706.00	89.70	179.77	10,344.43	-8,090.58	-405.53	469,068.35	731,291.63	32.288047	-103.718630
18,801.00	90.20	179.72	10,344.51	-8,185.58	-405.11	468,973.35	731,292.05	32.287785	-103.718631
18,896.00	90.74	180.46	10,343.74	-8,280.58	-405.26	468,878.36	731,291.91	32.287524	-103.718633
18,991.00	90.84	179.94	10,342.43	-8,375.57	-405.59	468,783.38	731,291.57	32.287263	-103.718636
19,087.00	90.77	180.71	10,341.08	-8,471.56	-406.14	468,687.39	731,291.03	32.286999	-103.718639
19,182.00	90.30	180.05	10,340.19	-8,566.55	-406.77	468,592.41	731,290.40	32.286738	-103.718643
19,277.00	90.27	180.13	10,339.72	-8,661.55	-406.92	468,497.41	731,290.25	32.286477	-103.718645
19,372.00	90.10	180.24	10,339.41	-8,756.55	-407.22	468,402.42	731,289.94	32.286216	-103.718648
19,466.00	89.77	180.53	10,339.52	-8,850.54	-407.85	468,308.42	731,289.31	32.285958	-103.718652
19,561.00	89.63	180.25	10,340.01	-8,945.54	-408.50	468,213.43	731,288.67	32.285697	-103.718656
19,656.00	89.77	178.39	10,340.51	-9,040.53	-407.37	468,118.45	731,289.79	32.285436	-103.718654
19,751.00	89.77	178.00	10,340.89	-9,135.48	-404.38	468,023.50	731,292.78	32.285175	-103.718646
19,846.00	89.63	178.00	10,341.39	-9,230.42	-401.07	467,928.57	731,296.10	32.284914	-103.718637
19,940.00	90.03	178.20	10,341.67	-9,324.37	-397.95	467,834.62	731,299.22	32.284655	-103.718629
20,035.00	89.46	178.21	10,342.09	-9,419.32	-394.97	467,739.68	731,302.19	32.284394	-103.718621
20,130.00	89.77	178.00	10,342.73	-9,514.27	-391.83	467,644.73	731,305.33	32.284133	-103.718612
20,225.00	89.93	178.14	10,342.98	-9,609.21	-388.63	467,549.79	731,308.53	32.283872	-103.718604
20,320.00	89.83	178.32	10,343.18	-9,704.17	-385.70	467,454.84	731,311.47	32.283611	-103.718596
20,415.00	90.40	178.88	10,342.99	-9,799.14	-383.38	467,359.88	731,313.79	32.283350	-103.718590
20,483.00	90.37	179.35	10,342.53	-9,867.13	-382.33	467,291.89	731,314.84	32.283163	-103.718588
Last Svy 20483 MD									
20,550.00	90.37	179.35	10,342.10	-9,934.12	-381.57	467,224.90	731,315.60	32.282979	-103.718587
BH: 102.3 FSL 1353.15 FWL - 20550 MD 9982.7 TVD - PTB 20550 MD									



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,033.30	9,982.65	418.08	-514.63	Cross 100 FNL
10,033.30	9,982.65	418.08	-514.63	10033.3 MD 9982.6 TVD
20,483.00	10,342.53	-9,867.13	-382.33	Last Svy 20483 MD
20,550.00	10,342.10	-9,934.12	-381.57	BH: 102.3 FSL 1353.15 FWL
20,550.00	10,342.10	-9,934.12	-381.57	20550 MD 9982.7 TVD
20,550.00	10,342.10	-9,934.12	-381.57	PTB 20550 MD

Checked By: _____ Approved By: _____ Date: _____

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 30-025-46787	² Pool Code 53800	³ Pool Name SAND DUNES; BONE SPRING
⁴ Property Code 327016	⁵ Property Name PURRITO 18-19 FED COM	⁶ Well Number 211H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3555.3

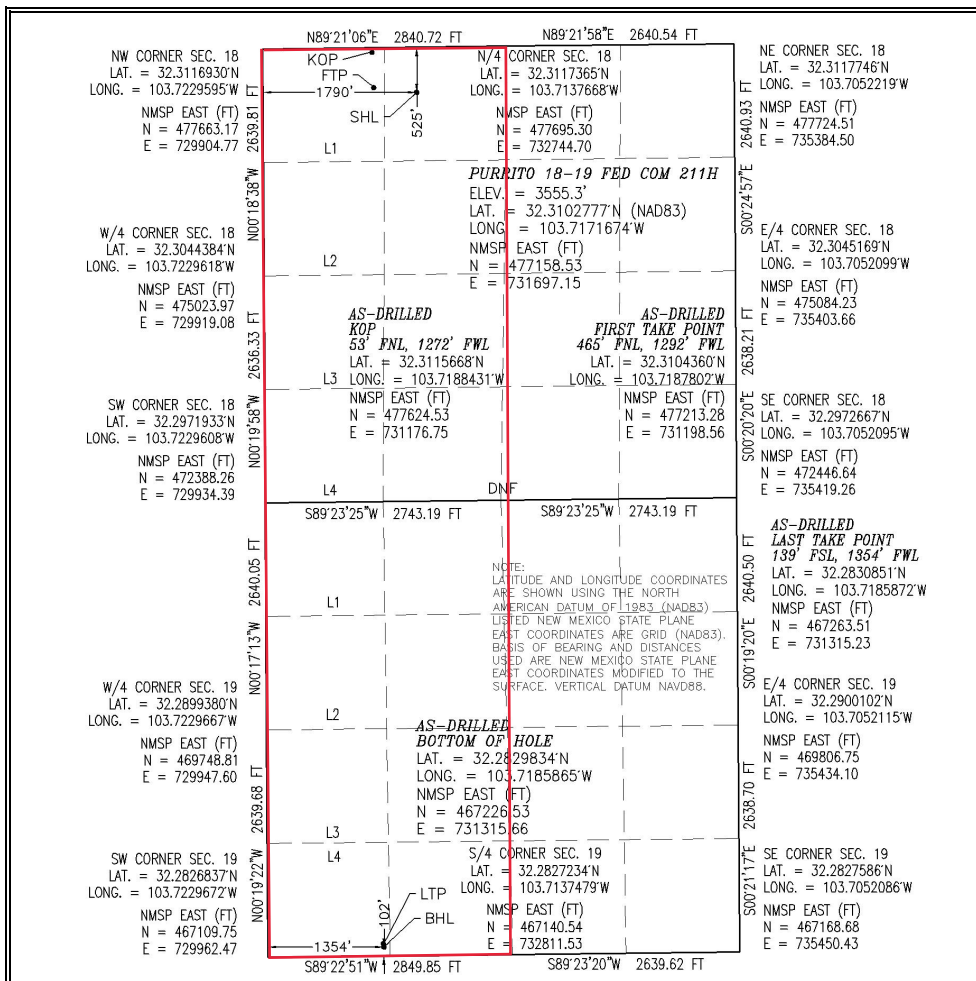
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	18	23 S	32 E		525	NORTH	1790	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
4	19	23 S	32 E		102	SOUTH	1354	WEST	LEA
¹² Dedicated Acres 689.36	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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.

Rebecca Deal 10/20/2020
Signature Date

Rebecca Deal, Regulatory Analyst
Printed Name

rebecca.deal@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.

MAY 10, 2019

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: **12797**
Survey No. 7277

Intent ☐ As Drilled ☒

API # 30-025-46787		
Operator Name: DEVON ENERGY PRODUCTION CO., L.P.	Property Name: PURRITO 18-19 FED COM	Well Number 211H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	18	23S	32E	1	53	NORTH	1272	WEST	LEA
Latitude 32.3115668					Longitude 103.7188431			NAD 83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	18	23S	32E	1	465	NORTH	1292	WEST	LEA
Latitude 32.3104360					Longitude 103.7187802			NAD 83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	19	23S	32E	4	139	SOUTH	1354	WEST	LEA
Latitude 32.2830851					Longitude 103.7185872			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

Form 3160-5
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use form 3160-3 (APD) for such proposals.5. Lease Serial No.
NMNM18848

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
PURRITO 18-19 FED COM 211H9. API Well No.
30-025-46787-00-X110. Field and Pool or Exploratory Area
SAND DUNES11. County or Parish, State
LEA COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Contact: REBECCA DEAL

DEVON ENERGY PRODUCTION COMPANY
E-mail: Rebecca.Deal@dvn.com

3a. Address

333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)

Ph: 405-228-8429

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 18 T23S R32E NENW 525FNL 1790FWL
32.310276 N Lat, 103.717171 W Lon

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Hydraulic Fracture
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Revision of Completion Ops Summary to include OCD requested language:

7/22/20 - 9/25/20: MIRU WL & PT. TIH & ran CBL, found TOC @ 8278'. PT csg for 30min, OK. TIH w/pump through frac plug and guns. Perf Bone Spring, 10,550'-20,513'. Frac totals 19,873,855# prop, 18 bbl acid. ND frac, MIRU PU, NU BOP, DO plugs & CO to PBTD 20,530'. CHC, FWB, ND BOP. No tubing ran. TOP.

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

Formation Top Depth

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #537265 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COMPANY, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 11/16/2020 (21PP0524SE)

Name (Printed/Typed) REBECCA DEAL

Title REGULATORY COMPLIANCE PROFESSI

Signature (Electronic Submission)

Date 11/13/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTEDJONATHON SHEPARD
Title PETROELUM ENGINEER

Date 12/30/2020

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #537265 that would not fit on the form

32. Additional remarks, continued

Rustler 936
Top of Salado 1263
Base of Salado 3296
Delaware 4578
Bone Spring 8439

Revisions to Operator-Submitted EC Data for Sundry Notice #537265

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	HF SR	HF SR
Lease:	NMNM18848	NMNM18848
Agreement:		
Operator:	DEVON ENERGY PRODUCTION COMPAN 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102 Ph: 405-228-8429	DEVON ENERGY PRODUCTION COMPAN 333 WEST SHERIDAN AVENUE OKLAHOMA CITY, OK 73102 Ph: 4055526571
Admin Contact:	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429
Tech Contact:	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429	REBECCA DEAL REGULATORY COMPLIANCE PROFESSI E-Mail: Rebecca.Deal@dvn.com Ph: 405-228-8429
Location:		
State:	NM	NM
County:	LEA	LEA
Field/Pool:	SAND DUNE; BONE SPRING	SAND DUNES
Well/Facility:	PURRITO 18-19 FED COM 211H Sec 18 T23S R32E Mer NMP NENW 525FNL 1790FWL	PURRITO 18-19 FED COM 211H Sec 18 T23S R32E NENW 525FNL 1790FWL 32.310276 N Lat, 103.717171 W Lon

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 30-025-46787	² Pool Code 53805	³ Pool Name SAND DUNES; BONE SPRING, SOUTH
⁴ Property Code 327016	⁵ Property Name PURRITO 18-19 FED COM	⁶ Well Number 211H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3555.3

¹⁰ Surface Location

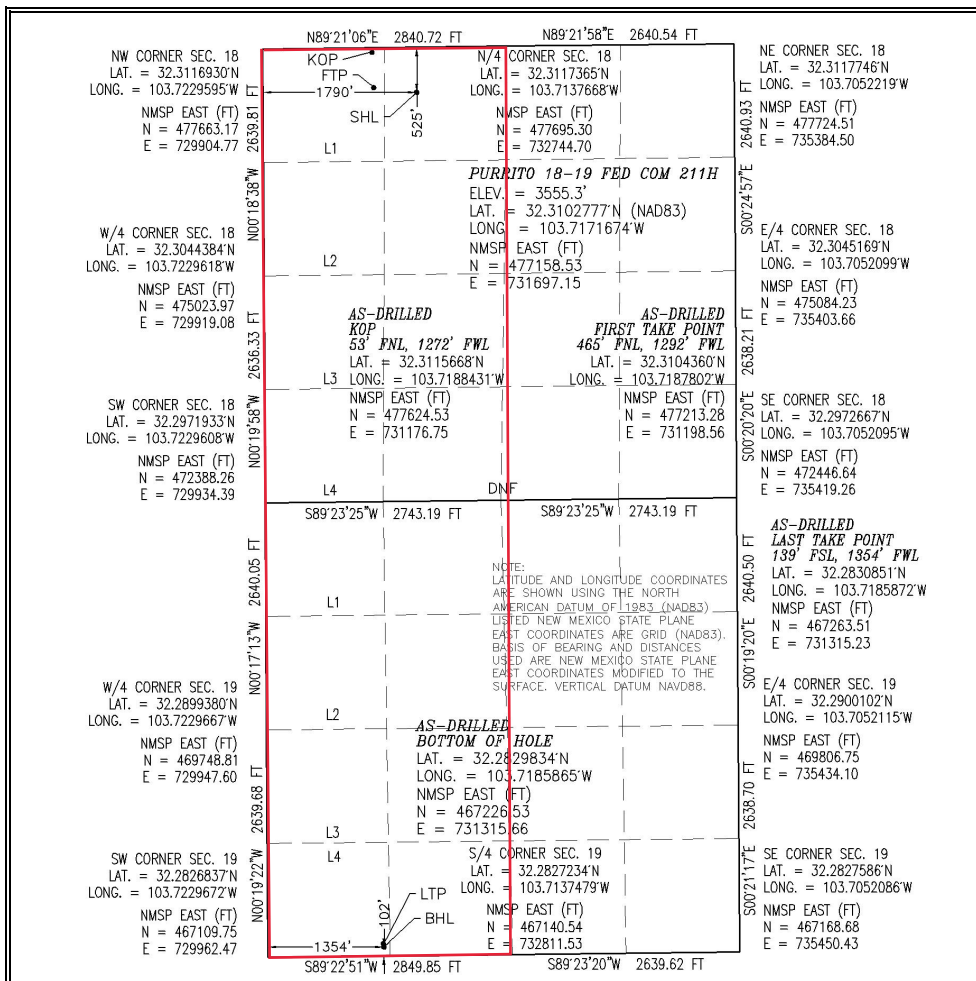
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	18	23 S	32 E		525	NORTH	1790	WEST	LEA

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
4	19	23 S	32 E		102	SOUTH	1354	WEST	LEA

¹² Dedicated Acres 689.36	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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.

Rebecca Deal 10/20/2020
Signature Date

Rebecca Deal, Regulatory Analyst
Printed Name

rebecca.deal@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.

MAY 10, 2019

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: **12797**
SURVEY NO. 7277

Intent ☐ As Drilled ☒

API # 30-025-46787		
Operator Name: DEVON ENERGY PRODUCTION CO., L.P.	Property Name: PURRITO 18-19 FED COM	Well Number 211H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	18	23S	32E	1	53	NORTH	1272	WEST	LEA
Latitude 32.3115668					Longitude 103.7188431			NAD 83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	18	23S	32E	1	465	NORTH	1292	WEST	LEA
Latitude 32.3104360					Longitude 103.7187802			NAD 83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	19	23S	32E	4	139	SOUTH	1354	WEST	LEA
Latitude 32.2830851					Longitude 103.7185872			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

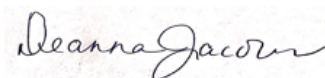
Devon

SURVEY REPORT

Purrito 18-19 Fed Com 211H

Patterson 575

I, Deanna Jacobs, certify the surveys supplied on
Purrito 18-19 Fed Com 211H are correct and accurate to the best of my
knowledge and are supported by actual field data.

Date: 4/9/2020

The **Ultimate Partner** In Wellbore Placement



Devon Energy

Lea County, NM (NAD83 NME)

Purrito 18-19 Fed Com

211H

OH

Design: As Drilled

Standard Survey Report

09 April, 2020



www.scientificdrilling.com





Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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	Purrito 18-19 Fed Com		
Site Position:		Northing:	477,158.17 usft
From:	Map	Easting:	731,667.14 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.310277
		Longitude:	-103.717265
		Grid Convergence:	0.33 °

Well	211H, 2BSSS Upper		
Well Position	+N/-S	0.00 usft	Northing: 477,158.53 usft
	+E/-W	0.00 usft	Easting: 731,697.15 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,579.00 usft
		Latitude:	32.310278
		Longitude:	-103.717168
		Ground Level:	3,555.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	11/14/2019	6.73
			Dip Angle (°) 60.00
			Field Strength (nT) 47,931.60000000

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
			Direction (°) 182.15

Survey Program	Date	4/9/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
208.00	479.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HDGM
570.00	20,550.00	Survey #2 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
208.00	1.12	65.66	207.99	0.84	1.85	-0.91	0.54	0.54	0.00
299.00	1.26	64.79	298.97	1.63	3.57	-1.76	0.16	0.15	-0.96
388.00	0.93	60.65	387.95	2.40	5.08	-2.59	0.38	-0.37	-4.65
479.00	0.97	40.50	478.94	3.35	6.23	-3.58	0.37	0.04	-22.14
570.00	0.94	56.20	569.93	4.35	7.35	-4.62	0.29	-0.03	17.25
662.00	0.92	32.00	661.91	5.40	8.37	-5.71	0.42	-0.02	-26.30
753.00	0.71	32.18	752.90	6.49	9.05	-6.83	0.23	-0.23	0.20
843.00	1.14	30.41	842.89	7.74	9.80	-8.10	0.48	0.48	-1.97
934.00	0.98	25.15	933.88	9.22	10.59	-9.61	0.21	-0.18	-5.78



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
981.00	0.76	36.74	980.87	9.84	10.95	-10.24	0.60	-0.47	24.66
1,154.00	0.41	31.56	1,153.86	11.28	11.96	-11.72	0.20	-0.20	-2.99
1,245.00	0.67	353.18	1,244.86	12.09	12.07	-12.53	0.47	0.29	-42.18
1,336.00	0.54	349.99	1,335.85	13.04	11.93	-13.48	0.15	-0.14	-3.51
1,427.00	0.47	310.52	1,426.85	13.70	11.57	-14.13	0.38	-0.08	-43.37
1,519.00	0.37	301.28	1,518.85	14.10	11.03	-14.51	0.13	-0.11	-10.04
1,609.00	0.20	278.71	1,608.85	14.28	10.63	-14.67	0.22	-0.19	-25.08
1,703.00	0.30	280.92	1,702.85	14.35	10.22	-14.72	0.11	0.11	2.35
1,798.00	0.11	317.46	1,797.85	14.46	9.92	-14.82	0.23	-0.20	38.46
1,894.00	0.22	256.34	1,893.85	14.49	9.68	-14.84	0.20	0.11	-63.67
1,989.00	0.78	305.79	1,988.84	14.82	8.97	-15.15	0.69	0.59	52.05
2,084.00	3.28	321.98	2,083.77	17.34	6.77	-17.58	2.67	2.63	17.04
2,179.00	6.67	321.45	2,178.40	23.80	1.66	-23.85	3.57	3.57	-0.56
2,274.00	8.17	320.73	2,272.60	33.34	-6.05	-33.09	1.58	1.58	-0.76
2,369.00	8.00	320.65	2,366.66	43.68	-14.51	-43.11	0.18	-0.18	-0.08
2,464.00	7.99	320.66	2,460.74	53.90	-22.89	-53.00	0.01	-0.01	0.01
2,560.00	7.33	322.03	2,555.88	63.89	-30.89	-62.68	0.71	-0.69	1.43
2,654.00	7.36	323.05	2,649.11	73.42	-38.20	-71.94	0.14	0.03	1.09
2,749.00	7.16	322.53	2,743.35	82.99	-45.46	-81.23	0.22	-0.21	-0.55
2,844.00	6.80	325.57	2,837.64	92.32	-52.24	-90.30	0.54	-0.38	3.20
2,939.00	6.53	327.40	2,932.00	101.51	-58.33	-99.26	0.36	-0.28	1.93
3,034.00	5.96	328.19	3,026.44	110.26	-63.84	-107.79	0.61	-0.60	0.83
3,129.00	6.67	321.03	3,120.86	118.74	-69.91	-116.04	1.11	0.75	-7.54
3,223.00	7.09	314.88	3,214.19	127.07	-77.45	-124.09	0.90	0.45	-6.54
3,318.00	6.40	313.90	3,308.53	134.88	-85.42	-131.59	0.74	-0.73	-1.03
3,413.00	5.69	311.13	3,403.00	141.65	-92.78	-138.08	0.81	-0.75	-2.92
3,507.00	4.94	310.79	3,496.59	147.36	-99.36	-143.54	0.80	-0.80	-0.36
3,603.00	5.90	309.57	3,592.16	153.21	-106.29	-149.12	1.01	1.00	-1.27
3,696.00	6.52	309.31	3,684.62	159.60	-114.06	-155.21	0.67	0.67	-0.28
3,792.00	6.20	308.77	3,780.03	166.29	-122.32	-161.60	0.34	-0.33	-0.56
3,887.00	6.34	306.62	3,874.46	172.64	-130.53	-167.63	0.29	0.15	-2.26
3,982.00	7.00	305.03	3,968.82	179.09	-139.48	-173.74	0.72	0.69	-1.67
4,078.00	8.34	304.81	4,063.95	186.42	-149.99	-180.67	1.40	1.40	-0.23
4,172.00	6.44	301.58	4,157.17	193.07	-160.08	-186.95	2.07	-2.02	-3.44
4,267.00	7.33	307.26	4,251.48	199.53	-169.44	-193.05	1.18	0.94	5.98
4,362.00	9.66	313.81	4,345.44	208.72	-180.02	-201.84	2.65	2.45	6.89
4,457.00	10.73	311.37	4,438.94	220.08	-192.41	-212.73	1.21	1.13	-2.57
4,552.00	10.19	311.55	4,532.36	231.50	-205.33	-223.65	0.57	-0.57	0.19
4,647.00	8.92	311.17	4,626.04	241.93	-217.16	-233.63	1.34	-1.34	-0.40
4,742.00	8.22	312.10	4,719.98	251.33	-227.75	-242.62	0.75	-0.74	0.98
4,840.00	8.16	312.07	4,816.98	260.68	-238.11	-251.59	0.06	-0.06	-0.03
4,932.00	7.63	311.92	4,908.11	269.14	-247.50	-259.69	0.58	-0.58	-0.16
5,027.00	6.81	312.05	5,002.35	277.13	-256.38	-267.33	0.86	-0.86	0.14



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
5,123.00	6.98	313.00	5,097.66	284.92	-264.87	-274.80	0.21	0.18	0.99
5,218.00	6.84	314.95	5,191.97	292.85	-273.09	-282.42	0.29	-0.15	2.05
5,313.00	6.52	314.20	5,286.32	300.61	-280.96	-289.88	0.35	-0.34	-0.79
5,407.00	7.28	312.92	5,379.64	308.38	-289.15	-297.34	0.82	0.81	-1.36
5,502.00	7.35	312.77	5,473.87	316.61	-298.02	-305.23	0.08	0.07	-0.16
5,596.00	7.02	313.59	5,567.13	324.65	-306.59	-312.95	0.37	-0.35	0.87
5,691.00	6.46	312.71	5,661.47	332.28	-314.73	-320.26	0.60	-0.59	-0.93
5,786.00	5.80	314.86	5,755.93	339.29	-322.06	-327.00	0.74	-0.69	2.26
5,881.00	6.64	310.50	5,850.37	346.24	-329.63	-333.66	1.01	0.88	-4.59
5,976.00	8.04	310.09	5,944.59	354.09	-338.89	-341.15	1.47	1.47	-0.43
6,071.00	7.67	310.40	6,038.70	362.48	-348.80	-349.16	0.39	-0.39	0.33
6,166.00	7.38	311.85	6,132.88	370.66	-358.18	-356.99	0.36	-0.31	1.53
6,262.00	6.88	310.63	6,228.14	378.51	-367.13	-364.50	0.54	-0.52	-1.27
6,357.00	6.41	310.49	6,322.50	385.66	-375.49	-371.34	0.50	-0.49	-0.15
6,452.00	6.22	310.54	6,416.92	392.45	-383.43	-377.82	0.20	-0.20	0.05
6,548.00	6.20	309.94	6,512.36	399.16	-391.36	-384.23	0.07	-0.02	-0.63
6,643.00	6.36	310.98	6,606.79	405.90	-399.26	-390.67	0.21	0.17	1.09
6,738.00	6.05	309.30	6,701.23	412.52	-407.11	-397.00	0.38	-0.33	-1.77
6,834.00	5.93	308.02	6,796.71	418.78	-414.93	-402.96	0.19	-0.13	-1.33
6,929.00	5.21	308.79	6,891.26	424.51	-422.16	-408.41	0.76	-0.76	0.81
7,024.00	4.96	309.19	6,985.88	429.81	-428.70	-413.46	0.27	-0.26	0.42
7,119.00	5.30	307.21	7,080.50	435.05	-435.38	-418.45	0.40	0.36	-2.08
7,214.00	5.21	305.95	7,175.10	440.24	-442.37	-423.37	0.15	-0.09	-1.33
7,319.00	5.30	304.56	7,279.66	445.79	-450.22	-428.62	0.15	0.09	-1.32
7,413.00	4.29	300.86	7,373.33	450.06	-456.81	-432.64	1.12	-1.07	-3.94
7,508.00	4.27	298.37	7,468.07	453.56	-462.98	-435.91	0.20	-0.02	-2.62
7,603.00	4.08	296.75	7,562.82	456.76	-469.11	-438.88	0.24	-0.20	-1.71
7,698.00	4.13	294.73	7,657.57	459.71	-475.23	-441.60	0.16	0.05	-2.13
7,793.00	3.74	293.55	7,752.35	462.38	-481.18	-444.04	0.42	-0.41	-1.24
7,888.00	3.72	291.88	7,847.15	464.77	-486.88	-446.22	0.12	-0.02	-1.76
7,982.00	3.63	291.26	7,940.95	466.98	-492.48	-448.22	0.10	-0.10	-0.66
8,077.00	3.34	291.16	8,035.78	469.07	-497.86	-450.11	0.31	-0.31	-0.11
8,172.00	3.46	291.31	8,130.61	471.11	-503.12	-451.95	0.13	0.13	0.16
8,268.00	3.01	287.44	8,226.46	472.92	-508.22	-453.57	0.52	-0.47	-4.03
8,363.00	3.04	285.66	8,321.32	474.35	-513.02	-454.81	0.10	0.03	-1.87
8,458.00	2.84	287.04	8,416.20	475.72	-517.70	-456.01	0.22	-0.21	1.45
8,554.00	2.84	282.67	8,512.08	476.94	-522.29	-457.05	0.23	0.00	-4.55
8,649.00	2.13	285.73	8,606.99	477.93	-526.29	-457.90	0.76	-0.75	3.22
8,744.00	1.65	272.37	8,701.94	478.47	-529.36	-458.32	0.68	-0.51	-14.06
8,839.00	1.71	270.69	8,796.90	478.54	-532.14	-458.29	0.08	0.06	-1.77
8,910.00	1.87	262.79	8,867.87	478.41	-534.35	-458.07	0.41	0.23	-11.13
9,009.00	2.19	228.04	8,966.81	476.94	-537.36	-456.49	1.26	0.32	-35.10
9,072.00	2.76	204.47	9,029.75	474.76	-538.88	-454.25	1.83	0.90	-37.41



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
9,167.00	3.16	165.52	9,124.63	470.14	-539.17	-449.62	2.11	0.42	-41.00
9,263.00	2.41	145.41	9,220.52	465.91	-537.37	-445.47	1.27	-0.78	-20.95
9,358.00	2.55	108.02	9,315.44	463.62	-534.22	-443.29	1.68	0.15	-39.36
9,453.00	2.44	95.82	9,410.35	462.76	-530.20	-442.58	0.57	-0.12	-12.84
9,548.00	2.10	85.24	9,505.27	462.70	-526.45	-442.66	0.57	-0.36	-11.14
9,644.00	1.26	58.80	9,601.23	463.39	-523.80	-443.46	1.17	-0.88	-27.54
9,739.00	1.67	30.46	9,696.20	465.12	-522.20	-445.25	0.86	0.43	-29.83
9,769.00	1.76	31.31	9,726.19	465.89	-521.74	-446.04	0.31	0.30	2.83
9,837.00	1.67	132.70	9,794.17	466.11	-520.47	-446.30	3.90	-0.13	149.10
9,933.00	14.05	171.97	9,889.11	453.57	-517.80	-433.87	13.33	12.90	40.91
9,980.00	21.02	175.23	9,933.90	439.51	-516.30	-419.87	14.97	14.83	6.94
10,027.00	25.94	175.72	9,976.99	420.85	-514.84	-401.28	10.48	10.47	1.04
10,033.30	26.24	175.67	9,982.65	418.08	-514.63	-398.52	4.85	4.84	-0.75
Cross 100 FNL - 10033.3 MD 9982.6 TVD									
10,122.00	30.54	175.10	10,060.66	376.05	-511.22	-356.65	4.85	4.84	-0.65
10,217.00	39.86	175.91	10,138.21	321.52	-506.98	-302.31	9.82	9.81	0.85
10,312.00	47.49	178.91	10,206.88	256.04	-504.14	-236.99	8.32	8.03	3.16
10,407.00	55.97	178.03	10,265.66	181.55	-502.11	-162.63	8.96	8.93	-0.93
10,502.00	63.78	179.13	10,313.31	99.47	-500.11	-80.68	8.28	8.22	1.16
10,597.00	74.02	177.32	10,347.46	11.01	-497.32	7.62	10.92	10.78	-1.91
10,692.00	82.06	174.65	10,367.14	-81.61	-490.79	99.93	8.90	8.46	-2.81
10,788.00	88.39	177.40	10,375.13	-176.99	-484.17	194.99	7.18	6.59	2.86
10,883.00	87.21	177.39	10,378.77	-271.82	-479.86	289.60	1.24	-1.24	-0.01
10,979.00	86.67	176.92	10,383.90	-367.57	-475.10	385.10	0.75	-0.56	-0.49
11,074.00	88.72	175.89	10,387.72	-462.30	-469.15	479.54	2.41	2.16	-1.08
11,169.00	88.76	176.06	10,389.81	-557.04	-462.48	573.96	0.18	0.04	0.18
11,265.00	89.16	177.52	10,391.55	-652.87	-457.10	669.53	1.58	0.42	1.52
11,360.00	89.40	177.64	10,392.74	-747.78	-453.09	764.22	0.28	0.25	0.13
11,455.00	88.73	177.87	10,394.29	-842.69	-449.37	858.92	0.75	-0.71	0.24
11,551.00	91.61	178.53	10,394.01	-938.63	-446.36	954.69	3.08	3.00	0.69
11,646.00	91.58	178.56	10,391.36	-1,033.57	-443.95	1,049.46	0.04	-0.03	0.03
11,741.00	91.21	178.84	10,389.05	-1,128.51	-441.79	1,144.26	0.49	-0.39	0.29
11,836.00	91.38	178.91	10,386.90	-1,223.47	-439.93	1,239.08	0.19	0.18	0.07
11,931.00	91.34	179.32	10,384.65	-1,318.43	-438.46	1,333.92	0.43	-0.04	0.43
12,027.00	91.11	179.59	10,382.60	-1,414.41	-437.55	1,429.79	0.37	-0.24	0.28
12,122.00	90.50	180.21	10,381.26	-1,509.40	-437.38	1,524.71	0.92	-0.64	0.65
12,216.00	90.60	180.16	10,380.36	-1,603.39	-437.68	1,618.65	0.12	0.11	-0.05
12,311.00	90.30	180.77	10,379.61	-1,698.38	-438.46	1,713.61	0.72	-0.32	0.64
12,407.00	89.87	181.52	10,379.47	-1,794.36	-440.37	1,809.59	0.90	-0.45	0.78
12,502.00	89.30	181.45	10,380.16	-1,889.33	-442.84	1,904.58	0.60	-0.60	-0.07
12,595.00	88.22	181.20	10,382.17	-1,982.28	-444.99	1,997.55	1.19	-1.16	-0.27
12,689.00	87.18	180.90	10,385.94	-2,076.19	-446.71	2,091.46	1.15	-1.11	-0.32
12,785.00	89.87	179.89	10,388.42	-2,172.14	-447.37	2,187.37	2.99	2.80	-1.05
12,879.00	90.50	179.72	10,388.11	-2,266.14	-447.05	2,281.29	0.69	0.67	-0.18



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
12,974.00	90.64	179.80	10,387.17	-2,361.14	-446.65	2,376.20	0.17	0.15	0.08
13,068.00	91.21	179.51	10,385.65	-2,455.12	-446.08	2,470.10	0.68	0.61	-0.31
13,162.00	91.31	179.56	10,383.58	-2,549.10	-445.32	2,563.98	0.12	0.11	0.05
13,257.00	92.05	179.98	10,380.80	-2,644.05	-444.94	2,658.86	0.90	0.78	0.44
13,353.00	92.72	179.81	10,376.80	-2,739.97	-444.76	2,754.70	0.72	0.70	-0.18
13,447.00	91.44	180.60	10,373.39	-2,833.91	-445.10	2,848.58	1.60	-1.36	0.84
13,543.00	90.44	180.41	10,371.82	-2,929.89	-445.95	2,944.53	1.06	-1.04	-0.20
13,639.00	90.70	179.98	10,370.86	-3,025.88	-446.27	3,040.47	0.52	0.27	-0.45
13,734.00	87.65	179.53	10,372.23	-3,120.86	-445.87	3,135.36	3.25	-3.21	-0.47
13,830.00	87.31	179.75	10,376.45	-3,216.76	-445.27	3,231.18	0.42	-0.35	0.23
13,925.00	86.98	179.67	10,381.18	-3,311.65	-444.79	3,325.97	0.36	-0.35	-0.08
14,019.00	87.28	179.90	10,385.89	-3,405.53	-444.43	3,419.78	0.40	0.32	0.24
14,115.00	87.52	180.14	10,390.24	-3,501.43	-444.47	3,515.61	0.35	0.25	0.25
14,210.00	89.43	179.30	10,392.77	-3,596.39	-444.00	3,610.49	2.20	2.01	-0.88
14,305.00	90.74	179.46	10,392.63	-3,691.38	-442.97	3,705.38	1.39	1.38	0.17
14,400.00	91.81	179.68	10,390.52	-3,786.35	-442.26	3,800.25	1.15	1.13	0.23
14,590.00	91.44	177.91	10,385.13	-3,976.23	-438.27	3,989.85	0.95	-0.19	-0.93
14,685.00	92.11	178.47	10,382.18	-4,071.13	-435.27	4,084.57	0.92	0.71	0.59
14,781.00	90.70	177.79	10,379.83	-4,167.05	-432.14	4,180.31	1.63	-1.47	-0.71
14,876.00	90.40	177.87	10,378.92	-4,261.98	-428.54	4,275.03	0.33	-0.32	0.08
14,972.00	90.03	177.52	10,378.56	-4,357.90	-424.68	4,370.74	0.53	-0.39	-0.36
15,067.00	90.20	178.22	10,378.37	-4,452.83	-421.15	4,465.48	0.76	0.18	0.74
15,161.00	90.30	178.04	10,377.96	-4,546.78	-418.08	4,559.24	0.22	0.11	-0.19
15,258.00	90.40	177.56	10,377.37	-4,643.71	-414.36	4,655.96	0.51	0.10	-0.49
15,353.00	90.54	177.43	10,376.59	-4,738.61	-410.20	4,750.65	0.20	0.15	-0.14
15,447.00	91.38	177.34	10,375.01	-4,832.50	-405.92	4,844.31	0.90	0.89	-0.10
15,543.00	92.08	177.35	10,372.11	-4,928.35	-401.47	4,939.93	0.73	0.73	0.01
15,637.00	90.87	178.70	10,369.69	-5,022.26	-398.23	5,033.65	1.93	-1.29	1.44
15,733.00	91.14	179.20	10,368.01	-5,118.23	-396.47	5,129.49	0.59	0.28	0.52
15,828.00	91.81	178.94	10,365.56	-5,213.19	-394.93	5,224.32	0.76	0.71	-0.27
15,922.00	90.37	179.67	10,363.78	-5,307.16	-393.79	5,318.18	1.72	-1.53	0.78
16,018.00	90.27	179.55	10,363.24	-5,403.16	-393.14	5,414.09	0.16	-0.10	-0.13
16,113.00	88.73	180.71	10,364.07	-5,498.15	-393.36	5,509.02	2.03	-1.62	1.22
16,208.00	89.03	181.07	10,365.93	-5,593.12	-394.83	5,603.98	0.49	0.32	0.38
16,303.00	89.43	180.81	10,367.20	-5,688.10	-396.39	5,698.95	0.50	0.42	-0.27
16,399.00	91.14	180.89	10,366.72	-5,784.08	-397.81	5,794.92	1.78	1.78	0.08
16,494.00	91.98	180.51	10,364.14	-5,879.04	-398.97	5,889.85	0.97	0.88	-0.40
16,613.00	90.20	179.91	10,361.87	-5,998.01	-399.41	6,008.76	1.58	-1.50	-0.50
16,708.00	90.40	179.84	10,361.38	-6,093.01	-399.20	6,103.68	0.22	0.21	-0.07
16,804.00	91.04	179.78	10,360.17	-6,189.00	-398.88	6,199.59	0.67	0.67	-0.06
16,899.00	91.71	179.48	10,357.89	-6,283.97	-398.27	6,294.47	0.77	0.71	-0.32
16,995.00	91.77	179.91	10,354.98	-6,379.92	-397.76	6,390.34	0.45	0.06	0.45
17,090.00	91.47	179.81	10,352.29	-6,474.89	-397.53	6,485.23	0.33	-0.32	-0.11



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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)
17,184.00	92.08	179.89	10,349.38	-6,568.84	-397.28	6,579.11	0.65	0.65	0.09
17,279.00	89.66	180.77	10,347.94	-6,663.82	-397.83	6,674.04	2.71	-2.55	0.93
17,374.00	89.06	180.74	10,349.00	-6,758.80	-399.08	6,769.01	0.63	-0.63	-0.03
17,468.00	89.16	180.60	10,350.46	-6,852.79	-400.18	6,862.96	0.18	0.11	-0.15
17,563.00	89.53	180.59	10,351.54	-6,947.78	-401.17	6,957.92	0.39	0.39	-0.01
17,659.00	89.46	180.38	10,352.39	-7,043.77	-401.98	7,053.88	0.23	-0.07	-0.22
17,754.00	89.43	180.57	10,353.31	-7,138.76	-402.77	7,148.83	0.20	-0.03	0.20
17,849.00	89.67	180.49	10,354.06	-7,233.75	-403.64	7,243.79	0.27	0.25	-0.08
17,944.00	90.00	180.33	10,354.33	-7,328.75	-404.32	7,338.75	0.39	0.35	-0.17
18,040.00	90.34	180.20	10,354.05	-7,424.75	-404.77	7,434.70	0.38	0.35	-0.14
18,134.00	90.77	180.08	10,353.13	-7,518.74	-405.00	7,528.63	0.47	0.46	-0.13
18,229.00	91.41	180.22	10,351.33	-7,613.73	-405.25	7,623.56	0.69	0.67	0.15
18,324.00	91.81	180.03	10,348.66	-7,708.69	-405.45	7,718.46	0.47	0.42	-0.20
18,420.00	92.28	180.34	10,345.23	-7,804.63	-405.76	7,814.34	0.59	0.49	0.32
18,515.00	90.44	180.20	10,342.98	-7,899.59	-406.21	7,909.26	1.94	-1.94	-0.15
18,610.00	89.06	179.61	10,343.39	-7,994.59	-406.05	8,004.19	1.58	-1.45	-0.62
18,706.00	89.70	179.77	10,344.43	-8,090.58	-405.53	8,100.09	0.69	0.67	0.17
18,801.00	90.20	179.72	10,344.51	-8,185.58	-405.11	8,195.01	0.53	0.53	-0.05
18,896.00	90.74	180.46	10,343.74	-8,280.58	-405.26	8,289.94	0.96	0.57	0.78
18,991.00	90.84	179.94	10,342.43	-8,375.57	-405.59	8,384.88	0.56	0.11	-0.55
19,087.00	90.77	180.71	10,341.08	-8,471.56	-406.14	8,480.82	0.81	-0.07	0.80
19,182.00	90.30	180.05	10,340.19	-8,566.55	-406.77	8,575.77	0.85	-0.49	-0.69
19,277.00	90.27	180.13	10,339.72	-8,661.55	-406.92	8,670.71	0.09	-0.03	0.08
19,372.00	90.10	180.24	10,339.41	-8,756.55	-407.22	8,765.65	0.21	-0.18	0.12
19,466.00	89.77	180.53	10,339.52	-8,850.54	-407.85	8,859.61	0.47	-0.35	0.31
19,561.00	89.63	180.25	10,340.01	-8,945.54	-408.50	8,954.56	0.33	-0.15	-0.29
19,656.00	89.77	178.39	10,340.51	-9,040.53	-407.37	9,049.44	1.96	0.15	-1.96
19,751.00	89.77	178.00	10,340.89	-9,135.48	-404.38	9,144.21	0.41	0.00	-0.41
19,846.00	89.63	178.00	10,341.39	-9,230.42	-401.07	9,238.96	0.15	-0.15	0.00
19,940.00	90.03	178.20	10,341.67	-9,324.37	-397.95	9,332.73	0.48	0.43	0.21
20,035.00	89.46	178.21	10,342.09	-9,419.32	-394.97	9,427.50	0.60	-0.60	0.01
20,130.00	89.77	178.00	10,342.73	-9,514.27	-391.83	9,522.27	0.39	0.33	-0.22
20,225.00	89.93	178.14	10,342.98	-9,609.21	-388.63	9,617.02	0.22	0.17	0.15
20,320.00	89.83	178.32	10,343.18	-9,704.17	-385.70	9,711.80	0.22	-0.11	0.19
20,415.00	90.40	178.88	10,342.99	-9,799.14	-383.38	9,806.62	0.84	0.60	0.59
20,483.00	90.37	179.35	10,342.53	-9,867.13	-382.33	9,874.52	0.69	-0.04	0.69
Last Svy 20483 MD									
20,550.00	90.37	179.35	10,342.10	-9,934.12	-381.57	9,941.44	0.00	0.00	0.00
BH: 102.3 FSL 1353.15 FWL - 20550 MD 9982.7 TVD - PTB 20550 MD									



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,033.30	9,982.65	418.08	-514.63	Cross 100 FNL
10,033.30	9,982.65	418.08	-514.63	10033.3 MD 9982.6 TVD
20,483.00	10,342.53	-9,867.13	-382.33	Last Svy 20483 MD
20,550.00	10,342.10	-9,934.12	-381.57	BH: 102.3 FSL 1353.15 FWL
20,550.00	10,342.10	-9,934.12	-381.57	20550 MD 9982.7 TVD
20,550.00	10,342.10	-9,934.12	-381.57	PTB 20550 MD

Checked By: _____ Approved By: _____ Date: _____



Devon Energy

Lea County, NM (NAD83 NME)
Purrito 18-19 Fed Com
211H

OH

Design: As Drilled

Survey Report - Geographic

09 April, 2020



www.scientificdrilling.com





Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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	Purrito 18-19 Fed Com		
Site Position:		Northing:	477,158.17 usft
From:	Map	Easting:	731,667.14 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.310277
		Longitude:	-103.717265
		Grid Convergence:	0.33 °

Well	211H, 2BSSS Upper		
Well Position	+N/-S	0.00 usft	Northing: 477,158.53 usft
	+E/-W	0.00 usft	Easting: 731,697.15 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,579.00 usft
		Latitude:	32.310278
		Longitude:	-103.717168
		Ground Level:	3,555.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	11/14/2019	6.73
			Dip Angle (°) 60.00
			Field Strength (nT) 47,931.60000000

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
			Direction (°) 182.15

Survey Program	Date 4/9/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
208.00	479.00	Survey #1 (OH)	MWD+HDGM
570.00	20,550.00	Survey #2 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	477,158.53	731,697.15	32.310278	-103.717168
208.00	1.12	65.66	207.99	0.84	1.85	477,159.37	731,699.00	32.310280	-103.717162
299.00	1.26	64.79	298.97	1.63	3.57	477,160.16	731,700.71	32.310282	-103.717156
388.00	0.93	60.65	387.95	2.40	5.08	477,160.93	731,702.23	32.310284	-103.717151
479.00	0.97	40.50	478.94	3.35	6.23	477,161.88	731,703.37	32.310287	-103.717147
570.00	0.94	56.20	569.93	4.35	7.35	477,162.88	731,704.49	32.310290	-103.717144
662.00	0.92	32.00	661.91	5.40	8.37	477,163.93	731,705.51	32.310292	-103.717140
753.00	0.71	32.18	752.90	6.49	9.05	477,165.02	731,706.20	32.310295	-103.717138
843.00	1.14	30.41	842.89	7.74	9.80	477,166.27	731,706.95	32.310299	-103.717136
934.00	0.98	25.15	933.88	9.22	10.59	477,167.75	731,707.74	32.310303	-103.717133
981.00	0.76	36.74	980.87	9.84	10.95	477,168.37	731,708.10	32.310305	-103.717132



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
1,154.00	0.41	31.56	1,153.86	11.28	11.96	477,169.81	731,709.11	32.310309	-103.717129
1,245.00	0.67	353.18	1,244.86	12.09	12.07	477,170.62	731,709.21	32.310311	-103.717128
1,336.00	0.54	349.99	1,335.85	13.04	11.93	477,171.57	731,709.07	32.310313	-103.717129
1,427.00	0.47	310.52	1,426.85	13.70	11.57	477,172.23	731,708.72	32.310315	-103.717130
1,519.00	0.37	301.28	1,518.85	14.10	11.03	477,172.63	731,708.18	32.310316	-103.717132
1,609.00	0.20	278.71	1,608.85	14.28	10.63	477,172.81	731,707.77	32.310317	-103.717133
1,703.00	0.30	280.92	1,702.85	14.35	10.22	477,172.88	731,707.37	32.310317	-103.717134
1,798.00	0.11	317.46	1,797.85	14.46	9.92	477,172.99	731,707.06	32.310317	-103.717135
1,894.00	0.22	256.34	1,893.85	14.49	9.68	477,173.02	731,706.82	32.310317	-103.717136
1,989.00	0.78	305.79	1,988.84	14.82	8.97	477,173.35	731,706.12	32.310318	-103.717138
2,084.00	3.28	321.98	2,083.77	17.34	6.77	477,175.87	731,703.92	32.310325	-103.717145
2,179.00	6.67	321.45	2,178.40	23.80	1.66	477,182.33	731,698.81	32.310343	-103.717162
2,274.00	8.17	320.73	2,272.60	33.34	-6.05	477,191.87	731,691.10	32.310369	-103.717187
2,369.00	8.00	320.65	2,366.66	43.68	-14.51	477,202.21	731,682.63	32.310398	-103.717214
2,464.00	7.99	320.66	2,460.74	53.90	-22.89	477,212.43	731,674.26	32.310426	-103.717241
2,560.00	7.33	322.03	2,555.88	63.89	-30.89	477,222.41	731,666.26	32.310454	-103.717266
2,654.00	7.36	323.05	2,649.11	73.42	-38.20	477,231.95	731,658.95	32.310480	-103.717290
2,749.00	7.16	322.53	2,743.35	82.99	-45.46	477,241.51	731,651.69	32.310507	-103.717313
2,844.00	6.80	325.57	2,837.64	92.32	-52.24	477,250.85	731,644.91	32.310532	-103.717335
2,939.00	6.53	327.40	2,932.00	101.51	-58.33	477,260.04	731,638.82	32.310558	-103.717355
3,034.00	5.96	328.19	3,026.44	110.26	-63.84	477,268.78	731,633.31	32.310582	-103.717372
3,129.00	6.67	321.03	3,120.86	118.74	-69.91	477,277.26	731,627.24	32.310605	-103.717392
3,223.00	7.09	314.88	3,214.19	127.07	-77.45	477,285.60	731,619.70	32.310628	-103.717416
3,318.00	6.40	313.90	3,308.53	134.88	-85.42	477,293.41	731,611.73	32.310650	-103.717442
3,413.00	5.69	311.13	3,403.00	141.65	-92.78	477,300.18	731,604.37	32.310669	-103.717465
3,507.00	4.94	310.79	3,496.59	147.36	-99.36	477,305.89	731,597.79	32.310684	-103.717487
3,603.00	5.90	309.57	3,592.16	153.21	-106.29	477,311.73	731,590.86	32.310701	-103.717509
3,696.00	6.52	309.31	3,684.62	159.60	-114.06	477,318.12	731,583.09	32.310718	-103.717534
3,792.00	6.20	308.77	3,780.03	166.29	-122.32	477,324.82	731,574.83	32.310737	-103.717560
3,887.00	6.34	306.62	3,874.46	172.64	-130.53	477,331.16	731,566.62	32.310754	-103.717587
3,982.00	7.00	305.03	3,968.82	179.09	-139.48	477,337.61	731,557.67	32.310772	-103.717616
4,078.00	8.34	304.81	4,063.95	186.42	-149.99	477,344.94	731,547.17	32.310793	-103.717650
4,172.00	6.44	301.58	4,157.17	193.07	-160.08	477,351.59	731,537.08	32.310811	-103.717682
4,267.00	7.33	307.26	4,251.48	199.53	-169.44	477,358.05	731,527.72	32.310829	-103.717712
4,362.00	9.66	313.81	4,345.44	208.72	-180.02	477,367.24	731,517.14	32.310854	-103.717746
4,457.00	10.73	311.37	4,438.94	220.08	-192.41	477,378.60	731,504.75	32.310886	-103.717786
4,552.00	10.19	311.55	4,532.36	231.50	-205.33	477,390.02	731,491.83	32.310917	-103.717828
4,647.00	8.92	311.17	4,626.04	241.93	-217.16	477,400.44	731,479.99	32.310946	-103.717866
4,742.00	8.22	312.10	4,719.98	251.33	-227.75	477,409.84	731,469.41	32.310972	-103.717900
4,840.00	8.16	312.07	4,816.98	260.68	-238.11	477,419.20	731,459.05	32.310998	-103.717933
4,932.00	7.63	311.92	4,908.11	269.14	-247.50	477,427.66	731,449.66	32.311021	-103.717964
5,027.00	6.81	312.05	5,002.35	277.13	-256.38	477,435.64	731,440.78	32.311044	-103.717992
5,123.00	6.98	313.00	5,097.66	284.92	-264.87	477,443.43	731,432.29	32.311065	-103.718020
5,218.00	6.84	314.95	5,191.97	292.85	-273.09	477,451.37	731,424.07	32.311087	-103.718046
5,313.00	6.52	314.20	5,286.32	300.61	-280.96	477,459.12	731,416.20	32.311108	-103.718071
5,407.00	7.28	312.92	5,379.64	308.38	-289.15	477,466.90	731,408.01	32.311130	-103.718098
5,502.00	7.35	312.77	5,473.87	316.61	-298.02	477,475.12	731,399.14	32.311153	-103.718126
5,596.00	7.02	313.59	5,567.13	324.65	-306.59	477,483.17	731,390.57	32.311175	-103.718154
5,691.00	6.46	312.71	5,661.47	332.28	-314.73	477,490.79	731,382.44	32.311196	-103.718180
5,786.00	5.80	314.86	5,755.93	339.29	-322.06	477,497.80	731,375.11	32.311215	-103.718204
5,881.00	6.64	310.50	5,850.37	346.24	-329.63	477,504.76	731,367.53	32.311235	-103.718228
5,976.00	8.04	310.09	5,944.59	354.09	-338.89	477,512.60	731,358.27	32.311256	-103.718258
6,071.00	7.67	310.40	6,038.70	362.48	-348.80	477,520.99	731,348.36	32.311280	-103.718290
6,166.00	7.38	311.85	6,132.88	370.66	-358.18	477,529.17	731,338.99	32.311302	-103.718320
6,262.00	6.88	310.63	6,228.14	378.51	-367.13	477,537.03	731,330.03	32.311324	-103.718349



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
6,357.00	6.41	310.49	6,322.50	385.66	-375.49	477,544.17	731,321.68	32.311344	-103.718376
6,452.00	6.22	310.54	6,416.92	392.45	-383.43	477,550.96	731,313.74	32.311362	-103.718401
6,548.00	6.20	309.94	6,512.36	399.16	-391.36	477,557.67	731,305.81	32.311381	-103.718427
6,643.00	6.36	310.98	6,606.79	405.90	-399.26	477,564.41	731,297.90	32.311400	-103.718452
6,738.00	6.05	309.30	6,701.23	412.52	-407.11	477,571.03	731,290.06	32.311418	-103.718478
6,834.00	5.93	308.02	6,796.71	418.78	-414.93	477,577.29	731,282.24	32.311435	-103.718503
6,929.00	5.21	308.79	6,891.26	424.51	-422.16	477,583.02	731,275.01	32.311451	-103.718526
7,024.00	4.96	309.19	6,985.88	429.81	-428.70	477,588.31	731,268.46	32.311466	-103.718547
7,119.00	5.30	307.21	7,080.50	435.05	-435.38	477,593.56	731,261.79	32.311480	-103.718569
7,214.00	5.21	305.95	7,175.10	440.24	-442.37	477,598.75	731,254.80	32.311495	-103.718591
7,319.00	5.30	304.56	7,279.66	445.79	-450.22	477,604.30	731,246.95	32.311510	-103.718617
7,413.00	4.29	300.86	7,373.33	450.06	-456.81	477,608.56	731,240.36	32.311522	-103.718638
7,508.00	4.27	298.37	7,468.07	453.56	-462.98	477,612.07	731,234.19	32.311532	-103.718658
7,603.00	4.08	296.75	7,562.82	456.76	-469.11	477,615.27	731,228.06	32.311541	-103.718677
7,698.00	4.13	294.73	7,657.57	459.71	-475.23	477,618.22	731,221.94	32.311549	-103.718697
7,793.00	3.74	293.55	7,752.35	462.38	-481.18	477,620.89	731,215.99	32.311556	-103.718716
7,888.00	3.72	291.88	7,847.15	464.77	-486.88	477,623.28	731,210.29	32.311563	-103.718735
7,982.00	3.63	291.26	7,940.95	466.98	-492.48	477,625.49	731,204.69	32.311569	-103.718753
8,077.00	3.34	291.16	8,035.78	469.07	-497.86	477,627.58	731,199.31	32.311575	-103.718770
8,172.00	3.46	291.31	8,130.61	471.11	-503.12	477,629.62	731,194.06	32.311581	-103.718787
8,268.00	3.01	287.44	8,226.46	472.92	-508.22	477,631.43	731,188.95	32.311586	-103.718804
8,363.00	3.04	285.66	8,321.32	474.35	-513.02	477,632.86	731,184.15	32.311590	-103.718819
8,458.00	2.84	287.04	8,416.20	475.72	-517.70	477,634.23	731,179.47	32.311593	-103.718834
8,554.00	2.84	282.67	8,512.08	476.94	-522.29	477,635.44	731,174.88	32.311597	-103.718849
8,649.00	2.13	285.73	8,606.99	477.93	-526.29	477,636.44	731,170.88	32.311600	-103.718862
8,744.00	1.65	272.37	8,701.94	478.47	-529.36	477,636.97	731,167.82	32.311601	-103.718872
8,839.00	1.71	270.69	8,796.90	478.54	-532.14	477,637.05	731,165.03	32.311601	-103.718881
8,910.00	1.87	262.79	8,867.87	478.41	-534.35	477,636.92	731,162.82	32.311601	-103.718888
9,009.00	2.19	228.04	8,966.81	476.94	-537.36	477,635.45	731,159.82	32.311597	-103.718898
9,072.00	2.76	204.47	9,029.75	474.76	-538.88	477,633.26	731,158.29	32.311591	-103.718903
9,167.00	3.16	165.52	9,124.63	470.14	-539.17	477,628.65	731,158.00	32.311578	-103.718904
9,263.00	2.41	145.41	9,220.52	465.91	-537.37	477,624.42	731,159.81	32.311567	-103.718898
9,358.00	2.55	108.02	9,315.44	463.62	-534.22	477,622.12	731,162.95	32.311560	-103.718888
9,453.00	2.44	95.82	9,410.35	462.76	-530.20	477,621.27	731,166.97	32.311558	-103.718875
9,548.00	2.10	85.24	9,505.27	462.70	-526.45	477,621.20	731,170.72	32.311558	-103.718863
9,644.00	1.26	58.80	9,601.23	463.39	-523.80	477,621.90	731,173.37	32.311560	-103.718854
9,739.00	1.67	30.46	9,696.20	465.12	-522.20	477,623.63	731,174.97	32.311564	-103.718849
9,769.00	1.76	31.31	9,726.19	465.89	-521.74	477,624.40	731,175.43	32.311567	-103.718848
9,837.00	1.67	132.70	9,794.17	466.11	-520.47	477,624.62	731,176.70	32.311567	-103.718844
9,933.00	14.05	171.97	9,889.11	453.57	-517.80	477,612.08	731,179.37	32.311533	-103.718835
9,980.00	21.02	175.23	9,933.90	439.51	-516.30	477,598.02	731,180.87	32.311494	-103.718831
10,027.00	25.94	175.72	9,976.99	420.85	-514.84	477,579.36	731,182.34	32.311443	-103.718826
10,033.30	26.24	175.67	9,982.65	418.08	-514.63	477,576.59	731,182.54	32.311435	-103.718826
Cross 100 FNL - 10033.3 MD 9982.6 TVD									
10,122.00	30.54	175.10	10,060.66	376.05	-511.22	477,534.57	731,185.95	32.311319	-103.718815
10,217.00	39.86	175.91	10,138.21	321.52	-506.98	477,480.03	731,190.19	32.311169	-103.718803
10,312.00	47.49	178.91	10,206.88	256.04	-504.14	477,414.56	731,193.03	32.310989	-103.718795
10,407.00	55.97	178.03	10,265.66	181.55	-502.11	477,340.07	731,195.06	32.310785	-103.718789
10,502.00	63.78	179.13	10,313.31	99.47	-500.11	477,258.00	731,197.06	32.310559	-103.718784
10,597.00	74.02	177.32	10,347.46	11.01	-497.32	477,169.54	731,199.85	32.310316	-103.718777
10,692.00	82.06	174.65	10,367.14	-81.61	-490.79	477,076.92	731,206.38	32.310061	-103.718758
10,788.00	88.39	177.40	10,375.13	-176.99	-484.17	476,981.55	731,213.00	32.309799	-103.718738
10,883.00	87.21	177.39	10,378.77	-271.82	-479.86	476,886.72	731,217.31	32.309538	-103.718726
10,979.00	86.67	176.92	10,383.90	-367.57	-475.10	476,790.98	731,222.07	32.309275	-103.718712
11,074.00	88.72	175.89	10,387.72	-462.30	-469.15	476,696.26	731,228.02	32.309015	-103.718695



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
11,169.00	88.76	176.06	10,389.81	-557.04	-462.48	476,601.52	731,234.69	32.308754	-103.718675
11,265.00	89.16	177.52	10,391.55	-652.87	-457.10	476,505.69	731,240.06	32.308491	-103.718659
11,360.00	89.40	177.64	10,392.74	-747.78	-453.09	476,410.79	731,244.08	32.308230	-103.718648
11,455.00	88.73	177.87	10,394.29	-842.69	-449.37	476,315.88	731,247.80	32.307969	-103.718638
11,551.00	91.61	178.53	10,394.01	-938.63	-446.36	476,219.94	731,250.81	32.307705	-103.718630
11,646.00	91.58	178.56	10,391.36	-1,033.57	-443.95	476,125.02	731,253.22	32.307444	-103.718624
11,741.00	91.21	178.84	10,389.05	-1,128.51	-441.79	476,030.07	731,255.38	32.307183	-103.718618
11,836.00	91.38	178.91	10,386.90	-1,223.47	-439.93	475,935.12	731,257.24	32.306922	-103.718614
11,931.00	91.34	179.32	10,384.65	-1,318.43	-438.46	475,840.16	731,258.71	32.306661	-103.718611
12,027.00	91.11	179.59	10,382.60	-1,414.41	-437.55	475,744.19	731,259.62	32.306397	-103.718610
12,122.00	90.50	180.21	10,381.26	-1,509.40	-437.38	475,649.21	731,259.79	32.306136	-103.718611
12,216.00	90.60	180.16	10,380.36	-1,603.39	-437.68	475,555.22	731,259.48	32.305878	-103.718614
12,311.00	90.30	180.77	10,379.61	-1,698.38	-438.46	475,460.23	731,258.71	32.305617	-103.718618
12,407.00	89.87	181.52	10,379.47	-1,794.36	-440.37	475,364.25	731,256.79	32.305353	-103.718626
12,502.00	89.30	181.45	10,380.16	-1,889.33	-442.84	475,269.29	731,254.33	32.305092	-103.718636
12,595.00	88.22	181.20	10,382.17	-1,982.28	-444.99	475,176.35	731,252.18	32.304836	-103.718645
12,689.00	87.18	180.90	10,385.94	-2,076.19	-446.71	475,082.44	731,250.46	32.304578	-103.718652
12,785.00	89.87	179.89	10,388.42	-2,172.14	-447.37	474,986.49	731,249.80	32.304315	-103.718656
12,879.00	90.50	179.72	10,388.11	-2,266.14	-447.05	474,892.50	731,250.12	32.304056	-103.718657
12,974.00	90.64	179.80	10,387.17	-2,361.14	-446.65	474,797.51	731,250.52	32.303795	-103.718657
13,068.00	91.21	179.51	10,385.65	-2,455.12	-446.08	474,703.53	731,251.08	32.303537	-103.718657
13,162.00	91.31	179.56	10,383.58	-2,549.10	-445.32	474,609.56	731,251.85	32.303278	-103.718656
13,257.00	92.05	179.98	10,380.80	-2,644.05	-444.94	474,514.61	731,252.23	32.303017	-103.718657
13,353.00	92.72	179.81	10,376.80	-2,739.97	-444.76	474,418.70	731,252.40	32.302754	-103.718658
13,447.00	91.44	180.60	10,373.39	-2,833.91	-445.10	474,324.77	731,252.07	32.302496	-103.718661
13,543.00	90.44	180.41	10,371.82	-2,929.89	-445.95	474,228.79	731,251.22	32.302232	-103.718665
13,639.00	90.70	179.98	10,370.86	-3,025.88	-446.27	474,132.80	731,250.89	32.301968	-103.718668
13,734.00	87.65	179.53	10,372.23	-3,120.86	-445.87	474,037.83	731,251.30	32.301707	-103.718669
13,830.00	87.31	179.75	10,376.45	-3,216.76	-445.27	473,941.92	731,251.90	32.301443	-103.718668
13,925.00	86.98	179.67	10,381.18	-3,311.65	-444.79	473,847.05	731,252.38	32.301182	-103.718669
14,019.00	87.28	179.90	10,385.89	-3,405.53	-444.43	473,753.17	731,252.74	32.300924	-103.718669
14,115.00	87.52	180.14	10,390.24	-3,501.43	-444.47	473,657.28	731,252.70	32.300661	-103.718671
14,210.00	89.43	179.30	10,392.77	-3,596.39	-444.00	473,562.32	731,253.17	32.300400	-103.718671
14,305.00	90.74	179.46	10,392.63	-3,691.38	-442.97	473,467.33	731,254.19	32.300139	-103.718670
14,400.00	91.81	179.68	10,390.52	-3,786.35	-442.26	473,372.37	731,254.91	32.299878	-103.718669
14,590.00	91.44	177.91	10,385.13	-3,976.23	-438.27	473,182.50	731,258.90	32.299356	-103.718660
14,685.00	92.11	178.47	10,382.18	-4,071.13	-435.27	473,087.60	731,261.90	32.299095	-103.718652
14,781.00	90.70	177.79	10,379.83	-4,167.05	-432.14	472,991.69	731,265.03	32.298831	-103.718644
14,876.00	90.40	177.87	10,378.92	-4,261.98	-428.54	472,896.76	731,268.63	32.298570	-103.718634
14,972.00	90.03	177.52	10,378.56	-4,357.90	-424.68	472,800.85	731,272.49	32.298306	-103.718623
15,067.00	90.20	178.22	10,378.37	-4,452.83	-421.15	472,705.92	731,276.02	32.298045	-103.718613
15,161.00	90.30	178.04	10,377.96	-4,546.78	-418.08	472,611.97	731,279.09	32.297787	-103.718605
15,258.00	90.40	177.56	10,377.37	-4,643.71	-414.36	472,515.05	731,282.81	32.297521	-103.718595
15,353.00	90.54	177.43	10,376.59	-4,738.61	-410.20	472,420.15	731,286.96	32.297260	-103.718583
15,447.00	91.38	177.34	10,375.01	-4,832.50	-405.92	472,326.27	731,291.25	32.297002	-103.718571
15,543.00	92.08	177.35	10,372.11	-4,928.35	-401.47	472,230.42	731,295.69	32.296738	-103.718559
15,637.00	90.87	178.70	10,369.69	-5,022.26	-398.23	472,136.52	731,298.93	32.296480	-103.718550
15,733.00	91.14	179.20	10,368.01	-5,118.23	-396.47	472,040.55	731,300.69	32.296216	-103.718546
15,828.00	91.81	178.94	10,365.56	-5,213.19	-394.93	471,945.60	731,302.23	32.295955	-103.718543
15,922.00	90.37	179.67	10,363.78	-5,307.16	-393.79	471,851.63	731,303.37	32.295697	-103.718541
16,018.00	90.27	179.55	10,363.24	-5,403.16	-393.14	471,755.64	731,304.03	32.295433	-103.718540
16,113.00	88.73	180.71	10,364.07	-5,498.15	-393.36	471,660.65	731,303.81	32.295172	-103.718543
16,208.00	89.03	181.07	10,365.93	-5,593.12	-394.83	471,565.69	731,302.34	32.294911	-103.718549
16,303.00	89.43	180.81	10,367.20	-5,688.10	-396.39	471,470.72	731,300.78	32.294650	-103.718556
16,399.00	91.14	180.89	10,366.72	-5,784.08	-397.81	471,374.74	731,299.35	32.294386	-103.718563



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	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
16,494.00	91.98	180.51	10,364.14	-5,879.04	-398.97	471,279.78	731,298.19	32.294125	-103.718568
16,613.00	90.20	179.91	10,361.87	-5,998.01	-399.41	471,160.82	731,297.76	32.293798	-103.718572
16,708.00	90.40	179.84	10,361.38	-6,093.01	-399.20	471,065.82	731,297.96	32.293537	-103.718573
16,804.00	91.04	179.78	10,360.17	-6,189.00	-398.88	470,969.84	731,298.28	32.293273	-103.718574
16,899.00	91.71	179.48	10,357.89	-6,283.97	-398.27	470,874.87	731,298.90	32.293012	-103.718573
16,995.00	91.77	179.91	10,354.98	-6,379.92	-397.76	470,778.92	731,299.41	32.292748	-103.718573
17,090.00	91.47	179.81	10,352.29	-6,474.89	-397.53	470,683.96	731,299.64	32.292487	-103.718574
17,184.00	92.08	179.89	10,349.38	-6,568.84	-397.28	470,590.02	731,299.88	32.292229	-103.718575
17,279.00	89.66	180.77	10,347.94	-6,663.82	-397.83	470,495.04	731,299.34	32.291968	-103.718579
17,374.00	89.06	180.74	10,349.00	-6,758.80	-399.08	470,400.06	731,298.09	32.291707	-103.718585
17,468.00	89.16	180.60	10,350.46	-6,852.79	-400.18	470,306.08	731,296.99	32.291449	-103.718590
17,563.00	89.53	180.59	10,351.54	-6,947.78	-401.17	470,211.10	731,296.00	32.291188	-103.718595
17,659.00	89.46	180.38	10,352.39	-7,043.77	-401.98	470,115.11	731,295.19	32.290924	-103.718599
17,754.00	89.43	180.57	10,353.31	-7,138.76	-402.77	470,020.12	731,294.40	32.290663	-103.718604
17,849.00	89.67	180.49	10,354.06	-7,233.75	-403.64	469,925.13	731,293.52	32.290402	-103.718608
17,944.00	90.00	180.33	10,354.33	-7,328.75	-404.32	469,830.14	731,292.84	32.290140	-103.718612
18,040.00	90.34	180.20	10,354.05	-7,424.75	-404.77	469,734.15	731,292.40	32.289877	-103.718615
18,134.00	90.77	180.08	10,353.13	-7,518.74	-405.00	469,640.16	731,292.17	32.289618	-103.718618
18,229.00	91.41	180.22	10,351.33	-7,613.73	-405.25	469,545.18	731,291.92	32.289357	-103.718621
18,324.00	91.81	180.03	10,348.66	-7,708.69	-405.45	469,450.22	731,291.71	32.289096	-103.718623
18,420.00	92.28	180.34	10,345.23	-7,804.63	-405.76	469,354.29	731,291.40	32.288833	-103.718626
18,515.00	90.44	180.20	10,342.98	-7,899.59	-406.21	469,259.33	731,290.95	32.288572	-103.718629
18,610.00	89.06	179.61	10,343.39	-7,994.59	-406.05	469,164.34	731,291.11	32.288310	-103.718630
18,706.00	89.70	179.77	10,344.43	-8,090.58	-405.53	469,068.35	731,291.63	32.288047	-103.718630
18,801.00	90.20	179.72	10,344.51	-8,185.58	-405.11	468,973.35	731,292.05	32.287785	-103.718631
18,896.00	90.74	180.46	10,343.74	-8,280.58	-405.26	468,878.36	731,291.91	32.287524	-103.718633
18,991.00	90.84	179.94	10,342.43	-8,375.57	-405.59	468,783.38	731,291.57	32.287263	-103.718636
19,087.00	90.77	180.71	10,341.08	-8,471.56	-406.14	468,687.39	731,291.03	32.286999	-103.718639
19,182.00	90.30	180.05	10,340.19	-8,566.55	-406.77	468,592.41	731,290.40	32.286738	-103.718643
19,277.00	90.27	180.13	10,339.72	-8,661.55	-406.92	468,497.41	731,290.25	32.286477	-103.718645
19,372.00	90.10	180.24	10,339.41	-8,756.55	-407.22	468,402.42	731,289.94	32.286216	-103.718648
19,466.00	89.77	180.53	10,339.52	-8,850.54	-407.85	468,308.42	731,289.31	32.285958	-103.718652
19,561.00	89.63	180.25	10,340.01	-8,945.54	-408.50	468,213.43	731,288.67	32.285697	-103.718656
19,656.00	89.77	178.39	10,340.51	-9,040.53	-407.37	468,118.45	731,289.79	32.285436	-103.718654
19,751.00	89.77	178.00	10,340.89	-9,135.48	-404.38	468,023.50	731,292.78	32.285175	-103.718646
19,846.00	89.63	178.00	10,341.39	-9,230.42	-401.07	467,928.57	731,296.10	32.284914	-103.718637
19,940.00	90.03	178.20	10,341.67	-9,324.37	-397.95	467,834.62	731,299.22	32.284655	-103.718629
20,035.00	89.46	178.21	10,342.09	-9,419.32	-394.97	467,739.68	731,302.19	32.284394	-103.718621
20,130.00	89.77	178.00	10,342.73	-9,514.27	-391.83	467,644.73	731,305.33	32.284133	-103.718612
20,225.00	89.93	178.14	10,342.98	-9,609.21	-388.63	467,549.79	731,308.53	32.283872	-103.718604
20,320.00	89.83	178.32	10,343.18	-9,704.17	-385.70	467,454.84	731,311.47	32.283611	-103.718596
20,415.00	90.40	178.88	10,342.99	-9,799.14	-383.38	467,359.88	731,313.79	32.283350	-103.718590
20,483.00	90.37	179.35	10,342.53	-9,867.13	-382.33	467,291.89	731,314.84	32.283163	-103.718588
Last Svy 20483 MD									
20,550.00	90.37	179.35	10,342.10	-9,934.12	-381.57	467,224.90	731,315.60	32.282979	-103.718587
BH: 102.3 FSL 1353.15 FWL - 20550 MD 9982.7 TVD - PTB 20550 MD									



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well 211H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Site:	Purrito 18-19 Fed Com	MD Reference:	Cactus 167 3555 GL 24 KB @ 3579.00usft
Well:	211H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,033.30	9,982.65	418.08	-514.63	Cross 100 FNL
10,033.30	9,982.65	418.08	-514.63	10033.3 MD 9982.6 TVD
20,483.00	10,342.53	-9,867.13	-382.33	Last Svy 20483 MD
20,550.00	10,342.10	-9,934.12	-381.57	BH: 102.3 FSL 1353.15 FWL
20,550.00	10,342.10	-9,934.12	-381.57	20550 MD 9982.7 TVD
20,550.00	10,342.10	-9,934.12	-381.57	PTB 20550 MD

Checked By: _____ Approved By: _____ Date: _____

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 18234

CONDITIONS OF APPROVAL

Operator: DEVON ENERGY PRODUCTION COMPAN			333 West Sheridan Ave.	Oklahoma City, OK73102	OGRID: 6137	Action Number: 18234	Action Type: C-104C
OCD Reviewer					Condition		
plmartinez					None		