



May 30, 2018

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DISTRICT II-ARTESIA O.C.D.

Devon Energy Production Company, LP
Well: Tomb Raider 1-12 Fed Com 528H
County/Parish: Eddy County, NM

LEAM MWD: (OH) from 0' MD – 18,844' MD
Projection; 18,902' MD

This Borehole Survey taken between 04/17/18 and 05/26/18 had been conducted and calculated according to the highest professional standards and complies with all known State and Federal requirements.

Reviewed and Approved:

Date: May 30, 2018

Physical & Mailing: 2010 East Davis, Conroe, TX 77301
(936) 756-7577 • www.learm.net • 1 (800) 756-7504



Survey Certification Form

State of New Mexico
Eddy County

I, Randy W. Rakowitz, certify that; I am employed by LEAM Drilling Services, that I did on the day(s) of 04/17/2018 through 05/26/2018, conduct or supervise the taking of MWD Survey from a depth of 0' MD to 18,902' MD; that the data is true, correct, complete and within the limitations of the tools as set forth by LEAM Drilling Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Devon Energy Production Company, LP for the Tomb Raider 1-12 Fed Com 528H in Eddy County, New Mexico; and that I reviewed this report and find that it conforms to the principals and procedures as set forth by LEAM Drilling Services.

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

Randy W. Rakowitz
MWD Operations Coordinator

LEAM Drilling Services

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Tomb Raider 1-12 Fed Com 528H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Site:	Tomb Raider 1-12 Fed Com	MD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Well:	Tomb Raider 1-12 Fed Com 528H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

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

Site	Tomb Raider 1-12 Fed Com		
Site Position:		Northing:	487,854.70 usft
From:	Map	Easting:	728,777.94 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 20' 23.0068 N
		Longitude:	103° 43' 35.1116 W
		Grid Convergence:	0.32 °

Well	Tomb Raider 1-12 Fed Com 528H		
Well Position	+N-S	0.00 usft	Northing: 487,855.16 usft
	+E-W	0.00 usft	Easting: 728,868.04 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 20' 23.0063 N
		Longitude:	103° 43' 34.0614 W
		Ground Level:	3,479.90 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	HDGM	6/28/2017	7.02
			Dip Angle
			60.15
			Field Strength
			48,218

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			179.68

Survey Program	Date 5/30/2018		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
138.00	9,474.00	Survey #1 (OH)	LEAM MWD+HDGM
9,513.00	18,844.00	Survey #2 (OH)	LEAM MWD+HDGM
18,902.00	18,902.00	Survey #3 (OH)	Project
			Description
			MWD+HDGM
			MWD+HDGM
			Projection

Survey									
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138.00	0.80	92.20	138.00	-0.04	0.96	0.04	0.58	0.58	0.00
239.00	0.80	89.10	238.99	-0.05	2.37	0.07	0.04	0.00	-3.07
324.00	0.90	89.20	323.98	-0.03	3.63	0.05	0.12	0.12	0.12
416.00	0.70	92.60	415.97	-0.05	4.92	0.08	0.22	-0.22	3.70
507.00	0.70	81.50	506.96	0.01	6.02	0.03	0.15	0.00	-12.20
598.00	0.60	88.00	597.95	0.11	7.05	-0.07	0.14	-0.11	7.14
683.00	0.60	84.70	682.95	0.16	7.94	-0.12	0.04	0.00	-3.88
788.00	0.70	92.10	787.94	0.19	9.12	-0.14	0.12	0.10	7.05

LEAM Drilling Services

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Site:	Tomb Raider 1-12 Fed Com	MD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Well:	Tomb Raider 1-12 Fed Com 528H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
878.00	0.50	105.10	877.94	0.07	10.05	-0.01	0.27	-0.22	14.44
.969.00	0.40	93.00	968.94	-0.05	10.75	0.11	0.15	-0.11	-13.30
1.060.00	0.40	75.80	1,059.93	0.01	11.38	0.05	0.13	0.00	-18.90
1.152.00	0.40	107.80	1,151.93	-0.01	12.00	0.08	0.24	0.00	34.78
1.242.00	0.40	90.50	1,241.93	-0.11	12.61	0.18	0.13	0.00	-19.22
1.334.00	0.30	127.30	1,333.93	-0.26	13.12	0.33	0.26	-0.11	40.00
1.426.00	0.20	55.40	1,425.93	-0.31	13.45	0.39	0.33	-0.11	-78.15
1.517.00	0.20	76.10	1,516.93	-0.18	13.73	0.26	0.08	0.00	22.75
1.608.00	0.20	16.00	1,607.93	0.01	13.93	0.07	0.22	0.00	-66.04
1.699.00	0.20	80.00	1,698.93	0.19	14.13	-0.11	0.23	0.00	70.33
1.795.00	0.20	47.10	1,794.92	0.33	14.42	-0.25	0.12	0.00	-34.27
1.890.00	0.20	321.00	1,889.92	0.57	14.43	-0.49	0.29	0.00	-90.63
1.985.00	0.10	191.80	1,984.92	0.62	14.31	-0.54	0.29	-0.11	-136.00
2.080.00	0.60	84.40	2,079.92	0.59	14.79	-0.50	0.67	0.53	-113.05
2.175.00	1.40	91.60	2,174.91	0.60	16.45	-0.51	0.85	0.84	7.58
2.270.00	2.00	89.10	2,269.87	0.60	19.26	-0.49	0.64	0.63	-2.63
2.365.00	2.80	97.40	2,364.78	0.32	23.22	-0.19	0.92	0.84	8.74
2.460.00	3.60	93.20	2,459.63	-0.14	28.50	0.30	0.88	0.84	-4.42
2.555.00	4.30	89.30	2,554.41	-0.26	35.04	0.46	0.79	0.74	-4.11
2.650.00	5.10	88.30	2,649.09	-0.10	42.82	0.34	0.85	0.84	-1.05
2.745.00	6.00	87.50	2,743.64	0.25	52.00	0.04	0.95	0.95	-0.84
2.840.00	5.90	86.10	2,838.13	0.79	61.83	-0.45	0.19	-0.11	-1.47
2.935.00	5.30	87.90	2,932.67	1.29	71.09	-0.89	0.66	-0.63	1.89
3.030.00	6.00	86.80	3,027.21	1.73	80.43	-1.28	0.75	0.74	-1.16
3.126.00	5.80	87.00	3,122.70	2.26	90.29	-1.75	0.21	-0.21	0.21
3.221.00	6.20	87.90	3,217.18	2.70	100.21	-2.14	0.43	0.42	0.95
3.316.00	6.10	89.50	3,311.64	2.93	110.38	-2.31	0.21	-0.11	1.68
3.411.00	6.40	90.70	3,406.07	2.91	120.72	-2.24	0.34	0.32	1.26
3.506.00	5.90	90.50	3,500.52	2.80	130.90	-2.07	0.53	-0.53	-0.21
3.602.00	5.50	89.30	3,596.05	2.82	140.43	-2.03	0.43	-0.42	-1.25
3.697.00	6.20	91.90	3,690.55	2.70	150.11	-1.86	0.79	0.74	2.74
3.793.00	6.90	96.50	3,785.93	1.88	161.02	-0.98	0.91	0.73	4.79
3.888.00	6.70	97.40	3,880.26	0.52	172.19	0.45	0.24	-0.21	0.95
3.983.00	6.30	98.80	3,974.65	-0.99	182.84	2.02	0.45	-0.42	1.47
4.078.00	6.00	98.40	4,069.10	-2.52	192.90	3.59	0.32	-0.32	-0.42
4.173.00	6.10	93.40	4,163.57	-3.54	202.85	4.67	0.56	0.11	-5.26
4.269.00	6.20	90.00	4,259.02	-3.84	213.13	5.03	0.39	0.10	-3.54
4.364.00	5.90	90.70	4,353.49	-3.90	223.14	5.15	0.33	-0.32	0.74
4.460.00	5.50	90.50	4,449.02	-4.00	232.67	5.30	0.42	-0.42	-0.21
4.555.00	5.40	90.00	4,543.59	-4.04	241.69	5.39	0.12	-0.11	-0.53
4.650.00	5.90	89.30	4,638.13	-3.98	251.05	5.39	0.53	0.53	-0.74
4.746.00	6.50	89.70	4,733.56	-3.90	261.41	5.36	0.63	0.63	0.42
4.842.00	6.20	89.70	4,828.98	-3.84	272.03	5.36	0.31	-0.31	0.00

LEAM Drilling Services

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

Survey									
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4,937.00	5.50	90.20	4,923.48	-3.83	281.71	5.40	0.74	-0.74	0.53
5,033.00	6.00	86.30	5,019.00	-3.52	291.32	5.15	0.66	0.52	-4.06
5,129.00	6.80	86.50	5,114.40	-2.85	302.00	4.54	0.83	0.83	0.21
5,224.00	6.80	87.70	5,208.73	-2.28	313.24	4.03	0.15	0.00	1.26
5,320.00	6.50	86.70	5,304.08	-1.74	324.34	3.55	0.33	-0.31	-1.04
5,415.00	6.20	86.50	5,398.50	-1.12	334.83	2.99	0.32	-0.32	-0.21
5,511.00	6.20	93.90	5,493.94	-1.15	345.17	3.08	0.83	0.00	7.71
5,606.00	6.00	95.50	5,588.40	-1.98	355.23	3.96	0.28	-0.21	1.68
5,701.00	5.90	91.60	5,682.89	-2.59	365.06	4.63	0.44	-0.11	-4.11
5,796.00	5.80	92.10	5,777.40	-2.90	374.74	5.00	0.12	-0.11	0.53
5,892.00	5.70	92.60	5,872.91	-3.30	384.34	5.44	0.12	-0.10	0.52
5,950.00	5.60	92.80	5,930.63	-3.57	390.05	5.74	0.18	-0.17	0.34
6,086.00	5.30	93.00	6,066.02	-4.22	402.95	6.47	0.22	-0.22	0.15
6,182.00	5.50	86.00	6,161.59	-4.13	411.97	6.43	0.72	0.21	-7.29
6,277.00	6.10	84.70	6,256.11	-3.35	421.53	5.70	0.65	0.63	-1.37
6,373.00	6.30	91.20	6,351.54	-2.99	431.88	5.40	0.76	0.21	6.77
6,469.00	6.50	94.40	6,446.95	-3.51	442.56	5.98	0.43	0.21	3.33
6,564.00	6.20	91.40	6,541.36	-4.05	453.05	6.58	0.47	-0.32	-3.16
6,659.00	5.90	90.90	6,635.84	-4.25	463.06	6.84	0.32	-0.32	-0.53
6,755.00	5.40	92.10	6,731.37	-4.50	472.51	7.13	0.54	-0.52	1.25
6,851.00	5.60	86.50	6,826.93	-4.38	481.70	7.07	0.60	0.21	-5.83
6,946.00	6.90	86.30	6,921.36	-3.72	492.02	6.47	1.37	1.37	-0.21
7,041.00	7.00	89.50	7,015.66	-3.31	503.51	6.12	0.42	0.11	3.37
7,137.00	6.20	89.70	7,111.03	-3.23	514.54	6.10	0.83	-0.83	0.21
7,232.00	5.60	91.80	7,205.52	-3.35	524.30	6.27	0.67	-0.63	2.21
7,328.00	4.80	92.60	7,301.13	-3.68	533.00	6.65	0.84	-0.83	0.83
7,424.00	4.90	87.00	7,396.78	-3.64	541.10	6.67	0.50	0.10	-5.83
7,519.00	4.80	86.30	7,491.44	-3.17	549.12	6.24	0.12	-0.11	-0.74
7,614.00	4.70	91.20	7,586.12	-3.00	556.98	6.11	0.44	-0.11	5.16
7,709.00	4.30	93.50	7,680.82	-3.30	564.42	6.45	0.46	-0.42	2.42
7,804.00	3.40	96.50	7,775.61	-3.83	570.78	7.02	0.97	-0.95	3.16
7,899.00	2.80	96.90	7,870.47	-4.43	575.88	7.65	0.63	-0.63	0.42
7,994.00	2.10	95.80	7,965.38	-4.89	579.92	8.13	0.74	-0.74	-1.16
8,090.00	1.50	86.80	8,061.33	-4.99	582.92	8.25	0.69	-0.63	-9.38
8,186.00	0.60	115.10	8,157.32	-5.14	584.63	8.40	1.05	-0.94	29.48
8,281.00	0.50	171.70	8,252.31	-5.76	585.14	9.03	0.56	-0.11	59.58
8,377.00	0.70	180.40	8,348.31	-6.76	585.20	10.03	0.23	0.21	9.06
8,472.00	0.90	199.90	8,443.30	-8.04	584.94	11.31	0.35	0.21	20.53
8,511.00	0.70	211.10	8,482.30	-8.53	584.71	11.80	0.65	-0.51	28.72
8,569.00	1.30	208.70	8,540.29	-9.41	584.21	12.68	1.04	1.03	-4.14
8,664.00	12.80	187.70	8,634.42	-20.83	582.28	24.08	12.21	12.11	-22.11
8,712.00	19.30	186.50	8,680.52	-33.99	580.67	37.23	13.56	13.54	-2.50
8,760.00	24.00	187.00	8,725.12	-51.57	578.58	54.80	9.80	9.79	1.04

LEAM Drilling Services

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Tomb Raider 1-12 Fed Com 528H
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Survey										
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8,808.00	28.80	186.70	8,768.10	-72.76	576.04	75.97	10.00	10.00	-0.63	
8,855.00	32.80	185.50	8,808.51	-96.61	573.50	99.81	8.19	8.09	-2.55	
8,903.00	36.80	184.40	8,847.96	-123.83	571.16	127.02	8.85	8.75	-2.29	
8,951.00	40.70	182.80	8,885.39	-153.81	569.29	156.98	8.39	8.13	-3.33	
8,999.00	45.00	181.20	8,920.57	-186.42	568.17	189.59	9.24	8.96	-3.33	
9,046.00	49.40	179.50	8,952.50	-220.90	567.98	224.07	9.73	9.36	-3.62	
9,094.00	51.50	178.60	8,983.06	-257.90	568.60	261.07	4.61	4.38	-1.88	
9,141.00	54.80	178.60	9,011.25	-295.49	569.51	298.67	7.02	7.02	0.00	
9,189.00	59.00	179.70	9,037.46	-335.69	570.10	338.87	8.96	8.75	2.29	
9,236.00	63.40	180.50	9,060.09	-376.87	570.02	380.04	9.48	9.36	1.70	
9,284.00	66.30	180.90	9,080.49	-420.31	569.49	423.48	6.09	6.04	0.83	
9,331.00	70.80	180.20	9,097.67	-464.04	569.08	467.21	9.67	9.57	-1.49	
9,378.00	75.20	180.20	9,111.41	-508.97	568.92	512.14	9.36	9.36	0.00	
9,426.00	79.20	179.50	9,122.04	-555.77	569.04	558.94	8.45	8.33	-1.46	
9,474.00	83.20	177.90	9,129.39	-603.18	570.12	606.36	8.96	8.33	-3.33	
9,513.00	87.00	177.50	9,132.72	-642.00	571.68	645.18	9.80	9.74	-1.03	
9,609.00	92.10	177.40	9,133.47	-737.87	575.95	741.08	5.31	5.31	-0.10	
9,704.00	92.20	177.40	9,129.91	-832.71	580.26	835.93	0.11	0.11	0.00	
9,799.00	92.70	179.70	9,125.84	-927.58	582.66	930.82	2.48	0.53	2.42	
9,895.00	93.30	180.50	9,120.82	-1,023.45	582.49	1,026.69	1.04	0.63	0.83	
9,990.00	92.50	179.80	9,116.01	-1,118.33	582.25	1,121.56	1.12	-0.84	-0.74	
10,086.00	91.30	180.20	9,112.83	-1,214.27	582.25	1,217.50	1.32	-1.25	0.42	
10,181.00	90.10	180.50	9,111.67	-1,309.26	581.66	1,312.49	1.30	-1.26	0.32	
10,276.00	89.90	180.90	9,111.67	-1,404.25	580.50	1,407.47	0.47	-0.21	0.42	
10,372.00	89.40	181.10	9,112.26	-1,500.24	578.83	1,503.45	0.56	-0.52	0.21	
10,463.00	89.10	180.00	9,113.45	-1,591.22	577.96	1,594.43	1.25	-0.33	-1.21	
10,554.00	88.90	180.50	9,115.04	-1,682.21	577.56	1,685.41	0.59	-0.22	0.55	
10,646.00	90.00	179.70	9,115.92	-1,774.20	577.40	1,777.40	1.48	1.20	-0.87	
10,737.00	91.20	179.80	9,114.97	-1,865.19	577.80	1,868.39	1.32	1.32	0.11	
10,828.00	90.00	179.00	9,114.01	-1,956.18	578.75	1,959.38	1.58	-1.32	-0.88	
10,919.00	90.00	178.80	9,114.01	-2,047.16	580.49	2,050.37	0.22	0.00	-0.22	
11,009.00	89.50	178.60	9,114.41	-2,137.14	582.54	2,140.36	0.60	-0.56	-0.22	
11,101.00	88.50	178.80	9,116.01	-2,229.10	584.62	2,232.33	1.11	-1.09	0.22	
11,192.00	89.20	178.60	9,117.84	-2,320.06	586.69	2,323.30	0.80	0.77	-0.22	
11,283.00	88.70	178.40	9,119.51	-2,411.01	589.07	2,414.26	0.59	-0.55	-0.22	
11,374.00	87.60	178.40	9,122.44	-2,501.93	591.61	2,505.19	1.21	-1.21	0.00	
11,466.00	88.10	177.90	9,125.90	-2,593.81	594.58	2,597.09	0.77	0.54	-0.54	
11,557.00	88.40	179.10	9,128.67	-2,684.74	596.96	2,688.03	1.36	0.33	1.32	
11,649.00	89.60	179.50	9,130.28	-2,776.72	598.08	2,780.01	1.37	1.30	0.43	
11,740.00	90.70	180.20	9,130.04	-2,867.71	598.32	2,871.01	1.43	1.21	0.77	
11,836.00	91.00	180.20	9,128.62	-2,963.70	597.98	2,967.00	0.31	0.31	0.00	
11,931.00	91.30	179.70	9,126.71	-3,058.68	598.07	3,061.98	0.61	0.32	-0.53	
12,027.00	91.00	180.70	9,124.78	-3,154.66	597.73	3,157.95	1.09	-0.31	1.04	
12,123.00	91.30	180.70	9,122.86	-3,250.63	596.56	3,253.92	0.31	0.31	0.00	

LEAM Drilling Services

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Tomb Raider 1-12 Fed Com 528H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Site:	Tomb Raider 1-12 Fed Com	MD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Well:	Tomb Raider 1-12 Fed Com 528H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,218.00	89.90	179.50	9,121.86	-3,345.63	596.39	3,348.90	1.94	-1.47	-1.26	
12,313.00	89.90	179.50	9,122.03	-3,440.62	597.22	3,443.90	0.00	0.00	0.00	
12,409.00	89.50	179.50	9,122.53	-3,536.62	598.06	3,539.90	0.42	-0.42	0.00	
12,504.00	89.90	179.30	9,123.03	-3,631.61	599.06	3,634.90	0.47	0.42	-0.21	
12,599.00	89.80	179.50	9,123.28	-3,726.60	600.05	3,729.90	0.24	-0.11	0.21	
12,695.00	88.80	179.70	9,124.45	-3,822.59	600.72	3,825.89	1.06	-1.04	0.21	
12,790.00	89.30	180.20	9,126.02	-3,917.58	600.80	3,920.87	0.74	0.53	0.53	
12,885.00	89.60	180.40	9,126.94	-4,012.57	600.31	4,015.86	0.38	0.32	0.21	
12,980.00	89.90	180.50	9,127.35	-4,107.57	599.56	4,110.85	0.33	0.32	0.11	
13,075.00	90.60	179.50	9,126.94	-4,202.57	599.56	4,205.85	1.28	0.74	-1.05	
13,170.00	90.80	179.80	9,125.78	-4,297.56	600.14	4,300.84	0.38	0.21	0.32	
13,266.00	90.70	179.80	9,124.52	-4,393.55	600.48	4,396.83	0.10	-0.10	0.00	
13,361.00	90.30	179.50	9,123.69	-4,488.54	601.06	4,491.83	0.53	-0.42	-0.32	
13,457.00	89.50	179.70	9,123.86	-4,584.54	601.73	4,587.83	0.86	-0.83	0.21	
13,552.00	89.00	180.20	9,125.10	-4,679.53	601.81	4,682.82	0.74	-0.53	0.53	
13,648.00	89.50	180.00	9,126.36	-4,775.52	601.64	4,778.81	0.56	0.52	-0.21	
13,743.00	90.40	179.10	9,126.44	-4,870.52	602.39	4,873.81	1.34	0.95	-0.95	
13,838.00	91.00	179.30	9,125.28	-4,965.50	603.71	4,968.80	0.67	0.63	0.21	
13,934.00	90.90	179.30	9,123.69	-5,061.48	604.89	5,064.78	0.10	-0.10	0.00	
14,030.00	89.90	179.80	9,123.02	-5,157.47	605.64	5,160.78	1.16	-1.04	0.52	
14,125.00	89.20	180.50	9,123.76	-5,252.47	605.39	5,255.77	1.04	-0.74	0.74	
14,221.00	89.80	180.20	9,124.60	-5,348.46	604.81	5,351.76	0.70	0.63	-0.31	
14,316.00	89.80	180.50	9,124.93	-5,443.46	604.23	5,446.75	0.32	0.00	0.32	
14,412.00	88.80	179.80	9,126.11	-5,539.45	603.97	5,542.74	1.27	-1.04	-0.73	
14,507.00	89.30	180.20	9,127.68	-5,634.44	603.97	5,637.72	0.67	0.53	0.42	
14,602.00	89.90	180.50	9,128.35	-5,729.43	603.39	5,732.71	0.71	0.63	0.32	
14,697.00	89.00	179.30	9,129.26	-5,824.43	603.56	5,827.71	1.58	-0.95	-1.26	
14,793.00	89.10	180.40	9,130.85	-5,920.41	603.81	5,923.69	1.15	0.10	1.15	
14,887.00	89.30	178.40	9,132.16	-6,014.39	604.79	6,017.68	2.14	0.21	-2.13	
14,982.00	90.20	178.80	9,132.58	-6,109.36	607.12	6,112.66	1.04	0.95	0.42	
15,078.00	90.60	179.30	9,131.91	-6,205.35	608.71	6,208.65	0.67	0.42	0.52	
15,173.00	89.30	179.30	9,131.99	-6,300.34	609.87	6,303.64	1.37	-1.37	0.00	
15,268.00	90.10	179.50	9,132.49	-6,395.33	610.86	6,398.64	0.87	0.84	0.21	
15,363.00	88.00	178.40	9,134.06	-6,490.29	612.60	6,493.61	2.50	-2.21	-1.16	
15,458.00	88.00	178.30	9,137.38	-6,585.20	615.34	6,588.53	0.11	0.00	-0.11	
15,553.00	89.90	179.30	9,139.12	-6,680.15	617.33	6,683.50	2.26	2.00	1.05	
15,648.00	90.10	178.60	9,139.12	-6,775.14	619.07	6,778.49	0.77	0.21	-0.74	
15,744.00	91.00	179.30	9,138.20	-6,871.12	620.83	6,874.48	1.19	0.94	0.73	
15,839.00	89.10	179.10	9,138.11	-6,966.10	622.15	6,969.47	2.01	-2.00	-0.21	
15,934.00	89.10	178.80	9,139.61	-7,061.07	623.89	7,064.45	0.32	0.00	-0.32	
16,030.00	91.20	180.00	9,139.35	-7,157.06	624.90	7,160.44	2.52	2.19	1.25	
16,125.00	92.00	179.80	9,136.70	-7,252.02	625.06	7,255.40	0.87	0.84	-0.21	
16,221.00	90.00	181.20	9,135.03	-7,348.00	624.23	7,351.37	2.54	-2.08	1.46	

LEAM Drilling Services

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Tomb Raider 1-12 Fed Com 528H
Project:	Eddy County, NM (NAD-83)	TVD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Site:	Tomb Raider 1-12 Fed Com	MD Reference:	3479.9' GE + 23.5' KB @ 3503.40usft
Well:	Tomb Raider 1-12 Fed Com 528H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,316.00	88.20	180.40	9,136.52	-7,442.97	622.90	7,446.33	2.07	-1.89	-0.84
16,412.00	88.40	180.50	9,139.37	-7,538.93	622.15	7,542.28	0.23	0.21	0.10
16,507.00	88.50	180.20	9,141.94	-7,633.89	621.57	7,637.24	0.33	0.11	-0.32
16,602.00	90.30	180.40	9,142.93	-7,728.88	621.07	7,732.23	1.91	1.89	0.21
16,697.00	90.90	180.20	9,141.94	-7,823.87	620.57	7,827.22	0.67	0.63	-0.21
16,792.00	91.90	179.80	9,139.61	-7,918.84	620.57	7,922.19	1.13	1.05	-0.42
16,888.00	90.90	179.10	9,137.27	-8,014.81	621.49	8,018.15	1.27	-1.04	-0.73
16,984.00	90.00	179.50	9,136.52	-8,110.80	622.66	8,114.15	1.03	-0.94	0.42
17,079.00	89.10	180.00	9,137.26	-8,205.79	623.08	8,209.14	1.08	-0.95	0.53
17,174.00	89.70	179.10	9,138.26	-8,300.78	623.83	8,304.14	1.14	0.63	-0.95
17,270.00	89.20	179.70	9,139.18	-8,396.77	624.83	8,400.13	0.81	-0.52	0.63
17,364.00	87.70	180.20	9,141.72	-8,490.73	624.91	8,494.09	1.68	-1.60	0.53
17,459.00	89.10	179.80	9,144.37	-8,585.69	624.91	8,589.05	1.53	1.47	-0.42
17,555.00	89.70	180.00	9,145.38	-8,681.69	625.08	8,685.04	0.66	0.63	0.21
17,650.00	88.60	180.70	9,146.79	-8,776.67	624.50	8,780.03	1.37	-1.16	0.74
17,746.00	88.10	180.20	9,149.55	-8,872.63	623.75	8,875.98	0.74	-0.52	-0.52
17,841.00	89.20	180.20	9,151.79	-8,967.60	623.41	8,970.94	1.16	1.16	0.00
17,937.00	87.90	180.40	9,154.22	-9,063.57	622.91	9,066.91	1.37	-1.35	0.21
18,032.00	87.80	180.20	9,157.78	-9,158.50	622.42	9,161.83	0.24	-0.11	-0.21
18,128.00	90.40	180.20	9,159.29	-9,254.48	622.08	9,257.81	2.71	2.71	0.00
18,223.00	90.50	180.20	9,158.54	-9,349.48	621.75	9,352.80	0.11	0.11	0.00
18,319.00	90.50	180.20	9,157.71	-9,445.47	621.41	9,448.79	0.00	0.00	0.00
18,413.00	91.00	178.60	9,156.48	-9,539.46	622.40	9,542.78	1.78	0.53	-1.70
18,508.00	91.00	178.80	9,154.82	-9,634.42	624.55	9,637.75	0.21	0.00	0.21
18,603.00	92.60	179.00	9,151.83	-9,729.35	626.38	9,732.70	1.70	1.68	0.21
18,698.00	92.60	181.60	9,147.52	-9,824.24	625.88	9,827.58	2.73	0.00	2.74
18,793.00	88.70	181.80	9,146.45	-9,919.18	623.06	9,922.50	4.11	-4.11	0.21
18,844.00	85.20	180.90	9,149.16	-9,970.08	621.86	9,973.40	7.09	-6.86	-1.76
18,902.00	85.20	180.90	9,154.01	-10,027.87	620.95	10,031.18	0.00	0.00	0.00
Projection									

CONFIDENTIAL

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

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised August 1, 2011

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

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-44810
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☐
2. Name of Operator Devon Energy Production Company, L.P.		6. State Oil & Gas Lease No.
3. Address of Operator 333 West Sheridan, Oklahoma City, OK 73102		7. Lease Name or Unit Agreement Name TOMB RAIDER 1-12 FED
4. Well Location Unit Letter 1 (lot) 360 feet from the North line and 980 feet from the East line Section 1 Township 23S Range 31E NMPM County EDDY		8. Well Number 528H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL: 3479.9		9. OGRID Number 6137
		10. Pool name or Wildcat LIVINGSTON RIDGE; BONESPRING

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

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ DOWNHOLE COMMINGLE ☐		SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐	
OTHER: ☐		OTHER: Completion ☒	

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

9/21/2019-11/23-2018: MIRU WL & PT. TIH & ran CBL, TOC @ 1831' TIH w/pump through frac plug and guns. Perf Bonespring, 9331'-18753', total 1136 holes. Frac'd 9331-18753' in 38 stages. Frac totals: 14,125,239 # prop, 222,100 gal fluid, 8,148 gal acid ND frac, MIRU PU, NU BOP, DO plugs & CO to Plug Back: 18,799 MD'. CHC, FWB, ND BOP. RIH w/262 jts 2-7/8" L-80 tbg, set @ 8741' MD.

RECEIVED

APR 18 2019

DISTRICT II-ARTESIA O.C.D.

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

SIGNATURE Jenny Harms TITLE Regulatory Analyst DATE 3/26/2019

Type or print name Jenny Harms E-mail address: Jenny.Harms@devn.com PHONE: 405-552-6560

For State Use Only

APPROVED BY: Karen Sharp TITLE Staff Mgr DATE 4-17-19
 Conditions of Approval (if any):

Accepted for Record: Federal well

Devon - Internal