



Devon Energy

**Lea Co., NM (Nad83 - East Zone)
Bell Lake 18-19 State Com
#10H**

OH

Design: OH

Standard Survey Report

10 September, 2019

**HOBBS OCD
SEP 25 2019
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Wellbenders Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #10H
Project:	Lea Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3569.90usft (Cactus 108)
Site:	Bell Lake 18-19 State Com	MD Reference:	RKB=30' @ 3569.90usft (Cactus 108)
Well:	#10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Project	Lea Co., NM (Nad83 - East Zone)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Bell Lake 18-19 State Com		
Site Position:		Northing:	436,249.73 usft
From:	Map	Easting:	766,169.93 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	32.197239
		Longitude:	-103.606488
		Grid Convergence:	0.387 °

Well	#10H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32.197239
		Longitude:	-103.606585
		Ground Level:	3,539.90 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	User Defined	2/18/2019	6.790
			Dip Angle (°)
			59.900
			Field Strength (nT)
			47,907.00000000

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			359.56

Survey Program	Date 9/10/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
167.00	19,490.00	Survey #1 (OH)	MWD+IFR1+MS
			Description
			OWSG MWD + IFR1 + Multi-Station Correction

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Bulld Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
167.00	0.36	238.98	167.00	-0.27	-0.45	-0.27	0.22	0.22	0.00	
259.00	0.67	187.09	259.00	-0.95	-0.76	-0.95	0.58	0.34	-56.40	
360.00	0.23	213.97	359.99	-1.71	-0.95	-1.70	0.47	-0.44	26.61	
453.00	0.67	197.10	452.99	-2.38	-1.21	-2.37	0.49	0.47	-18.14	
545.00	0.53	221.51	544.98	-3.21	-1.65	-3.20	0.31	-0.15	26.53	
729.00	0.60	266.50	728.98	-3.91	-3.18	-3.89	0.24	0.04	24.45	
822.00	0.59	263.80	821.97	-3.99	-4.14	-3.96	0.03	-0.01	-2.90	
914.00	0.27	318.11	913.97	-3.88	-4.76	-3.85	0.53	-0.35	59.03	
1,006.00	0.63	280.55	1,005.97	-3.63	-5.40	-3.59	0.49	0.39	-40.83	



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,099.00	0.67	282.07	1,098.96	-3.42	-6.43	-3.37	0.05	0.04	1.63
1,138.00	0.82	321.20	1,137.96	-3.16	-6.83	-3.10	1.33	0.38	100.33
1,345.00	0.82	320.34	1,344.94	-0.86	-8.71	-0.79	0.01	0.00	-0.42
1,438.00	0.75	312.02	1,437.93	0.06	-9.58	0.13	0.14	-0.08	-8.95
1,531.00	0.40	330.18	1,530.92	0.75	-10.20	0.83	0.42	-0.38	19.53
1,623.00	0.48	310.33	1,622.92	1.28	-10.65	1.36	0.19	0.09	-21.58
1,716.00	0.90	328.79	1,715.91	2.15	-11.32	2.24	0.51	0.45	19.85
1,810.00	2.37	302.75	1,809.87	3.84	-13.34	3.94	1.71	1.56	-27.70
1,904.00	3.69	283.53	1,903.74	5.60	-17.92	5.73	1.75	1.40	-20.45
1,999.00	4.44	256.18	1,998.51	5.43	-24.46	5.62	2.16	0.79	-28.79
2,093.00	6.28	247.87	2,092.10	2.63	-32.76	2.88	2.12	1.96	-8.84
2,188.00	7.84	250.79	2,186.37	-1.46	-43.69	-1.13	1.68	1.64	3.07
2,283.00	9.52	252.51	2,280.28	-5.96	-57.30	-5.52	1.79	1.77	1.81
2,377.00	9.85	253.59	2,372.94	-10.56	-72.43	-10.01	0.40	0.35	1.15
2,472.00	9.81	252.84	2,466.55	-15.25	-87.96	-14.57	0.14	-0.04	-0.79
2,567.00	9.74	250.77	2,560.17	-20.28	-103.28	-19.49	0.38	-0.07	-2.18
2,661.00	9.59	251.50	2,652.84	-25.39	-118.21	-24.48	0.21	-0.16	0.78
2,756.00	9.59	253.79	2,746.51	-30.11	-133.31	-29.08	0.40	0.00	2.41
2,851.00	9.78	253.56	2,840.15	-34.60	-148.65	-33.46	0.20	0.20	-0.24
2,945.00	9.97	253.75	2,932.76	-39.14	-164.12	-37.87	0.21	0.20	0.20
3,040.00	10.06	254.30	3,026.31	-43.68	-180.00	-42.30	0.14	0.09	0.58
3,135.00	10.30	256.35	3,119.82	-47.93	-196.24	-46.42	0.46	0.25	2.16
3,229.00	10.24	257.37	3,212.31	-51.74	-212.56	-50.11	0.20	-0.06	1.09
3,324.00	10.53	257.58	3,305.76	-55.45	-229.28	-53.69	0.31	0.31	0.22
3,419.00	10.40	259.63	3,399.18	-58.87	-246.19	-56.97	0.42	-0.14	2.16
3,514.00	9.44	258.29	3,492.76	-61.99	-262.26	-59.97	1.04	-1.01	-1.41
3,608.00	8.64	259.48	3,585.59	-64.84	-276.75	-62.72	0.87	-0.85	1.27
3,703.00	8.22	260.00	3,679.56	-67.33	-290.45	-65.09	0.45	-0.44	0.55
3,798.00	9.13	255.76	3,773.47	-70.36	-304.45	-68.02	1.17	0.96	-4.46
3,893.00	11.04	251.21	3,867.00	-75.14	-320.36	-72.68	2.18	2.01	-4.79
3,987.00	10.89	250.98	3,959.29	-80.94	-337.28	-78.34	0.17	-0.16	-0.24
4,082.00	10.05	251.46	4,052.70	-86.50	-353.62	-83.78	0.89	-0.88	0.51
4,175.00	9.13	252.76	4,144.40	-91.26	-368.36	-88.43	1.02	-0.99	1.40
4,271.00	7.98	252.60	4,239.33	-95.51	-382.00	-92.58	1.20	-1.20	-0.17
4,366.00	8.18	253.06	4,333.39	-99.46	-394.75	-96.42	0.22	0.21	0.48
4,461.00	9.33	248.67	4,427.28	-104.23	-408.39	-101.09	1.40	1.21	-4.62
4,555.00	9.28	250.23	4,520.05	-109.56	-422.62	-106.31	0.27	-0.05	1.66
4,650.00	9.25	247.52	4,613.81	-115.07	-436.89	-111.71	0.46	-0.03	-2.85
4,744.00	10.27	245.85	4,706.45	-121.39	-451.51	-117.92	1.13	1.09	-1.78
4,839.00	10.32	246.58	4,799.92	-128.24	-467.05	-124.64	0.15	0.05	0.77
4,933.00	9.53	247.28	4,892.51	-134.59	-481.95	-130.88	0.85	-0.84	0.74
5,028.00	8.53	247.31	4,986.33	-140.34	-495.71	-136.53	1.05	-1.05	0.03
5,212.00	7.65	248.54	5,168.50	-150.09	-519.70	-146.09	0.49	-0.48	0.67
5,307.00	10.02	254.43	5,262.37	-154.62	-533.55	-150.52	2.67	2.49	6.20



Wellbenders

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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,401.00	12.04	255.04	5,354.62	-159.35	-550.90	-155.11	2.15	2.15	0.65
5,495.00	12.48	254.60	5,446.48	-164.57	-570.16	-160.19	0.48	0.47	-0.47
5,590.00	13.01	252.93	5,539.14	-170.44	-590.28	-165.90	0.68	0.56	-1.76
5,684.00	12.35	252.49	5,630.85	-176.57	-609.98	-171.88	0.71	-0.70	-0.47
5,779.00	11.38	254.34	5,723.82	-182.16	-628.69	-177.32	1.10	-1.02	1.95
5,873.00	11.08	253.46	5,816.02	-187.23	-646.28	-182.26	0.37	-0.32	-0.94
5,968.00	10.68	252.76	5,909.31	-192.44	-663.44	-187.34	0.44	-0.42	-0.74
6,063.00	10.77	250.21	6,002.65	-198.05	-680.20	-192.82	0.51	0.09	-2.68
6,157.00	11.12	250.74	6,094.94	-204.02	-697.02	-198.66	0.39	0.37	0.56
6,252.00	11.21	249.51	6,188.14	-210.27	-714.32	-204.78	0.27	0.09	-1.29
6,346.00	11.16	248.54	6,280.36	-216.80	-731.35	-211.17	0.21	-0.05	-1.03
6,441.00	11.47	250.30	6,373.51	-223.34	-748.79	-217.59	0.49	0.33	1.85
6,535.00	10.90	256.01	6,465.73	-228.64	-766.22	-222.75	1.32	-0.61	6.07
6,630.00	10.55	260.67	6,559.07	-232.23	-783.52	-226.20	0.98	-0.37	4.91
6,725.00	10.64	259.96	6,652.45	-235.16	-800.73	-229.01	0.17	0.09	-0.75
6,819.00	10.59	258.03	6,744.84	-238.47	-817.73	-232.18	0.38	-0.05	-2.05
6,914.00	10.37	256.98	6,838.26	-242.21	-834.60	-235.79	0.31	-0.23	-1.11
7,008.00	10.11	255.57	6,930.76	-246.17	-850.83	-239.63	0.38	-0.28	-1.50
7,103.00	10.07	253.46	7,024.29	-250.61	-866.87	-243.95	0.39	-0.04	-2.22
7,198.00	10.20	252.41	7,117.81	-255.52	-882.85	-248.73	0.24	0.14	-1.11
7,293.00	10.07	251.26	7,211.33	-260.73	-898.73	-253.82	0.25	-0.14	-1.21
7,387.00	10.33	250.56	7,303.84	-266.17	-914.46	-259.14	0.31	0.28	-0.74
7,482.00	10.68	251.26	7,397.25	-271.83	-930.83	-264.68	0.39	0.37	0.74
7,576.00	10.37	248.19	7,489.67	-277.78	-946.93	-270.50	0.68	-0.33	-3.27
7,671.00	9.93	245.11	7,583.18	-284.40	-962.30	-277.00	0.74	-0.46	-3.24
7,765.00	8.18	250.56	7,676.01	-290.04	-975.96	-282.53	2.07	-1.86	5.80
7,860.00	7.52	253.90	7,770.12	-294.01	-988.31	-286.41	0.84	-0.69	3.52
7,955.00	7.52	253.20	7,864.30	-297.53	-1,000.23	-289.84	0.10	0.00	-0.74
8,049.00	7.25	251.35	7,957.52	-301.21	-1,011.74	-293.43	0.38	-0.29	-1.97
8,144.00	5.36	254.16	8,051.94	-304.34	-1,021.69	-296.48	2.02	-1.99	2.96
8,238.00	3.21	271.83	8,145.68	-305.45	-1,028.54	-297.54	2.66	-2.29	18.80
8,333.00	2.68	280.62	8,240.55	-304.96	-1,033.39	-297.01	0.73	-0.56	9.25
8,428.00	2.55	274.64	8,335.45	-304.38	-1,037.68	-296.40	0.32	-0.14	-6.29
8,523.00	1.14	312.70	8,430.40	-303.56	-1,040.48	-295.56	1.89	-1.48	40.06
8,617.00	1.05	2.44	8,524.39	-302.07	-1,041.13	-294.06	0.98	-0.10	52.91
8,712.00	1.01	336.78	8,619.37	-300.43	-1,041.42	-292.42	0.48	-0.04	-27.01
8,807.00	0.79	328.34	8,714.36	-299.10	-1,042.09	-291.09	0.27	-0.23	-8.88
8,838.00	1.05	332.74	8,745.36	-298.67	-1,042.34	-290.65	0.87	0.84	14.19
8,898.00	1.49	330.65	8,805.34	-297.50	-1,042.97	-289.48	0.74	0.73	-3.48
8,902.00	1.97	337.53	8,809.34	-297.39	-1,043.02	-289.37	13.00	11.94	172.10
KOP @ 8902.00' MD									
8,993.00	13.69	354.84	8,899.34	-285.18	-1,044.59	-277.15	13.00	12.88	19.02
9,087.00	22.73	349.40	8,988.55	-256.19	-1,048.94	-248.13	9.78	9.62	-5.79



Wellbenders

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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9,182.00	30.38	345.41	9,073.47	-214.84	-1,058.39	-206.70	8.26	8.05	-4.20
9,277.00	38.81	346.20	9,151.60	-162.58	-1,071.56	-154.35	8.89	8.87	0.83
9,371.00	44.06	359.33	9,222.19	-101.13	-1,078.99	-92.84	10.78	5.59	13.97
9,466.00	51.93	5.01	9,285.74	-30.71	-1,076.10	-22.44	9.39	8.28	5.98
9,561.00	66.41	3.18	9,334.30	50.44	-1,070.39	58.66	15.33	15.24	-1.93
9,655.00	74.83	1.78	9,365.46	138.95	-1,066.59	147.14	9.07	8.96	-1.49
9,700.00	78.83	1.58	9,375.71	182.74	-1,065.31	190.92	8.91	8.89	-0.45
1st Take Point @ 9700.00' MD									
9,750.00	83.28	1.36	9,383.48	232.11	-1,064.04	240.27	8.91	8.89	-0.44
9,814.00	87.91	359.90	9,388.40	295.89	-1,063.34	304.05	7.58	7.23	-2.28
9,909.00	90.63	359.28	9,389.61	390.87	-1,064.02	399.03	2.94	2.86	-0.65
10,003.00	91.67	0.80	9,387.72	484.85	-1,063.96	493.01	1.96	1.11	1.62
10,098.00	90.55	2.39	9,385.88	579.79	-1,061.31	587.92	2.05	-1.18	1.67
10,193.00	90.32	2.58	9,385.16	674.70	-1,057.19	682.80	0.31	-0.24	0.20
10,287.00	90.60	2.92	9,384.41	768.59	-1,052.68	776.65	0.47	0.30	0.36
10,381.00	91.11	0.78	9,383.00	862.52	-1,049.65	870.56	2.34	0.54	-2.28
10,473.00	91.95	0.76	9,380.55	954.48	-1,048.41	962.50	0.91	0.91	-0.02
10,565.00	91.16	359.68	9,378.05	1,046.44	-1,048.06	1,054.46	1.45	-0.86	-1.17
10,657.00	91.39	358.77	9,376.00	1,138.41	-1,049.30	1,146.44	1.02	0.25	-0.99
10,749.00	89.57	358.19	9,375.23	1,230.37	-1,051.74	1,238.41	2.08	-1.98	-0.63
10,842.00	89.15	358.60	9,376.27	1,323.33	-1,054.35	1,331.39	0.63	-0.45	0.44
10,934.00	89.45	359.32	9,377.40	1,415.31	-1,056.02	1,423.37	0.85	0.33	0.78
11,026.00	90.18	359.38	9,377.69	1,507.30	-1,057.06	1,515.37	0.80	0.79	0.07
11,119.00	90.77	359.78	9,376.92	1,600.29	-1,057.74	1,608.37	0.77	0.63	0.43
11,211.00	90.71	0.27	9,375.73	1,692.29	-1,057.70	1,700.36	0.54	-0.07	0.53
11,304.00	91.19	0.63	9,374.19	1,785.27	-1,056.97	1,793.33	0.65	0.52	0.39
11,397.00	89.93	358.97	9,373.28	1,878.26	-1,057.30	1,886.32	2.24	-1.35	-1.78
11,490.00	91.42	359.41	9,372.19	1,971.24	-1,058.61	1,979.31	1.67	1.60	0.47
11,582.00	91.47	359.53	9,369.87	2,063.21	-1,059.46	2,071.28	0.14	0.05	0.13
11,675.00	91.11	359.24	9,367.77	2,156.18	-1,060.46	2,164.26	0.50	-0.39	-0.31
11,770.00	89.40	357.31	9,367.35	2,251.13	-1,063.32	2,259.23	2.71	-1.80	-2.03
11,865.00	90.13	356.67	9,367.74	2,345.99	-1,068.31	2,354.13	1.02	0.77	-0.67
11,959.00	91.39	356.82	9,366.49	2,439.83	-1,073.65	2,448.00	1.35	1.34	0.16
12,054.00	90.38	358.40	9,365.03	2,534.73	-1,077.61	2,542.93	1.97	-1.06	1.66
12,149.00	90.91	358.49	9,363.96	2,629.69	-1,080.18	2,637.91	0.57	0.56	0.09
12,243.00	90.52	1.49	9,362.78	2,723.67	-1,080.20	2,731.89	3.22	-0.41	3.19
12,338.00	90.57	1.99	9,361.88	2,818.63	-1,077.32	2,826.82	0.53	0.05	0.53
12,432.00	90.04	2.15	9,361.38	2,912.56	-1,073.92	2,920.72	0.59	-0.56	0.17
12,527.00	90.66	2.52	9,360.80	3,007.48	-1,070.05	3,015.61	0.76	0.65	0.39
12,621.00	89.79	2.03	9,360.43	3,101.40	-1,066.32	3,109.50	1.06	-0.93	-0.52
12,716.00	90.27	1.92	9,360.38	3,196.35	-1,063.05	3,204.42	0.52	0.51	-0.12
12,810.00	91.86	2.48	9,358.63	3,290.26	-1,059.44	3,298.30	1.79	1.69	0.60
12,905.00	92.09	1.47	9,355.36	3,385.15	-1,056.17	3,393.16	1.09	0.24	-1.06
12,999.00	91.08	0.36	9,352.76	3,479.09	-1,054.67	3,487.09	1.60	-1.07	-1.18



Wellbenders

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #10H
Project:	Lea Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3569.90usft (Cactus 108)
Site:	Bell Lake 18-19 State Com	MD Reference:	RKB=30' @ 3569.90usft (Cactus 108)
Well:	#10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,094.00	90.97	359.73	9,351.06	3,574.08	-1,054.59	3,582.07	0.67	-0.12	-0.66
13,188.00	89.48	359.22	9,350.69	3,668.07	-1,055.45	3,676.07	1.68	-1.59	-0.54
13,283.00	90.63	358.56	9,350.60	3,763.05	-1,057.29	3,771.06	1.40	1.21	-0.69
13,378.00	90.24	359.57	9,349.88	3,858.03	-1,058.84	3,866.05	1.14	-0.41	1.06
13,472.00	89.71	359.31	9,349.92	3,952.03	-1,059.76	3,960.05	0.63	-0.56	-0.28
13,566.00	88.81	359.37	9,351.13	4,046.01	-1,060.84	4,054.04	0.96	-0.96	0.06
13,661.00	89.37	359.16	9,352.64	4,140.99	-1,062.06	4,149.03	0.63	0.59	-0.22
13,756.00	90.85	358.94	9,352.46	4,235.98	-1,063.64	4,244.02	1.58	1.56	-0.23
13,860.00	91.47	0.16	9,350.35	4,339.95	-1,064.45	4,348.00	1.32	0.60	1.17
13,945.00	90.43	0.80	9,348.94	4,424.93	-1,063.74	4,432.97	1.44	-1.22	0.75
14,039.00	89.82	0.19	9,348.74	4,518.93	-1,062.93	4,526.96	0.92	-0.65	-0.65
14,134.00	90.46	0.78	9,348.51	4,613.93	-1,062.13	4,621.95	0.92	0.67	0.62
14,229.00	92.31	1.93	9,346.21	4,708.87	-1,059.88	4,716.87	2.29	1.95	1.21
14,323.00	87.88	0.09	9,346.05	4,802.82	-1,058.22	4,810.81	5.10	-4.71	-1.96
14,418.00	87.74	359.91	9,349.68	4,897.75	-1,058.22	4,905.74	0.24	-0.15	-0.19
14,512.00	88.75	359.78	9,352.56	4,991.71	-1,058.48	4,999.69	1.08	1.07	-0.14
14,607.00	89.48	0.11	9,354.03	5,086.70	-1,058.57	5,094.68	0.84	0.77	0.35
14,702.00	90.13	0.55	9,354.35	5,181.69	-1,058.02	5,189.67	0.83	0.68	0.46
14,796.00	90.41	0.61	9,353.91	5,275.69	-1,057.07	5,283.65	0.30	0.30	0.06
14,891.00	90.63	359.34	9,353.05	5,370.68	-1,057.11	5,378.64	1.36	0.23	-1.34
14,985.00	91.78	359.15	9,351.07	5,464.65	-1,058.35	5,472.62	1.24	1.22	-0.20
15,080.00	91.61	358.09	9,348.26	5,559.58	-1,060.64	5,567.56	1.13	-0.18	-1.12
15,175.00	88.64	357.51	9,348.06	5,654.50	-1,064.28	5,662.51	3.19	-3.13	-0.61
15,269.00	88.70	357.49	9,350.24	5,748.38	-1,068.38	5,756.42	0.07	0.06	-0.02
15,364.00	90.52	357.06	9,350.88	5,843.27	-1,072.90	5,851.34	1.97	1.92	-0.45
15,458.00	90.21	356.65	9,350.28	5,937.13	-1,078.06	5,945.23	0.55	-0.33	-0.44
15,553.00	91.08	359.18	9,349.22	6,032.05	-1,081.51	6,040.18	2.82	0.92	2.66
15,648.00	86.79	356.64	9,350.98	6,126.94	-1,084.97	6,135.09	5.25	-4.52	-2.67
15,743.00	86.82	356.19	9,356.28	6,221.61	-1,090.91	6,229.80	0.47	0.03	-0.47
15,838.00	86.96	357.35	9,361.43	6,316.31	-1,096.25	6,324.55	1.23	0.15	1.22
15,932.00	89.12	359.23	9,364.64	6,410.21	-1,099.05	6,418.46	3.05	2.30	2.00
16,027.00	90.52	0.04	9,364.94	6,505.20	-1,099.66	6,513.45	1.70	1.47	0.85
16,121.00	88.73	359.64	9,365.56	6,599.20	-1,099.92	6,607.45	1.95	-1.90	-0.43
16,216.00	94.53	0.85	9,362.86	6,694.11	-1,099.52	6,702.36	6.24	6.11	1.27
16,311.00	96.27	1.10	9,353.92	6,788.67	-1,097.91	6,796.91	1.85	1.83	0.26
16,405.00	94.84	0.54	9,344.82	6,882.22	-1,096.57	6,890.44	1.63	-1.52	-0.60
16,499.00	91.41	0.71	9,339.69	6,976.06	-1,095.54	6,984.27	3.65	-3.65	0.18
16,594.00	90.32	0.53	9,338.26	7,071.04	-1,094.52	7,079.24	1.16	-1.15	-0.19
16,688.00	91.39	0.31	9,336.86	7,165.03	-1,093.83	7,173.22	1.16	1.14	-0.23
16,783.00	90.74	0.22	9,335.09	7,260.01	-1,093.39	7,268.19	0.69	-0.68	-0.09
16,877.00	89.96	0.61	9,334.52	7,354.01	-1,092.71	7,362.18	0.93	-0.83	0.41
16,972.00	87.27	359.58	9,336.81	7,448.97	-1,092.55	7,457.14	3.03	-2.83	-1.08
17,066.00	88.31	359.05	9,340.44	7,542.89	-1,093.67	7,551.07	1.24	1.11	-0.56



Wellbenders

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #10H
Project:	Lea Co., NM (Nad83 - East Zone)	TVD Reference:	RKB=30' @ 3569.90usft (Cactus 108)
Site:	Bell Lake 18-19 State Com	MD Reference:	RKB=30' @ 3569.90usft (Cactus 108)
Well:	#10H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
17,161.00	89.71	358.76	9,342.08	7,637.86	-1,095.49	7,646.04	1.50	1.47	-0.31
17,255.00	88.89	359.19	9,343.23	7,731.83	-1,097.17	7,740.03	0.98	-0.87	0.46
17,349.00	87.13	359.32	9,346.49	7,825.76	-1,098.39	7,833.97	1.88	-1.87	0.14
17,443.00	87.60	359.24	9,350.81	7,919.66	-1,099.57	7,927.87	0.51	0.50	-0.09
17,538.00	88.36	359.03	9,354.16	8,014.59	-1,101.00	8,022.81	0.83	0.80	-0.22
17,633.00	89.09	359.47	9,356.28	8,109.55	-1,102.25	8,117.78	0.90	0.77	0.46
17,728.00	90.57	359.30	9,356.56	8,204.55	-1,103.27	8,212.78	1.57	1.56	-0.18
17,822.00	91.67	359.04	9,354.72	8,298.52	-1,104.63	8,306.75	1.20	1.17	-0.28
17,917.00	90.88	358.81	9,352.61	8,393.48	-1,106.41	8,401.72	0.87	-0.83	-0.24
18,011.00	92.00	358.33	9,350.24	8,487.41	-1,108.75	8,495.68	1.30	1.19	-0.51
18,105.00	90.60	359.33	9,348.11	8,581.37	-1,110.67	8,589.64	1.83	-1.49	1.06
18,200.00	91.61	359.43	9,346.28	8,676.34	-1,111.70	8,684.62	1.07	1.06	0.11
18,294.00	90.10	0.02	9,344.88	8,770.33	-1,112.15	8,778.61	1.72	-1.61	0.63
18,389.00	90.24	0.22	9,344.60	8,865.33	-1,111.95	8,873.61	0.26	0.15	0.21
18,483.00	89.15	359.46	9,345.10	8,959.32	-1,112.22	8,967.60	1.41	-1.16	-0.81
18,578.00	89.17	359.45	9,346.49	9,054.31	-1,113.12	9,062.59	0.02	0.02	-0.01
18,672.00	90.15	359.41	9,347.05	9,148.30	-1,114.05	9,156.59	1.04	1.04	-0.04
18,767.00	91.16	359.15	9,345.96	9,243.29	-1,115.25	9,251.58	1.10	1.06	-0.27
18,861.00	89.43	0.19	9,345.48	9,337.28	-1,115.79	9,345.57	2.15	-1.84	1.11
18,956.00	89.54	359.99	9,346.33	9,432.28	-1,115.64	9,440.56	0.24	0.12	-0.21
19,050.00	90.66	359.85	9,346.17	9,526.27	-1,115.77	9,534.56	1.20	1.19	-0.15
19,145.00	91.36	359.64	9,344.49	9,621.26	-1,116.19	9,629.55	0.77	0.74	-0.22
19,239.00	90.29	359.44	9,343.14	9,715.24	-1,116.95	9,723.53	1.16	-1.14	-0.21
19,333.00	90.74	359.53	9,342.29	9,809.24	-1,117.79	9,817.53	0.49	0.48	0.10
19,423.00	91.50	359.41	9,340.53	9,899.21	-1,118.63	9,907.51	0.85	0.84	-0.13
19,465.00	91.50	359.41	9,339.43	9,941.20	-1,119.06	9,949.50	0.00	0.00	0.00
Last Take Point @ 19465.00' MD									
19,490.00	91.50	359.41	9,338.78	9,966.19	-1,119.32	9,974.49	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,902.00	8,809.34	-297.39	-1,043.02	KOP @ 8902.00' MD
9,700.00	9,375.71	182.74	-1,065.31	1st Take Point @ 9700.00' MD
19,465.00	9,339.43	9,941.20	-1,119.06	Last Take Point @ 19465.00' MD

Checked By: _____ Approved By: _____ Date: _____



I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **02/24/19** thru **03/9/19** conduct or supervise the taking of a **MWD Survey** from a depth of **167'** to a depth of **19490'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **Devon Energy** for the **Bell Lake 18-19 State Com #10H** API No. **30-025-45453** in **Lea County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright