



30-025-44149

Matador Resources

Lea County, NM

Federal 30

No. 124H

OH

Survey: ProDirectional

Survey Report

20 December, 2017





ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No: 124H
Project:	Lea County, NM(NAD83)	TVD Reference:	Well @ 3630.50usft
Site:	Federal 30	MD Reference:	Well @ 3630.50usft
Well:	No. 124H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-197'-14573', Proj. 14700'	Database:	WellPlanner1

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

Site	Federal 30		
Site Position:		Northing:	596,383.00 usft
From:	Map	Easting:	736,152.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 38' 16.4776 N
		Longitude:	103° 42' 1.6552 W
		Grid Convergence:	0.34 °

Well		No. 124H				
Well Position	+N/-S	0.00 usft	Northing:	596,389.00 usft	Latitude:	32° 38' 16.4584 N
	+E/-W	0.00 usft	Easting:	737,481.00 usft	Longitude:	103° 41' 46.1130 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,602.00 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/19/2017	6.98	60.67	48,434.70

Design		MWD-197'-14573', Proj. 14700'		
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.76

Survey Program		Date: 12/20/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
197.00	14,700.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM



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MD Reference:
North Reference:
Survey Calculation Method:
Database:
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Well @ 3630.50usft
Well @ 3630.50usft
Grid
Minimum Curvature
WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	596,389.00	737,481.00	
197.00	0.60	71.70	197.00	-0.32	0.32	0.98	1.03	71.70	596,389.32	737,481.98	
Pro MWD First Survey: 197' MD											
379.00	0.70	54.00	378.98	-1.26	1.28	2.78	3.06	65.36	596,390.28	737,483.78	
535.00	0.80	76.90	534.97	-2.06	2.08	4.62	5.06	65.70	596,391.08	737,485.62	
688.00	0.20	92.30	687.97	-2.29	2.31	5.92	6.36	68.65	596,391.31	737,486.92	
779.00	0.30	180.60	778.96	-2.04	2.07	6.08	6.42	71.19	596,391.07	737,487.08	
870.00	0.30	251.90	869.96	-1.73	1.76	5.85	6.11	73.27	596,390.76	737,486.85	
962.00	0.30	208.00	961.96	-1.45	1.47	5.51	5.70	75.05	596,390.47	737,486.51	
1,055.00	0.30	237.80	1,054.96	-1.10	1.13	5.19	5.31	77.75	596,390.13	737,486.19	
1,149.00	0.20	219.50	1,148.96	-0.85	0.87	4.87	4.95	79.90	596,389.87	737,485.87	
1,188.00	0.10	28.70	1,187.96	-0.83	0.85	4.85	4.92	80.11	596,389.85	737,485.85	
1,336.00	0.40	336.30	1,335.96	-1.41	1.43	4.70	4.92	73.06	596,390.43	737,485.70	
1,429.00	0.40	320.00	1,428.96	-1.96	1.98	4.36	4.79	65.61	596,390.98	737,485.36	
1,523.00	0.30	310.90	1,522.95	-2.37	2.39	3.97	4.63	58.92	596,391.39	737,484.97	
1,616.00	0.20	355.00	1,615.95	-2.70	2.71	3.77	4.64	54.26	596,391.71	737,484.77	
1,710.00	0.30	262.80	1,709.95	-2.83	2.84	3.51	4.52	50.98	596,391.84	737,484.51	
1,803.00	0.20	125.40	1,802.95	-2.71	2.72	3.40	4.35	51.35	596,391.72	737,484.40	
1,897.00	0.20	58.00	1,896.95	-2.70	2.71	3.67	4.57	53.57	596,391.71	737,484.67	
1,991.00	0.20	116.90	1,990.95	-2.71	2.72	3.96	4.81	55.47	596,391.72	737,484.96	
2,084.00	0.70	20.30	2,083.95	-3.17	3.18	4.30	5.35	53.49	596,392.18	737,485.30	
2,178.00	2.20	2.30	2,177.92	-5.51	5.52	4.57	7.17	39.61	596,394.52	737,485.57	
2,272.00	3.20	6.80	2,271.81	-9.91	9.93	4.95	11.10	26.51	596,398.93	737,485.95	
2,365.00	3.20	8.10	2,364.67	-15.06	15.08	5.63	16.10	20.47	596,404.08	737,486.63	
2,459.00	2.80	9.20	2,458.54	-19.92	19.94	6.36	20.93	17.70	596,408.94	737,487.36	
2,552.00	3.00	5.40	2,551.42	-24.58	24.61	6.96	25.57	15.79	596,413.61	737,487.96	
2,646.00	4.60	4.30	2,645.21	-30.79	30.82	7.47	31.71	13.63	596,419.82	737,488.47	



ProDirectional
Survey Report



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Site: Federal 30
Well: No. 124H
Wellbore: OH
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Local Co-ordinate Reference:
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MD Reference:
North Reference:
Survey Calculation Method:
Database:
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Well @ 3630.50usft
Well @ 3630.50usft
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WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
2,739.00	4.40	5.10	2,737.92	-38.06	38.09	8.07	38.93	11.96	596,427.09	737,489.07	
2,833.00	3.90	4.10	2,831.68	-44.83	44.87	8.62	45.69	10.87	596,433.87	737,489.62	
2,927.00	3.40	4.50	2,925.48	-50.80	50.84	9.06	51.64	10.11	596,439.84	737,490.06	
3,020.00	3.10	2.20	3,018.34	-56.06	56.10	9.38	56.88	9.49	596,445.10	737,490.38	
3,135.00	2.70	357.00	3,133.19	-61.87	61.91	9.35	62.61	8.59	596,450.91	737,490.35	
3,238.00	2.50	354.90	3,236.08	-66.53	66.57	9.03	67.18	7.72	596,455.57	737,490.03	
3,300.00	3.70	356.80	3,297.99	-69.88	69.92	8.80	70.47	7.17	596,458.92	737,489.80	
3,487.00	7.30	359.30	3,484.10	-87.79	87.83	8.31	88.22	5.41	596,476.83	737,489.31	
3,581.00	9.00	2.90	3,577.15	-101.10	101.14	8.61	101.51	4.87	596,490.14	737,489.61	
3,674.00	8.80	6.30	3,669.03	-115.43	115.48	9.76	115.89	4.83	596,504.48	737,490.76	
3,768.00	7.30	23.20	3,762.11	-128.06	128.12	12.90	128.76	5.75	596,517.12	737,493.90	
3,862.00	5.10	57.40	3,855.59	-135.78	135.86	18.78	137.15	7.87	596,524.86	737,499.78	
3,955.00	3.20	60.00	3,948.34	-139.28	139.38	24.51	141.52	9.97	596,528.38	737,505.51	
4,049.00	3.30	19.00	4,042.20	-143.14	143.25	27.66	145.90	10.93	596,532.25	737,508.66	
4,143.00	4.40	2.70	4,135.99	-149.29	149.41	28.71	152.15	10.88	596,538.41	737,509.71	
4,236.00	5.90	357.90	4,228.61	-157.63	157.76	28.71	160.35	10.31	596,546.76	737,509.71	
4,330.00	5.20	2.70	4,322.17	-166.72	166.84	28.73	169.29	9.77	596,555.84	737,509.73	
4,423.00	3.50	14.40	4,414.90	-173.67	173.80	29.64	176.31	9.68	596,562.80	737,510.64	
4,517.00	2.60	23.70	4,508.77	-178.40	178.53	31.21	181.24	9.91	596,567.53	737,512.21	
4,610.00	2.00	53.20	4,601.70	-181.29	181.43	33.35	184.47	10.42	596,570.43	737,514.35	
4,703.00	2.70	86.90	4,694.62	-182.37	182.52	36.84	186.21	11.41	596,571.52	737,517.84	
4,797.00	2.90	87.60	4,788.51	-182.57	182.74	41.43	187.38	12.77	596,571.74	737,522.43	
4,891.00	3.20	87.30	4,882.37	-182.77	182.97	46.42	188.76	14.24	596,571.97	737,527.42	
4,953.00	3.00	85.10	4,944.28	-182.98	183.19	49.77	189.83	15.20	596,572.19	737,530.77	
5,079.00	2.50	77.80	5,070.14	-183.81	184.05	55.74	192.30	16.85	596,573.05	737,536.74	
5,173.00	1.80	175.50	5,164.10	-182.77	183.01	57.86	191.94	17.54	596,572.01	737,538.86	
5,266.00	2.50	188.00	5,257.03	-179.30	179.55	57.69	188.59	17.81	596,568.55	737,538.69	



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Survey Calculation Method:
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Well No. 124H
Well @ 3630.50usft
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Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
5,360.00	2.40	187.70	5,350.95	-175.32	175.57	57.14	184.63	18.03	596,564.57	737,538.14	
5,453.00	2.30	195.50	5,443.87	-171.60	171.84	56.38	180.85	18.17	596,560.84	737,537.38	
5,549.00	1.70	278.80	5,539.83	-169.97	170.20	54.46	178.70	17.74	596,559.20	737,535.46	
5,642.00	2.30	301.30	5,632.77	-171.16	171.38	51.50	178.95	16.73	596,560.38	737,532.50	
5,736.00	2.50	298.50	5,726.69	-173.13	173.34	48.09	179.88	15.51	596,562.34	737,529.09	
5,830.00	2.50	301.50	5,820.60	-175.20	175.39	44.54	180.95	14.25	596,564.39	737,525.54	
5,923.00	2.60	295.70	5,913.51	-177.19	177.36	40.91	182.02	12.99	596,566.36	737,521.91	
6,017.00	2.20	299.10	6,007.42	-179.01	179.16	37.41	183.03	11.79	596,568.16	737,518.41	
6,110.00	2.10	303.80	6,100.36	-180.83	180.98	34.44	184.23	10.77	596,569.98	737,515.44	
6,205.00	1.30	224.90	6,195.33	-181.05	181.18	32.23	184.03	10.09	596,570.18	737,513.23	
6,298.00	1.50	222.30	6,288.30	-179.41	179.54	30.67	182.14	9.69	596,568.54	737,511.67	
6,392.00	1.50	218.40	6,382.27	-177.54	177.66	29.07	180.03	9.29	596,566.66	737,510.07	
6,486.00	1.60	218.50	6,476.23	-175.55	175.67	27.49	177.81	8.89	596,564.67	737,508.49	
6,579.00	1.50	227.00	6,569.20	-173.72	173.83	25.79	175.73	8.44	596,562.83	737,506.79	
6,673.00	1.50	230.90	6,663.17	-172.11	172.21	23.94	173.87	7.91	596,561.21	737,504.94	
6,767.00	1.60	131.50	6,757.14	-170.46	170.56	23.97	172.24	8.00	596,559.56	737,504.97	
6,860.00	1.90	125.50	6,850.10	-168.70	168.81	26.19	170.83	8.82	596,557.81	737,507.19	
6,954.00	1.30	132.80	6,944.06	-167.06	167.18	28.25	169.55	9.59	596,556.18	737,509.25	
7,047.00	1.60	0.80	7,037.05	-167.64	167.76	29.04	170.26	9.82	596,556.76	737,510.04	
7,141.00	1.90	356.10	7,131.01	-170.51	170.63	28.95	173.07	9.63	596,559.63	737,509.95	
7,235.00	2.00	352.10	7,224.95	-173.69	173.81	28.62	176.15	9.35	596,562.81	737,509.62	
7,329.00	1.60	343.40	7,318.91	-176.57	176.69	28.02	178.90	9.01	596,565.69	737,509.02	
7,422.00	1.60	340.80	7,411.87	-179.04	179.16	27.22	181.22	8.64	596,568.16	737,508.22	
7,516.00	1.80	333.90	7,505.83	-181.61	181.73	26.14	183.60	8.19	596,570.73	737,507.14	
7,610.00	1.50	321.20	7,599.79	-183.90	184.01	24.72	185.66	7.65	596,573.01	737,505.72	
7,703.00	2.00	35.40	7,692.76	-186.18	186.28	24.90	187.94	7.61	596,575.28	737,505.90	
7,796.00	1.60	41.70	7,785.71	-188.46	188.57	26.70	190.45	8.06	596,577.57	737,507.70	



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Survey										
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7,890.00	1.50	27.60	7,879.68	-190.52	190.64	28.14	192.71	8.40	596,579.64	737,509.14
7,983.00	1.20	340.20	7,972.65	-192.52	192.64	28.38	194.72	8.38	596,581.64	737,509.38
8,077.00	0.30	124.60	8,066.65	-193.31	193.43	28.25	195.48	8.31	596,582.43	737,509.25
8,171.00	0.40	222.80	8,160.65	-192.92	193.04	28.23	195.10	8.32	596,582.04	737,509.23
8,264.00	1.10	261.40	8,253.64	-192.56	192.67	27.12	194.57	8.01	596,581.67	737,508.12
8,358.00	1.10	250.40	8,347.62	-192.13	192.24	25.38	193.90	7.52	596,581.24	737,506.38
8,451.00	1.50	254.80	8,440.60	-191.52	191.62	23.36	193.04	6.95	596,580.62	737,504.36
8,545.00	1.90	270.30	8,534.56	-191.21	191.30	20.62	192.41	6.15	596,580.30	737,501.62
8,734.00	2.00	270.00	8,723.45	-191.26	191.32	14.19	191.84	4.24	596,580.32	737,495.19
8,828.00	0.30	181.00	8,817.43	-191.02	191.07	12.54	191.48	3.76	596,580.07	737,493.54
8,921.00	1.50	119.80	8,910.41	-190.17	190.22	13.60	190.71	4.09	596,579.22	737,494.60
9,015.00	2.50	152.60	9,004.36	-187.73	187.79	15.61	188.44	4.75	596,576.79	737,496.61
9,109.00	2.40	157.00	9,098.27	-184.09	184.16	17.32	184.97	5.37	596,573.16	737,498.32
9,202.00	2.10	155.60	9,191.20	-180.74	180.82	18.78	181.79	5.93	596,569.82	737,499.78
9,332.00	6.00	162.30	9,320.85	-172.08	172.17	21.83	173.55	7.23	596,561.17	737,502.83
9,379.00	11.60	161.40	9,367.28	-165.24	165.35	24.09	167.09	8.29	596,554.35	737,505.09
9,426.00	16.00	155.40	9,412.91	-154.85	154.97	28.30	157.54	10.35	596,543.97	737,509.30
9,473.00	20.70	152.30	9,457.51	-141.57	141.72	34.86	145.95	13.82	596,530.72	737,515.86
9,519.00	24.40	162.70	9,500.01	-125.26	125.44	41.47	132.12	18.29	596,514.44	737,522.47
9,566.00	27.50	174.00	9,542.29	-105.17	105.36	45.49	114.76	23.35	596,494.36	737,526.49
9,613.00	30.00	179.00	9,583.50	-82.62	82.82	46.83	95.14	29.49	596,471.82	737,527.83
9,660.00	31.70	182.50	9,623.85	-58.53	58.73	46.50	74.91	38.37	596,447.73	737,527.50
9,708.00	33.80	183.90	9,664.22	-32.61	32.80	45.04	55.72	53.93	596,421.80	737,526.04
9,755.00	37.90	184.40	9,702.30	-5.18	5.36	43.04	43.37	82.91	596,394.36	737,524.04
9,801.00	41.80	182.60	9,737.61	24.23	-24.06	41.26	47.76	120.24	596,364.94	737,522.26
9,848.00	45.50	180.40	9,771.62	56.65	-56.48	40.43	69.46	144.40	596,332.52	737,521.43
9,895.00	49.60	180.90	9,803.33	91.32	-91.15	40.04	99.55	156.29	596,297.85	737,521.04



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Wellbore: OH
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Well @ 3630.50usft
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Survey											
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9,942.00	55.60	180.20	9,831.87	128.63	-128.47	39.69	134.46	162.83	596,260.53	737,520.69	
9,989.00	60.90	180.80	9,856.59	168.58	-168.42	39.33	172.95	166.85	596,220.58	737,520.33	
10,036.00	62.40	181.20	9,878.91	209.93	-209.77	38.61	213.30	169.57	596,179.23	737,519.61	
10,083.00	64.80	181.80	9,899.81	252.01	-251.85	37.51	254.63	171.53	596,137.15	737,518.51	
10,130.00	68.00	182.30	9,918.62	295.04	-294.89	35.96	297.07	173.05	596,094.11	737,516.96	
10,176.00	71.00	181.50	9,934.73	338.09	-337.95	34.54	339.71	174.16	596,051.05	737,515.54	
10,223.00	74.10	180.20	9,948.82	382.91	-382.77	33.88	384.27	174.94	596,006.23	737,514.88	
10,270.00	76.40	179.70	9,960.79	428.36	-428.22	33.92	429.56	175.47	595,960.78	737,514.92	
10,317.00	77.80	179.00	9,971.28	474.17	-474.03	34.44	475.28	175.84	595,914.97	737,515.44	
10,363.00	79.60	178.50	9,980.29	519.27	-519.13	35.42	520.33	176.10	595,869.87	737,516.42	
10,410.00	83.10	180.00	9,987.36	565.72	-565.58	36.03	566.72	176.36	595,823.42	737,517.03	
10,457.00	85.00	179.60	9,992.23	612.47	-612.32	36.19	613.39	176.62	595,776.68	737,517.19	
10,551.00	88.60	179.70	9,997.48	706.31	-706.16	36.76	707.12	177.02	595,682.84	737,517.76	
10,644.00	88.60	180.10	9,999.75	799.28	-799.13	36.93	799.98	177.35	595,589.87	737,517.93	
10,738.00	88.40	180.10	10,002.21	893.24	-893.10	36.76	893.85	177.64	595,495.90	737,517.76	
10,832.00	87.40	179.50	10,005.66	987.18	-987.03	37.09	987.73	177.85	595,401.97	737,518.09	
10,925.00	86.40	179.40	10,010.68	1,080.04	-1,079.89	37.98	1,080.56	177.99	595,309.11	737,518.98	
11,019.00	88.20	179.10	10,015.11	1,173.93	-1,173.78	39.21	1,174.43	178.09	595,215.22	737,520.21	
11,112.00	87.80	179.10	10,018.36	1,266.87	-1,266.71	40.67	1,267.36	178.16	595,122.29	737,521.67	
11,206.00	90.10	179.00	10,020.08	1,360.84	-1,360.67	42.23	1,361.33	178.22	595,028.33	737,523.23	
11,300.00	90.00	178.70	10,020.00	1,454.82	-1,454.65	44.12	1,455.32	178.26	594,934.35	737,525.12	
11,394.00	91.20	179.20	10,019.01	1,548.81	-1,548.63	45.84	1,549.31	178.30	594,840.37	737,526.84	
11,487.00	91.40	179.70	10,016.90	1,641.78	-1,641.60	46.73	1,642.27	178.37	594,747.40	737,527.73	
11,581.00	91.40	180.10	10,014.61	1,735.75	-1,735.57	46.89	1,736.21	178.45	594,653.43	737,527.89	
11,675.00	90.80	180.20	10,012.80	1,829.73	-1,829.55	46.65	1,830.15	178.54	594,559.45	737,527.65	
11,768.00	90.10	180.40	10,012.07	1,922.73	-1,922.55	46.16	1,923.10	178.62	594,466.45	737,527.16	
11,862.00	89.80	180.00	10,012.15	2,016.72	-2,016.55	45.83	2,017.07	178.70	594,372.45	737,526.83	



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No. 124H
Wellbore: OH
Design: MWD-197'-14573', Proj. 14700'

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well No. 124H
Well @ 3630.50usft
Well @ 3630.50usft
Grid
Minimum Curvature
WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
11,955.00	89.90	180.10	10,012.40	2,109.72	-2,109.55	45.75	2,110.04	178.76	594,279.45	737,526.75	
12,048.00	90.20	179.90	10,012.32	2,202.72	-2,202.55	45.75	2,203.02	178.81	594,186.45	737,526.75	
12,142.00	90.30	180.30	10,011.91	2,296.72	-2,296.55	45.59	2,297.00	178.86	594,092.45	737,526.59	
12,235.00	90.40	180.50	10,011.34	2,389.71	-2,389.54	44.94	2,389.97	178.92	593,999.46	737,525.94	
12,329.00	91.10	180.60	10,010.11	2,483.69	-2,483.53	44.04	2,483.92	178.98	593,905.47	737,525.04	
12,423.00	91.30	180.80	10,008.14	2,577.66	-2,577.50	42.89	2,577.86	179.05	593,811.50	737,523.89	
12,516.00	91.60	180.40	10,005.79	2,670.62	-2,670.47	41.91	2,670.80	179.10	593,718.53	737,522.91	
12,610.00	91.70	180.80	10,003.08	2,764.57	-2,764.42	40.93	2,764.73	179.15	593,624.58	737,521.93	
12,704.00	90.00	180.70	10,001.69	2,858.54	-2,858.40	39.70	2,858.68	179.20	593,530.60	737,520.70	
12,797.00	89.40	181.40	10,002.17	2,951.52	-2,951.38	38.00	2,951.63	179.26	593,437.62	737,519.00	
12,891.00	89.90	181.70	10,002.75	3,045.47	-3,045.35	35.45	3,045.55	179.33	593,343.65	737,516.45	
12,984.00	90.30	182.00	10,002.58	3,138.41	-3,138.30	32.45	3,138.47	179.41	593,250.70	737,513.45	
13,078.00	90.80	182.10	10,001.68	3,232.33	-3,232.23	29.09	3,232.36	179.48	593,156.77	737,510.09	
13,172.00	91.30	182.70	9,999.96	3,326.21	-3,326.13	25.15	3,326.23	179.57	593,062.87	737,506.15	
13,265.00	91.20	180.80	9,997.93	3,419.13	-3,419.06	22.31	3,419.14	179.63	592,969.94	737,503.31	
13,359.00	89.80	180.80	9,997.11	3,513.11	-3,513.05	21.00	3,513.11	179.66	592,875.95	737,502.00	
13,452.00	87.60	179.70	9,999.22	3,606.07	-3,606.02	20.60	3,606.08	179.67	592,782.98	737,501.60	
13,546.00	87.90	179.40	10,002.91	3,700.00	-3,699.94	21.33	3,700.00	179.67	592,689.06	737,502.33	
13,639.00	88.20	179.50	10,006.07	3,792.94	-3,792.88	22.23	3,792.95	179.66	592,596.12	737,503.23	
13,733.00	89.20	179.90	10,008.21	3,886.92	-3,886.86	22.72	3,886.92	179.67	592,502.14	737,503.72	
13,826.00	90.20	179.80	10,008.69	3,979.92	-3,979.85	22.96	3,979.92	179.67	592,409.15	737,503.96	
13,919.00	91.40	179.90	10,007.40	4,072.90	-4,072.84	23.20	4,072.91	179.67	592,316.16	737,504.20	
14,012.00	92.30	180.50	10,004.39	4,165.85	-4,165.79	22.88	4,165.86	179.69	592,223.21	737,503.88	
14,106.00	93.20	180.80	9,999.88	4,259.73	-4,259.68	21.82	4,259.73	179.71	592,129.32	737,502.82	
14,199.00	94.50	181.00	9,993.64	4,352.50	-4,352.45	20.36	4,352.50	179.73	592,036.55	737,501.36	
14,293.00	92.40	180.10	9,987.98	4,446.32	-4,446.27	19.46	4,446.32	179.75	591,942.73	737,500.46	
14,387.00	89.10	178.60	9,986.75	4,540.29	-4,540.24	20.52	4,540.29	179.74	591,848.76	737,501.52	



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No. 124H
Wellbore: OH
Design: MWD-197'-14573', Proj. 14700'

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well No. 124H
Well @ 3630.50usft
Well @ 3630.50usft
Grid
Minimum Curvature
WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)		TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
14,480.00	89.80	178.50		9,987.65	4,633.26	-4,633.21	22.88	4,633.26	179.72	591,755.79	737,503.88
14,573.00	91.00	178.70		9,987.00	4,726.24	-4,726.18	25.15	4,726.24	179.70	591,662.82	737,506.15
Last Survey: 14573' MD											
14,700.00	91.00	178.70		9,984.78	4,853.20	-4,853.12	28.03	4,853.21	179.67	591,535.88	737,509.03
PTB: 14700' MD											

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
197.00	197.00	0.32	0.98	Pro MWD First Survey: 197' MD	
14,573.00	9,987.00	-4,726.18	25.15	Last Survey: 14573' MD	
14,700.00	9,984.78	-4,853.12	28.03	PTB: 14700' MD	



Survey Certification Letter

December 20, 2017



Operator Name: Matador Resources
Well Name: Federal 30 No. 124H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5156417

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

<u>Surveyor</u>	<u>Surveyed Depths</u>	<u>Projection to Bit</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
ProDirectional	197' MD – 14,573' MD	14,700' MD	11/11/17 – 12/02/17	MWD-OWSG

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

850 Conroe Park West Drive | Conroe, TX 77303 | Phone: 936.441.7266

prodirectional.com