



PRODIRECTIONAL



Cimarron State 16-19S-34E RN No. 133H
Lea County, NM

December 12, 2016

Job No. LNM5128816

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

December 12, 2016



Operator Name: Matador Resources
Well Name: Cimarron State 16-19S-34E RN No. 133H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5128816

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:

Surveyor	Surveyed Depths	Projection to Bit	Dates Performed	Type of Survey
ProDirectional	197' MD – 15,310' MD	15,469' MD	11/28/16 – 12/12/16	MWD-OWSG

Sincerely,

Mike Coats
Well Planning
Professional Directional

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

The Standard of Excellence in Directional Supervision



Matador Resources

Lea County, NM

Cimarron State 16-19S-34E RN

No. 133H

OH

Survey: ProDirectional

Survey Report

12 December, 2016





ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 133H
Project:	Lea County, NM	TVD Reference:	Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
Site:	Cimarron State 16-19S-34E RN	MD Reference:	Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
Well:	No. 133H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD	Database:	WellPlanner1

Project	Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Cimarron State 16-19S-34E RN		
Site Position:		Northing:	607,129.00 usft
From:	Map	Easting:	738,164.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 40' 0.161 N
		Longitude:	103° 33' 33.864 W
		Grid Convergence:	0.42 "

Well	No. 133H					
Well Position	+N/-S	0.00 usft	Northing:	607,129.00 usft	Latitude:	32° 40' 0.163 N
	+E/-W	0.00 usft	Easting:	738,134.00 usft	Longitude:	103° 33' 34.215 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,825.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/25/2016	6.75	60.72	48,408.20

Design	MWD			
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	179.49

Survey Program		Date 12/12/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
197.00	15,469.00	Survey #1 (OH)	MWD - OWSG	MWD - OWSG



ProDirectional
Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well No. 133H
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
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	607,129.00	738,134.00
197.00	0.30	327.00	197.00	-0.44	0.43	-0.28	0.52	327.00	607,129.43	738,133.72
Pro MWD First Survey: 197" MD										
293.00	0.40	317.50	293.00	-0.90	0.89	-0.64	1.10	324.12	607,129.89	738,133.36
358.00	0.70	320.80	357.99	-1.37	1.37	-1.05	1.72	322.48	607,130.37	738,132.95
421.00	0.70	333.80	420.99	-2.02	2.01	-1.46	2.48	323.96	607,131.01	738,132.54
518.00	0.80	334.40	517.98	-3.17	3.15	-2.02	3.74	327.39	607,132.15	738,131.98
579.00	1.20	309.10	578.97	-3.96	3.94	-2.70	4.77	325.61	607,132.94	738,131.30
672.00	1.70	294.40	671.94	-5.16	5.12	-4.71	6.96	317.42	607,134.12	738,129.29
763.00	2.70	287.90	762.87	-6.41	6.34	-7.98	10.19	308.47	607,135.34	738,126.02
856.00	4.00	285.60	855.71	-8.00	7.88	-13.19	15.36	300.88	607,136.88	738,120.81
946.00	4.30	285.10	945.48	-9.78	9.61	-19.47	21.71	296.27	607,138.61	738,114.53
1,040.00	3.70	285.40	1,039.25	-11.56	11.33	-25.79	28.17	293.72	607,140.33	738,108.21
1,134.00	3.30	286.70	1,133.07	-13.19	12.91	-31.31	33.87	292.41	607,141.91	738,102.69
1,321.00	2.80	286.80	1,319.81	-16.14	15.78	-40.84	43.78	291.13	607,144.78	738,093.16
1,414.00	2.50	292.90	1,412.71	-17.63	17.23	-44.88	48.07	291.00	607,146.23	738,089.12
1,508.00	2.10	288.40	1,506.63	-19.00	18.57	-48.40	51.84	290.99	607,147.57	738,085.60
1,601.00	1.90	287.90	1,599.58	-20.04	19.58	-51.49	55.08	290.82	607,148.58	738,082.51
1,704.00	1.70	293.20	1,702.52	-21.19	20.71	-54.51	58.31	290.80	607,149.71	738,079.49
1,789.00	1.50	293.50	1,787.49	-22.15	21.65	-56.69	60.69	290.90	607,150.65	738,077.31
1,883.00	2.20	295.00	1,881.44	-23.43	22.90	-59.46	63.71	291.06	607,151.90	738,074.54
1,976.00	3.00	296.20	1,974.34	-25.29	24.73	-63.26	67.92	291.35	607,153.73	738,070.74
2,070.00	2.70	292.20	2,068.23	-27.25	26.65	-67.52	72.59	291.54	607,155.65	738,066.48
2,164.00	4.00	294.40	2,162.07	-29.49	28.84	-72.55	78.07	291.68	607,157.84	738,061.45
2,257.00	4.30	296.00	2,254.82	-32.41	31.71	-78.64	84.79	291.96	607,160.71	738,055.36
2,351.00	4.50	295.00	2,348.55	-35.57	34.81	-85.15	91.99	292.24	607,163.81	738,048.85
2,445.00	4.40	293.60	2,442.26	-38.63	37.82	-91.80	99.28	292.39	607,166.82	738,042.20



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well No. 133H
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
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)	
2,538.00	4.30	291.10	2,534.99	-41.37	40.50	-98.32	106.33	292.39	607,169.50	738,035.68	
2,632.00	4.20	289.40	2,628.74	-43.84	42.91	-104.85	113.29	292.26	607,171.91	738,029.15	
2,725.00	3.90	290.70	2,721.50	-46.15	45.16	-111.02	119.86	292.13	607,174.16	738,022.98	
2,818.00	3.70	298.50	2,814.30	-48.75	47.71	-116.62	126.00	292.25	607,176.71	738,017.38	
2,912.00	3.10	298.40	2,908.13	-51.45	50.37	-121.52	131.54	292.51	607,179.37	738,012.48	
3,006.00	3.00	297.90	3,002.00	-53.84	52.73	-125.93	136.52	292.72	607,181.73	738,008.07	
3,100.00	3.00	298.70	3,095.87	-56.22	55.06	-130.26	141.42	292.91	607,184.06	738,003.74	
3,193.00	2.70	301.70	3,188.76	-58.57	57.38	-134.26	146.01	293.14	607,186.38	737,999.74	
3,287.00	3.30	294.20	3,282.63	-60.88	59.65	-138.61	150.90	293.28	607,188.65	737,995.39	
3,381.00	3.70	294.10	3,376.45	-63.28	62.00	-143.85	156.64	293.32	607,191.00	737,990.15	
3,475.00	3.20	290.70	3,470.28	-65.49	64.16	-149.07	162.29	293.29	607,193.16	737,984.93	
3,569.00	3.00	289.60	3,564.14	-67.28	65.92	-153.84	167.37	293.19	607,194.92	737,980.16	
3,662.00	2.70	289.40	3,657.03	-68.87	67.46	-158.20	171.98	293.09	607,196.46	737,975.80	
3,755.00	2.50	295.80	3,749.93	-70.51	69.07	-162.09	176.19	293.08	607,198.07	737,971.91	
3,849.00	2.80	292.70	3,843.83	-72.32	70.85	-166.06	180.54	293.11	607,199.85	737,967.94	
3,943.00	3.00	291.00	3,937.71	-74.13	72.62	-170.47	185.29	293.07	607,201.62	737,963.53	
4,036.00	3.00	288.30	4,030.58	-75.81	74.25	-175.05	190.15	292.99	607,203.25	737,958.95	
4,130.00	3.00	286.40	4,124.46	-77.32	75.72	-179.75	195.05	292.84	607,204.72	737,954.25	
4,224.00	2.90	284.40	4,218.33	-78.64	77.01	-184.41	199.84	292.66	607,206.01	737,949.59	
4,317.00	2.70	284.90	4,311.22	-79.83	78.15	-188.81	204.34	292.49	607,207.15	737,945.19	
4,411.00	2.60	280.50	4,405.12	-80.83	79.11	-193.04	208.62	292.28	607,208.11	737,940.96	
4,505.00	3.20	280.50	4,499.00	-81.73	79.98	-197.72	213.28	292.02	607,208.98	737,936.28	
4,598.00	3.70	281.80	4,591.83	-82.87	81.06	-203.21	218.78	291.75	607,210.06	737,930.79	
4,691.00	3.50	280.10	4,684.65	-84.03	82.18	-208.94	224.52	291.47	607,211.18	737,925.06	
4,785.00	3.50	279.20	4,778.47	-85.05	83.14	-214.60	230.14	291.18	607,212.14	737,919.40	
4,878.00	3.60	279.70	4,871.29	-86.04	84.08	-220.28	235.78	290.89	607,213.08	737,913.72	
4,972.00	3.40	277.80	4,965.12	-86.97	84.96	-225.95	241.39	290.61	607,213.96	737,908.05	



ProDirectional
Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well No. 133H
Well @ 3853.50usft (GL: 8825' + KB: 28.5' (Pat809))
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Pat809))
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)
5,065.00	3.30	275.30	5,057.96	-87.64	85.58	-231.35	246.67	290.30	607,214.58	737,902.65
5,159.00	3.30	273.70	5,151.80	-88.11	86.01	-236.74	251.88	289.97	607,215.01	737,897.26
5,253.00	3.30	270.30	5,245.65	-88.35	86.19	-242.14	257.03	289.59	607,215.19	737,891.86
5,346.00	3.30	269.00	5,338.49	-88.36	86.16	-247.50	262.07	289.19	607,215.16	737,886.50
5,440.00	3.30	265.80	5,432.34	-88.16	85.92	-252.90	267.10	288.76	607,214.92	737,881.10
5,533.00	3.30	264.60	5,525.18	-87.76	85.47	-258.24	272.01	288.31	607,214.47	737,875.76
5,627.00	3.20	264.40	5,619.03	-87.30	84.96	-263.54	276.90	287.87	607,213.96	737,870.46
5,720.00	3.30	263.50	5,711.88	-86.79	84.40	-268.78	281.72	287.43	607,213.40	737,865.22
5,814.00	3.40	265.20	5,805.72	-86.30	83.86	-274.25	286.78	287.00	607,212.86	737,859.75
5,847.00	3.30	266.20	5,838.66	-86.17	83.72	-276.17	288.58	286.86	607,212.72	737,857.83
5,938.00	2.90	266.10	5,929.53	-85.89	83.39	-281.08	293.19	286.52	607,212.39	737,852.92
6,031.00	3.00	317.00	6,022.42	-87.54	85.01	-285.09	297.49	286.60	607,214.01	737,848.91
6,125.00	3.40	324.70	6,116.28	-91.64	89.08	-288.38	301.82	287.17	607,218.08	737,845.62
6,218.00	2.60	318.70	6,209.15	-95.51	92.92	-291.36	305.82	287.69	607,221.92	737,842.64
6,312.00	2.50	322.50	6,303.06	-98.76	96.14	-294.02	309.34	288.11	607,225.14	737,839.98
6,405.00	2.70	314.60	6,395.96	-101.93	99.29	-296.81	312.98	288.50	607,228.29	737,837.19
6,499.00	3.40	311.20	6,489.83	-105.35	102.68	-300.49	317.55	288.87	607,231.68	737,833.51
6,592.00	3.10	310.00	6,582.68	-108.82	106.12	-304.49	322.45	289.21	607,235.12	737,829.51
6,686.00	3.00	307.40	6,676.54	-111.98	109.24	-308.39	327.17	289.51	607,238.24	737,825.61
6,780.00	2.60	305.00	6,770.43	-114.73	111.96	-312.09	331.56	289.74	607,240.96	737,821.91
6,873.00	2.60	305.40	6,863.34	-117.20	114.39	-315.54	335.63	289.93	607,243.39	737,818.46
6,967.00	3.80	314.00	6,957.19	-120.63	117.79	-319.52	340.54	290.24	607,246.79	737,814.48
7,060.00	4.40	317.10	7,049.95	-125.43	122.54	-324.16	346.55	290.71	607,251.54	737,809.84
7,154.00	4.10	315.20	7,143.69	-130.49	127.57	-328.98	352.85	291.19	607,256.57	737,805.02
7,247.00	4.00	315.20	7,236.46	-135.20	132.23	-333.61	358.86	291.62	607,261.23	737,800.39
7,341.00	3.60	316.10	7,330.25	-139.69	136.68	-337.97	364.56	292.02	607,265.68	737,796.03
7,435.00	3.30	314.80	7,424.08	-143.76	140.72	-341.93	369.76	292.37	607,269.72	737,792.07



ProDirectional
Survey Report



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Well: No. 133H
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Design: MWD

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WellPlanner1

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	EW (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
7,528.00	3.30	317.50	7,516.93	-147.65	144.58	-345.64	374.68	292.70	607,273.58	737,788.36
7,622.00	3.40	320.40	7,610.77	-151.82	148.72	-349.25	379.59	293.07	607,277.72	737,784.75
7,715.00	3.10	321.40	7,703.62	-155.94	152.81	-352.57	384.26	293.43	607,281.81	737,781.43
7,809.00	3.50	300.10	7,797.47	-159.40	156.23	-356.64	389.36	293.66	607,285.23	737,777.36
7,902.00	3.90	294.20	7,890.27	-162.17	158.96	-361.98	395.35	293.71	607,287.96	737,772.02
7,996.00	3.70	292.10	7,984.06	-164.67	161.41	-367.71	401.57	293.70	607,290.41	737,766.29
8,089.00	3.30	288.00	8,076.89	-166.68	163.36	-373.03	407.24	293.65	607,292.36	737,760.97
8,182.00	3.20	289.40	8,169.74	-168.41	165.05	-378.03	412.49	293.59	607,294.05	737,755.97
8,276.00	3.30	292.40	8,263.59	-170.36	166.95	-383.00	417.81	293.55	607,295.95	737,751.00
8,369.00	2.80	292.40	8,356.46	-172.28	168.84	-387.58	422.76	293.54	607,297.84	737,746.42
8,463.00	2.30	280.10	8,450.37	-173.52	170.05	-391.56	426.89	293.47	607,299.05	737,742.44
8,556.00	2.70	275.60	8,543.28	-174.10	170.59	-395.58	430.79	293.33	607,299.59	737,738.42
8,650.00	2.60	277.30	8,637.18	-174.63	171.07	-399.89	434.95	293.16	607,300.07	737,734.11
8,744.00	3.00	288.40	8,731.06	-175.71	172.12	-404.34	439.45	293.06	607,301.12	737,729.66
8,837.00	3.00	288.70	8,823.94	-177.30	173.67	-408.96	444.31	293.01	607,302.67	737,725.04
8,931.00	3.20	292.10	8,917.80	-179.12	175.45	-413.72	449.38	292.98	607,304.45	737,720.28
9,024.00	3.30	291.70	9,010.65	-181.13	177.41	-418.61	454.65	292.97	607,306.41	737,715.39
9,117.00	3.40	293.70	9,103.49	-183.27	179.51	-423.62	460.09	292.96	607,308.51	737,710.38
9,210.00	3.40	298.80	9,196.33	-185.75	181.95	-428.56	465.59	293.00	607,310.95	737,705.44
9,304.00	3.70	303.70	9,290.15	-188.82	184.97	-433.53	471.34	293.11	607,313.97	737,700.47
9,397.00	3.80	305.30	9,382.95	-192.31	188.42	-438.54	477.31	293.25	607,317.42	737,695.46
9,491.00	3.90	306.10	9,476.74	-196.04	192.10	-443.67	483.47	293.41	607,321.10	737,690.33
9,584.00	2.40	283.50	9,569.60	-198.40	194.42	-448.12	488.47	293.45	607,323.42	737,685.88
9,678.00	2.00	269.60	9,663.53	-198.88	194.87	-451.67	491.91	293.34	607,323.87	737,682.33
9,771.00	2.00	262.00	9,756.47	-198.67	194.63	-454.90	494.79	293.16	607,323.63	737,679.10
9,865.00	2.20	258.80	9,850.41	-198.12	194.05	-458.29	497.68	292.95	607,323.05	737,675.71
9,958.00	2.30	265.50	9,943.34	-197.66	193.56	-461.91	500.82	292.74	607,322.56	737,672.09



ProDirectional
Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference:
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Survey Calculation Method:
Database:
Well No. 133H
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
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)	
10,052.00	2.20	271.50	10,037.26	-197.59	193.46	-465.59	504.18	292.56	607,322.46	737,668.41	
10,149.00	4.30	207.60	10,134.13	-194.45	190.28	-469.14	506.26	292.08	607,319.28	737,664.86	
10,180.00	8.40	196.90	10,164.93	-191.26	187.09	-470.33	506.18	291.69	607,316.09	737,663.67	
10,242.00	14.90	197.70	10,225.62	-179.36	175.15	-474.08	505.40	290.28	607,304.15	737,659.92	
10,289.00	16.50	195.30	10,270.87	-167.20	162.95	-477.68	504.71	288.84	607,291.95	737,656.32	
10,336.00	21.40	192.50	10,315.31	-152.41	148.13	-481.30	503.58	287.11	607,277.13	737,652.70	
10,383.00	25.00	188.60	10,358.50	-134.24	129.93	-484.64	501.75	285.01	607,258.93	737,649.36	
10,430.00	28.60	182.80	10,400.46	-113.19	108.87	-486.67	498.70	282.61	607,237.87	737,647.33	
10,477.00	32.30	176.10	10,440.98	-89.41	85.09	-486.37	493.76	279.92	607,214.09	737,647.63	
10,523.00	36.30	175.50	10,478.97	-63.55	59.24	-484.46	488.07	276.97	607,188.24	737,649.54	
10,570.00	40.80	179.10	10,515.72	-34.30	30.00	-483.13	484.06	273.55	607,159.00	737,650.87	
10,617.00	45.80	180.20	10,549.92	-2.08	-2.22	-482.95	482.95	269.74	607,126.78	737,651.05	
10,663.00	49.50	179.20	10,580.90	31.91	-36.21	-482.76	484.12	265.71	607,092.79	737,651.24	
10,710.00	52.70	177.40	10,610.41	68.47	-72.76	-481.66	487.13	261.41	607,056.24	737,652.34	
10,728.00	54.42	177.97	10,621.10	82.95	-87.23	-481.08	488.92	259.72	607,041.77	737,652.92	
HL Xing @ 10728' MD											
10,756.00	57.10	178.80	10,636.86	106.09	-110.37	-480.43	492.94	257.06	607,018.63	737,653.57	
10,803.00	64.00	181.10	10,659.95	146.98	-151.27	-480.42	503.67	252.52	606,977.73	737,653.58	
10,850.00	70.90	182.20	10,677.97	190.33	-194.63	-481.68	519.52	248.00	606,934.37	737,652.32	
10,897.00	74.70	182.70	10,691.86	235.16	-239.48	-483.60	539.65	243.66	606,889.52	737,650.40	
10,943.00	78.00	182.90	10,702.72	279.78	-284.12	-485.79	562.77	239.68	606,844.88	737,648.21	
10,991.00	80.20	181.90	10,711.79	326.85	-331.21	-487.76	589.58	235.82	606,797.79	737,646.24	
11,084.00	85.50	179.50	10,723.37	419.07	-423.44	-488.87	646.76	229.10	606,705.56	737,645.13	
11,178.00	87.30	178.60	10,729.27	512.88	-517.23	-487.32	710.64	223.29	606,611.77	737,646.68	
11,271.00	88.20	178.00	10,732.92	605.78	-610.12	-484.56	779.13	218.46	606,518.88	737,649.44	
11,365.00	87.70	178.50	10,736.28	699.70	-704.01	-481.69	853.03	214.38	606,424.99	737,652.31	
11,476.00	87.80	178.90	10,740.64	810.60	-814.90	-479.17	945.34	210.46	606,314.10	737,654.83	



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well No. 133H
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Pat809))
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Pat809))
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)	
11,569.00	88.30	179.40	10,743.81	903.55	-907.84	-477.80	1,025.89	207.76	606,221.16	737,656.20	
11,663.00	89.00	179.80	10,746.02	997.52	-1,001.81	-477.14	1,109.63	205.47	606,127.19	737,656.86	
11,756.00	89.80	180.40	10,746.99	1,090.51	-1,094.80	-477.30	1,194.32	203.56	606,034.20	737,656.70	
11,850.00	90.20	180.60	10,746.99	1,184.49	-1,188.80	-478.12	1,281.34	201.91	605,940.20	737,655.88	
11,943.00	89.40	180.40	10,747.32	1,277.48	-1,281.79	-478.93	1,368.34	200.49	605,847.21	737,655.07	
12,037.00	88.90	179.80	10,748.71	1,371.46	-1,375.78	-479.10	1,456.81	199.20	605,753.22	737,654.90	
12,131.00	89.40	179.80	10,750.11	1,465.45	-1,469.77	-478.77	1,545.78	198.04	605,659.23	737,655.23	
12,225.00	89.60	179.60	10,750.93	1,559.44	-1,563.76	-478.28	1,635.27	197.01	605,565.24	737,655.72	
12,318.00	89.70	180.20	10,751.50	1,652.44	-1,656.76	-478.12	1,724.37	196.10	605,472.24	737,655.88	
12,411.00	89.80	180.30	10,751.90	1,745.43	-1,749.76	-478.52	1,814.01	195.30	605,379.24	737,655.48	
12,505.00	89.50	180.20	10,752.48	1,839.42	-1,843.76	-478.93	1,904.95	194.56	605,285.24	737,655.07	
12,598.00	89.50	180.30	10,753.29	1,932.41	-1,936.75	-479.34	1,995.19	193.90	605,192.25	737,654.66	
12,692.00	89.10	180.20	10,754.44	2,026.39	-2,030.74	-479.75	2,086.64	193.29	605,098.26	737,654.25	
12,786.00	88.70	180.10	10,756.24	2,120.37	-2,124.73	-479.99	2,178.27	192.73	605,004.27	737,654.01	
12,879.00	88.30	180.10	10,758.67	2,213.33	-2,217.69	-480.16	2,269.08	192.22	604,911.31	737,653.84	
12,973.00	88.00	180.30	10,761.71	2,307.28	-2,311.64	-480.48	2,361.05	191.74	604,817.36	737,653.52	
13,066.00	88.60	178.90	10,764.47	2,400.23	-2,404.60	-479.83	2,452.01	191.29	604,724.40	737,654.17	
13,160.00	89.10	179.00	10,766.36	2,494.21	-2,498.56	-478.11	2,543.90	190.83	604,630.44	737,655.89	
13,253.00	89.90	179.50	10,767.17	2,587.20	-2,591.55	-476.90	2,635.06	190.43	604,537.45	737,657.10	
13,347.00	91.20	179.60	10,766.26	2,681.20	-2,685.54	-476.16	2,727.43	190.05	604,443.46	737,657.84	
13,440.00	89.50	178.90	10,765.70	2,774.19	-2,778.53	-474.94	2,818.83	189.70	604,350.47	737,659.06	
13,533.00	89.90	179.20	10,766.18	2,867.19	-2,871.51	-473.40	2,910.27	189.36	604,257.49	737,660.60	
13,627.00	90.60	179.60	10,765.77	2,961.18	-2,965.51	-472.41	3,002.90	189.05	604,163.49	737,661.59	
13,720.00	89.10	178.70	10,766.02	3,054.18	-3,058.49	-471.03	3,094.55	188.76	604,070.51	737,662.97	
13,814.00	89.10	178.60	10,767.49	3,148.16	-3,152.46	-468.82	3,187.13	188.46	603,976.54	737,665.18	
13,907.00	89.80	179.10	10,768.39	3,241.15	-3,245.43	-466.95	3,278.85	188.19	603,883.57	737,667.05	
14,001.00	89.90	179.10	10,768.63	3,335.14	-3,339.42	-465.48	3,371.70	187.94	603,789.58	737,668.52	



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

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

Well No. 133H
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Patt809))
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)
14,095.00	90.40	179.40	10,768.39	3,429.14	-3,433.41	-464.25	3,464.65	187.70	603,695.59	737,669.75
14,188.00	88.00	178.90	10,769.68	3,522.12	-3,526.38	-462.87	3,556.63	187.48	603,602.62	737,671.13
14,282.00	88.00	179.00	10,772.96	3,616.06	-3,620.31	-461.15	3,649.56	187.26	603,508.69	737,672.85
14,375.00	88.20	179.10	10,776.05	3,709.01	-3,713.25	-459.60	3,741.58	187.06	603,415.75	737,674.40
14,469.00	88.30	179.20	10,778.92	3,802.96	-3,807.19	-458.21	3,834.67	186.86	603,321.81	737,675.79
14,562.00	88.60	179.60	10,781.43	3,895.93	-3,900.15	-457.24	3,926.86	186.69	603,228.85	737,676.76
14,656.00	89.10	179.60	10,783.32	3,989.91	-3,994.13	-456.58	4,020.14	186.52	603,134.87	737,677.42
14,749.00	89.90	180.00	10,784.13	4,082.90	-4,087.13	-456.26	4,112.51	186.37	603,041.87	737,677.74
14,843.00	89.60	179.90	10,784.54	4,176.90	-4,181.13	-456.17	4,205.94	186.23	602,947.87	737,677.83
14,936.00	89.50	180.10	10,785.27	4,269.89	-4,274.12	-456.17	4,298.40	186.09	602,854.88	737,677.83
15,030.00	90.20	180.40	10,785.52	4,363.88	-4,368.12	-456.58	4,391.92	185.97	602,760.88	737,677.42
15,123.00	91.70	181.20	10,783.98	4,456.84	-4,461.10	-457.88	4,484.53	185.86	602,667.90	737,676.12
15,217.00	89.40	180.30	10,783.08	4,550.81	-4,555.08	-459.11	4,578.16	185.76	602,573.92	737,674.89
15,310.00	89.60	180.40	10,783.89	4,643.80	-4,648.07	-459.68	4,670.75	185.65	602,480.93	737,674.32
Last Survey: 15310' MD, 10783.89' TVD										
15,369.00	89.60	180.40	10,784.30	4,702.79	-4,707.07	-460.09	4,729.50	185.58	602,421.93	737,673.91
XL Xing @ 15369' MD										
15,469.00	89.60	180.40	10,785.00	4,802.77	-4,807.06	-460.79	4,829.10	185.48	602,321.94	737,673.21
PTB: 15469' MD, 10785' TVD										



ProDirectional
Survey Report



Company: Matador Resources
Project: Lea County, NM
Site: Cimarron State 16-19S-34E RN
Well: No. 133H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference: Well No. 133H
TVD Reference: Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Pat809))
MD Reference: Well @ 3853.50usft (GL: 3825' + KB: 28.5' (Pat809))
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Design Annotations:

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
197.00	197.00	0.43	-0.28	Pro MWD First Survey: 197' MD
10,728.00	10,621.10	-87.23	-481.08	HL Xing @ 10728' MD
15,310.00	10,783.89	-4,648.07	-459.68	Last Survey: 15310' MD, 10783.89' TVD
15,369.00	10,784.30	-4,707.07	-460.09	XL Xing @ 15369' MD
15,469.00	10,785.00	-4,807.06	-460.79	PTB: 15469' MD, 10785' TVD

Matador Production Company

One Lincoln Centre • 5400 LBJ Freeway • Suite 1500 • Dallas, Texas 75240

Voice 972.371.5218 • Fax 972.371.5201

amonroe@matadorresources.com

March 28, 2017

EMNRD – NMOCD Dist 1
Mr. Maxey Brown, District Supervisor
1625 N. French Drive
Hobbs, NM 88240

RE: ELAND 32 18 33 RN STATE COM 123H
API 30-025-42977; Property 316323
Lea Co., NM

Dear Sir:

Enclosed please find these completion documents for the above captioned well:

C-104 – RT
Directional survey with certification

If you need further information, please don't hesitate to contact me at 972-371-5218 or via email at amonroe@matadorresources.com.

Thank you,



Ava Monroe
Sr. Engineering Technician

Encl.