



PRODIRECTIONAL



Federal 30 No. 123H

Lea County, NM

August 08, 2017

Job No. LNM5143617

30-025-42467

ORIGINAL

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

August 08, 2017



Operator Name: Matador Resources
Well Name: Federal 30 No. 123H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5143617

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	199' MD – 14,489' MD	14,675' MD	07/08/17 – 08/02/17	MWD-OWSG

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

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

prodirectional.com



Matador Resources

Lea County, NM

Federal 30

No, 123H

OH

Survey: ProDirectional

Survey Report

08 August, 2017





ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No, 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference: Well No, 123H
TVD Reference: Well @ 3628.50usft
MD Reference: Well @ 3628.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

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

Site: Federal 30
Site Position: Northing: 596,383.00 usft Latitude: 32.637910°N
From: Map Easting: 736,152.00 usft Longitude: 103.700460°W
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: 0.34 °

Well: No, 123H
Well Position: +N/-S 0.00 usft Northing: 596,383.00 usft Latitude: 32.637910°N
+E/-W 0.00 usft Easting: 736,152.00 usft Longitude: 103.700460°W
Position Uncertainty: 0.00 usft Wellhead Elevation: usft Ground Level: 3,600.00 usft

Wellbore: OH
Magnetics: Model Name Sample Date Declination (°) Dip Angle (°) Field Strength (nT)
HDGM 6/19/2017 7.00 60.67 48,435.50

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

Survey Program: Date: 8/8/2017
From (usft) To (usft) Survey (Wellbore) Tool Name Description
199.00 14,675.00 Survey #1 (OH) MWD+HDGM OWSG MWD + HRGM



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No. 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3628.50usft
MD Reference: Well @ 3628.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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	596,383.00	736,152.00	
199.00	0.20	227.00	199.00	0.24	-0.24	-0.25	0.35	227.00	596,382.76	736,151.75	
PRO MWD First Survey: 199' MD											
323.00	0.20	198.20	323.00	0.59	-0.59	-0.48	0.76	219.12	596,382.41	736,151.52	
416.00	0.30	214.30	416.00	0.94	-0.95	-0.67	1.16	215.24	596,382.05	736,151.33	
508.00	0.30	193.50	508.00	1.37	-1.38	-0.86	1.62	211.95	596,381.62	736,151.14	
602.00	0.00	274.70	602.00	1.61	-1.62	-0.92	1.86	209.55	596,381.38	736,151.08	
691.00	0.10	298.10	691.00	1.58	-1.58	-0.99	1.86	211.94	596,381.42	736,151.01	
875.00	0.00	258.40	875.00	1.50	-1.51	-1.13	1.88	216.82	596,381.49	736,150.87	
968.00	0.20	278.30	968.00	1.48	-1.48	-1.29	1.96	220.99	596,381.52	736,150.71	
1,062.00	0.30	205.20	1,062.00	1.67	-1.68	-1.56	2.29	222.77	596,381.32	736,150.44	
1,155.00	0.30	210.40	1,154.99	2.10	-2.11	-1.78	2.76	220.16	596,380.89	736,150.22	
1,265.00	0.30	210.40	1,264.99	2.60	-2.61	-2.07	3.33	218.48	596,380.39	736,149.93	
1,346.00	0.30	232.40	1,345.99	2.91	-2.92	-2.35	3.75	218.81	596,380.08	736,149.65	
1,439.00	0.30	204.90	1,438.99	3.28	-3.29	-2.64	4.22	218.79	596,379.71	736,149.36	
1,533.00	0.20	189.10	1,532.99	3.66	-3.68	-2.77	4.60	217.04	596,379.32	736,149.23	
1,627.00	0.20	156.60	1,626.99	3.98	-3.99	-2.73	4.84	214.44	596,379.01	736,149.27	
1,720.00	0.10	134.90	1,719.99	4.18	-4.19	-2.61	4.94	211.92	596,378.81	736,149.39	
1,814.00	0.00	180.20	1,813.99	4.24	-4.25	-2.55	4.96	211.00	596,378.75	736,149.45	
1,908.00	0.00	180.20	1,907.99	4.24	-4.25	-2.55	4.96	211.00	596,378.75	736,149.45	
2,001.00	0.60	14.90	2,000.99	3.77	-3.78	-2.43	4.49	212.72	596,379.22	736,149.57	
2,095.00	2.30	13.20	2,094.95	1.46	-1.47	-1.87	2.38	231.87	596,381.53	736,150.13	
2,188.00	4.90	15.00	2,187.76	-4.19	4.19	-0.42	4.21	354.30	596,387.19	736,151.58	
2,282.00	8.00	18.80	2,281.16	-14.25	14.26	2.73	14.52	10.84	596,397.26	736,154.73	
2,375.00	9.00	20.10	2,373.13	-27.18	27.22	7.32	28.18	15.05	596,410.22	736,159.32	
2,469.00	8.60	21.00	2,466.03	-40.63	40.68	12.36	42.52	16.90	596,423.68	736,164.36	
2,562.00	7.10	19.00	2,558.15	-52.54	52.61	16.72	55.20	17.64	596,435.61	736,168.72	



ProDirectional
Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No, 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3628.50usft
MD Reference: Well @ 3628.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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)	
2,656.00	5.10	14.90	2,651.62	-62.06	62.14	19.69	65.18	17.58	596,445.14	736,171.69	
2,749.00	4.60	15.50	2,744.28	-69.64	69.73	21.75	73.04	17.32	596,452.73	736,173.75	
2,843.00	4.20	14.60	2,838.01	-76.59	76.69	23.62	80.25	17.12	596,459.69	736,175.62	
2,936.00	3.80	14.00	2,930.78	-82.87	82.98	25.23	86.73	16.91	596,465.98	736,177.23	
3,030.00	3.50	11.40	3,024.59	-88.70	88.81	26.55	92.70	16.64	596,471.81	736,178.55	
3,123.00	3.10	11.00	3,117.43	-93.95	94.06	27.59	98.03	16.35	596,477.06	736,179.59	
3,141.00	3.10	9.70	3,135.41	-94.90	95.02	27.77	98.99	16.29	596,478.02	736,179.77	
3,307.00	2.20	6.30	3,301.23	-102.49	102.61	28.87	106.60	15.71	596,485.61	736,180.87	
3,401.00	3.00	5.40	3,395.13	-106.73	106.85	29.30	110.80	15.33	596,489.85	736,181.30	
3,494.00	3.30	6.60	3,487.99	-111.81	111.94	29.84	115.84	14.93	596,494.94	736,181.84	
3,588.00	3.40	359.50	3,581.83	-117.28	117.41	30.12	121.21	14.39	596,500.41	736,182.12	
3,775.00	4.90	4.90	3,768.33	-130.78	130.91	30.76	134.48	13.22	596,513.91	736,182.76	
3,962.00	5.80	358.70	3,954.52	-148.19	148.32	31.23	151.57	11.89	596,531.32	736,183.23	
4,149.00	7.90	32.20	4,140.25	-168.49	168.65	37.86	172.85	12.65	596,551.65	736,189.86	
4,180.00	7.90	36.50	4,170.95	-171.99	172.16	40.27	176.81	13.16	596,555.16	736,192.27	
4,242.00	7.40	47.00	4,232.40	-178.12	178.31	45.72	184.08	14.38	596,561.31	736,197.72	
4,274.00	7.30	51.00	4,264.14	-180.79	181.00	48.81	187.46	15.09	596,564.00	736,200.81	
4,336.00	6.30	60.90	4,325.71	-184.90	185.13	54.84	193.08	16.50	596,568.13	736,206.84	
4,367.00	5.40	65.60	4,356.54	-186.32	186.56	57.66	195.27	17.17	596,569.56	736,209.66	
4,398.00	5.10	69.70	4,387.41	-187.39	187.64	60.28	197.09	17.81	596,570.64	736,212.28	
4,429.00	4.00	78.70	4,418.32	-188.07	188.33	62.63	198.47	18.39	596,571.33	736,214.63	
4,460.00	3.40	84.80	4,449.25	-188.35	188.63	64.60	199.38	18.91	596,571.63	736,216.60	
4,523.00	2.00	108.80	4,512.18	-188.16	188.44	67.51	200.17	19.71	596,571.44	736,219.51	
4,585.00	1.40	149.50	4,574.16	-187.15	187.44	68.91	199.71	20.19	596,570.44	736,220.91	
4,648.00	1.50	163.30	4,637.14	-185.69	185.99	69.54	198.56	20.50	596,568.99	736,221.54	
4,710.00	1.80	167.00	4,699.11	-183.97	184.26	69.99	197.11	20.80	596,567.26	736,221.99	
4,772.00	1.90	170.20	4,761.08	-182.00	182.30	70.39	195.42	21.11	596,565.30	736,222.39	



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No, 123H
Wellbore: OH
Design: MWD

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

Well No, 123H
Well @ 3628.50usft
Well @ 3628.50usft
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)	
4,835.00	2.20	172.50	4,824.04	-179.77	180.07	70.72	193.46	21.44	596,563.07	736,222.72	
4,897.00	2.30	174.70	4,885.99	-177.35	177.65	70.99	191.31	21.78	596,560.65	736,222.99	
4,952.00	2.30	177.40	4,940.95	-175.15	175.45	71.15	189.33	22.07	596,558.45	736,223.15	
5,086.00	2.50	174.40	5,074.83	-169.56	169.86	71.55	184.31	22.84	596,552.86	736,223.55	
5,176.00	2.50	166.50	5,164.74	-165.69	166.00	72.20	181.02	23.51	596,549.00	736,224.20	
5,270.00	2.40	159.70	5,258.66	-161.85	162.16	73.36	177.98	24.34	596,545.16	736,225.36	
5,363.00	0.30	20.90	5,351.63	-160.24	160.56	74.13	176.84	24.78	596,543.56	736,226.13	
5,457.00	1.00	354.40	5,445.63	-161.29	161.60	74.14	177.80	24.64	596,544.60	736,226.14	
5,550.00	1.00	1.00	5,538.61	-162.91	163.22	74.07	179.24	24.41	596,546.22	736,226.07	
5,644.00	0.90	6.60	5,632.60	-164.46	164.78	74.17	180.70	24.23	596,547.78	736,226.17	
5,738.00	0.80	7.10	5,726.59	-165.85	166.16	74.34	182.03	24.10	596,549.16	736,226.34	
5,832.00	1.00	13.40	5,820.58	-167.30	167.61	74.61	183.46	23.99	596,550.61	736,226.61	
5,926.00	1.00	14.90	5,914.56	-168.88	169.20	75.01	185.08	23.91	596,552.20	736,227.01	
6,020.00	1.10	356.50	6,008.55	-170.58	170.89	75.16	186.69	23.74	596,553.89	736,227.16	
6,114.00	1.00	348.10	6,102.53	-172.28	172.60	74.94	188.16	23.47	596,555.60	736,226.94	
6,205.00	0.80	192.60	6,193.53	-172.44	172.75	74.64	188.19	23.37	596,555.75	736,226.64	
6,299.00	1.40	206.00	6,287.51	-170.77	171.08	73.99	186.40	23.39	596,554.08	736,225.99	
6,391.00	1.60	193.30	6,379.48	-168.51	168.82	73.20	184.01	23.44	596,551.82	736,225.20	
6,485.00	1.50	194.80	6,473.44	-166.05	166.35	72.59	181.50	23.57	596,549.35	736,224.59	
6,579.00	1.50	192.30	6,567.41	-163.66	163.96	72.01	179.08	23.71	596,546.96	736,224.01	
6,672.00	1.40	188.10	6,660.38	-161.35	161.65	71.59	176.79	23.89	596,544.65	736,223.59	
6,766.00	1.20	190.60	6,754.36	-159.24	159.54	71.25	174.73	24.06	596,542.54	736,223.25	
6,859.00	1.20	199.20	6,847.34	-157.37	157.67	70.75	172.81	24.17	596,540.67	736,222.75	
6,952.00	1.00	212.50	6,940.32	-155.77	156.06	69.99	171.04	24.16	596,539.06	736,221.99	
7,046.00	0.90	39.00	7,034.32	-155.65	155.95	70.02	170.94	24.18	596,538.95	736,222.02	
7,140.00	1.00	10.20	7,128.30	-157.03	157.33	70.63	172.45	24.18	596,540.33	736,222.63	
7,235.00	1.00	358.90	7,223.29	-158.67	158.97	70.76	174.01	23.99	596,541.97	736,222.76	



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No, 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3628.50usft
MD Reference: Well @ 3628.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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)
7,329.00	1.10	340.40	7,317.27	-160.34	160.64	70.44	175.41	23.68	596,543.64	736,222.44
7,423.00	1.20	348.00	7,411.25	-162.16	162.45	69.93	176.87	23.29	596,545.45	736,221.93
7,518.00	1.30	346.90	7,506.23	-164.18	164.48	69.48	178.55	22.90	596,547.48	736,221.48
7,606.00	1.20	338.90	7,594.21	-166.02	166.31	68.92	180.02	22.51	596,549.31	736,220.92
7,700.00	1.10	345.90	7,688.19	-167.81	168.10	68.35	181.46	22.13	596,551.10	736,220.35
7,794.00	0.90	348.70	7,782.18	-169.41	169.70	67.98	182.81	21.83	596,552.70	736,219.98
7,887.00	0.70	338.50	7,875.17	-170.66	170.95	67.63	183.84	21.59	596,553.95	736,219.63
7,981.00	0.30	1.90	7,969.17	-171.44	171.73	67.43	184.49	21.44	596,554.73	736,219.43
8,074.00	0.10	271.60	8,062.16	-171.69	171.97	67.36	184.69	21.39	596,554.97	736,219.36
8,168.00	0.30	316.50	8,156.16	-171.87	172.15	67.10	184.77	21.30	596,555.15	736,219.10
8,262.00	0.70	319.90	8,250.16	-172.49	172.77	66.57	185.15	21.07	596,555.77	736,218.57
8,355.00	0.80	301.10	8,343.15	-173.26	173.54	65.64	185.54	20.72	596,556.54	736,217.64
8,448.00	0.80	279.60	8,436.14	-173.71	173.98	64.45	185.54	20.33	596,556.98	736,216.45
8,542.00	1.40	210.60	8,530.13	-172.84	173.10	63.22	184.29	20.06	596,556.10	736,215.22
8,635.00	2.40	212.40	8,623.08	-170.22	170.48	61.59	181.27	19.86	596,553.48	736,213.59
8,729.00	2.10	208.40	8,717.00	-167.05	167.31	59.72	177.64	19.64	596,550.31	736,211.72
8,822.00	1.90	214.20	8,809.95	-164.29	164.53	58.04	174.47	19.43	596,547.53	736,210.04
8,916.00	2.00	229.70	8,903.89	-161.95	162.18	55.92	171.55	19.02	596,545.18	736,207.92
9,009.00	1.90	246.30	8,996.84	-160.29	160.51	53.27	169.12	18.36	596,543.51	736,205.27
9,103.00	1.90	241.00	9,090.79	-158.92	159.13	50.48	166.94	17.60	596,542.13	736,202.48
9,197.00	2.80	201.30	9,184.72	-156.03	156.24	48.28	163.53	17.17	596,539.24	736,200.28
9,265.00	3.30	191.20	9,252.62	-152.57	152.77	47.30	159.92	17.20	596,535.77	736,199.30
9,331.00	4.00	182.70	9,318.49	-148.41	148.61	46.82	155.81	17.49	596,531.61	736,198.82
9,378.00	7.30	182.30	9,365.25	-143.79	143.98	46.62	151.34	17.94	596,526.98	736,198.62
9,424.00	10.60	183.10	9,410.68	-136.64	136.84	46.28	144.45	18.68	596,519.84	736,198.28
9,456.00	12.70	185.40	9,442.02	-130.20	130.39	45.79	138.20	19.35	596,513.39	736,197.79
9,487.00	14.80	184.50	9,472.13	-122.86	123.05	45.15	131.08	20.15	596,506.05	736,197.15



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No. 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3628.50usft
MD Reference: Well @ 3628.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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)
9,518.00	16.50	184.40	9,501.98	-114.53	114.72	44.51	123.05	21.20	596,497.72	736,196.51
9,549.00	19.20	185.30	9,531.49	-105.07	105.25	43.70	113.96	22.55	596,488.25	736,195.70
9,580.00	21.40	185.40	9,560.56	-94.36	94.54	42.69	103.74	24.30	596,477.54	736,194.69
9,611.00	23.60	184.00	9,589.20	-82.55	82.72	41.73	92.65	26.77	596,465.72	736,193.73
9,642.00	25.80	183.50	9,617.36	-69.62	69.80	40.88	80.89	30.36	596,452.80	736,192.88
9,674.00	28.30	183.60	9,645.86	-55.10	55.27	39.98	68.22	35.88	596,438.27	736,191.98
9,708.00	30.60	183.60	9,675.46	-38.43	38.59	38.93	54.82	45.25	596,421.59	736,190.93
9,739.00	32.50	184.10	9,701.88	-22.25	22.41	37.84	43.98	59.37	596,405.41	736,189.84
9,770.00	36.60	183.80	9,727.41	-4.72	4.87	36.63	36.96	82.43	596,387.87	736,188.63
9,801.00	40.50	182.80	9,751.65	14.56	-14.41	35.53	38.34	112.08	596,368.59	736,187.53
9,848.00	47.00	182.50	9,785.58	47.00	-46.86	34.03	57.91	144.01	596,336.14	736,186.03
9,895.00	53.90	182.60	9,815.49	83.18	-83.04	32.42	89.15	158.68	596,299.96	736,184.42
9,942.00	59.60	181.90	9,841.25	122.43	-122.30	30.88	126.14	165.83	596,260.70	736,182.88
9,989.00	61.80	179.40	9,864.25	163.41	-163.28	30.43	166.09	169.44	596,219.72	736,182.43
10,036.00	65.10	179.70	9,885.26	205.44	-205.32	30.76	207.61	171.48	596,177.68	736,182.76
10,082.00	70.00	181.60	9,902.82	247.94	-247.81	30.26	249.65	173.04	596,135.19	736,182.26
10,129.00	76.10	182.70	9,916.51	292.83	-292.72	28.57	294.11	174.43	596,090.28	736,180.57
10,175.00	80.80	181.40	9,925.72	337.85	-337.74	26.96	338.82	175.44	596,045.26	736,178.96
10,222.00	84.30	177.60	9,931.82	384.44	-384.33	27.38	385.30	175.93	595,998.67	736,179.38
10,269.00	88.10	175.00	9,934.93	431.24	-431.11	30.40	432.18	175.97	595,951.89	736,182.40
10,363.00	89.40	173.00	9,936.98	524.73	-524.57	40.23	526.11	175.61	595,858.43	736,192.23
10,456.00	89.40	171.40	9,937.96	616.92	-616.70	52.85	618.96	175.10	595,766.30	736,204.85
10,550.00	86.50	173.60	9,941.32	710.09	-709.82	65.11	712.80	174.76	595,673.18	736,217.11
10,644.00	85.80	177.70	9,947.63	803.61	-803.32	72.22	806.56	174.86	595,579.68	736,224.22
10,738.00	85.60	178.10	9,954.68	897.30	-896.99	75.66	900.18	175.18	595,486.01	736,227.66
10,831.00	88.80	178.80	9,959.22	990.15	-989.83	78.17	992.91	175.48	595,393.17	736,230.17
10,924.00	89.40	179.10	9,960.69	1,083.13	-1,082.81	79.87	1,085.75	175.78	595,300.19	736,231.87



ProDirectional
Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No. 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3628.50usft
MD Reference: Well @ 3628.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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)
11,018.00	89.60	178.70	9,961.51	1,177.12	-1,176.78	81.68	1,179.62	176.03	595,206.22	736,233.68
11,112.00	90.10	177.50	9,961.75	1,271.07	-1,270.73	84.79	1,273.56	176.18	595,112.27	736,236.79
11,205.00	90.00	177.00	9,961.67	1,363.98	-1,363.62	89.25	1,366.54	176.26	595,019.38	736,241.25
11,298.00	89.60	179.50	9,962.00	1,456.94	-1,456.57	92.09	1,459.48	176.38	594,926.43	736,244.09
11,392.00	89.90	180.20	9,962.41	1,550.94	-1,550.57	92.34	1,553.32	176.59	594,832.43	736,244.34
11,485.00	90.60	180.20	9,962.00	1,643.94	-1,643.57	92.02	1,646.14	176.80	594,739.43	736,244.02
11,579.00	90.50	182.50	9,961.10	1,737.89	-1,737.53	89.80	1,739.85	177.04	594,645.47	736,241.80
11,672.00	91.00	183.70	9,959.88	1,830.72	-1,830.38	84.77	1,832.35	177.35	594,552.62	736,236.77
11,765.00	89.80	184.30	9,959.23	1,923.46	-1,923.15	78.29	1,924.75	177.67	594,459.85	736,230.29
11,859.00	89.90	184.60	9,959.48	2,017.15	-2,016.87	70.99	2,018.12	177.98	594,366.13	736,222.99
11,952.00	90.30	185.00	9,959.31	2,109.79	-2,109.54	63.21	2,110.49	178.28	594,273.46	736,215.21
12,046.00	88.80	181.50	9,960.05	2,203.60	-2,203.37	57.88	2,204.13	178.50	594,179.63	736,209.88
12,139.00	88.50	181.30	9,962.24	2,296.53	-2,296.32	55.61	2,296.99	178.61	594,086.68	736,207.61
12,233.00	88.50	182.00	9,964.70	2,390.45	-2,390.25	52.91	2,390.83	178.73	593,992.75	736,204.91
12,327.00	89.30	182.10	9,966.51	2,484.35	-2,484.17	49.54	2,484.66	178.86	593,898.83	736,201.54
12,420.00	88.40	180.20	9,968.38	2,577.30	-2,577.13	47.68	2,577.57	178.94	593,805.87	736,199.68
12,514.00	88.00	180.10	9,971.33	2,671.25	-2,671.08	47.43	2,671.50	178.98	593,711.92	736,199.43
12,607.00	88.30	180.00	9,974.33	2,764.20	-2,764.03	47.35	2,764.44	179.02	593,618.97	736,199.35
12,701.00	90.30	178.80	9,975.48	2,858.19	-2,858.01	48.33	2,858.42	179.03	593,524.99	736,200.33
12,794.00	90.90	179.40	9,974.51	2,951.18	-2,950.99	49.79	2,951.41	179.03	593,432.01	736,201.79
12,887.00	91.30	179.50	9,972.72	3,044.16	-3,043.97	50.69	3,044.39	179.05	593,339.03	736,202.69
12,981.00	89.40	178.10	9,972.15	3,138.14	-3,137.94	52.66	3,138.38	179.04	593,245.06	736,204.66
13,074.00	89.30	177.60	9,973.20	3,231.08	-3,230.87	56.14	3,231.36	179.00	593,152.13	736,208.14
13,168.00	89.40	178.20	9,974.27	3,325.02	-3,324.80	59.59	3,325.34	178.97	593,058.20	736,211.59
13,261.00	89.50	179.10	9,975.16	3,418.00	-3,417.77	61.78	3,418.33	178.96	592,965.23	736,213.78
13,355.00	90.10	179.70	9,975.49	3,512.00	-3,511.76	62.76	3,512.33	178.98	592,871.24	736,214.76
13,449.00	89.90	180.00	9,975.49	3,606.00	-3,605.76	63.01	3,606.31	179.00	592,777.24	736,215.01



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Federal 30
Well: No. 123H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well No. 123H
MD Reference: Well @ 3628.50usft
North Reference: Well @ 3628.50usft
Survey Calculation Method: Grid
Database: 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)
13,542.00	90.00	179.90	9,975.57	3,699.00	-3,698.76	63.09	3,699.30	179.02	592,684.24	736,215.09
13,636.00	89.70	179.60	9,975.82	3,792.99	-3,792.76	63.50	3,793.29	179.04	592,590.24	736,215.50
13,729.00	89.80	178.80	9,976.22	3,885.99	-3,885.75	64.80	3,886.29	179.04	592,497.25	736,216.80
13,823.00	90.60	178.80	9,975.89	3,979.97	-3,979.73	66.77	3,980.29	179.04	592,403.27	736,218.77
13,916.00	91.40	178.80	9,974.27	4,072.95	-4,072.69	68.72	4,073.27	179.03	592,310.31	736,220.72
14,010.00	91.50	178.80	9,971.89	4,166.90	-4,166.64	70.68	4,167.24	179.03	592,216.36	736,222.68
14,104.00	88.90	178.80	9,971.56	4,260.88	-4,260.61	72.65	4,261.23	179.02	592,122.39	736,224.65
14,197.00	89.60	178.90	9,972.78	4,353.86	-4,353.59	74.52	4,354.22	179.02	592,029.41	736,226.52
14,302.00	91.30	179.00	9,971.96	4,458.84	-4,458.56	76.44	4,459.22	179.02	591,924.44	736,228.44
14,395.00	93.50	178.90	9,968.06	4,551.75	-4,551.46	78.15	4,552.13	179.02	591,831.54	736,230.15
14,489.00	92.70	177.90	9,962.98	4,645.58	-4,645.28	80.77	4,645.99	179.00	591,737.72	736,232.77
Last Survey: 14489' MD, 9962.98' TVD										
14,675.00	92.70	177.91	9,954.22	4,831.28	-4,830.95	87.56	4,831.75	178.96	591,552.05	736,239.56
PTB: 14675' MD										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
199.00	199.00	-0.24	-0.25	PRO MWD First Survey: 199' MD
14,489.00	9,962.98	-4,645.28	80.77	Last Survey: 14489' MD, 9962.98' TVD
14,675.00	9,954.22	-4,830.95	87.56	PTB: 14675' MD