



30-025-44937

Carl Mottek Federal No. 125

Lea County, NM

December 14, 2018

Job No. LNM5191118

Certified Report



December 14, 2018



Operator Name: Matador Resources
Well Name: Carl Mottek Federal No. 125
County/Parish: Lea County,
State: NM
Rig Name: Patterson 274
Job Number: LNM5191118

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	148' MD – 15,672' MD	15,740' MD	11/08/18 – 11/21/18	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

Carl Mottek Federal

No. 125H

OH

Survey: ProDirectional

Survey Report

14 December, 2018





ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Carl Mottek Federal
Well: No. 125H
Wellbore: OH
Design: MWD-148'-15672', Proj. 15740'

Local Co-ordinate Reference: Well No. 125H
TVD Reference: Well @ 3606.50usft
MD Reference: Well @ 3606.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	Carl Mottek Federal		
Site Position:		Northing:	446,202.00 usft
From:	Map	Easting:	799,323.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.223932
		Longitude:	-103.499069
		Grid Convergence:	0.44 °

Well	No. 125H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32.223932
		Longitude:	-103.499069
		Ground Level:	3,578.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	HDGM	11/5/2018	(°)
			6.72
			Dip Angle
			(°)
			59.92
			Field Strength
			(nT)
			47,962.30

Design	MWD-148'-15672', Proj. 15740'		
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
			(°)
			179.45

Survey Program	Date	12/14/2018		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
148.00	15,740.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM



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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	446,202.00	799,323.00
148.00	0.40	3.60	148.00	-0.52	0.52	0.03	0.52	3.60	446,202.52	799,323.03
Pro MWD First Survey: 148' MD										
274.00	0.50	22.30	273.99	-1.46	1.46	0.27	1.49	10.40	446,203.46	799,323.27
368.00	0.70	28.00	367.99	-2.34	2.35	0.69	2.45	16.45	446,204.35	799,323.69
429.00	0.50	27.70	428.99	-2.90	2.91	0.99	3.08	18.81	446,204.91	799,323.99
521.00	0.60	33.00	520.98	-3.66	3.67	1.44	3.95	21.42	446,205.67	799,324.44
612.00	0.70	42.70	611.98	-4.46	4.48	2.08	4.94	24.87	446,206.48	799,325.08
704.00	0.80	52.30	703.97	-5.26	5.29	2.97	6.06	29.30	446,207.29	799,325.97
796.00	0.90	45.50	795.96	-6.15	6.19	3.99	7.36	32.82	446,208.19	799,326.99
887.00	0.90	53.70	886.95	-7.06	7.11	5.08	8.74	35.52	446,209.11	799,328.08
978.00	0.80	56.30	977.94	-7.83	7.89	6.18	10.02	38.09	446,209.89	799,329.18
1,069.00	0.70	56.50	1,068.93	-8.48	8.55	7.17	11.16	40.01	446,210.55	799,330.17
1,160.00	0.70	50.00	1,159.92	-9.13	9.21	8.06	12.24	41.20	446,211.21	799,331.06
1,251.00	0.90	54.30	1,250.91	-9.90	9.98	9.07	13.49	42.25	446,211.98	799,332.07
1,344.00	0.80	68.40	1,343.90	-10.55	10.65	10.27	14.79	43.95	446,212.65	799,333.27
1,439.00	0.60	39.20	1,438.90	-11.17	11.28	11.20	15.89	44.79	446,213.28	799,334.20
1,535.00	1.00	36.20	1,534.89	-12.23	12.34	12.01	17.22	44.21	446,214.34	799,335.01
1,630.00	0.70	61.30	1,629.88	-13.17	13.29	13.01	18.60	44.38	446,215.29	799,336.01
1,725.00	2.10	55.90	1,724.85	-14.40	14.55	14.96	20.86	45.80	446,216.55	799,337.96
1,821.00	4.30	53.70	1,820.69	-17.48	17.66	19.32	26.17	47.56	446,219.66	799,342.32
1,915.00	5.50	52.50	1,914.35	-22.24	22.49	25.73	34.18	48.84	446,224.49	799,348.73
2,010.00	5.40	56.70	2,008.92	-27.40	27.72	33.08	43.16	50.04	446,229.72	799,356.08
2,106.00	5.60	55.00	2,104.47	-32.49	32.89	40.69	52.32	51.06	446,234.89	799,363.69
2,201.00	5.30	58.70	2,199.05	-37.36	37.82	48.24	61.30	51.90	446,239.82	799,371.24
2,297.00	5.20	58.50	2,294.64	-41.86	42.40	55.73	70.03	52.74	446,244.40	799,378.73
2,392.00	5.20	53.60	2,389.25	-46.60	47.20	62.87	78.62	53.10	446,249.20	799,385.87



ProDirectional Survey Report



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Site: Carl Mottek Federal
Well: No. 125H
Wellbore: OH
Design: MWD-148'-15672', Proj. 15740'

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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)
2,487.00	5.00	52.40	2,483.88	-51.61	52.28	69.61	87.06	53.09	446,254.28	799,392.61
2,582.00	4.90	55.30	2,578.52	-56.39	57.12	76.23	95.26	53.16	446,259.12	799,399.23
2,678.00	4.50	53.10	2,674.20	-60.92	61.72	82.61	103.12	53.24	446,263.72	799,405.61
2,773.00	3.90	57.20	2,768.94	-64.85	65.70	88.31	110.07	53.35	446,267.70	799,411.31
2,868.00	4.00	50.70	2,863.72	-68.65	69.55	93.59	116.60	53.38	446,271.55	799,416.59
2,963.00	3.60	50.50	2,958.51	-72.60	73.55	98.45	122.89	53.24	446,275.55	799,421.45
3,057.00	3.50	53.50	3,052.33	-76.14	77.13	103.04	128.71	53.18	446,279.13	799,426.04
3,153.00	3.70	49.60	3,148.14	-79.84	80.88	107.75	134.73	53.11	446,282.88	799,430.75
3,248.00	4.40	52.60	3,242.90	-83.99	85.08	112.98	141.44	53.02	446,287.08	799,435.98
3,343.00	5.90	52.80	3,337.52	-89.09	90.25	119.77	149.96	53.00	446,292.25	799,442.77
3,438.00	5.80	53.70	3,432.02	-94.81	96.04	127.52	159.64	53.02	446,298.04	799,450.52
3,533.00	5.60	52.90	3,526.55	-100.38	101.68	135.09	169.08	53.03	446,303.68	799,458.09
3,629.00	5.40	48.50	3,622.11	-106.13	107.50	142.21	178.27	52.91	446,309.50	799,465.21
3,724.00	5.10	48.70	3,716.71	-111.81	113.25	148.73	186.94	52.71	446,315.25	799,471.73
3,819.00	4.10	50.00	3,811.40	-116.73	118.22	154.50	194.54	52.58	446,320.22	799,477.50
3,914.00	3.40	49.50	3,906.20	-120.70	122.23	159.25	200.75	52.49	446,324.23	799,482.25
4,010.00	3.90	49.30	4,002.00	-124.63	126.21	163.89	206.85	52.40	446,328.21	799,486.89
4,104.00	4.30	62.40	4,095.77	-128.29	129.92	169.43	213.51	52.52	446,331.92	799,492.43
4,200.00	3.50	60.60	4,191.54	-131.34	133.03	175.18	219.96	52.79	446,335.03	799,498.18
4,295.00	3.00	60.90	4,286.39	-133.93	135.66	179.87	225.30	52.98	446,337.66	799,502.87
4,390.00	2.80	59.40	4,381.27	-136.28	138.05	184.04	230.07	53.13	446,340.05	799,507.04
4,486.00	4.90	51.90	4,477.05	-139.95	141.78	189.29	236.50	53.17	446,343.78	799,512.29
4,581.00	6.60	58.70	4,571.57	-145.22	147.12	197.15	245.99	53.27	446,349.12	799,520.15
4,676.00	6.90	63.10	4,665.91	-150.54	152.54	206.90	257.05	53.60	446,354.54	799,529.90
4,771.00	7.60	58.10	4,760.15	-156.34	158.44	217.32	268.95	53.91	446,360.44	799,540.32
4,867.00	7.80	54.50	4,855.28	-163.38	165.58	228.02	281.79	54.01	446,367.58	799,551.02
4,962.00	7.40	54.80	4,949.45	-170.55	172.85	238.26	294.36	54.04	446,374.85	799,561.26



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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)
5,057.00	6.00	51.70	5,043.80	-177.07	179.45	247.16	305.43	54.02	446,381.45	799,570.16
5,153.00	5.00	49.60	5,139.36	-182.82	185.27	254.28	314.62	53.92	446,387.27	799,577.28
5,248.00	4.40	52.80	5,234.04	-187.65	190.16	260.34	322.39	53.85	446,392.16	799,583.34
5,355.00	3.50	50.00	5,340.78	-192.17	194.74	266.11	329.75	53.80	446,396.74	799,589.11
5,450.00	3.50	52.00	5,435.60	-195.78	198.39	270.62	335.55	53.76	446,400.39	799,593.62
5,545.00	6.50	47.50	5,530.23	-201.14	203.81	276.87	343.79	53.64	446,405.81	799,599.87
5,641.00	7.10	46.40	5,625.56	-208.82	211.57	285.17	355.08	53.43	446,413.57	799,608.17
5,736.00	7.30	46.50	5,719.81	-216.94	219.77	293.80	366.90	53.20	446,421.77	799,616.80
5,831.00	7.30	44.50	5,814.04	-225.32	228.23	302.41	378.87	52.96	446,430.23	799,625.41
5,927.00	7.60	44.20	5,909.23	-234.14	237.13	311.11	391.18	52.68	446,439.13	799,634.11
6,022.00	5.80	49.90	6,003.57	-241.65	244.73	319.16	402.19	52.52	446,446.73	799,642.16
6,117.00	5.30	49.40	6,098.13	-247.53	250.68	326.17	411.37	52.46	446,452.68	799,649.17
6,212.00	5.20	46.20	6,192.73	-253.31	256.51	332.60	420.03	52.36	446,458.51	799,655.60
6,307.00	5.10	46.10	6,287.35	-259.16	262.42	338.75	428.51	52.24	446,464.42	799,661.75
6,402.00	5.10	56.70	6,381.97	-264.34	267.67	345.33	436.91	52.22	446,469.67	799,668.33
6,497.00	5.10	57.50	6,476.60	-268.86	272.25	352.42	445.33	52.31	446,474.25	799,675.42
6,592.00	3.00	72.50	6,571.36	-271.82	275.27	358.35	451.87	52.47	446,477.27	799,681.35
6,687.00	2.30	86.90	6,666.26	-272.63	276.12	362.62	455.78	52.71	446,478.12	799,685.62
6,782.00	0.90	100.40	6,761.22	-272.57	276.09	365.26	457.86	52.92	446,478.09	799,688.26
6,878.00	0.60	121.70	6,857.21	-272.16	275.69	366.43	458.56	53.04	446,477.69	799,689.43
6,973.00	0.90	119.30	6,952.20	-271.52	275.06	367.50	459.04	53.19	446,477.06	799,690.50
7,068.00	1.70	283.10	7,047.19	-271.48	275.02	366.78	458.44	53.14	446,477.02	799,689.78
7,164.00	2.00	280.70	7,143.14	-272.15	275.65	363.75	456.39	52.85	446,477.65	799,686.75
7,259.00	1.90	284.40	7,238.08	-272.88	276.35	360.59	454.31	52.53	446,478.35	799,683.59
7,354.00	1.90	286.00	7,333.03	-273.73	277.18	357.56	452.41	52.22	446,479.18	799,680.56
7,449.00	1.90	287.30	7,427.98	-274.66	278.08	354.54	450.58	51.89	446,480.08	799,677.54
7,545.00	0.50	118.20	7,523.97	-274.95	278.35	353.39	449.85	51.77	446,480.35	799,676.39



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7,640.00	0.70	122.80	7,618.96	-274.43	277.84	354.24	450.20	51.89	446,479.84	799,677.24
7,735.00	0.40	132.10	7,713.96	-273.89	277.31	354.97	450.45	52.00	446,479.31	799,677.97
7,829.00	0.20	129.50	7,807.95	-273.56	276.98	355.34	450.54	52.06	446,478.98	799,678.34
7,924.00	0.20	146.00	7,902.95	-273.31	276.74	355.56	450.57	52.11	446,478.74	799,678.56
8,020.00	0.40	127.60	7,998.95	-272.97	276.40	355.92	450.64	52.17	446,478.40	799,678.92
8,115.00	0.20	193.70	8,093.95	-272.60	276.03	356.15	450.59	52.22	446,478.03	799,679.15
8,210.00	0.30	170.40	8,188.95	-272.19	275.63	356.15	450.35	52.26	446,477.63	799,679.15
8,305.00	0.40	174.80	8,283.95	-271.62	275.05	356.22	450.05	52.33	446,477.05	799,679.22
8,401.00	0.40	170.40	8,379.95	-270.95	274.39	356.31	449.71	52.40	446,476.39	799,679.31
8,496.00	0.50	192.90	8,474.94	-270.22	273.65	356.27	449.24	52.47	446,475.65	799,679.27
8,592.00	0.60	192.10	8,570.94	-269.32	272.76	356.07	448.53	52.55	446,474.76	799,679.07
8,687.00	0.60	191.10	8,665.93	-268.35	271.78	355.87	447.78	52.63	446,473.78	799,678.87
8,782.00	0.30	231.50	8,760.93	-267.71	271.14	355.58	447.16	52.67	446,473.14	799,678.58
8,877.00	0.40	231.80	8,855.93	-267.36	270.78	355.13	446.58	52.68	446,472.78	799,678.13
8,972.00	0.30	296.20	8,950.93	-267.27	270.68	354.64	446.14	52.65	446,472.68	799,677.64
9,067.00	0.30	275.10	9,045.93	-267.40	270.81	354.17	445.84	52.60	446,472.81	799,677.17
9,162.00	0.20	294.30	9,140.93	-267.50	270.90	353.77	445.58	52.56	446,472.90	799,676.77
9,258.00	0.30	350.40	9,236.92	-267.82	271.22	353.58	445.62	52.51	446,473.22	799,676.58
9,353.00	0.30	303.30	9,331.92	-268.20	271.60	353.33	445.66	52.45	446,473.60	799,676.33
9,448.00	0.40	339.30	9,426.92	-268.65	272.05	353.00	445.67	52.38	446,474.05	799,676.00
9,543.00	1.00	343.30	9,521.91	-269.76	273.15	352.65	446.06	52.24	446,475.15	799,675.65
9,638.00	1.00	355.90	9,616.90	-271.38	274.78	352.35	446.82	52.05	446,476.78	799,675.35
9,733.00	0.80	2.40	9,711.89	-272.87	276.26	352.32	447.72	51.90	446,478.26	799,675.32
9,828.00	0.50	12.70	9,806.88	-273.94	277.33	352.44	448.47	51.80	446,479.33	799,675.44
9,924.00	0.70	21.80	9,902.88	-274.89	278.28	352.75	449.30	51.73	446,480.28	799,675.75
10,019.00	0.60	345.30	9,997.87	-275.90	279.30	352.84	450.01	51.63	446,481.30	799,675.84
10,115.00	0.60	329.20	10,093.87	-276.83	280.22	352.45	450.27	51.51	446,482.22	799,675.45



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Wellbore: OH
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10,210.00	0.70	317.80	10,188.86	-277.69	281.08	351.81	450.30	51.38	446,483.08	799,674.81
10,305.00	5.50	143.40	10,283.73	-274.44	277.85	354.13	450.13	51.88	446,479.85	799,677.13
10,400.00	19.50	138.60	10,376.25	-258.69	262.22	367.40	451.38	54.48	446,464.22	799,690.40
10,496.00	29.70	138.80	10,463.42	-228.44	232.23	393.73	457.12	59.47	446,434.23	799,716.73
10,591.00	40.90	145.40	10,540.86	-184.66	188.77	427.01	466.88	66.15	446,390.77	799,750.01
10,687.00	50.70	150.00	10,607.72	-126.12	130.58	463.53	481.57	74.27	446,332.58	799,786.53
10,782.00	56.10	154.00	10,664.36	-58.45	63.24	499.23	503.22	82.78	446,265.24	799,822.23
10,877.00	63.60	157.70	10,712.05	16.80	-11.69	532.71	532.84	91.26	446,190.31	799,855.71
10,972.00	73.30	166.00	10,746.96	100.89	-95.52	559.97	568.06	99.68	446,106.48	799,882.97
11,067.00	79.80	180.00	10,769.15	192.42	-186.94	571.04	600.86	108.13	446,015.06	799,894.04
11,162.00	86.20	186.20	10,780.73	286.42	-281.00	565.91	631.83	116.41	445,921.00	799,888.91
11,257.00	91.30	187.80	10,782.80	380.54	-375.24	554.34	669.40	124.09	445,826.76	799,877.34
11,332.00	90.90	185.30	10,781.36	454.94	-449.73	545.78	707.20	129.49	445,752.27	799,868.78
11,426.00	89.50	182.30	10,781.03	548.66	-543.51	539.56	765.84	135.21	445,658.49	799,862.56
11,521.00	90.10	181.70	10,781.37	643.56	-638.45	536.24	833.77	139.97	445,563.55	799,859.24
11,617.00	91.30	181.50	10,780.19	739.49	-734.40	533.56	907.76	144.00	445,467.60	799,856.56
11,712.00	90.30	181.30	10,778.87	834.42	-829.36	531.24	984.91	147.36	445,372.64	799,854.24
11,806.00	88.10	182.40	10,780.18	928.32	-923.30	528.21	1,063.71	150.23	445,278.70	799,851.21
11,902.00	88.60	182.30	10,782.94	1,024.16	-1,019.17	524.27	1,146.11	152.78	445,182.83	799,847.27
11,997.00	89.50	182.90	10,784.52	1,119.00	-1,114.06	519.96	1,229.43	154.98	445,087.94	799,842.96
12,092.00	88.70	181.70	10,786.01	1,213.87	-1,208.97	516.15	1,314.54	156.88	444,993.03	799,839.15
12,187.00	89.50	181.70	10,787.50	1,308.79	-1,303.92	513.33	1,401.32	158.51	444,898.08	799,836.33
12,283.00	91.10	182.10	10,787.00	1,404.69	-1,399.86	510.15	1,489.92	159.98	444,802.14	799,833.15
12,378.00	88.70	182.80	10,787.17	1,499.55	-1,494.77	506.09	1,578.12	161.30	444,707.23	799,829.09
12,473.00	86.00	182.70	10,791.56	1,594.29	-1,589.55	501.54	1,666.79	162.49	444,612.45	799,824.54
12,569.00	86.70	182.60	10,797.67	1,689.94	-1,685.25	497.11	1,757.04	163.57	444,516.75	799,820.11
12,664.00	86.40	180.60	10,803.39	1,784.70	-1,780.03	494.46	1,847.43	164.48	444,421.97	799,817.46



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Carl Mottek Federal
Well: No. 125H
Wellbore: OH
Design: MWD-148'-15672', Proj. 15740'

Local Co-ordinate Reference: Well No. 125H
TVD Reference: Well @ 3606.50usft
MD Reference: Well @ 3606.50usft
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)
12,759.00	86.60	180.00	10,809.19	1,879.51	-1,874.86	493.96	1,938.83	165.24	444,327.14	799,816.96
12,855.00	87.20	180.20	10,814.38	1,975.36	-1,970.71	493.79	2,031.64	165.93	444,231.29	799,816.79
12,950.00	88.00	180.80	10,818.36	2,070.26	-2,065.63	492.97	2,123.63	166.58	444,136.37	799,815.97
13,045.00	88.90	181.20	10,820.93	2,165.19	-2,160.58	491.31	2,215.73	167.19	444,041.42	799,814.31
13,140.00	88.50	179.10	10,823.08	2,260.16	-2,255.55	491.06	2,308.38	167.72	443,946.45	799,814.06
13,235.00	89.00	178.70	10,825.15	2,355.13	-2,350.50	492.88	2,401.63	168.16	443,851.50	799,815.88
13,330.00	90.00	178.70	10,825.98	2,450.11	-2,445.48	495.04	2,495.08	168.56	443,756.52	799,818.04
13,426.00	91.10	178.90	10,825.06	2,546.10	-2,541.45	497.05	2,589.60	168.93	443,660.55	799,820.05
13,520.00	89.20	179.60	10,824.81	2,640.10	-2,635.44	498.28	2,682.13	169.29	443,566.56	799,821.28
13,615.00	90.00	179.60	10,825.48	2,735.09	-2,730.43	498.94	2,775.64	169.64	443,471.57	799,821.94
13,710.00	90.80	179.50	10,824.81	2,830.09	-2,825.42	499.69	2,869.27	169.97	443,376.58	799,822.69
13,805.00	89.20	179.90	10,824.81	2,925.09	-2,920.42	500.19	2,962.94	170.28	443,281.58	799,823.19
13,900.00	87.90	179.80	10,827.22	3,020.05	-3,015.39	500.43	3,056.63	170.58	443,186.61	799,823.43
13,995.00	88.80	180.10	10,829.95	3,115.01	-3,110.35	500.52	3,150.36	170.86	443,091.65	799,823.52
14,091.00	90.40	180.00	10,830.62	3,211.00	-3,206.34	500.43	3,245.16	171.13	442,995.66	799,823.43
14,186.00	91.50	180.00	10,829.05	3,305.98	-3,301.33	500.43	3,339.04	171.38	442,900.67	799,823.43
14,281.00	92.60	180.10	10,825.65	3,400.91	-3,396.26	500.35	3,432.92	171.62	442,805.74	799,823.35
14,376.00	90.20	179.90	10,823.33	3,495.87	-3,491.23	500.35	3,526.90	171.84	442,710.77	799,823.35
14,472.00	90.60	180.00	10,822.66	3,591.86	-3,587.23	500.43	3,621.96	172.06	442,614.77	799,823.43
14,567.00	91.80	179.90	10,820.67	3,686.84	-3,682.20	500.52	3,716.06	172.26	442,519.80	799,823.52
14,662.00	89.90	177.90	10,819.26	3,781.81	-3,777.17	502.34	3,810.42	172.42	442,424.83	799,825.34
14,757.00	90.10	177.90	10,819.26	3,876.78	-3,872.10	505.82	3,905.00	172.56	442,329.90	799,828.82
14,852.00	91.50	177.80	10,817.93	3,971.73	-3,967.02	509.39	3,999.59	172.68	442,234.98	799,832.39
14,948.00	89.50	177.40	10,817.10	4,067.67	-4,062.93	513.41	4,095.24	172.80	442,139.07	799,836.41
15,043.00	89.90	177.60	10,817.59	4,162.61	-4,157.84	517.55	4,189.93	172.90	442,044.16	799,840.55
15,138.00	90.80	177.70	10,817.01	4,257.57	-4,252.76	521.44	4,284.60	173.01	441,949.24	799,844.44
15,233.00	92.10	177.50	10,814.61	4,352.48	-4,347.64	525.42	4,379.27	173.11	441,854.36	799,848.42



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Carl Mottek Federal
Well: No. 125H
Wellbore: OH
Design: MWD-148'-15672', Proj. 15740'

Local Co-ordinate Reference: Well No. 125H
TVD Reference: Well @ 3606.50usft
MD Reference: Well @ 3606.50usft
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)
15,329.00	93.40	177.90	10,810.00	4,448.33	-4,443.45	529.27	4,474.86	173.21	441,758.55	799,852.27
15,424.00	91.60	179.00	10,805.86	4,543.22	-4,538.32	531.84	4,569.38	173.32	441,663.68	799,854.84
15,519.00	92.50	179.30	10,802.46	4,638.15	-4,633.25	533.24	4,663.83	173.43	441,568.75	799,856.24
15,614.00	93.90	179.70	10,797.16	4,733.00	-4,728.09	534.07	4,758.16	173.56	441,473.91	799,857.07
15,672.00	94.90	179.90	10,792.71	4,790.83	-4,785.92	534.27	4,815.65	173.63	441,416.08	799,857.27
Last Survey: 15672' MD										
15,740.00	94.90	179.90	10,786.90	4,858.58	-4,853.67	534.39	4,883.00	173.72	441,348.33	799,857.39
PTB: 15740' MD										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
148.00	148.00	0.52	0.03	Pro MWD First Survey: 148' MD
15,672.00	10,792.71	-4,785.92	534.27	Last Survey: 15672' MD
15,740.00	10,786.90	-4,853.67	534.39	PTB: 15740' MD