



PHOENIX
TECHNOLOGY SERVICES

Matador Resources

Eddy County, NM (NAD27 NME)
David Edelstein State Com 12-24S-27E RB
223H

OH / 63722

Survey: Phoenix MWD Surveys

Standard Survey Report

26 November, 2018



Company:	Matador Resources	Local Co-ordinate Reference:	Well 223H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB=29' @ 3117.50usft (Patterson 297)
Site:	David Edelstein State Com 12-24S-27E RB	MD Reference:	KB=29' @ 3117.50usft (Patterson 297)
Well:	223H	North Reference:	Grid
Wellbore:	OH / 63722	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	USA Compass

Project:	Eddy County, NM (NAD27 NME)		
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:	David Edelstein State Com 12-24S-27E RB			
Site Position:		Northing:	447,660.00 usft	Latitude: 32° 13' 50.08972 N
From:	Map	Easting:	560,995.00 usft	Longitude: 104° 8' 9.87662 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.11 °

Well:	223H			
Well Position	+N/-S	0.00 usft	Northing:	447,660.00 usft
	+E/-W	0.00 usft	Easting:	560,995.00 usft
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft
			Ground Level:	3,089.00 usft

Wellbore:	OH / 63722				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	MVHD	10/31/2018	7.22	59.99	47,944.64853237

Design:	Surveys (Patterson 297)			
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	269.03

Survey Program:	Date: 11/26/2018			
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
135.00	17,543.00	Phoenix MWD Surveys (OH / 63722)	MWD+HDGM	OWSG Rev.2 MWD + HDGM

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate	
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
135.00	0.14	93.19	135.00	-0.01	0.16	-0.16	0.10	0.10	0.00	
First Phoenix MWD Survey										
226.00	0.74	109.41	226.00	-0.21	0.83	-0.83	0.67	0.66	17.82	
317.00	1.43	134.09	316.98	-1.20	2.20	-2.18	0.90	0.76	27.12	
399.00	1.68	129.91	398.95	-2.68	3.86	-3.81	0.33	0.30	-5.10	
506.00	1.81	134.94	505.90	-4.88	6.26	-6.17	0.19	0.12	4.70	
597.00	1.93	133.96	596.85	-6.96	8.38	-8.26	0.14	0.13	-1.08	
689.00	1.31	126.75	688.81	-8.66	10.33	-10.19	0.71	-0.67	-7.84	
781.00	1.06	132.46	780.80	-9.87	11.80	-11.64	0.30	-0.27	6.21	
872.00	1.10	131.79	871.78	-11.02	13.08	-12.89	0.05	0.04	-0.74	

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Well:	223H	North Reference:	Grid
Wellbore:	OH/63722	Survey/Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	USA Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
966.00	0.13	54.32	965.77	-11.56	13.84	-13.64	1.15	-1.03	-82.41
1,059.00	0.25	304.02	1,058.77	-11.38	13.75	-13.56	0.34	0.13	-118.60
1,153.00	0.41	227.01	1,152.77	-11.50	13.34	-13.14	0.46	0.17	-81.93
1,247.00	0.31	283.52	1,246.77	-11.67	12.84	-12.64	0.37	-0.11	60.12
1,340.00	0.60	274.69	1,339.77	-11.57	12.11	-11.92	0.32	0.31	-9.49
1,434.00	0.80	281.71	1,433.76	-11.39	10.98	-10.79	0.23	0.21	7.47
1,528.00	0.79	281.74	1,527.75	-11.13	9.70	-9.51	0.01	-0.01	0.03
1,621.00	0.20	60.23	1,620.75	-10.92	9.22	-9.03	1.02	-0.63	148.91
1,715.00	0.90	101.67	1,714.74	-10.98	10.08	-9.90	0.81	0.74	44.09
1,808.00	1.66	100.00	1,807.72	-11.37	12.12	-11.93	0.82	0.82	-1.80
1,902.00	0.99	109.69	1,901.69	-11.88	14.23	-14.03	0.75	-0.71	10.31
1,995.00	1.09	128.23	1,994.68	-12.69	15.68	-15.46	0.38	0.11	19.94
2,089.00	0.81	86.54	2,088.67	-13.21	17.05	-16.82	0.77	-0.30	-44.35
2,182.00	1.21	68.96	2,181.65	-12.82	18.62	-18.40	0.54	0.43	-18.90
2,276.00	0.39	104.84	2,275.64	-12.54	19.86	-19.64	0.98	-0.87	38.17
2,369.00	0.34	160.51	2,368.64	-12.88	20.25	-20.03	0.37	-0.05	59.86
2,445.00	0.29	99.19	2,444.64	-13.13	20.52	-20.29	0.43	-0.07	-80.68
2,573.00	0.23	111.22	2,572.64	-13.27	21.08	-20.85	0.06	-0.05	9.40
2,666.00	0.38	135.40	2,665.64	-13.56	21.47	-21.24	0.21	0.16	26.00
2,760.00	0.59	128.25	2,759.63	-14.08	22.07	-21.83	0.23	0.22	-7.61
2,854.00	0.56	125.09	2,853.63	-14.64	22.82	-22.57	0.05	-0.03	-3.36
2,947.00	0.50	126.73	2,946.63	-15.15	23.52	-23.26	0.07	-0.06	1.76
3,041.00	1.49	117.39	3,040.61	-15.95	24.93	-24.66	1.06	1.05	-9.94
3,134.00	2.80	118.73	3,133.54	-17.60	28.00	-27.70	1.41	1.41	1.44
3,227.00	3.88	114.36	3,226.38	-19.99	32.86	-32.51	1.19	1.16	-4.70
3,320.00	4.32	113.74	3,319.15	-22.70	38.93	-38.54	0.48	0.47	-0.67
3,414.00	4.40	112.60	3,412.87	-25.51	45.50	-45.06	0.13	0.09	-1.21
3,506.00	4.51	119.02	3,504.60	-28.62	51.92	-51.43	0.55	0.12	6.98
3,600.00	4.52	121.08	3,598.30	-32.33	58.33	-57.77	0.17	0.01	2.19
3,693.00	4.33	120.31	3,691.03	-35.99	64.49	-63.88	0.21	-0.20	-0.83
3,787.00	4.11	120.14	3,784.77	-39.47	70.47	-69.79	0.23	-0.23	-0.18
3,879.00	4.89	120.55	3,876.49	-43.12	76.70	-75.96	0.85	0.85	0.45
3,973.00	6.45	120.18	3,970.03	-47.81	84.71	-83.89	1.66	1.66	-0.39
4,067.00	7.77	116.77	4,063.30	-53.33	94.95	-94.03	1.47	1.40	-3.63
4,160.00	8.23	116.55	4,155.40	-59.14	106.52	-105.50	0.50	0.49	-0.24
4,253.00	8.01	116.63	4,247.46	-65.02	118.27	-117.15	0.24	-0.24	0.09
4,347.00	7.80	118.41	4,340.57	-70.99	129.73	-128.51	0.34	-0.22	1.89
4,440.00	7.37	119.48	4,432.76	-76.92	140.47	-139.15	0.49	-0.46	1.15
4,534.00	6.82	121.97	4,526.04	-82.85	150.46	-149.03	0.67	-0.59	2.65
4,628.00	6.85	118.28	4,619.37	-88.46	160.13	-158.61	0.47	0.03	-3.93
4,721.00	7.19	116.67	4,711.67	-93.70	170.21	-168.60	0.42	0.37	-1.73
4,815.00	7.24	117.26	4,804.93	-99.05	180.74	-179.03	0.10	0.05	0.63
4,908.00	8.30	117.76	4,897.07	-104.86	191.89	-190.08	1.14	1.14	0.54

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Wellbore:	OH / 63722	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	USA Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,002.00	7.95	118.98	4,990.13	-111.17	203.58	-201.66	0.42	-0.37	1.30
5,095.00	7.15	118.61	5,082.32	-117.06	214.28	-212.27	0.86	-0.86	-0.40
5,189.00	6.64	119.62	5,175.64	-122.55	224.14	-222.03	0.56	-0.54	1.07
5,282.00	6.92	120.06	5,267.99	-128.01	233.67	-231.46	0.31	0.30	0.47
5,376.00	6.70	121.78	5,361.33	-133.73	243.23	-240.93	0.32	-0.23	1.83
5,470.00	6.13	122.36	5,454.74	-139.31	252.13	-249.73	0.61	-0.61	0.62
5,563.00	6.18	124.18	5,547.20	-144.78	260.47	-257.97	0.22	0.05	1.96
5,657.00	5.05	121.18	5,640.75	-149.76	268.19	-265.61	1.24	-1.20	-3.19
5,750.00	3.30	124.00	5,733.50	-153.38	273.91	-271.27	1.89	-1.88	3.03
5,844.00	2.98	129.92	5,827.36	-156.46	278.03	-275.34	0.48	-0.34	6.30
5,937.00	1.22	142.17	5,920.29	-158.79	280.49	-277.76	1.94	-1.89	13.17
6,031.00	0.46	171.84	6,014.28	-159.96	281.16	-278.40	0.91	-0.81	31.56
6,124.00	0.30	139.69	6,107.28	-160.51	281.37	-278.61	0.28	-0.17	-34.57
6,218.00	0.16	74.15	6,201.28	-160.66	281.65	-278.89	0.29	-0.15	-69.72
6,311.00	0.51	114.20	6,294.28	-160.80	282.16	-279.39	0.43	0.38	43.06
6,405.00	0.52	45.59	6,388.28	-160.67	282.84	-280.08	0.62	0.01	-72.99
6,499.00	0.53	26.89	6,482.27	-159.99	283.34	-280.59	0.18	0.01	-19.89
6,592.00	0.50	139.86	6,575.27	-159.91	283.80	-281.05	0.92	-0.03	121.47
6,686.00	0.58	155.39	6,669.27	-160.66	284.26	-281.50	0.18	0.09	16.52
6,780.00	0.34	170.26	6,763.26	-161.37	284.51	-281.73	0.28	-0.26	15.82
6,873.00	0.80	139.25	6,856.26	-162.13	284.98	-282.19	0.58	0.49	-33.34
6,967.00	1.33	132.57	6,950.24	-163.36	286.21	-283.40	0.58	0.56	-7.11
7,060.00	0.72	145.11	7,043.23	-164.57	287.34	-284.51	0.70	-0.66	13.48
7,154.00	0.41	175.53	7,137.22	-165.39	287.70	-284.86	0.45	-0.33	32.36
7,247.00	1.12	146.52	7,230.21	-166.48	288.23	-285.37	0.85	0.76	-31.19
7,341.00	0.47	249.29	7,324.21	-167.39	288.38	-285.50	1.39	-0.69	109.33
7,435.00	1.52	287.94	7,418.19	-167.14	286.83	-283.95	1.27	1.12	41.12
7,528.00	1.23	257.29	7,511.17	-166.98	284.68	-281.81	0.84	-0.31	-32.96
7,622.00	1.02	238.60	7,605.15	-167.64	282.99	-280.10	0.45	-0.22	-19.88
7,715.00	0.99	231.87	7,698.13	-168.56	281.65	-278.75	0.13	-0.03	-7.24
7,809.00	0.97	232.07	7,792.12	-169.55	280.38	-277.46	0.02	-0.02	0.21
7,902.00	0.84	233.40	7,885.11	-170.44	279.21	-276.28	0.14	-0.14	1.43
7,996.00	0.90	217.53	7,979.10	-171.44	278.21	-275.26	0.26	0.06	-16.88
8,089.00	0.81	211.08	8,072.09	-172.58	277.43	-274.46	0.14	-0.10	-6.94
8,183.00	0.99	19.88	8,166.08	-172.39	277.36	-274.39	1.91	0.19	179.57
8,276.00	1.14	8.20	8,259.07	-170.72	277.76	-274.83	0.28	0.16	-12.56
8,370.00	0.70	4.78	8,353.06	-169.22	277.94	-275.03	0.47	-0.47	-3.64
8,464.00	0.25	65.10	8,447.05	-168.56	278.18	-275.28	0.66	-0.48	64.17
8,557.00	0.96	98.53	8,540.05	-168.59	279.13	-276.23	0.82	0.76	35.95
8,651.00	0.76	106.61	8,634.04	-168.89	280.51	-277.60	0.25	-0.21	8.60
8,745.00	0.82	134.28	8,728.03	-169.53	281.59	-278.67	0.41	0.06	29.44
8,838.00	1.00	129.44	8,821.02	-170.51	282.69	-279.76	0.21	0.19	-5.20
8,932.00	1.22	106.53	8,915.00	-171.32	284.28	-281.34	0.52	0.23	-24.37

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Wellbore:	OH / 63722	Survey Calculation Method:	Minimum Curvature
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Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,025.00	1.20	107.36	9,007.98	-171.89	286.16	-283.21	0.03	-0.02	0.89	
9,119.00	0.23	136.67	9,101.97	-172.32	287.23	-284.27	1.07	-1.03	31.18	
9,213.00	0.28	245.62	9,195.97	-172.55	287.15	-284.18	0.44	0.05	115.90	
9,306.00	0.18	202.57	9,288.97	-172.78	286.89	-283.92	0.21	-0.11	-46.29	
9,400.00	0.54	172.16	9,382.97	-173.36	286.89	-283.91	0.42	0.38	-32.35	
9,493.00	1.07	150.12	9,475.96	-174.55	287.39	-284.38	0.65	0.57	-23.70	
9,587.00	1.35	154.73	9,569.94	-176.31	288.30	-285.26	0.32	0.30	4.90	
9,618.00	1.30	160.10	9,600.93	-176.97	288.57	-285.53	0.43	-0.16	17.32	
9,685.00	0.83	166.33	9,667.92	-178.15	288.94	-285.88	0.72	-0.70	9.30	
9,732.00	3.90	284.23	9,714.88	-178.09	287.47	-284.41	9.26	6.53	250.85	
9,778.00	9.12	294.84	9,760.57	-176.18	282.65	-279.62	11.60	11.35	23.07	
9,825.00	15.60	287.42	9,806.46	-172.71	273.23	-270.26	14.17	13.79	-15.79	
9,872.00	20.63	282.26	9,851.12	-169.06	259.09	-256.19	11.22	10.70	-10.98	
9,919.00	26.82	275.11	9,894.13	-166.36	240.42	-237.56	14.50	13.17	-15.21	
9,966.00	32.66	272.70	9,934.93	-164.81	217.17	-214.34	12.68	12.43	-5.13	
10,013.00	40.21	271.98	9,972.71	-163.69	189.30	-186.50	16.09	16.06	-1.53	
10,059.00	45.49	273.37	10,006.43	-162.21	158.06	-155.29	11.66	11.48	3.02	
10,106.00	50.97	271.53	10,037.72	-160.74	123.06	-120.31	12.02	11.66	-3.91	
10,153.00	52.69	269.10	10,066.77	-160.54	86.11	-83.38	5.47	3.66	-5.17	
10,200.00	54.47	268.47	10,094.68	-161.35	48.30	-45.56	3.94	3.79	-1.34	
10,246.00	55.22	268.31	10,121.16	-162.41	10.71	-7.95	1.66	1.63	-0.35	
10,293.00	55.07	268.05	10,148.02	-163.63	-27.84	30.61	0.55	-0.32	-0.55	
10,340.00	58.13	265.30	10,173.90	-165.92	-67.00	69.80	8.14	6.51	-5.85	
10,387.00	61.23	265.64	10,197.62	-169.12	-107.44	110.29	6.63	6.60	0.72	
10,488.00	66.99	267.29	10,241.70	-174.69	-198.09	201.02	5.89	5.70	1.63	
10,534.00	75.13	267.27	10,256.62	-176.76	-241.51	244.48	17.70	17.70	-0.04	
10,579.00	82.37	267.80	10,265.40	-178.65	-285.58	288.57	16.13	16.09	1.18	
10,625.00	84.51	270.82	10,270.65	-179.20	-331.26	334.26	8.01	4.65	6.57	
10,671.00	84.98	270.84	10,274.86	-178.53	-377.07	380.04	1.02	1.02	0.04	
10,717.00	85.86	271.31	10,278.54	-177.67	-422.91	425.86	2.17	1.91	1.02	
10,763.00	86.53	271.68	10,281.59	-176.48	-468.79	471.72	1.66	1.46	0.80	
10,809.00	88.04	271.84	10,283.77	-175.06	-514.72	517.61	3.30	3.28	0.35	
10,854.00	88.96	271.91	10,284.95	-173.59	-559.68	562.54	2.05	2.04	0.16	
10,947.00	89.38	271.71	10,286.29	-170.66	-652.62	655.42	0.50	0.45	-0.22	
11,039.00	89.02	271.89	10,287.58	-167.77	-744.57	747.31	0.44	-0.39	0.20	
11,133.00	92.86	275.02	10,286.04	-162.11	-838.35	840.98	5.27	4.09	3.33	
11,227.00	89.47	268.86	10,284.12	-158.93	-932.22	934.78	7.48	-3.61	-6.55	
11,322.00	90.08	267.62	10,284.50	-161.85	-1,027.17	1,029.77	1.45	0.64	-1.31	
11,416.00	93.44	267.77	10,281.61	-165.62	-1,121.04	1,123.69	3.58	3.57	0.16	
11,511.00	93.42	268.40	10,275.93	-168.79	-1,215.82	1,218.51	0.66	-0.02	0.66	
11,606.00	93.26	266.74	10,270.39	-172.81	-1,310.57	1,313.31	1.75	-0.17	-1.75	
11,701.00	93.47	266.50	10,264.82	-178.41	-1,405.24	1,408.06	0.34	0.22	-0.25	
11,795.00	90.08	265.93	10,261.90	-184.61	-1,498.97	1,501.89	3.66	-3.61	-0.61	
11,890.00	94.70	268.08	10,257.94	-189.57	-1,593.73	1,596.72	5.36	4.86	2.26	

Company:	Matador Resources	Local Co-ordinate Reference:	Well 223H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB=29' @ 3117.50usft (Patterson 297)
Site:	David Edelstein State Com 12-24S-27E RB	MD Reference:	KB=29' @ 3117.50usft (Patterson 297)
Well:	223H	North Reference:	Grid
Wellbore:	OH / 63722	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	USA Compass

Survey:									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,985.00	93.19	267.71	10,251.41	-193.05	-1,688.44	1,691.47	1.64	-1.59	-0.39
12,079.00	92.27	267.51	10,246.93	-196.97	-1,782.25	1,785.33	1.00	-0.98	-0.21
12,173.00	96.28	268.05	10,239.92	-200.60	-1,875.90	1,879.03	4.30	4.27	0.57
12,268.00	96.25	268.62	10,229.56	-203.34	-1,970.29	1,973.46	0.60	-0.03	0.60
12,362.00	96.99	270.49	10,218.72	-204.07	-2,063.66	2,066.82	2.13	0.79	1.99
12,456.00	92.72	270.46	10,210.77	-203.29	-2,157.29	2,160.43	4.54	-4.54	-0.03
12,551.00	98.32	270.94	10,201.63	-202.14	-2,251.81	2,254.91	5.92	5.89	0.51
12,646.00	94.28	271.41	10,191.21	-200.20	-2,346.19	2,349.25	4.28	-4.25	0.49
12,741.00	93.89	277.51	10,184.43	-192.83	-2,440.62	2,443.54	6.42	-0.41	6.42
12,836.00	94.85	278.45	10,177.20	-179.68	-2,534.43	2,537.11	1.41	1.01	0.99
12,930.00	90.78	278.34	10,172.58	-165.98	-2,627.29	2,629.72	4.33	-4.33	-0.12
13,023.00	84.99	279.22	10,176.01	-151.80	-2,719.09	2,721.28	6.30	-6.23	0.95
13,118.00	86.89	276.30	10,182.74	-139.01	-2,812.97	2,814.93	3.66	2.00	-3.07
13,213.00	88.96	272.03	10,186.18	-132.12	-2,907.63	2,909.46	4.99	2.18	-4.49
13,309.00	90.36	270.83	10,186.75	-129.72	-3,003.60	3,005.37	1.92	1.46	-1.25
13,403.00	92.18	270.80	10,184.67	-128.39	-3,097.56	3,099.29	1.94	1.94	-0.03
13,498.00	93.96	269.46	10,179.58	-128.17	-3,192.42	3,194.13	2.34	1.87	-1.41
13,593.00	92.80	266.51	10,173.98	-131.51	-3,287.18	3,288.94	3.33	-1.22	-3.11
13,689.00	90.78	263.09	10,170.98	-140.20	-3,382.72	3,384.61	4.14	-2.10	-3.56
13,784.00	94.17	265.06	10,166.87	-150.00	-3,477.11	3,479.15	4.13	3.57	2.07
13,879.00	89.97	265.50	10,163.44	-157.81	-3,571.70	3,573.87	4.45	-4.42	0.46
13,973.00	91.96	267.44	10,161.86	-163.60	-3,665.50	3,667.75	2.96	2.12	2.06
14,068.00	93.53	269.34	10,157.31	-166.27	-3,760.35	3,762.63	2.59	1.65	2.00
14,162.00	89.80	266.48	10,154.58	-169.69	-3,854.22	3,856.54	5.00	-3.97	-3.04
14,258.00	90.45	267.42	10,154.37	-174.80	-3,950.08	3,952.48	1.19	0.68	0.98
14,352.00	92.27	267.86	10,152.14	-178.67	-4,043.97	4,046.42	1.99	1.94	0.47
14,447.00	89.78	266.66	10,150.44	-183.21	-4,138.84	4,141.35	2.91	-2.62	-1.26
14,541.00	91.68	266.01	10,149.24	-189.22	-4,232.63	4,235.23	2.14	2.02	-0.69
14,636.00	88.26	263.81	10,149.29	-197.65	-4,327.24	4,329.97	4.28	-3.60	-2.32
14,731.00	96.03	268.44	10,145.74	-204.06	-4,421.86	4,424.68	9.52	8.18	4.87
14,825.00	96.12	268.10	10,135.79	-206.89	-4,515.29	4,518.15	0.37	0.10	-0.36
14,919.00	96.48	269.23	10,125.47	-209.06	-4,608.69	4,611.57	1.25	0.38	1.20
15,014.00	93.36	269.97	10,117.33	-209.72	-4,703.33	4,706.21	3.37	-3.28	0.78
15,109.00	90.20	267.91	10,114.38	-211.48	-4,798.25	4,801.14	3.97	-3.33	-2.17
15,201.00	88.57	264.57	10,115.36	-217.51	-4,890.03	4,893.01	4.04	-1.77	-3.63
15,295.00	88.77	264.90	10,117.55	-226.13	-4,983.61	4,986.72	0.41	0.21	0.35
15,389.00	94.51	266.24	10,114.86	-233.39	-5,077.24	5,080.47	6.27	6.11	1.43
15,484.00	94.12	266.13	10,107.71	-239.69	-5,171.77	5,175.09	0.43	-0.41	-0.12
15,580.00	91.06	263.53	10,103.37	-248.34	-5,267.26	5,270.71	4.18	-3.19	-2.71
15,674.00	92.41	265.50	10,100.52	-257.32	-5,360.78	5,364.37	2.54	1.44	2.10
15,768.00	90.62	263.66	10,098.04	-266.19	-5,454.32	5,458.05	2.73	-1.90	-1.96
15,863.00	90.78	262.31	10,096.88	-277.79	-5,548.60	5,552.51	1.43	0.17	-1.42
15,957.00	88.69	258.66	10,097.31	-293.33	-5,641.28	5,645.45	4.47	-2.22	-3.88

Company:	Matador Resources	Local Co-ordinate Reference:	Well 223H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB=29: @ 3117.50usft (Patterson 297)
Site:	David Edelstein State Com:12-24S-27E RB	MD Reference:	KB=29: @ 3117.50usft (Patterson 297)
Well:	223H	North Reference:	Grid
Wellbore:	OH / 63722	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	USA Compass

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,052.00	90.98	259.55	10,097.59	-311.28	-5,734.56	5,739.02	2.59	2.41	0.94
16,146.00	88.66	259.40	10,097.88	-328.45	-5,826.97	5,831.71	2.47	-2.47	-0.16
16,241.00	88.66	261.05	10,100.10	-344.58	-5,920.56	5,925.56	1.74	0.00	1.74
16,336.00	90.73	264.23	10,100.61	-356.74	-6,014.76	6,019.95	3.99	2.18	3.35
16,430.00	92.07	267.75	10,098.31	-363.31	-6,108.49	6,113.77	4.01	1.43	3.74
16,524.00	92.30	271.09	10,094.73	-364.27	-6,202.40	6,207.69	3.56	0.24	3.55
16,619.00	90.45	270.08	10,092.45	-363.30	-6,297.36	6,302.62	2.22	-1.95	-1.06
16,714.00	89.52	271.39	10,092.47	-362.08	-6,392.35	6,397.58	1.69	-0.98	1.38
16,809.00	91.32	271.81	10,091.78	-359.43	-6,487.31	6,492.47	1.95	1.89	0.44
16,904.00	91.51	272.17	10,089.43	-356.13	-6,582.22	6,587.32	0.43	0.20	0.38
16,998.00	90.64	273.12	10,087.67	-351.79	-6,676.10	6,681.11	1.37	-0.93	1.01
17,093.00	90.34	273.84	10,086.85	-346.02	-6,770.93	6,775.82	0.82	-0.32	0.76
17,188.00	88.13	274.44	10,088.12	-339.17	-6,865.66	6,870.43	2.41	-2.33	0.63
17,282.00	89.94	276.67	10,089.71	-330.07	-6,959.20	6,963.80	3.06	1.93	2.37
17,378.00	92.41	277.33	10,087.74	-318.37	-7,054.45	7,058.84	2.66	2.57	0.69
17,473.00	93.14	278.33	10,083.14	-305.45	-7,148.46	7,152.61	1.30	0.77	1.05
Final Phoenix MWD Survey - OH									
17,543.00	93.14	278.33	10,079.30	-295.32	-7,217.61	7,221.59	0.00	0.00	0.00
Projection to TD - OH									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
135.00	135.00	-0.01	0.16	First Phoenix MWD Survey
17,473.00	10,083.14	-305.45	-7,148.46	Final Phoenix MWD Survey - OH
17,543.00	10,079.30	-295.32	-7,217.61	Projection to TD - OH