

Results of Directional Survey

API number:	30-025-41113		
OGRID:		Operator:	MATADOR PRODUCTION COMPANY
		Property:	RANGER 33 STATE COM # 1H

surface	ULSTR:	D	33	T 20S	R 35E
				250 FNL	430 FWL

BH Loc	ULSTR:	M	33	T 20S	R 35E
15261	MD	10674.1	TVD	315 FSL	566 FWL
				4965 FNL	

Top Perf/OH	ULSTR:	D	33	T 20S	R 35E
10902	MD	10664.7	TVD	630 FNL	684 FWL

Bot Perf/OH	ULSTR:	M	33	T 20S	R 35E
15175	MD	10679.4	TVD	400 FSL	578 FWL
				4880 FNL	

	MD	N/S	E/W	VD
	10874	-353.55	250.22	10655.39
TOP PERFS/OH	10902	-379.73	253.76	10664.66
	10906	-383.47	254.27	10665.98
	15117	-4572.62	156.45	10682.77
BOT PERFS/OH	15175	-4629.90	147.96	10679.43
	15211	-4665.45	142.69	10677.36

NEXT TO LAST	15211	-4665.45	142.69	10677.36
LAST READING	15261	-4714.83	135.55	10674.05
TD	15261	-4714.83	135.55	10674.05

Surface Location	250	FN	430	FW
Projected BHL	4965	FN	566	FW
Location of				
Top Perfs/OH	630	FN	684	FW
Bottom Perfs/OH	4880	FN	578	FW

SUMMARY of Subsurface Locations

Surface Location	D-33-20S-35E	250	FN	430	FW	Vert. Depth
Top Perfs/OH	D-33-20S-35E	630	FN	684	FW	10664.66
Bottom Perfs/OH	M-33-20S-35E	4880	FN	578	FW	10679.43
Projected TD	M-33-20S-35E	4965	FN	566	FW	10674.05

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWB
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWB at 9278.00 MD

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.0
North Reference	Grid	User	Gilbjosl
Scale	0.99999	Report Generated	04/Nov/2013 at 10:39:45 AM
Convergence at slot	0.46° East	Database/Source file	WA Midland/No.1H_ST02_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	766371.00	559814.00	32°32'09.840"N	103°28'08.417"W
Facility Reference Pt			766371.00	559814.00	32°32'09.840"N	103°28'08.417"W
Field Reference Pt			0.00	0.00	30°59'24.512"N	105°55'44.137"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (KB) to Facility Vertical Datum	27.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (KB) to Mean Sea Level	3743.00ft
Vertical Reference Pt	Rig on No. 1H SHL (KB)	Rig on No. 1H SHL (KB) to Mud Line at Slot (No. 1H SHL)	27.00ft
MD Reference Pt	Rig on No. 1H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.53°

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Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

WELLPATH DATA (187 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	287.350	0.00	0.00	0.00	0.00	766371.00	559814.00	32°32'09.840"N	103°28'08.417"W	0.00	
27.00	0.000	287.350	27.00	0.00	0.00	0.00	766371.00	559814.00	32°32'09.840"N	103°28'08.417"W	0.00	
100.00	0.060	287.350	100.00	-0.01	0.01	-0.04	766370.96	559814.01	32°32'09.841"N	103°28'08.418"W	0.08	
200.00	0.120	304.790	200.00	-0.09	0.09	-0.17	766370.83	559814.09	32°32'09.841"N	103°28'08.419"W	0.07	
300.00	0.170	341.910	300.00	-0.29	0.29	-0.30	766370.70	559814.29	32°32'09.843"N	103°28'08.421"W	0.10	
400.00	0.060	339.700	400.00	-0.48	0.48	-0.37	766370.63	559814.48	32°32'09.845"N	103°28'08.422"W	0.11	
500.00	0.120	340.020	500.00	-0.63	0.63	-0.42	766370.58	559814.63	32°32'09.847"N	103°28'08.422"W	0.06	
600.00	0.240	343.730	600.00	-0.93	0.92	-0.52	766370.48	559814.92	32°32'09.850"N	103°28'08.423"W	0.12	
700.00	0.150	316.070	700.00	-1.23	1.22	-0.67	766370.33	559815.22	32°32'09.853"N	103°28'08.425"W	0.13	
800.00	0.220	290.860	800.00	-1.39	1.38	-0.94	766370.06	559815.38	32°32'09.854"N	103°28'08.428"W	0.11	
900.00	0.220	272.940	900.00	-1.47	1.46	-1.31	766369.69	559815.46	32°32'09.855"N	103°28'08.432"W	0.07	
1000.00	0.410	282.630	1000.00	-1.56	1.55	-1.85	766369.15	559815.55	32°32'09.856"N	103°28'08.439"W	0.20	
1100.00	0.330	294.740	1099.99	-1.77	1.75	-2.46	766368.54	559815.75	32°32'09.858"N	103°28'08.446"W	0.11	
1200.00	0.300	341.340	1199.99	-2.14	2.12	-2.80	766368.20	559816.12	32°32'09.862"N	103°28'08.450"W	0.25	
1300.00	0.170	328.180	1299.99	-2.51	2.49	-2.97	766368.03	559816.49	32°32'09.865"N	103°28'08.452"W	0.14	
1400.00	0.250	302.690	1399.99	-2.76	2.73	-3.23	766367.77	559816.73	32°32'09.868"N	103°28'08.455"W	0.12	
1500.00	0.270	302.460	1499.99	-3.01	2.98	-3.61	766367.39	559816.98	32°32'09.870"N	103°28'08.459"W	0.02	
1600.00	0.460	309.980	1599.99	-3.40	3.36	-4.12	766366.88	559817.36	32°32'09.874"N	103°28'08.465"W	0.20	
1700.00	0.630	309.850	1699.98	-4.01	3.97	-4.85	766366.15	559817.97	32°32'09.880"N	103°28'08.474"W	0.17	
1800.00	0.430	282.240	1799.98	-4.45	4.40	-5.64	766365.36	559818.40	32°32'09.884"N	103°28'08.483"W	0.32	
1900.00	0.650	294.160	1899.97	-4.77	4.72	-6.52	766364.48	559818.72	32°32'09.888"N	103°28'08.493"W	0.25	
2000.00	0.540	302.310	1999.97	-5.26	5.20	-7.44	766363.56	559819.20	32°32'09.892"N	103°28'08.504"W	0.14	
2100.00	0.560	316.080	2099.96	-5.87	5.80	-8.17	766362.83	559819.80	32°32'09.898"N	103°28'08.512"W	0.13	
2200.00	0.750	32.290	2199.96	-6.78	6.71	-8.16	766362.84	559820.71	32°32'09.907"N	103°28'08.512"W	0.82	
2300.00	1.270	45.960	2299.94	-8.09	8.03	-7.02	766363.98	559822.03	32°32'09.920"N	103°28'08.499"W	0.57	
2400.00	1.440	63.730	2399.92	-9.40	9.36	-5.09	766365.91	559823.36	32°32'09.933"N	103°28'08.476"W	0.45	
2500.00	1.390	57.440	2499.89	-10.59	10.57	-2.94	766368.06	559824.57	32°32'09.945"N	103°28'08.451"W	0.16	
2600.00	1.460	62.200	2599.85	-11.82	11.82	-0.79	766370.21	559825.82	32°32'09.957"N	103°28'08.426"W	0.14	
2700.00	1.430	59.710	2699.82	-13.03	13.04	1.41	766372.41	559827.04	32°32'09.969"N	103°28'08.400"W	0.07	
2800.00	1.450	56.610	2799.79	-14.34	14.36	3.54	766374.54	559828.36	32°32'09.982"N	103°28'08.375"W	0.08	

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWB
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWB at 9278.00 MD

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2900.00	1.460	56.720	2899.76	-15.71	15.76	5.66	766376.66	559829.76	32°32'09.996"N	103°28'08.350"W	0.01	
3000.00	1.500	44.610	2999.73	-17.33	17.39	7.65	766378.65	559831.39	32°32'10.012"N	103°28'08.326"W	0.31	
3100.00	2.280	47.510	3099.67	-19.58	19.67	10.03	766381.03	559833.67	32°32'10.034"N	103°28'08.298"W	0.79	
3200.00	2.970	47.510	3199.57	-22.65	22.76	13.41	766384.41	559836.76	32°32'10.065"N	103°28'08.259"W	0.69	
3300.00	3.860	54.340	3299.39	-26.32	26.47	18.06	766389.06	559840.47	32°32'10.101"N	103°28'08.204"W	0.98	
3400.00	4.000	53.450	3399.15	-30.32	30.51	23.59	766394.59	559844.51	32°32'10.140"N	103°28'08.139"W	0.15	
3500.00	4.050	42.780	3498.91	-34.95	35.18	28.79	766399.79	559849.18	32°32'10.186"N	103°28'08.078"W	0.75	
3600.00	4.760	45.010	3598.61	-40.43	40.71	34.13	766405.13	559854.71	32°32'10.240"N	103°28'08.015"W	0.73	
3700.00	4.570	53.610	3698.28	-45.67	46.00	40.27	766411.27	559860.00	32°32'10.292"N	103°28'07.943"W	0.72	
3780.00	3.790	52.700	3778.07	-49.13	49.50	44.94	766415.94	559863.50	32°32'10.327"N	103°28'07.888"W	0.98	
3814.00	3.650	51.300	3812.00	-50.47	50.85	46.68	766417.68	559864.85	32°32'10.340"N	103°28'07.867"W	0.49	
4002.00	4.030	40.440	3999.58	-59.17	59.62	55.63	766426.63	559873.62	32°32'10.426"N	103°28'07.762"W	0.44	
4096.00	4.470	32.860	4093.32	-64.73	65.21	59.76	766430.76	559879.21	32°32'10.481"N	103°28'07.713"W	0.76	
4187.00	4.160	24.140	4184.06	-70.69	71.21	63.04	766434.04	559885.20	32°32'10.540"N	103°28'07.674"W	0.80	
4280.00	4.550	20.030	4276.79	-77.21	77.75	65.68	766436.68	559891.75	32°32'10.604"N	103°28'07.643"W	0.54	
4474.00	4.830	10.400	4470.15	-92.44	93.01	69.79	766440.79	559907.01	32°32'10.755"N	103°28'07.593"W	0.43	
4662.00	5.160	9.470	4657.43	-108.54	109.14	72.61	766443.61	559923.13	32°32'10.914"N	103°28'07.559"W	0.18	
4850.00	5.230	4.130	4844.66	-125.41	126.02	74.62	766445.62	559940.02	32°32'11.081"N	103°28'07.534"W	0.26	
5038.00	5.700	2.990	5031.81	-143.27	143.89	75.72	766446.72	559957.89	32°32'11.258"N	103°28'07.519"W	0.26	
5226.00	6.110	2.070	5218.81	-162.58	163.21	76.57	766447.57	559977.21	32°32'11.449"N	103°28'07.508"W	0.22	
5320.00	5.280	358.500	5312.34	-171.91	172.54	76.64	766447.64	559986.53	32°32'11.541"N	103°28'07.506"W	0.96	
5414.00	5.330	351.900	5405.94	-180.56	181.18	75.91	766446.91	559995.18	32°32'11.627"N	103°28'07.514"W	0.65	
5509.00	5.000	346.200	5500.56	-188.96	189.57	74.30	766445.30	560003.57	32°32'11.710"N	103°28'07.532"W	0.64	
5603.00	4.730	341.010	5594.22	-196.62	197.21	72.06	766443.06	560011.21	32°32'11.786"N	103°28'07.557"W	0.55	
5697.00	4.330	335.260	5687.92	-203.53	204.10	69.31	766440.31	560018.10	32°32'11.854"N	103°28'07.588"W	0.64	
5791.00	3.580	335.620	5781.70	-209.45	210.00	66.62	766437.62	560023.99	32°32'11.913"N	103°28'07.619"W	0.80	
5851.00	3.270	337.090	5841.59	-212.74	213.28	65.18	766436.18	560027.28	32°32'11.945"N	103°28'07.636"W	0.54	
5932.00	2.590	337.340	5922.49	-216.57	217.10	63.57	766434.57	560031.09	32°32'11.983"N	103°28'07.654"W	0.84	
5995.00	1.560	316.920	5985.44	-218.52	219.04	62.44	766433.44	560033.03	32°32'12.003"N	103°28'07.667"W	1.99	
6089.00	2.220	249.660	6079.40	-218.84	219.34	59.86	766430.86	560033.34	32°32'12.006"N	103°28'07.697"W	2.30	

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

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Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6183.00	1.920	249.270	6173.34	-217.68	218.15	56.68	766427.68	560032.15	32°32'11.994"N	103°28'07.735"W	0.32	
6277.00	1.750	242.320	6267.29	-216.48	216.92	53.94	766424.93	560030.92	32°32'11.982"N	103°28'07.767"W	0.30	
6373.00	1.810	242.320	6363.25	-215.11	215.54	51.29	766422.29	560029.54	32°32'11.969"N	103°28'07.798"W	0.06	
6466.00	1.270	241.880	6456.21	-213.96	214.37	49.08	766420.08	560028.37	32°32'11.958"N	103°28'07.824"W	0.58	
6560.00	1.250	228.780	6550.19	-212.81	213.20	47.39	766418.39	560027.20	32°32'11.946"N	103°28'07.844"W	0.31	
6654.00	1.000	249.920	6644.17	-211.87	212.25	45.85	766416.85	560026.24	32°32'11.937"N	103°28'07.862"W	0.51	
6748.00	0.930	252.380	6738.16	-211.37	211.73	44.36	766415.36	560025.73	32°32'11.932"N	103°28'07.879"W	0.09	
6842.00	0.960	240.430	6832.15	-210.76	211.11	42.94	766413.94	560025.11	32°32'11.926"N	103°28'07.896"W	0.21	
6936.00	1.000	248.330	6926.13	-210.08	210.42	41.50	766412.50	560024.42	32°32'11.919"N	103°28'07.913"W	0.15	
7030.00	1.050	247.530	7020.12	-209.46	209.79	39.94	766410.94	560023.79	32°32'11.913"N	103°28'07.931"W	0.06	
7124.00	0.760	245.680	7114.11	-208.88	209.21	38.57	766409.57	560023.20	32°32'11.907"N	103°28'07.947"W	0.31	
7218.00	0.590	237.510	7208.10	-208.38	208.69	37.60	766408.60	560022.69	32°32'11.902"N	103°28'07.958"W	0.21	
7312.00	0.750	226.060	7302.09	-207.70	208.00	36.75	766407.75	560022.00	32°32'11.896"N	103°28'07.968"W	0.22	
7406.00	0.800	221.870	7396.08	-206.79	207.09	35.87	766406.87	560021.08	32°32'11.887"N	103°28'07.979"W	0.08	
7500.00	0.810	230.930	7490.08	-205.89	206.18	34.91	766405.91	560020.18	32°32'11.878"N	103°28'07.990"W	0.14	
7594.00	0.820	226.120	7584.07	-205.01	205.29	33.91	766404.91	560019.29	32°32'11.869"N	103°28'08.002"W	0.07	
7688.00	0.740	218.830	7678.06	-204.08	204.35	33.05	766404.05	560018.35	32°32'11.860"N	103°28'08.012"W	0.14	
7782.00	0.610	197.050	7772.05	-203.13	203.40	32.52	766403.52	560017.40	32°32'11.850"N	103°28'08.018"W	0.30	
7876.00	0.850	188.960	7866.04	-201.97	202.24	32.26	766403.26	560016.23	32°32'11.839"N	103°28'08.021"W	0.28	
7970.00	0.960	183.940	7960.03	-200.49	200.76	32.10	766403.10	560014.76	32°32'11.824"N	103°28'08.023"W	0.14	
8063.00	1.230	185.760	8053.01	-198.72	198.99	31.95	766402.95	560012.99	32°32'11.807"N	103°28'08.025"W	0.29	
8157.00	0.460	237.810	8147.00	-197.52	197.79	31.53	766402.53	560011.78	32°32'11.795"N	103°28'08.030"W	1.08	
8251.00	0.330	259.360	8241.00	-197.28	197.54	30.94	766401.94	560011.53	32°32'11.792"N	103°28'08.037"W	0.21	
8346.00	0.150	216.310	8336.00	-197.13	197.38	30.60	766401.60	560011.38	32°32'11.791"N	103°28'08.041"W	0.26	
8439.00	0.280	196.100	8429.00	-196.81	197.07	30.46	766401.46	560011.07	32°32'11.788"N	103°28'08.043"W	0.16	
8534.00	0.440	159.990	8524.00	-196.25	196.50	30.52	766401.52	560010.50	32°32'11.782"N	103°28'08.042"W	0.28	
8628.00	0.800	128.900	8617.99	-195.49	195.75	31.16	766402.16	560009.75	32°32'11.775"N	103°28'08.035"W	0.51	
8714.00	0.890	118.310	8703.98	-194.79	195.06	32.21	766403.21	560009.06	32°32'11.768"N	103°28'08.023"W	0.21	
8808.00	1.180	108.600	8797.97	-194.12	194.40	33.77	766404.77	560008.40	32°32'11.761"N	103°28'08.004"W	0.36	
8902.00	1.200	103.030	8891.95	-193.58	193.87	35.65	766406.65	560007.87	32°32'11.756"N	103°28'07.983"W	0.12	

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8997.00	0.940	105.960	8986.93	-193.12	193.43	37.37	766408.37	560007.43	32°32'11.751"N	103°28'07.963"W	0.28	
9090.00	0.980	89.140	9079.92	-192.91	193.24	38.90	766409.90	560007.23	32°32'11.749"N	103°28'07.945"W	0.30	
9184.00	1.450	115.570	9173.90	-192.40	192.73	40.77	766411.77	560006.73	32°32'11.744"N	103°28'07.923"W	0.77	
9278.00	1.200	117.800	9267.87	-191.41	191.76	42.72	766413.72	560005.76	32°32'11.734"N	103°28'07.900"W	0.27	
9361.00	10.010	128.540	9350.40	-186.45	186.85	49.14	766420.14	560000.85	32°32'11.685"N	103°28'07.826"W	10.64	
9393.00	10.410	129.660	9381.89	-182.83	183.27	53.54	766424.54	559997.27	32°32'11.650"N	103°28'07.775"W	1.40	
9424.00	10.480	132.710	9412.38	-179.10	179.57	57.77	766428.77	559993.57	32°32'11.613"N	103°28'07.726"W	1.80	
9455.00	10.360	133.420	9442.86	-175.24	175.75	61.87	766432.86	559989.74	32°32'11.574"N	103°28'07.678"W	0.57	
9486.00	10.600	137.310	9473.35	-171.19	171.73	65.82	766436.82	559985.73	32°32'11.534"N	103°28'07.632"W	2.41	
9518.00	10.590	139.880	9504.80	-166.75	167.32	69.71	766440.71	559981.32	32°32'11.490"N	103°28'07.587"W	1.48	
9549.00	10.430	140.520	9535.28	-162.38	162.98	73.33	766444.33	559976.98	32°32'11.447"N	103°28'07.545"W	0.64	
9580.00	10.050	140.390	9565.79	-158.10	158.73	76.84	766447.84	559972.73	32°32'11.405"N	103°28'07.505"W	1.23	
9612.00	9.330	138.400	9597.33	-153.98	154.64	80.34	766451.34	559968.64	32°32'11.364"N	103°28'07.464"W	2.48	
9643.00	9.040	140.480	9627.93	-150.20	150.88	83.56	766454.56	559964.88	32°32'11.327"N	103°28'07.427"W	1.42	
9706.00	9.010	141.320	9690.15	-142.48	143.21	89.80	766460.79	559957.21	32°32'11.250"N	103°28'07.355"W	0.21	
9800.00	9.720	142.770	9782.90	-130.34	131.15	99.20	766470.20	559945.15	32°32'11.130"N	103°28'07.246"W	0.80	
9895.00	10.260	145.300	9876.46	-116.92	117.81	108.86	766479.86	559931.80	32°32'10.997"N	103°28'07.135"W	0.73	
9990.00	10.190	146.740	9969.95	-102.86	103.82	118.29	766489.29	559917.82	32°32'10.858"N	103°28'07.026"W	0.28	
10084.00	10.250	146.670	10062.46	-88.84	89.88	127.45	766498.44	559903.88	32°32'10.720"N	103°28'06.920"W	0.07	
10112.00	9.980	148.510	10090.03	-84.67	85.73	130.08	766501.08	559899.73	32°32'10.678"N	103°28'06.890"W	1.50	
10144.00	11.080	148.210	10121.49	-79.67	80.75	133.15	766504.15	559894.75	32°32'10.629"N	103°28'06.854"W	3.44	
10175.00	13.350	148.130	10151.78	-74.07	75.18	136.61	766507.61	559889.18	32°32'10.573"N	103°28'06.815"W	7.32	
10207.00	16.340	146.470	10182.71	-67.14	68.29	141.05	766512.05	559882.29	32°32'10.505"N	103°28'06.763"W	9.44	
10239.00	19.350	146.870	10213.17	-58.90	60.10	146.43	766517.43	559874.10	32°32'10.423"N	103°28'06.701"W	9.41	
10270.00	22.540	147.330	10242.12	-49.55	50.79	152.45	766523.45	559864.79	32°32'10.331"N	103°28'06.632"W	10.30	
10302.00	25.940	148.900	10271.29	-38.33	39.63	159.38	766530.37	559853.63	32°32'10.220"N	103°28'06.552"W	10.81	
10333.00	28.570	151.570	10298.85	-25.95	27.31	166.41	766537.41	559841.31	32°32'10.097"N	103°28'06.471"W	9.35	
10364.00	30.580	155.760	10325.81	-12.18	13.59	173.18	766544.18	559827.59	32°32'09.961"N	103°28'06.393"W	9.30	
10402.00	32.020	159.810	10358.28	6.15	-4.68	180.62	766551.62	559809.32	32°32'09.780"N	103°28'06.308"W	6.71	
10433.00	33.440	165.850	10384.37	22.19	-20.68	185.55	766556.55	559793.32	32°32'09.621"N	103°28'06.252"W	11.48	

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10465.00	36.080	162.030	10410.66	39.75	-38.20	190.61	766561.61	559775.80	32°32'09.447"N	103°28'06.195"W	10.69	
10496.00	39.190	163.460	10435.20	57.87	-56.27	196.22	766567.22	559757.73	32°32'09.268"N	103°28'06.131"W	10.42	
10527.00	42.080	165.230	10458.73	77.35	-75.71	201.66	766572.66	559738.29	32°32'09.075"N	103°28'06.069"W	10.04	
10559.00	43.480	167.460	10482.22	98.51	-96.83	206.78	766577.78	559717.17	32°32'08.866"N	103°28'06.011"W	6.44	
10590.00	46.380	168.770	10504.16	119.97	-118.25	211.28	766582.28	559695.75	32°32'08.653"N	103°28'05.961"W	9.82	
10622.00	49.440	170.450	10525.61	143.35	-141.61	215.56	766586.56	559672.40	32°32'08.422"N	103°28'05.913"W	10.33	
10653.00	52.320	170.180	10545.17	167.09	-165.31	219.60	766590.60	559648.69	32°32'08.187"N	103°28'05.868"W	9.31	
10685.00	55.530	170.360	10564.01	192.62	-190.80	223.97	766594.97	559623.20	32°32'07.935"N	103°28'05.819"W	10.04	
10717.00	56.440	170.680	10581.91	218.81	-216.96	228.34	766599.34	559597.04	32°32'07.675"N	103°28'05.771"W	2.96	
10748.00	58.130	171.090	10598.66	244.60	-242.71	232.47	766603.47	559571.29	32°32'07.420"N	103°28'05.725"W	5.56	
10780.00	59.850	170.350	10615.15	271.70	-269.78	236.90	766607.89	559544.22	32°32'07.152"N	103°28'05.676"W	5.73	
10811.00	63.000	169.870	10629.97	298.55	-296.60	241.57	766612.57	559517.41	32°32'06.886"N	103°28'05.624"W	10.25	
10844.00	66.420	171.740	10644.07	328.04	-326.04	246.33	766617.33	559487.96	32°32'06.595"N	103°28'05.571"W	11.56	
10874.00	69.240	172.160	10655.39	355.57	-353.55	250.22	766621.22	559460.45	32°32'06.322"N	103°28'05.528"W	9.49	
10906.00	72.100	172.430	10665.98	385.53	-383.47	254.27	766625.27	559430.53	32°32'06.026"N	103°28'05.484"W	8.97	
10937.00	75.310	173.360	10674.68	415.08	-412.99	257.95	766628.95	559401.01	32°32'05.733"N	103°28'05.444"W	10.75	
10969.00	79.560	173.950	10681.64	446.14	-444.03	261.40	766632.40	559369.98	32°32'05.426"N	103°28'05.406"W	13.40	
11000.00	83.070	173.370	10686.32	476.62	-474.48	264.78	766635.78	559339.53	32°32'05.124"N	103°28'05.370"W	11.47	
11032.00	86.520	175.960	10689.22	508.36	-506.20	267.74	766638.74	559307.80	32°32'04.810"N	103°28'05.338"W	13.46	
11063.00	88.400	176.560	10690.59	539.28	-537.10	269.76	766640.76	559276.90	32°32'04.504"N	103°28'05.317"W	6.37	
11095.00	87.500	177.200	10691.74	571.23	-569.04	271.50	766642.50	559244.97	32°32'04.188"N	103°28'05.300"W	3.45	
11126.00	87.190	177.270	10693.17	602.17	-599.97	273.00	766643.99	559214.04	32°32'03.882"N	103°28'05.286"W	1.03	
11151.00	87.780	177.300	10694.27	627.12	-624.91	274.18	766645.18	559189.09	32°32'03.635"N	103°28'05.274"W	2.36	
11246.00	92.090	178.340	10694.38	722.06	-719.82	277.79	766648.79	559094.19	32°32'02.696"N	103°28'05.241"W	4.67	
11340.00	89.600	176.260	10692.99	815.96	-813.69	282.22	766653.22	559000.31	32°32'01.766"N	103°28'05.198"W	3.45	
11435.00	89.630	176.870	10693.63	910.83	-908.52	287.91	766658.91	558905.49	32°32'00.828"N	103°28'05.141"W	0.64	
11529.00	92.990	177.430	10691.48	1004.71	-1002.37	292.58	766663.58	558811.64	32°31'59.899"N	103°28'05.095"W	3.62	
11623.00	93.020	178.810	10686.55	1098.55	-1096.18	295.66	766666.66	558717.83	32°31'58.970"N	103°28'05.068"W	1.47	
11718.00	91.170	177.930	10683.08	1193.47	-1191.08	298.37	766669.36	558622.94	32°31'58.031"N	103°28'05.045"W	2.16	
11813.00	90.520	179.270	10681.68	1288.44	-1286.04	300.69	766671.68	558527.98	32°31'57.091"N	103°28'05.027"W	1.57	

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11907.00	92.800	181.000	10678.96	1382.39	-1379.99	300.47	766671.46	558434.03	32°31'56.162"N	103°28'05.039"W	3.04	
12002.00	91.790	182.250	10675.15	1477.24	-1474.87	297.77	766668.77	558339.15	32°31'55.223"N	103°28'05.079"W	1.69	
12096.00	95.940	184.040	10668.82	1570.82	-1568.49	292.63	766663.63	558245.53	32°31'54.297"N	103°28'05.148"W	4.81	
12191.00	96.480	184.800	10658.54	1664.92	-1662.65	285.35	766656.35	558151.37	32°31'53.366"N	103°28'05.242"W	0.98	
12285.00	94.750	185.160	10649.34	1758.04	-1755.84	277.23	766648.23	558058.18	32°31'52.445"N	103°28'05.346"W	1.88	
12379.00	91.940	184.510	10643.86	1851.47	-1849.34	269.33	766640.32	557964.68	32°31'51.520"N	103°28'05.447"W	3.07	
12473.00	90.150	184.090	10642.15	1945.12	-1943.06	262.28	766633.28	557870.97	32°31'50.593"N	103°28'05.538"W	1.96	
12568.00	88.950	182.850	10642.89	2039.89	-2037.87	256.53	766627.53	557776.15	32°31'49.656"N	103°28'05.614"W	1.82	
12662.00	86.020	182.750	10647.02	2133.64	-2131.66	251.94	766622.94	557682.36	32°31'48.728"N	103°28'05.677"W	3.12	
12757.00	86.270	182.380	10653.40	2228.29	-2226.35	247.70	766618.70	557587.67	32°31'47.792"N	103°28'05.735"W	0.47	
12851.00	86.150	181.950	10659.62	2321.99	-2320.08	244.16	766615.15	557493.95	32°31'46.864"N	103°28'05.786"W	0.47	
12945.00	89.140	180.880	10663.48	2415.85	-2413.96	241.84	766612.84	557400.07	32°31'45.936"N	103°28'05.822"W	3.38	
13040.00	88.400	178.570	10665.52	2510.82	-2508.93	242.30	766613.29	557305.10	32°31'44.996"N	103°28'05.825"W	2.55	
13135.00	90.620	177.850	10666.33	2605.78	-2603.87	245.26	766616.26	557210.16	32°31'44.056"N	103°28'05.800"W	2.46	
13229.00	90.890	176.580	10665.09	2699.69	-2697.75	249.83	766620.83	557116.28	32°31'43.127"N	103°28'05.755"W	1.38	
13323.00	89.450	173.220	10664.81	2793.37	-2791.36	258.18	766629.18	557022.67	32°31'42.200"N	103°28'05.666"W	3.89	
13418.00	88.580	172.740	10666.45	2887.73	-2885.64	269.79	766640.79	556928.40	32°31'41.266"N	103°28'05.540"W	1.05	
13513.00	89.110	173.690	10668.36	2982.14	-2979.95	281.01	766652.01	556834.09	32°31'40.332"N	103°28'05.418"W	1.14	
13607.00	89.230	175.300	10669.72	3075.76	-3073.50	290.03	766661.03	556740.53	32°31'39.406"N	103°28'05.321"W	1.72	
13701.00	86.980	177.570	10672.83	3169.56	-3167.26	295.87	766666.87	556646.78	32°31'38.478"N	103°28'05.262"W	3.40	
13795.00	86.360	177.940	10678.29	3263.35	-3261.03	299.55	766670.54	556553.01	32°31'37.550"N	103°28'05.228"W	0.77	
13890.00	85.990	179.760	10684.63	3358.13	-3355.79	301.45	766672.45	556458.25	32°31'36.612"N	103°28'05.215"W	1.95	
13984.00	86.000	182.180	10691.20	3451.87	-3449.54	299.86	766670.86	556364.50	32°31'35.684"N	103°28'05.242"W	2.57	
14079.00	88.370	184.090	10695.86	3546.55	-3544.27	294.67	766665.67	556269.77	32°31'34.747"N	103°28'05.312"W	3.20	
14173.00	90.000	185.560	10697.20	3640.14	-3637.92	286.77	766657.76	556176.12	32°31'33.821"N	103°28'05.413"W	2.33	
14267.00	91.730	187.870	10695.78	3733.38	-3731.26	275.78	766646.78	556082.78	32°31'32.899"N	103°28'05.550"W	3.07	
14362.00	92.370	187.500	10692.38	3827.36	-3825.35	263.08	766634.08	555988.70	32°31'31.969"N	103°28'05.707"W	0.78	
14456.00	89.720	187.840	10690.67	3920.39	-3918.48	250.54	766621.54	555895.57	32°31'31.048"N	103°28'05.863"W	2.84	
14550.00	90.060	187.600	10690.85	4013.43	-4011.63	237.91	766608.91	555802.42	32°31'30.128"N	103°28'06.019"W	0.44	
14645.00	89.910	187.340	10690.87	4107.52	-4105.82	225.56	766596.56	555708.23	32°31'29.197"N	103°28'06.172"W	0.32	

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

WELLPATH DATA (187 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14739.00	90.710	188.690	10690.36	4200.49	-4198.90	212.46	766583.45	555615.15	32°31'28.277"N	103°28'06.334"W	1.67	
14833.00	90.620	188.530	10689.27	4293.31	-4291.83	198.39	766569.38	555522.22	32°31'27.358"N	103°28'06.507"W	0.20	
14928.00	90.650	188.930	10688.22	4387.08	-4385.73	183.97	766554.97	555428.32	32°31'26.430"N	103°28'06.684"W	0.42	
15022.00	91.570	187.970	10686.40	4479.92	-4478.69	170.16	766541.16	555335.37	32°31'25.512"N	103°28'06.854"W	1.41	
15117.00	92.810	188.640	10682.77	4573.74	-4572.62	156.45	766527.44	555241.43	32°31'24.583"N	103°28'07.024"W	1.48	
15211.00	93.790	188.220	10677.36	4666.46	-4665.45	142.69	766513.69	555148.61	32°31'23.666"N	103°28'07.193"W	1.13	
15261.00	93.790	188.220	10674.05	4715.77	-4714.83	135.55	766506.55	555099.23	32°31'23.178"N	103°28'07.281"W	0.00	Proj to Bit

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Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWP
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWP at 9278.00 MD

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1,766' VS		10667.00	-1765.94	14.36	766385.36	558048.08	32°31'52.366"N	103°28'08.417"W	point
2,019' VS		10667.00	-2018.93	16.42	766387.42	557795.09	32°31'49.862"N	103°28'08.417"W	point
2,271' VS		10669.00	-2270.92	18.47	766389.47	557543.10	32°31'47.369"N	103°28'08.417"W	point
1,514' VS		10671.00	-1513.95	12.31	766383.31	558300.07	32°31'54.859"N	103°28'08.417"W	point
2,523' VS		10671.00	-2522.92	20.52	766391.52	557291.11	32°31'44.875"N	103°28'08.417"W	point
2,776' VS		10673.00	-2775.91	22.58	766393.58	557038.12	32°31'42.372"N	103°28'08.417"W	point
3,028' VS		10675.00	-3027.90	24.63	766395.63	556786.14	32°31'39.878"N	103°28'08.417"W	point
1,262' VS		10678.00	-1261.96	10.26	766381.26	558552.06	32°31'57.353"N	103°28'08.417"W	point
3,280' VS		10678.00	-3279.89	26.68	766397.68	556534.15	32°31'37.385"N	103°28'08.417"W	point
3,533' VS		10680.00	-3532.88	28.73	766399.73	556281.16	32°31'34.881"N	103°28'08.417"W	point
3,785' VS		10682.00	-3784.87	30.78	766401.78	556029.17	32°31'32.388"N	103°28'08.416"W	point

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1,009' VS		10684.00	-1008.97	8.21	766379.21	558805.05	32°31'59.856"N	103°28'08.417"W	point
4,037' VS		10684.00	-4036.87	32.83	766403.83	555777.18	32°31'29.894"N	103°28'08.416"W	point
4,290' VS		10686.00	-4289.86	34.89	766405.89	555524.19	32°31'27.391"N	103°28'08.416"W	point
4,542' VS		10689.00	-4541.85	36.94	766407.94	555272.20	32°31'24.897"N	103°28'08.416"W	point
757' VS		10691.00	-756.97	6.16	766377.16	559057.03	32°32'02.350"N	103°28'08.417"W	point
No. 1H PBHL		10691.00	-4794.06	39.00	766410.00	555020.00	32°31'22.402"N	103°28'08.416"W	point
505' VS		10694.00	-504.98	4.11	766375.11	559309.02	32°32'04.843"N	103°28'08.417"W	point
252' VS		10697.00	-251.99	2.05	766373.05	559562.01	32°32'07.347"N	103°28'08.417"W	point

0' VS								
	10700.00	0.00	0.00	766371.00	559814.00	32°32'09.840"N	103°28'08.417"W	point

☒ No Operator logo

Actual Wellpath Report

No.1H ST02 AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	No. 1H SHL
Area	Lea County, NM	Well	No. 1H
Field	(Ranger) 33 State Com No. 1H	Wellbore	No.1H ST02 AWB
Facility	Ranger 33 State Com No. 1H	Sidetrack from	No. 1H AWB at 9278.00 MD

WELLPATH COMPOSITION - Ref Wellbore: No.1H ST02 AWB Ref Wellpath: No.1H ST02 AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
27.00	3700.00	Generic gyro - northseeking (Standard)	VES Gyros	No. 1H AWB
3700.00	9278.00	NaviTrak (Standard)	BHI MWD NaviTrak <3780-XXXX>	No. 1H AWB
9278.00	15211.00	Unknown Tool (Standard)	BHI MWD NaviTrak <9361-XXXX>	No.1H ST02 AWB
15211.00	15261.00	Blind Drilling (std)	Projection to bit	No.1H ST02 AWB