

Results of Directional Survey

API number:	30-025-41614		
OGRID:		Operator:	MATADOR PRODUCTION COMPANY
		Property:	PICKARD STATE # 2H

surface	ULSTR:	O	20	T 18S	R 34E
				702 FSL	1776 FEL

BH Loc	ULSTR:	B	20	T 18S	R 34E
16330	MD	11984.1	TVD	338 FNL	2265 FEL
				4942 FSL	

Top Perf/OH	ULSTR:	O	20	T 18S	R 34E
11890	MD	11766.6	TVD	574 FSL	2168 FEL

Bot Perf/OH	ULSTR:	B	20	T 18S	R 34E
16223	MD	11987.3	TVD	445 FNL	2269 FEL
				4835 FSL	

	MD	N/S	E/W	VD
	11885	-131.82	-391.88	11763.01
TOP PERFS/OH	11890	-128.37	-391.84	11766.63
	11917	-109.73	-391.61	11786.15
	16191	4101.24	-493.87	11988.24
BOT PERFS/OH	16223	4133.21	-492.76	11987.31
	16277	4187.15	-490.88	11985.74

NEXT TO LAST	16277	4187.15	-490.88	11985.74
LAST READING	16330	4240.08	-488.81	11984.12
TD	16330	4240.08	-488.81	11984.12

Surface Location	702	FS	1776	FE
Projected BHL	4942	FS	2265	FE
Location of				
Top Perfs/OH	574	FS	2168	FE
Bottom Perfs/OH	4835	FS	2269	FE

SUMMARY of Subsurface Locations

Surface Location	O-20-18S-34E	702	FS	1776	FE	Vert. Depth
Top Perfs/OH	O-20-18S-34E	574	FS	2168	FE	11766.63
Bottom Perfs/OH	B-20-18S-34E	4835	FS	2269	FE	11987.31
Projected TD	B-20-18S-34E	4942	FS	2265	FE	11984.12

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Matador Resources

Location: Lea County, NM
Field: (Pickard) Sec 20, TS 18-S, R 34-E
Facility: Pickard State No. 2H

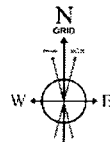
Slot: No. 2H SHL
Well: No. 2H
Wellbore: No. 2H ST01 PWB



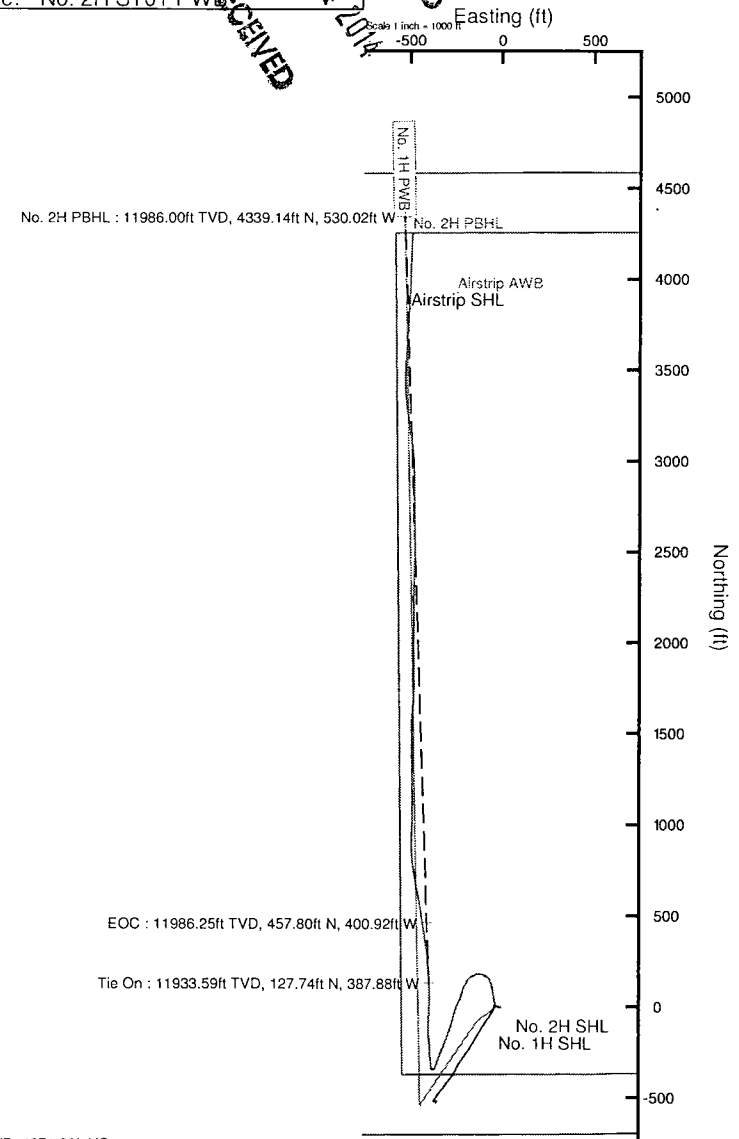
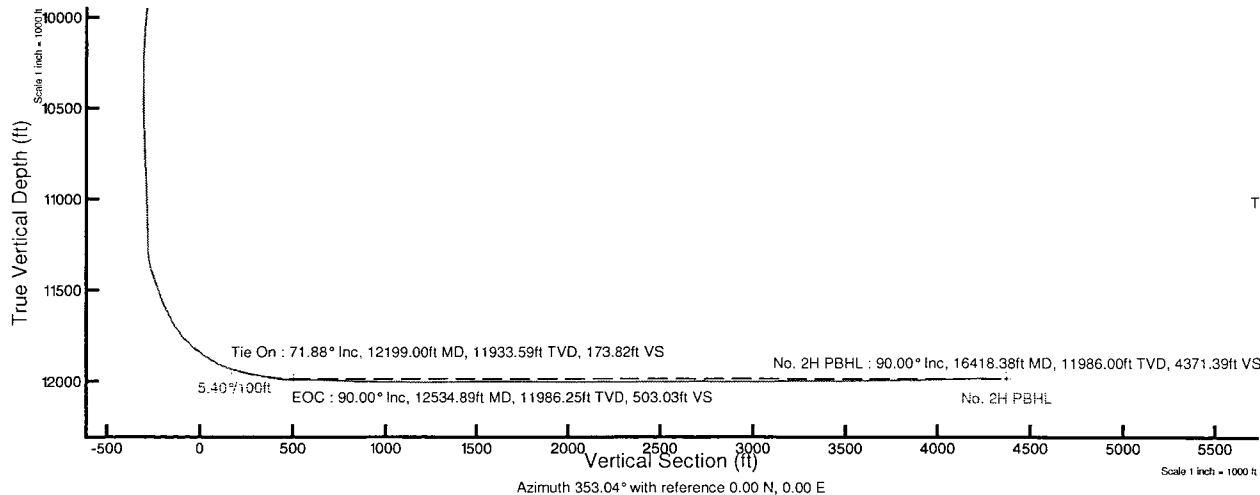
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Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (7100ft)	VS (ft)
Tie On	12199.00	71.880	357.360	11933.59	127.74	-387.88	10.93	173.82
EOC	12534.89	90.004	358.095	11986.25	457.80	-400.92	5.40	503.03
No. 2H PWB HL	16418.38	90.004	358.095	11986.00	4339.14	-530.02	0.00	4371.39

Plot reference azimuth is Rev G 0 ST01								
True vertical depths are referenced to Rig on No. 2H SHL (vB)				Grid System: NAD83 / TM New Mexico SP, Eastern Zone (000), US feet				
Measured depths are referenced to Rig on No. 2H SHL (vB)				North Reference: Grid north				
Rig on No. 2H SHL (vB) to Mean Sea Level: 4079 feet				Scale: True distance				
Mean Sea Level to Mud line (At Slot: No. 2H SHL): 4293 feet				Depths are in feet				
Coordinates are in feet referenced to Facility Center				Created by: gplacel on 23 Apr 2014				



BGGM (1945.0 to 2015.0) Dip: 80.58° Field: 48635.5 nT
Magnetic North is 7.42 degrees East of True North (at 27Jan2014)
Grid North is 0.41 degrees East of True North
To correct azimuth from True to Grid subtract 0.41 degrees
To correct azimuth from Magnetic to Grid add 7.01 degrees

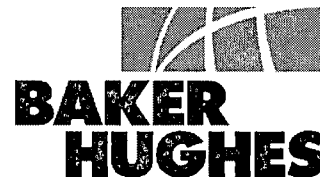


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Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWB
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWB at 5500.00 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	0.999971	Report Generated	12/May/2014 at 1:54:48 PM
Convergence at slot	0.41° East	Database/Source file	WA Midland/No. 2H_ST01_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	731916.00	629303.00	32°43'40.013"N	103°34'45.106"W
Facility Reference Pt			731916.00	629303.00	32°43'40.013"N	103°34'45.106"W
Field Reference Pt			152400.30	0.00	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 2H SHL (KB) to Facility Vertical Datum	25.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 2H SHL (KB) to Mean Sea Level	4078.00ft
Vertical Reference Pt	Rig on No. 2H SHL (KB)	Rig on No. 2H SHL (KB) to Mud Line at Slot (No. 2H SHL)	25.00ft
MD Reference Pt	Rig on No. 2H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	353.04°

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Actual Wellpath Report

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Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWP at 5500.00 MD

WELLPATH DATA (201 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	158.350	0.00	0.00	0.00	0.00	731916.00	629303.00	32°43'40.013"N	103°34'45.106"W	0.00	
25.00	0.000	158.350	25.00	0.00	0.00	0.00	731916.00	629303.00	32°43'40.013"N	103°34'45.106"W	0.00	
100.00	0.580	158.350	100.00	-0.37	-0.35	0.14	731916.14	629302.65	32°43'40.009"N	103°34'45.104"W	0.77	
200.00	0.590	156.180	199.99	-1.35	-1.29	0.53	731916.53	629301.71	32°43'40.000"N	103°34'45.100"W	0.02	
300.00	0.400	168.120	299.99	-2.19	-2.11	0.81	731916.81	629300.89	32°43'39.992"N	103°34'45.097"W	0.22	
400.00	0.400	172.540	399.99	-2.89	-2.79	0.93	731916.93	629300.21	32°43'39.985"N	103°34'45.095"W	0.03	
500.00	0.270	170.660	499.99	-3.47	-3.37	1.02	731917.02	629299.63	32°43'39.979"N	103°34'45.094"W	0.13	
600.00	0.230	194.040	599.98	-3.89	-3.80	1.00	731917.00	629299.20	32°43'39.975"N	103°34'45.095"W	0.11	
700.00	0.230	191.550	699.98	-4.27	-4.19	0.92	731916.92	629298.81	32°43'39.971"N	103°34'45.096"W	0.01	
800.00	0.170	177.730	799.98	-4.61	-4.54	0.88	731916.88	629298.46	32°43'39.968"N	103°34'45.096"W	0.08	
900.00	0.160	201.740	899.98	-4.88	-4.81	0.84	731916.84	629298.19	32°43'39.965"N	103°34'45.097"W	0.07	
1000.00	0.200	215.110	999.98	-5.13	-5.09	0.68	731916.68	629297.91	32°43'39.962"N	103°34'45.098"W	0.06	
1100.00	0.220	187.440	1099.98	-5.45	-5.42	0.56	731916.56	629297.58	32°43'39.959"N	103°34'45.100"W	0.10	
1200.00	0.200	162.200	1199.98	-5.81	-5.78	0.59	731916.59	629297.22	32°43'39.956"N	103°34'45.100"W	0.09	
1300.00	0.240	170.690	1299.98	-6.19	-6.15	0.67	731916.67	629296.85	32°43'39.952"N	103°34'45.099"W	0.05	
1400.00	0.280	153.590	1399.98	-6.63	-6.58	0.82	731916.82	629296.43	32°43'39.948"N	103°34'45.097"W	0.09	
1500.00	0.180	157.840	1499.98	-7.01	-6.94	0.98	731916.98	629296.06	32°43'39.944"N	103°34'45.095"W	0.10	
1600.00	0.400	317.570	1599.98	-6.87	-6.83	0.81	731916.81	629296.17	32°43'39.945"N	103°34'45.097"W	0.57	
1700.00	2.990	297.420	1699.93	-5.12	-5.37	-1.74	731914.26	629297.63	32°43'39.960"N	103°34'45.127"W	2.62	
1800.00	4.700	294.780	1799.70	-1.49	-2.45	-7.78	731908.22	629300.55	32°43'39.989"N	103°34'45.197"W	1.72	
1900.00	5.000	295.570	1899.34	3.01	1.15	-15.43	731900.57	629304.15	32°43'40.025"N	103°34'45.287"W	0.31	
2000.00	4.130	295.270	1999.02	7.27	4.57	-22.62	731893.38	629307.57	32°43'40.060"N	103°34'45.370"W	0.87	
2100.00	2.320	283.510	2098.86	9.90	6.58	-27.84	731888.16	629309.58	32°43'40.080"N	103°34'45.431"W	1.92	
2200.00	1.050	260.080	2198.82	10.56	6.89	-30.71	731885.29	629309.89	32°43'40.083"N	103°34'45.465"W	1.42	
2300.00	0.670	223.240	2298.80	10.14	6.31	-32.01	731883.99	629309.31	32°43'40.077"N	103°34'45.480"W	0.65	
2400.00	0.520	200.810	2398.80	9.37	5.46	-32.58	731883.42	629308.46	32°43'40.069"N	103°34'45.487"W	0.27	
2500.00	0.440	180.950	2498.80	8.59	4.65	-32.74	731883.26	629307.65	32°43'40.061"N	103°34'45.489"W	0.18	
2600.00	0.500	181.990	2598.79	7.77	3.83	-32.77	731883.24	629306.83	32°43'40.053"N	103°34'45.489"W	0.06	
2700.00	0.480	162.570	2698.79	6.93	2.99	-32.66	731883.35	629305.99	32°43'40.045"N	103°34'45.488"W	0.17	
2800.00	0.480	123.520	2798.79	6.25	2.36	-32.18	731883.82	629305.36	32°43'40.038"N	103°34'45.483"W	0.32	

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Actual Wellpath Report

No. 2H ST01 AWP

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Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWB
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWB at 5500.00 MD

WELLPATH DATA (201 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	0.690	86.880	2898.78	5.94	2.16	-31.23	731884.77	629305.16	32°43'40.036"N	103°34'45.471"W	0.42	
3000.00	0.660	79.920	2998.77	5.93	2.30	-30.06	731885.94	629305.30	32°43'40.038"N	103°34'45.458"W	0.09	
3100.00	0.760	80.390	3098.77	5.99	2.51	-28.84	731887.16	629305.51	32°43'40.040"N	103°34'45.443"W	0.10	
3200.00	0.810	79.500	3198.76	6.06	2.75	-27.49	731888.51	629305.75	32°43'40.042"N	103°34'45.428"W	0.05	
3300.00	0.360	90.300	3298.75	6.07	2.88	-26.48	731889.52	629305.88	32°43'40.043"N	103°34'45.416"W	0.46	
3400.00	0.430	92.500	3398.75	5.96	2.86	-25.79	731890.21	629305.86	32°43'40.043"N	103°34'45.408"W	0.07	
3500.00	0.410	99.090	3498.75	5.80	2.79	-25.07	731890.94	629305.79	32°43'40.042"N	103°34'45.399"W	0.05	
3600.00	0.270	207.360	3598.74	5.51	2.52	-24.82	731891.18	629305.52	32°43'40.039"N	103°34'45.396"W	0.56	
3700.00	0.320	213.850	3698.74	5.10	2.08	-25.08	731890.92	629305.08	32°43'40.035"N	103°34'45.400"W	0.06	
3800.00	0.350	208.730	3798.74	4.65	1.58	-25.39	731890.61	629304.58	32°43'40.030"N	103°34'45.403"W	0.04	
3900.00	0.110	170.330	3898.74	4.30	1.22	-25.52	731890.48	629304.22	32°43'40.027"N	103°34'45.405"W	0.27	
4000.00	0.340	41.610	3998.74	4.40	1.34	-25.30	731890.70	629304.34	32°43'40.028"N	103°34'45.402"W	0.42	
4100.00	0.470	36.140	4098.74	4.90	1.90	-24.87	731891.14	629304.90	32°43'40.033"N	103°34'45.397"W	0.14	
4200.00	0.510	357.330	4198.73	5.64	2.67	-24.64	731891.36	629305.67	32°43'40.041"N	103°34'45.394"W	0.33	
4300.00	0.380	320.350	4298.73	6.36	3.37	-24.88	731891.12	629306.37	32°43'40.048"N	103°34'45.397"W	0.31	
4400.00	0.500	268.720	4398.73	6.69	3.62	-25.52	731890.48	629306.62	32°43'40.050"N	103°34'45.405"W	0.40	
4500.00	0.440	274.210	4498.73	6.80	3.64	-26.34	731889.66	629306.64	32°43'40.051"N	103°34'45.414"W	0.07	
4600.00	0.440	232.330	4598.72	6.68	3.43	-27.03	731888.97	629306.43	32°43'40.049"N	103°34'45.422"W	0.31	
4700.00	0.490	229.460	4698.72	6.25	2.92	-27.66	731888.34	629305.92	32°43'40.044"N	103°34'45.430"W	0.06	
4800.00	0.540	129.550	4798.72	5.67	2.34	-27.62	731888.38	629305.34	32°43'40.038"N	103°34'45.429"W	0.79	
4900.00	0.680	26.980	4898.71	5.82	2.57	-26.99	731889.01	629305.57	32°43'40.040"N	103°34'45.422"W	0.96	
5000.00	0.730	265.690	4998.71	6.34	3.05	-27.35	731888.65	629306.05	32°43'40.045"N	103°34'45.426"W	1.23	
5100.00	0.680	142.420	5098.71	5.86	2.53	-27.63	731888.37	629305.53	32°43'40.040"N	103°34'45.429"W	1.24	
5200.00	0.740	29.670	5198.70	5.87	2.62	-26.95	731889.05	629305.62	32°43'40.041"N	103°34'45.421"W	1.18	
5300.00	1.020	279.010	5298.70	6.63	3.32	-27.51	731888.50	629306.32	32°43'40.048"N	103°34'45.428"W	1.46	
5400.00	0.790	166.440	5398.69	6.19	2.79	-28.22	731887.78	629305.79	32°43'40.042"N	103°34'45.436"W	1.51	
5500.00	0.740	66.440	5498.68	5.69	2.38	-27.47	731888.53	629305.38	32°43'40.038"N	103°34'45.427"W	1.17	
5581.00	7.040	350.190	5579.47	10.81	7.49	-27.84	731888.16	629310.49	32°43'40.089"N	103°34'45.431"W	8.52	
5675.00	8.090	347.470	5672.65	23.14	19.62	-30.25	731885.75	629322.62	32°43'40.209"N	103°34'45.459"W	1.18	
5769.00	8.450	347.640	5765.68	36.60	32.82	-33.17	731882.83	629335.82	32°43'40.340"N	103°34'45.492"W	0.38	

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Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
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Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWP at 5500.00 MD

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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
5852.00	8.690	349.670	5847.75	48.93	44.95	-35.60	731880.41	629347.95	32°43'40.460"N	103°34'45.519"W	0.47	
5946.00	8.660	349.590	5940.67	63.08	58.89	-38.15	731877.85	629361.89	32°43'40.598"N	103°34'45.548"W	0.03	
6040.00	8.450	350.880	6033.63	77.05	72.67	-40.52	731875.48	629375.67	32°43'40.735"N	103°34'45.574"W	0.30	
6134.00	8.280	349.970	6126.63	90.71	86.16	-42.79	731873.21	629389.15	32°43'40.868"N	103°34'45.600"W	0.23	
6228.00	8.360	350.350	6219.64	104.30	99.56	-45.12	731870.88	629402.56	32°43'41.001"N	103°34'45.626"W	0.10	
6321.00	7.940	347.850	6311.70	117.45	112.50	-47.60	731868.40	629415.50	32°43'41.129"N	103°34'45.654"W	0.59	
6416.00	7.710	344.380	6405.82	130.28	125.06	-50.70	731865.30	629428.05	32°43'41.254"N	103°34'45.689"W	0.55	
6510.00	7.540	338.750	6498.99	142.49	136.88	-54.63	731861.37	629439.87	32°43'41.371"N	103°34'45.734"W	0.81	
6603.00	7.610	332.210	6591.18	154.16	148.01	-59.72	731856.28	629451.01	32°43'41.481"N	103°34'45.793"W	0.93	
6698.00	8.230	313.270	6685.28	165.27	158.24	-67.60	731848.40	629461.23	32°43'41.583"N	103°34'45.884"W	2.81	
6792.00	8.290	304.490	6778.31	174.93	166.69	-78.09	731837.92	629469.68	32°43'41.668"N	103°34'46.006"W	1.34	
6886.00	7.060	294.020	6871.47	182.39	172.88	-88.95	731827.05	629475.87	32°43'41.730"N	103°34'46.133"W	1.98	
6981.00	7.040	279.730	6965.76	187.06	176.24	-100.02	731815.98	629479.23	32°43'41.764"N	103°34'46.262"W	1.84	
7075.00	8.310	273.100	7058.92	189.91	177.58	-112.48	731803.52	629480.57	32°43'41.778"N	103°34'46.408"W	1.64	
7170.00	7.900	261.260	7152.98	190.90	176.96	-125.79	731790.21	629479.95	32°43'41.773"N	103°34'46.564"W	1.81	
7264.00	8.940	246.030	7245.98	188.57	173.01	-138.85	731777.15	629476.00	32°43'41.734"N	103°34'46.717"W	2.61	
7359.00	9.370	239.450	7339.77	183.31	166.08	-152.26	731763.75	629469.07	32°43'41.667"N	103°34'46.874"W	1.19	
7453.00	9.520	224.360	7432.51	175.39	156.63	-164.28	731751.72	629459.63	32°43'41.574"N	103°34'47.016"W	2.63	
7547.00	9.530	217.210	7525.22	164.95	144.87	-174.42	731741.58	629447.87	32°43'41.459"N	103°34'47.136"W	1.26	
7642.00	10.120	210.230	7618.82	152.66	131.40	-183.38	731732.62	629434.40	32°43'41.326"N	103°34'47.242"W	1.40	
7737.00	9.910	208.340	7712.38	139.34	116.99	-191.47	731724.54	629419.99	32°43'41.184"N	103°34'47.337"W	0.41	
7832.00	11.730	202.050	7805.69	124.23	100.85	-198.97	731717.03	629403.84	32°43'41.025"N	103°34'47.427"W	2.28	
7926.00	12.220	198.430	7897.64	106.88	82.55	-205.71	731710.30	629385.55	32°43'40.844"N	103°34'47.507"W	0.95	
8021.00	13.240	198.430	7990.31	87.97	62.69	-212.32	731703.68	629365.69	32°43'40.648"N	103°34'47.586"W	1.07	
8116.00	10.930	198.170	8083.20	69.99	43.81	-218.57	731697.43	629346.81	32°43'40.462"N	103°34'47.661"W	2.43	
8211.00	9.800	202.880	8176.65	54.82	27.80	-224.52	731691.48	629330.80	32°43'40.304"N	103°34'47.732"W	1.49	
8305.00	10.560	208.180	8269.17	40.84	12.84	-231.70	731684.30	629315.84	32°43'40.156"N	103°34'47.817"W	1.28	
8383.00	12.050	201.850	8345.65	27.86	-1.02	-238.11	731677.90	629301.98	32°43'40.019"N	103°34'47.893"W	2.48	
8477.00	12.990	197.100	8437.42	9.61	-20.22	-244.87	731671.14	629282.78	32°43'39.830"N	103°34'47.974"W	1.48	
8572.00	13.440	196.590	8529.90	-10.26	-41.01	-251.16	731664.85	629261.99	32°43'39.625"N	103°34'48.049"W	0.49	

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Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWP
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWP at 5500.00 MD

WELLPATH DATA (201 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
8667.00	14.730	193.440	8622.05	-31.70	-63.34	-257.12	731658.89	629239.66	32°43'39.404"N	103°34'48.121"W	1.58	
8762.00	14.780	194.970	8713.92	-54.26	-86.79	-263.06	731652.95	629216.21	32°43'39.173"N	103°34'48.192"W	0.41	
8856.00	12.910	196.950	8805.18	-74.98	-108.42	-269.22	731646.79	629194.58	32°43'38.959"N	103°34'48.266"W	2.05	
8951.00	12.770	201.820	8897.81	-93.88	-128.32	-276.21	731639.80	629174.68	32°43'38.763"N	103°34'48.350"W	1.15	
9046.00	14.270	200.370	8990.17	-113.49	-149.05	-284.19	731631.82	629153.96	32°43'38.558"N	103°34'48.445"W	1.62	
9141.00	14.250	198.510	9082.25	-134.45	-171.11	-291.98	731624.03	629131.90	32°43'38.340"N	103°34'48.538"W	0.48	
9236.00	14.440	200.650	9174.29	-155.50	-193.28	-299.87	731616.14	629109.73	32°43'38.122"N	103°34'48.632"W	0.59	
9330.00	12.160	202.170	9265.76	-174.53	-213.42	-307.74	731608.27	629089.59	32°43'37.923"N	103°34'48.726"W	2.45	
9425.00	12.160	201.710	9358.63	-192.05	-231.98	-315.21	731600.80	629071.03	32°43'37.740"N	103°34'48.815"W	0.10	
9519.00	13.620	202.280	9450.26	-210.39	-251.42	-323.07	731592.94	629051.59	32°43'37.548"N	103°34'48.909"W	1.56	
9614.00	11.970	200.040	9542.89	-228.93	-271.03	-330.69	731585.32	629031.98	32°43'37.354"N	103°34'48.999"W	1.81	
9707.00	10.320	199.990	9634.14	-244.95	-287.92	-336.84	731579.17	629015.09	32°43'37.188"N	103°34'49.073"W	1.77	
9802.00	8.780	200.870	9727.82	-258.95	-302.69	-342.34	731573.68	629000.32	32°43'37.042"N	103°34'49.138"W	1.63	
9896.00	7.220	197.790	9820.90	-270.66	-315.02	-346.70	731569.32	628987.99	32°43'36.920"N	103°34'49.190"W	1.72	
9991.00	6.290	199.350	9915.24	-280.75	-325.61	-350.24	731565.77	628977.40	32°43'36.816"N	103°34'49.233"W	1.00	
10085.00	4.750	198.040	10008.80	-288.89	-334.17	-353.16	731562.86	628968.84	32°43'36.731"N	103°34'49.268"W	1.64	
10180.00	4.440	208.610	10103.50	-295.44	-341.14	-356.13	731559.88	628961.87	32°43'36.662"N	103°34'49.303"W	0.95	
10270.00	1.820	210.180	10193.36	-299.42	-345.44	-358.52	731557.49	628957.57	32°43'36.620"N	103°34'49.331"W	2.91	
10290.00	1.640	218.750	10213.35	-299.87	-345.93	-358.86	731557.15	628957.08	32°43'36.615"N	103°34'49.335"W	1.57	
10385.00	1.680	236.700	10308.31	-301.44	-347.76	-360.88	731555.14	628955.25	32°43'36.597"N	103°34'49.359"W	0.55	
10479.00	1.180	278.160	10402.28	-301.80	-348.38	-362.99	731553.03	628954.63	32°43'36.591"N	103°34'49.384"W	1.19	
10573.00	1.930	303.070	10496.25	-300.53	-347.38	-365.27	731550.74	628955.63	32°43'36.601"N	103°34'49.410"W	1.06	
10668.00	2.220	293.870	10591.18	-298.55	-345.76	-368.29	731547.72	628957.25	32°43'36.618"N	103°34'49.446"W	0.46	
10762.00	2.770	300.450	10685.09	-296.24	-343.87	-371.92	731544.10	628959.14	32°43'36.637"N	103°34'49.488"W	0.66	
10857.00	2.340	317.380	10780.00	-293.27	-341.28	-375.21	731540.80	628961.73	32°43'36.662"N	103°34'49.526"W	0.91	
10952.00	2.230	348.890	10874.93	-289.85	-338.04	-376.88	731539.13	628964.97	32°43'36.695"N	103°34'49.546"W	1.31	
11047.00	1.890	353.820	10969.87	-286.44	-334.67	-377.40	731538.61	628968.34	32°43'36.728"N	103°34'49.551"W	0.40	
11141.00	1.440	357.640	11063.83	-283.71	-331.95	-377.62	731538.39	628971.06	32°43'36.755"N	103°34'49.554"W	0.49	
11235.00	1.300	1.100	11157.80	-281.48	-329.70	-377.65	731538.37	628973.31	32°43'36.777"N	103°34'49.554"W	0.17	
11330.00	1.020	8.500	11252.78	-279.60	-327.79	-377.50	731538.51	628975.22	32°43'36.796"N	103°34'49.552"W	0.33	

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Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWP
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWP at 5500.00 MD

WELLPATH DATA (201 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
11387.00	6.010	356.770	11309.66	-276.13	-324.30	-377.59	731538.42	628978.71	32°43'36.831"N	103°34'49.553"W	8.80	
11414.00	10.310	353.840	11336.38	-272.30	-320.49	-377.93	731538.08	628982.52	32°43'36.868"N	103°34'49.556"W	16.00	
11445.00	14.930	354.080	11366.62	-265.53	-313.76	-378.64	731537.37	628989.25	32°43'36.935"N	103°34'49.564"W	14.90	
11477.00	16.480	355.890	11397.42	-256.88	-305.13	-379.39	731536.62	628997.88	32°43'37.020"N	103°34'49.572"W	5.08	
11508.00	17.420	353.950	11427.08	-247.84	-296.13	-380.20	731535.81	629006.88	32°43'37.110"N	103°34'49.581"W	3.54	
11539.00	18.600	352.450	11456.56	-238.26	-286.61	-381.34	731534.68	629016.40	32°43'37.204"N	103°34'49.593"W	4.09	
11570.00	18.640	352.870	11485.94	-228.36	-276.79	-382.60	731533.41	629026.21	32°43'37.301"N	103°34'49.607"W	0.45	
11602.00	19.770	356.010	11516.16	-217.84	-266.32	-383.61	731532.40	629036.69	32°43'37.405"N	103°34'49.618"W	4.78	
11633.00	21.640	358.980	11545.15	-206.92	-255.37	-384.08	731531.93	629047.63	32°43'37.513"N	103°34'49.623"W	6.92	
11664.00	22.810	0.360	11573.85	-195.28	-243.65	-384.14	731531.87	629059.36	32°43'37.629"N	103°34'49.623"W	4.13	
11696.00	24.510	357.780	11603.16	-182.51	-230.81	-384.36	731531.65	629072.19	32°43'37.756"N	103°34'49.624"W	6.22	
11727.00	25.960	355.540	11631.20	-169.32	-217.62	-385.14	731530.87	629085.39	32°43'37.887"N	103°34'49.632"W	5.60	
11759.00	28.220	353.660	11659.69	-154.75	-203.12	-386.52	731529.49	629099.89	32°43'38.030"N	103°34'49.647"W	7.55	
11791.00	30.930	353.690	11687.52	-138.96	-187.42	-388.26	731527.75	629115.58	32°43'38.186"N	103°34'49.666"W	8.47	
11822.00	34.530	354.410	11713.59	-122.21	-170.75	-389.99	731526.02	629132.25	32°43'38.351"N	103°34'49.685"W	11.68	
11854.00	38.280	357.150	11739.34	-103.25	-151.82	-391.37	731524.65	629151.19	32°43'38.538"N	103°34'49.700"W	12.77	
11885.00	42.140	359.790	11763.01	-83.33	-131.82	-391.88	731524.13	629171.18	32°43'38.736"N	103°34'49.704"W	13.61	
11917.00	45.220	1.560	11786.15	-61.43	-109.73	-391.61	731524.40	629193.28	32°43'38.955"N	103°34'49.699"W	10.35	
11948.00	48.230	2.580	11807.40	-39.15	-87.17	-390.79	731525.22	629215.83	32°43'39.178"N	103°34'49.688"W	10.00	
11980.00	51.010	2.110	11828.13	-15.09	-62.82	-389.80	731526.22	629240.18	32°43'39.419"N	103°34'49.674"W	8.76	
12012.00	54.590	2.170	11847.48	10.07	-37.35	-388.85	731527.17	629265.65	32°43'39.671"N	103°34'49.661"W	11.19	
12043.00	56.950	2.500	11864.91	35.36	-11.75	-387.80	731528.21	629291.25	32°43'39.924"N	103°34'49.646"W	7.66	
12074.00	58.880	1.760	11881.38	61.29	14.50	-386.83	731529.19	629317.50	32°43'40.183"N	103°34'49.633"W	6.55	
12105.00	61.820	0.680	11896.71	87.96	41.43	-386.26	731529.76	629344.43	32°43'40.450"N	103°34'49.624"W	9.96	
12136.00	65.220	359.840	11910.53	115.48	69.17	-386.13	731529.88	629372.17	32°43'40.724"N	103°34'49.620"W	11.23	
12167.00	68.440	358.030	11922.73	143.83	97.66	-386.67	731529.34	629400.66	32°43'41.006"N	103°34'49.624"W	11.69	
12199.00	71.880	357.360	11933.59	173.82	127.74	-387.88	731528.13	629430.73	32°43'41.304"N	103°34'49.636"W	10.93	
12224.00	75.400	357.090	11940.63	197.74	151.69	-389.04	731526.97	629454.69	32°43'41.541"N	103°34'49.647"W	14.12	
12256.00	77.190	356.070	11948.21	228.77	182.72	-390.90	731525.11	629485.72	32°43'41.848"N	103°34'49.666"W	6.39	
12287.00	76.990	355.500	11955.14	258.95	212.86	-393.12	731522.89	629515.85	32°43'42.147"N	103°34'49.690"W	1.90	

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Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWB
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWB at 5500.00 MD

WELLPATH DATA (201 stations)

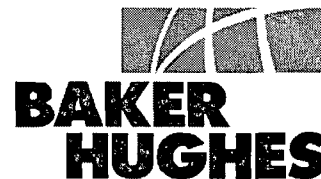
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12319.00	77.470	354.720	11962.21	290.14	243.95	-395.78	731520.23	629546.94	32°43'42.454"N	103°34'49.718"W	2.81	
12350.00	78.090	354.330	11968.77	320.43	274.11	-398.67	731517.34	629577.10	32°43'42.753"N	103°34'49.750"W	2.35	
12382.00	79.040	353.370	11975.12	351.79	305.29	-402.03	731513.98	629608.28	32°43'43.062"N	103°34'49.786"W	4.18	
12413.00	79.940	351.850	11980.77	382.26	335.52	-405.95	731510.06	629638.51	32°43'43.361"N	103°34'49.830"W	5.63	
12445.00	81.340	350.250	11985.98	413.82	366.71	-410.86	731505.15	629669.70	32°43'43.670"N	103°34'49.885"W	6.59	
12476.00	83.620	350.620	11990.03	444.52	397.01	-415.97	731500.04	629700.00	32°43'43.970"N	103°34'49.942"W	7.45	
12508.00	87.350	350.870	11992.55	476.39	428.49	-421.10	731494.91	629731.48	32°43'44.282"N	103°34'49.999"W	11.68	
12571.00	90.680	352.280	11993.64	539.35	490.79	-430.33	731485.69	629793.78	32°43'44.899"N	103°34'50.102"W	5.74	
12602.00	90.710	352.280	11993.26	570.34	521.51	-434.49	731481.52	629824.49	32°43'45.203"N	103°34'50.148"W	0.10	
12634.00	90.220	350.020	11993.00	602.32	553.12	-439.41	731476.60	629856.11	32°43'45.517"N	103°34'50.203"W	7.23	
12697.00	86.890	349.280	11994.59	665.18	615.07	-450.73	731465.29	629918.05	32°43'46.130"N	103°34'50.331"W	5.41	
12791.00	88.400	349.880	11998.45	758.93	707.44	-467.71	731448.30	630010.42	32°43'47.045"N	103°34'50.522"W	1.73	
12854.00	87.970	351.050	12000.45	821.83	769.54	-478.14	731437.87	630072.51	32°43'47.661"N	103°34'50.639"W	1.98	
12886.00	89.230	354.480	12001.23	853.82	801.27	-482.17	731433.84	630104.24	32°43'47.975"N	103°34'50.683"W	11.42	
12980.00	89.540	0.240	12002.24	947.50	895.12	-486.50	731429.52	630198.09	32°43'48.904"N	103°34'50.726"W	6.14	
13074.00	89.200	2.460	12003.27	1040.51	989.08	-484.28	731431.73	630292.05	32°43'49.833"N	103°34'50.692"W	2.39	
13169.00	89.200	358.860	12004.60	1134.64	1084.05	-483.19	731432.83	630387.02	32°43'50.773"N	103°34'50.672"W	3.79	
13263.00	88.800	0.060	12006.24	1228.03	1178.03	-484.08	731431.94	630481.00	32°43'51.703"N	103°34'50.674"W	1.35	
13357.00	91.940	359.260	12005.63	1321.39	1272.02	-484.63	731431.38	630574.98	32°43'52.633"N	103°34'50.673"W	3.45	
13452.00	91.170	359.310	12003.05	1415.79	1366.97	-485.82	731430.20	630669.93	32°43'53.572"N	103°34'50.679"W	0.81	
13547.00	90.000	359.590	12002.08	1510.19	1461.96	-486.73	731429.29	630764.92	32°43'54.512"N	103°34'50.682"W	1.27	
13641.00	89.820	1.220	12002.23	1603.41	1555.96	-486.07	731429.95	630858.91	32°43'55.442"N	103°34'50.666"W	1.74	
13735.00	90.060	6.440	12002.33	1695.72	1649.71	-479.79	731436.23	630952.66	32°43'56.370"N	103°34'50.585"W	5.56	
13830.00	89.940	0.390	12002.33	1789.12	1744.50	-474.13	731441.88	631047.45	32°43'57.307"N	103°34'50.511"W	6.37	
13925.00	89.010	358.450	12003.20	1883.52	1839.49	-475.09	731440.92	631142.43	32°43'58.247"N	103°34'50.514"W	2.26	
14020.00	88.990	359.160	12004.86	1978.02	1934.45	-477.07	731438.94	631237.39	32°43'59.187"N	103°34'50.529"W	0.75	
14114.00	90.800	0.530	12005.03	2071.35	2028.44	-477.33	731438.69	631331.38	32°44'00.117"N	103°34'50.525"W	2.41	
14208.00	90.400	0.430	12004.05	2164.56	2122.44	-476.54	731439.47	631425.37	32°44'01.047"N	103°34'50.508"W	0.44	
14302.00	88.980	358.750	12004.56	2257.94	2216.43	-477.21	731438.80	631519.36	32°44'01.977"N	103°34'50.508"W	2.34	
14397.00	91.290	3.300	12004.33	2351.98	2311.38	-475.52	731440.50	631614.31	32°44'02.916"N	103°34'50.480"W	5.37	

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Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWP
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWP at 5500.00 MD

WELLPATH DATA (201 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
14492.00	90.550	1.140	12002.81	2445.75	2406.29	-471.84	731444.18	631709.21	32°44'03.855"N	103°34'50.429"W	2.40	
14586.00	89.690	0.530	12002.61	2538.87	2500.28	-470.47	731445.55	631803.20	32°44'04.785"N	103°34'50.405"W	1.12	
14680.00	90.370	359.500	12002.56	2632.18	2594.28	-470.44	731445.57	631897.20	32°44'05.715"N	103°34'50.397"W	1.31	
14775.00	89.910	359.570	12002.33	2726.57	2689.27	-471.21	731444.80	631992.19	32°44'06.655"N	103°34'50.398"W	0.49	
14869.00	89.320	358.830	12002.96	2820.02	2783.26	-472.53	731443.49	632086.17	32°44'07.585"N	103°34'50.406"W	1.01	
14963.00	89.880	0.040	12003.62	2913.43	2877.25	-473.45	731442.56	632180.16	32°44'08.515"N	103°34'50.409"W	1.42	
15057.00	90.000	357.400	12003.71	3006.96	2971.22	-475.55	731440.46	632274.13	32°44'09.445"N	103°34'50.425"W	2.81	
15152.00	91.390	352.440	12002.56	3101.87	3065.81	-483.96	731432.06	632368.71	32°44'10.381"N	103°34'50.516"W	5.42	
15246.00	90.890	351.640	12000.69	3195.83	3158.88	-496.97	731419.04	632461.78	32°44'11.303"N	103°34'50.661"W	1.00	
15340.00	89.690	352.000	12000.21	3289.81	3251.92	-510.35	731405.67	632554.82	32°44'12.225"N	103°34'50.809"W	1.33	
15435.00	90.220	354.910	12000.29	3384.80	3346.29	-521.18	731394.84	632649.19	32°44'13.159"N	103°34'50.928"W	3.11	
15529.00	90.370	0.680	11999.80	3478.43	3440.18	-524.79	731391.23	632743.08	32°44'14.088"N	103°34'50.963"W	6.14	
15623.00	91.080	2.940	11998.62	3571.32	3534.12	-521.82	731394.19	632837.01	32°44'15.018"N	103°34'50.920"W	2.52	
15718.00	91.020	2.960	11996.87	3664.88	3628.98	-516.93	731399.08	632931.87	32°44'15.956"N	103°34'50.855"W	0.07	
15813.00	91.540	4.500	11994.75	3758.21	3723.75	-510.76	731405.26	633026.64	32°44'16.893"N	103°34'50.775"W	1.71	
15907.00	88.980	2.780	11994.33	3850.59	3817.55	-504.79	731411.23	633120.43	32°44'17.821"N	103°34'50.697"W	3.28	
16001.00	92.130	2.950	11993.42	3943.19	3911.42	-500.09	731415.92	633214.29	32°44'18.749"N	103°34'50.634"W	3.36	
16096.00	91.270	1.410	11990.60	4036.94	4006.30	-496.48	731419.54	633309.18	32°44'19.688"N	103°34'50.584"W	1.86	
16191.00	91.570	1.740	11988.24	4130.86	4101.24	-493.87	731422.15	633404.11	32°44'20.627"N	103°34'50.546"W	0.47	
16277.00	91.760	2.240	11985.74	4215.78	4187.15	-490.88	731425.13	633490.02	32°44'21.477"N	103°34'50.504"W	0.62	
16330.00	91.760	2.240	11984.12	4268.07	4240.08	-488.81	731427.20	633542.95	32°44'22.000"N	103°34'50.475"W	0.00	Proj to bit

☒ No Operator
logo

Actual Wellpath Report

No. 2H ST01 AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	No. 2H SHL
Area	Lea County, NM	Well	No. 2H
Field	(Pickard) Sec 20, TS 18-S, R 34-E	Wellbore	No. 2H ST01 AWB
Facility	Pickard State No. 2H	Sidetrack from	No. 2H AWB at 5500.00 MD

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No. 2H PBHL		11986.00	4339.14	-530.02	731386.00	633642.00	32°44'22.983"N	103°34'50.949"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 2H ST01 AWB Ref Wellpath: No. 2H ST01 AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	5500.00	Generic gyro - northseeking (Standard)	Unknown Gyros <100-5870>	No. 2H AWB
5500.00	16277.00	NaviTrak (Standard)	BHI NaviTrak <5581-xxxx>	No. 2H ST01 AWB
16277.00	16330.00	Blind Drilling (std)	Projection to bit	No. 2H ST01 AWB