

30-015-38226



Cimarex Energy Co.

Location Eddy County, NM
Field (Burton) Sec 6, T20S, R30E
Facility Burton 6 Fed No. 1H

Slot No. 1H SHL
Well No. 1H
Wellbore No. 1H PWB



Well Profile Data								
Description	MD (ft)	True V	Az (°)	TVD (ft)	Loca. N (ft)	Loca. E (ft)	SLS (7"00ft)	VS (ft)
Top of Curve	8067.20	2.06	83.370	3535.96	-9.27	44.58	0.72	9.43
Est KOP	8112.00	2.06	89.370	8108.47	-9.36	46.42	0.22	8.41
End of Curve	8607.47	92.000	80.330	8425.00	-126.00	56.15	-8.10	326.10
No. 1H TGT 1	9385.00	90.000	80.353	8425.00	-1604.50	48.90	0.22	1604.50
EOB	9917.30	90.504	80.721	8424.88	-1635.80	48.61	2.20	1635.88
No. 1H PWB	3096.60	90.504	80.721	8397.00	-1864.72	8.70	0.00	1864.73

Plot reference wellpath is Plan #1

True vertical depths are referenced to Rig on No. 1H SHL (KB)

Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet

Measured depths are referenced to Rig on No. 1H SHL (KB)

North Reference Grid north

Rig on No. 1H S-ft (KB) to Mean Sea Level 3344 feet

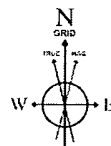
Scale True distance

Mean Sea Level to Mud line (Facility Burton 6 Fed No. 1H) -3323 feet

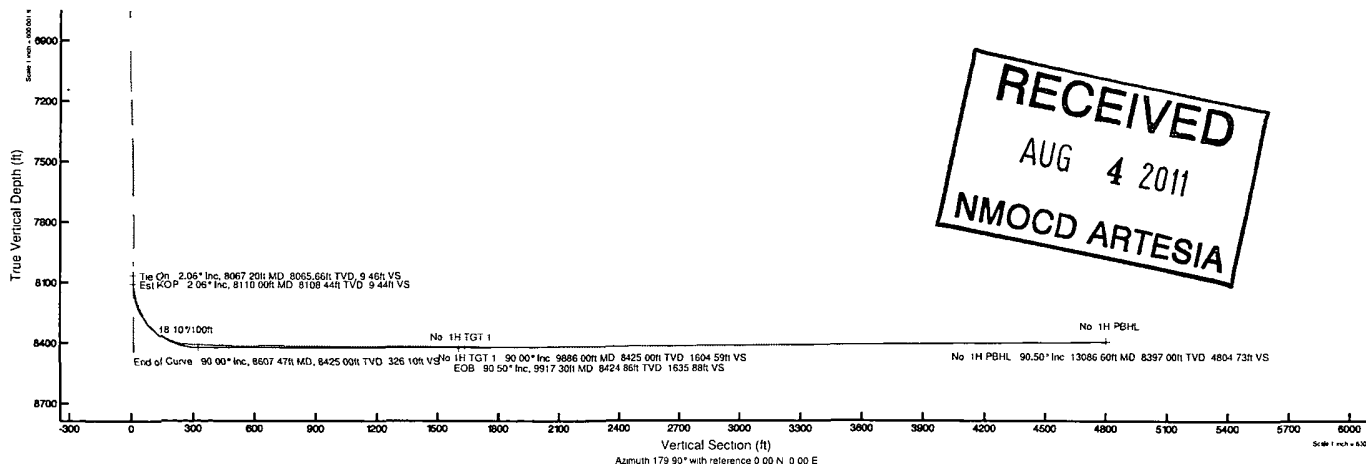
Depths are in feet

Coordinates are in feet referenced to Slot

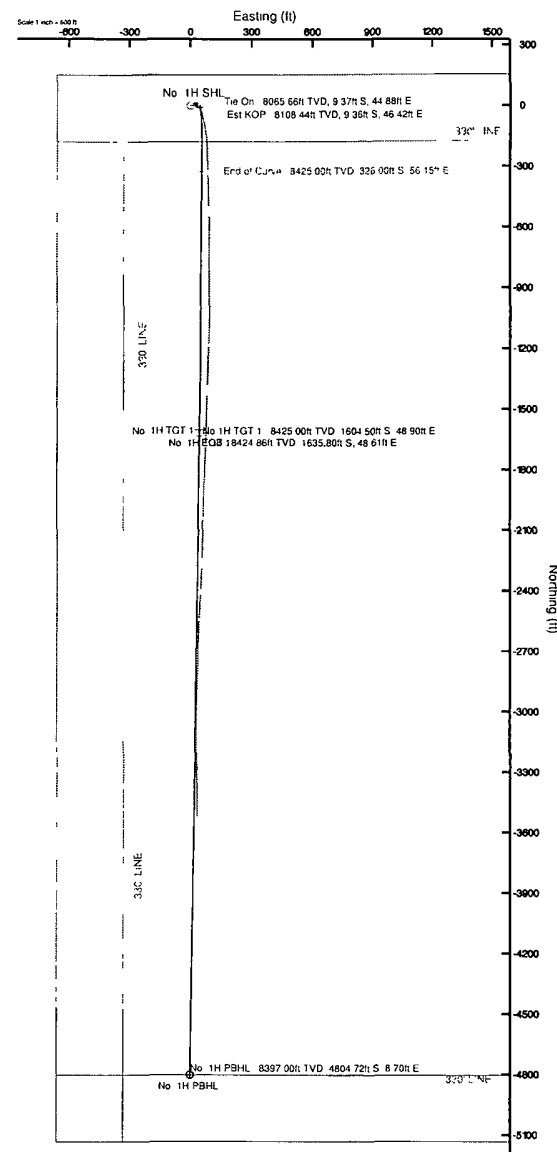
Created by gomeoscr on 11/30/2010



BGGM (1945.0 to 2011.0) Dip 60.50° Field 48922.5 nT
Magnetic North is 7.92 degrees East of True North (at 11/30/2010)
Grid North is 0.17 degrees East of True North
To correct azimuth from True to Grid subtract 0.17 degrees
To correct azimuth from Magnetic to Grid add 7.75 degrees
For example if the Magnetic North Azimuth = 90 degs then the Grid North Azimuth = 90 + 7.75 = 97.75



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Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Burton) Sec 6, T20S, R30E	Wellbore	No. 1H AWB
Facility	Burton 6 Fed No. 1H	Sidetrack from	No. 1H AWB PILOT at 8067.20 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Jonebea
Scale	0.99992	Report Generated	12/17/2010 at 11:54:50 AM
Convergence at slot	0.17° East	Database/Source file	WA Midland/No. 1H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	638530.00	585528.50	32°36'33.382"N	104°01'03.694"W
Facility Reference Pt			638530.00	585528.50	32°36'33.382"N	104°01'03.694"W
Field Reference Pt			639370.01	585205.16	32°36'30.158"N	104°00'53.884"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (KB) to Facility Vertical Datum	21.00ft
Horizontal Reference Pt	Slot	Rig on No. 1H SHL (KB) to Mean Sea Level	3344.00ft
Vertical Reference Pt	Rig on No. 1H SHL (KB)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
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	179.90°



Actual Wellpath Report

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Field	(Burton) Sec 6, T20S, R30E	Wellbore	No. 1H AWB
Facility	Burton 6 Fed No. 1H	Sidetrack from	No. 1H AWB PILOT at 8067.20 MD

WELLPATH DATA (198 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
0.00	0.000	91.630	0.00	0.00	0.00	0.00	638530.00	585528.50	32°36'33.382"N	104°01'03.694"W	0.00
46.80	0.640	91.630	46.80	0.01	-0.01	0.26	638530.26	585528.49	32°36'33.382"N	104°01'03.691"W	1.37
107.20	0.800	99.830	107.19	0.09	-0.09	1.01	638531.01	585528.41	32°36'33.381"N	104°01'03.682"W	0.31
167.70	1.120	107.090	167.69	0.34	-0.33	2.00	638532.00	585528.17	32°36'33.379"N	104°01'03.670"W	0.56
228.60	1.430	106.070	228.57	0.73	-0.72	3.29	638533.29	585527.78	32°36'33.375"N	104°01'03.655"W	0.51
288.10	1.550	100.630	288.05	1.08	-1.07	4.80	638534.80	585527.43	32°36'33.371"N	104°01'03.638"W	0.31
348.10	1.550	96.940	348.03	1.33	-1.32	6.40	638536.40	585527.18	32°36'33.369"N	104°01'03.619"W	0.17
409.10	1.380	90.450	409.01	1.44	-1.43	7.96	638537.95	585527.07	32°36'33.368"N	104°01'03.601"W	0.39
471.40	1.240	78.950	471.29	1.32	-1.30	9.37	638539.37	585527.20	32°36'33.369"N	104°01'03.584"W	0.48
535.20	1.170	70.690	535.08	0.97	-0.96	10.66	638540.66	585527.54	32°36'33.372"N	104°01'03.569"W	0.29
599.00	1.130	57.020	598.87	0.42	-0.40	11.80	638541.80	585528.10	32°36'33.378"N	104°01'03.556"W	0.43
662.90	1.230	50.240	662.75	-0.36	0.38	12.86	638542.86	585528.88	32°36'33.386"N	104°01'03.543"W	0.27
726.70	1.410	47.470	726.54	-1.33	1.35	13.96	638543.96	585529.85	32°36'33.395"N	104°01'03.530"W	0.30
790.50	1.700	46.710	790.31	-2.50	2.53	15.23	638545.23	585531.03	32°36'33.407"N	104°01'03.516"W	0.46
854.40	1.840	46.760	854.18	-3.85	3.88	16.67	638546.67	585532.38	32°36'33.420"N	104°01'03.499"W	0.22
918.20	2.100	49.690	917.94	-5.31	5.34	18.30	638548.30	585533.84	32°36'33.435"N	104°01'03.479"W	0.44
982.00	2.180	51.370	981.70	-6.82	6.86	20.14	638550.14	585535.36	32°36'33.449"N	104°01'03.458"W	0.16
1045.90	2.310	53.840	1045.55	-8.34	8.37	22.13	638552.13	585536.87	32°36'33.464"N	104°01'03.435"W	0.25
1109.70	2.410	58.640	1109.30	-9.79	9.83	24.32	638554.31	585538.33	32°36'33.479"N	104°01'03.409"W	0.35
1173.50	2.420	61.150	1173.04	-10.13	10.18	26.64	638556.64	585539.68	32°36'33.492"N	104°01'03.382"W	0.17
1237.30	2.000	59.330	1236.79	-12.35	12.40	28.78	638558.78	585540.90	32°36'33.504"N	104°01'03.357"W	0.67
1301.20	1.260	57.900	1300.67	-13.29	13.34	30.33	638560.33	585541.84	32°36'33.513"N	104°01'03.339"W	1.16
1365.00	0.620	76.240	1364.46	-13.74	13.79	31.26	638561.26	585542.29	32°36'33.518"N	104°01'03.328"W	1.10
1428.80	0.460	160.680	1428.25	-13.58	13.63	31.68	638561.68	585542.13	32°36'33.516"N	104°01'03.323"W	1.15
1492.70	0.920	191.230	1492.15	-12.83	12.89	31.67	638561.67	585541.39	32°36'33.509"N	104°01'03.323"W	0.90
1556.50	1.070	199.140	1555.94	-11.77	11.82	31.37	638561.37	585540.32	32°36'33.498"N	104°01'03.326"W	0.32
1620.30	1.020	198.180	1619.73	-10.67	10.72	31.00	638561.00	585539.22	32°36'33.487"N	104°01'03.331"W	0.08
1684.20	1.050	203.670	1683.62	-9.59	9.64	30.59	638560.59	585538.14	32°36'33.477"N	104°01'03.336"W	0.16
1748.00	1.150	212.360	1747.41	-8.52	8.57	30.01	638560.01	585537.07	32°36'33.466"N	104°01'03.343"W	0.30
1811.80	1.180	220.450	1811.19	-7.48	7.53	29.24	638559.24	585536.03	32°36'33.456"N	104°01'03.352"W	0.26
1875.70	1.460	214.330	1875.08	-6.31	6.36	28.36	638558.35	585534.85	32°36'33.444"N	104°01'03.362"W	0.49
1939.50	1.470	209.140	1938.86	-4.92	4.97	27.50	638557.50	585533.47	32°36'33.431"N	104°01'03.372"W	0.21
2003.30	1.190	209.470	2002.64	-3.63	3.68	26.77	638556.77	585532.18	32°36'33.418"N	104°01'03.381"W	0.44
2067.10	1.260	206.180	2066.42	-2.43	2.47	26.14	638556.14	585530.97	32°36'33.406"N	104°01'03.388"W	0.16
2131.00	1.220	196.850	2130.31	-1.14	1.19	25.63	638555.63	585529.69	32°36'33.393"N	104°01'03.394"W	0.32
2194.80	1.000	169.160	2194.10	0.05	-0.01	25.54	638555.54	585528.49	32°36'33.381"N	104°01'03.395"W	0.90
2258.60	0.990	160.470	2257.89	1.12	-1.07	25.83	638555.83	585527.43	32°36'33.371"N	104°01'03.392"W	0.24
2322.50	0.930	158.370	2321.78	2.12	-2.08	26.20	638556.20	585526.42	32°36'33.361"N	104°01'03.387"W	0.11
2386.30	0.780	123.640	2385.57	2.84	-2.80	26.76	638556.75	585525.70	32°36'33.354"N	104°01'03.381"W	0.83
2450.10	0.580	130.510	2449.37	3.30	-3.25	27.36	638557.36	585525.25	32°36'33.349"N	104°01'03.374"W	0.34
2513.90	0.380	135.770	2513.17	3.66	-3.61	27.76	638557.75	585524.89	32°36'33.346"N	104°01'03.369"W	0.32
2577.80	0.240	123.270	2577.07	3.88	-3.83	28.02	638558.01	585524.67	32°36'33.343"N	104°01'03.366"W	0.24
2641.60	0.150	98.970	2640.86	3.97	-3.92	28.21	638558.21	585524.58	32°36'33.343"N	104°01'03.364"W	0.19
2705.40	0.130	72.650	2704.66	3.96	-3.91	28.36	638558.36	585524.59	32°36'33.343"N	104°01'03.362"W	0.10
2769.30	0.130	64.620	2768.56	3.91	-3.86	28.50	638558.49	585524.64	32°36'33.343"N	104°01'03.361"W	0.03



Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Burton) Sec 6, T20S, R30E	Wellbore	No. 1H AWB
Facility	Burton 6 Fed No. 1H	Sidetrack from	No. 1H AWB PILOT at 8067.20 MD

WELLPATH DATA (198 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
2833.10	0.100	30.310	2832.36	3.83	-3.78	28.59	638558.59	585524.72	32°36'33.344"N	104°01'03.360"W	0.12
2896.90	0.160	316.260	2896.16	3.72	-3.67	28.56	638558.55	585524.83	32°36'33.345"N	104°01'03.360"W	0.26
2960.80	0.230	314.850	2960.06	3.56	-3.51	28.40	638558.40	585524.99	32°36'33.347"N	104°01'03.362"W	0.11
3024.60	0.200	315.380	3023.86	3.39	-3.34	28.24	638558.23	585525.16	32°36'33.348"N	104°01'03.364"W	0.05
3088.40	0.130	54.900	3087.66	3.27	-3.22	28.22	638558.21	585525.28	32°36'33.349"N	104°01'03.364"W	0.40
3152.30	0.340	82.560	3151.56	3.21	-3.16	28.46	638558.46	585525.34	32°36'33.350"N	104°01'03.361"W	0.36
3216.10	0.400	78.360	3215.36	3.14	-3.09	28.87	638558.87	585525.41	32°36'33.351"N	104°01'03.356"W	0.10
3279.90	0.480	70.490	3279.16	3.00	-2.95	29.34	638559.34	585525.55	32°36'33.352"N	104°01'03.351"W	0.16
3343.70	0.540	58.980	3342.96	2.76	-2.71	29.85	638559.85	585525.79	32°36'33.355"N	104°01'03.345"W	0.19
3407.60	0.550	62.330	3406.85	2.46	-2.41	30.38	638560.38	585526.09	32°36'33.357"N	104°01'03.339"W	0.05
3471.40	0.450	76.830	3470.65	2.27	-2.21	30.89	638560.89	585526.29	32°36'33.359"N	104°01'03.333"W	0.25
3535.20	0.450	85.220	3534.45	2.19	-2.13	31.39	638561.38	585526.37	32°36'33.360"N	104°01'03.327"W	0.10
3599.10	0.480	77.180	3598.35	2.11	-2.05	31.90	638561.90	585526.45	32°36'33.361"N	104°01'03.321"W	0.11
3662.90	0.510	67.450	3662.15	1.94	-1.89	32.42	638562.42	585526.61	32°36'33.363"N	104°01'03.315"W	0.14
3726.70	0.540	58.740	3725.94	1.68	-1.62	32.94	638562.94	585526.88	32°36'33.365"N	104°01'03.309"W	0.13
3790.60	0.580	55.290	3789.84	1.34	-1.28	33.46	638563.46	585527.22	32°36'33.369"N	104°01'03.303"W	0.08
3854.40	0.590	50.630	3853.64	0.95	-0.89	33.98	638563.98	585527.61	32°36'33.372"N	104°01'03.296"W	0.08
3918.20	0.520	45.660	3917.43	0.54	-0.48	34.44	638564.44	585528.02	32°36'33.376"N	104°01'03.291"W	0.13
3982.00	0.460	40.860	3981.23	0.14	-0.08	34.82	638564.82	585528.42	32°36'33.380"N	104°01'03.287"W	0.11
4045.90	0.480	37.550	4045.13	-0.26	0.33	35.15	638565.15	585528.83	32°36'33.384"N	104°01'03.283"W	0.05
4109.70	0.460	28.700	4108.93	-0.70	0.76	35.44	638565.43	585529.26	32°36'33.389"N	104°01'03.279"W	0.12
4173.50	0.480	10.500	4172.72	-1.19	1.25	35.61	638565.60	585529.75	32°36'33.394"N	104°01'03.277"W	0.24
4237.40	0.500	355.640	4236.62	-1.73	1.79	35.63	638565.63	585530.29	32°36'33.399"N	104°01'03.277"W	0.20
4301.20	0.440	354.450	4300.42	-2.25	2.31	35.59	638565.59	585530.81	32°36'33.404"N	104°01'03.278"W	0.10
4365.00	0.420	355.800	4364.22	-2.73	2.79	35.55	638565.55	585531.29	32°36'33.409"N	104°01'03.278"W	0.04
4428.90	0.420	0.730	4428.12	-3.19	3.26	35.53	638565.53	585531.76	32°36'33.413"N	104°01'03.278"W	0.06
4492.70	0.420	3.580	4491.91	-3.66	3.72	35.55	638565.55	585532.22	32°36'33.418"N	104°01'03.278"W	0.03
4556.50	0.420	6.260	4555.71	-4.13	4.19	35.59	638565.59	585532.69	32°36'33.423"N	104°01'03.277"W	0.03
4620.30	0.420	0.830	4619.51	-4.59	4.66	35.62	638565.62	585533.16	32°36'33.427"N	104°01'03.277"W	0.06
4684.20	0.370	0.880	4683.41	-5.03	5.10	35.63	638565.63	585533.60	32°36'33.432"N	104°01'03.277"W	0.08
4748.00	0.340	347.430	4747.21	-5.42	5.49	35.59	638565.59	585533.99	32°36'33.435"N	104°01'03.277"W	0.14
4811.80	0.370	336.850	4811.01	-5.80	5.86	35.47	638565.46	585534.36	32°36'33.439"N	104°01'03.279"W	0.11
4875.70	0.410	321.950	4874.91	-6.17	6.23	35.25	638565.24	585534.73	32°36'33.443"N	104°01'03.281"W	0.17
4939.50	0.400	311.570	4938.70	-6.50	6.56	34.94	638564.94	585535.06	32°36'33.446"N	104°01'03.285"W	0.12
5003.30	0.420	305.520	5002.50	-6.78	6.84	34.58	638564.58	585535.34	32°36'33.449"N	104°01'03.289"W	0.07
5067.10	0.410	307.280	5066.30	-7.06	7.12	34.21	638564.21	585535.62	32°36'33.452"N	104°01'03.293"W	0.03
5131.00	0.460	305.250	5130.20	-7.34	7.40	33.82	638563.82	585535.90	32°36'33.454"N	104°01'03.298"W	0.08
5194.80	0.490	303.250	5194.00	-7.64	7.70	33.38	638563.38	585536.20	32°36'33.457"N	104°01'03.303"W	0.05
5258.60	0.510	303.070	5257.79	-7.95	8.00	32.91	638562.91	585536.50	32°36'33.460"N	104°01'03.309"W	0.03
5322.50	0.480	306.410	5321.69	-8.26	8.32	32.46	638562.46	585536.82	32°36'33.464"N	104°01'03.314"W	0.07
5386.30	0.470	307.980	5385.49	-8.58	8.64	32.04	638562.04	585537.14	32°36'33.467"N	104°01'03.319"W	0.03
5450.10	0.450	305.590	5449.29	-8.89	8.95	31.63	638561.63	585537.44	32°36'33.470"N	104°01'03.324"W	0.04
5514.00	0.490	301.080	5513.19	-9.18	9.23	31.19	638561.19	585537.73	32°36'33.473"N	104°01'03.329"W	0.09
5577.80	0.600	298.350	5576.98	-9.48	9.53	30.66	638560.66	585538.03	32°36'33.476"N	104°01'03.335"W	0.18
5641.60	0.750	298.970	5640.78	-9.84	9.89	30.00	638560.00	585538.39	32°36'33.479"N	104°01'03.343"W	0.24



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

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Field	(Burton) Sec 6, T20S, R30E	Wellbore	No. 1H AWB
Facility	Burton 6 Fed No. 1H	Sidetrack from	No. 1H AWB PILOT at 8067.20 MD

WELLPATH DATA (198 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
5705.40	0.770	299.740	5704.57	-10.26	10.31	29.27	638559.26	585538.81	32°36'33.483"N	104°01'03.351"W	0.04
5769.30	0.890	296.330	5768.47	-10.69	10.74	28.45	638558.45	585539.24	32°36'33.488"N	104°01'03.361"W	0.20
5833.10	0.910	290.250	5832.26	-11.09	11.14	27.53	638557.53	585539.63	32°36'33.492"N	104°01'03.371"W	0.15
5896.90	0.980	286.570	5896.05	-11.42	11.47	26.53	638556.53	585539.97	32°36'33.495"N	104°01'03.383"W	0.15
5960.80	1.020	284.300	5959.94	-11.72	11.76	25.46	638555.46	585540.26	32°36'33.498"N	104°01'03.396"W	0.09
6024.60	1.050	282.770	6023.73	-11.99	12.03	24.34	638554.33	585540.53	32°36'33.501"N	104°01'03.409"W	0.06
6088.40	0.990	278.810	6087.52	-12.21	12.25	23.22	638553.22	585540.75	32°36'33.503"N	104°01'03.422"W	0.15
6152.30	0.820	274.510	6151.41	-12.33	12.37	22.22	638552.22	585540.87	32°36'33.504"N	104°01'03.433"W	0.29
6216.10	0.840	266.710	6215.20	-12.34	12.38	21.30	638551.30	585540.87	32°36'33.504"N	104°01'03.444"W	0.18
6279.90	0.900	256.530	6279.00	-12.20	12.23	20.34	638550.34	585540.73	32°36'33.503"N	104°01'03.455"W	0.26
6343.80	0.770	240.710	6342.89	-11.87	11.91	19.48	638549.48	585540.40	32°36'33.499"N	104°01'03.465"W	0.41
6407.60	0.770	248.430	6406.68	-11.51	11.54	18.71	638548.71	585540.04	32°36'33.496"N	104°01'03.475"W	0.16
6471.40	0.450	293.790	6470.48	-11.45	11.48	18.08	638548.08	585539.98	32°36'33.495"N	104°01'03.482"W	0.87
6535.20	0.080	8.070	6534.28	-11.60	11.63	17.86	638547.86	585540.13	32°36'33.497"N	104°01'03.484"W	0.68
6599.10	0.270	161.660	6598.18	-11.50	11.53	17.91	638547.91	585540.03	32°36'33.496"N	104°01'03.484"W	0.54
6662.90	0.530	173.710	6661.98	-11.06	11.09	17.99	638547.99	585539.59	32°36'33.491"N	104°01'03.483"W	0.43
6726.70	0.710	166.090	6725.78	-10.38	10.41	18.12	638548.12	585538.91	32°36'33.485"N	104°01'03.481"W	0.31
6790.60	0.720	153.540	6789.67	-9.64	9.67	18.39	638548.39	585538.17	32°36'33.477"N	104°01'03.478"W	0.25
6854.40	0.790	150.500	6853.46	-8.90	8.93	18.79	638548.79	585537.43	32°36'33.470"N	104°01'03.474"W	0.13
6918.20	0.940	146.540	6917.26	-8.08	8.11	19.29	638549.29	585536.61	32°36'33.462"N	104°01'03.468"W	0.25
6982.10	1.070	142.830	6981.15	-7.16	7.20	19.94	638549.94	585535.70	32°36'33.453"N	104°01'03.460"W	0.23
7045.90	1.360	143.300	7044.93	-6.08	6.12	20.76	638550.75	585534.61	32°36'33.442"N	104°01'03.451"W	0.45
7109.70	1.770	154.980	7108.71	-4.58	4.62	21.62	638551.62	585533.12	32°36'33.427"N	104°01'03.441"W	0.81
7173.50	2.070	164.220	7172.47	-2.57	2.61	22.35	638552.35	585531.11	32°36'33.407"N	104°01'03.432"W	0.67
7237.40	2.320	167.920	7236.33	-0.20	0.24	22.94	638552.94	585528.74	32°36'33.384"N	104°01'03.425"W	0.45
7301.20	1.950	158.730	7300.08	2.08	-2.04	23.60	638553.60	585526.46	32°36'33.361"N	104°01'03.418"W	0.79
7365.00	1.720	144.030	7363.85	3.87	-3.82	24.56	638554.56	585524.68	32°36'33.344"N	104°01'03.407"W	0.82
7428.90	1.660	138.650	7427.72	5.34	-5.29	25.73	638555.73	585523.21	32°36'33.329"N	104°01'03.393"W	0.27
7492.70	1.550	136.210	7491.50	6.66	-6.61	26.94	638556.94	585521.89	32°36'33.316"N	104°01'03.379"W	0.20
7556.50	1.400	131.260	7555.28	7.80	-7.75	28.12	638558.12	585520.75	32°36'33.305"N	104°01'03.365"W	0.31
7620.40	1.430	120.890	7619.16	8.72	-8.67	29.40	638559.39	585519.83	32°36'33.296"N	104°01'03.350"W	0.40
7684.20	1.610	113.570	7682.93	9.49	-9.44	30.90	638560.90	585519.06	32°36'33.288"N	104°01'03.333"W	0.41
7748.00	1.980	106.380	7746.70	10.16	-10.11	32.78	638562.78	585518.39	32°36'33.281"N	104°01'03.311"W	0.68
7811.80	2.160	100.680	7810.46	10.70	-10.64	35.02	638565.02	585517.86	32°36'33.276"N	104°01'03.285"W	0.43
7875.70	2.310	83.860	7874.31	10.79	-10.73	37.48	638567.48	585517.77	32°36'33.275"N	104°01'03.256"W	1.05
7939.50	2.310	74.160	7938.06	10.31	-10.24	40.00	638569.99	585518.26	32°36'33.280"N	104°01'03.226"W	0.61
8003.30	2.290	78.720	8001.81	9.71	-9.64	42.48	638572.48	585518.86	32°36'33.286"N	104°01'03.197"W	0.29
8067.20	2.060	89.370	8065.66	9.45	-9.37	44.88	638574.88	585519.13	32°36'33.288"N	104°01'03.169"W	0.73
8077.00	2.300	112.200	8075.46	9.53	-9.45	45.24	638575.24	585519.05	32°36'33.287"N	104°01'03.165"W	9.12
8109.00	5.200	154.600	8107.39	11.08	-11.00	46.46	638576.46	585517.50	32°36'33.272"N	104°01'03.151"W	11.96
8137.00	9.400	164.200	8135.16	14.43	-14.35	47.63	638577.62	585514.15	32°36'33.239"N	104°01'03.137"W	15.57
8173.00	14.200	163.100	8170.39	21.49	-21.41	49.71	638579.71	585507.10	32°36'33.169"N	104°01'03.113"W	13.35
8204.00	19.200	163.400	8200.07	30.03	-29.93	52.28	638582.27	585498.57	32°36'33.084"N	104°01'03.084"W	16.13
8236.00	23.600	164.300	8229.86	41.25	-41.15	55.51	638585.51	585487.35	32°36'32.973"N	104°01'03.046"W	13.79
8268.00	27.600	166.200	8258.71	54.62	-54.52	59.02	638589.01	585473.98	32°36'32.841"N	104°01'03.006"W	12.76



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Burton) Sec 6, T20S, R30E	Wellbore	No. 1H AWB
Facility	Burton 6 Fed No. 1H	Sidetrack from	No. 1H AWB PILOT at 8067.20 MD

WELLPATH DATA (198 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
8300.00	32.400	167.600	8286.42	70.21	-70.10	62.63	638592.62	585458.40	32°36'32.687"N	104°01'02.964"W	15.16
8331.00	39.000	167.500	8311.58	87.87	-87.76	66.53	638596.52	585440.75	32°36'32.512"N	104°01'02.919"W	21.29
8363.00	46.200	168.500	8335.12	109.05	-108.93	71.01	638601.01	585419.58	32°36'32.302"N	104°01'02.867"W	22.60
8395.00	53.300	171.000	8355.78	133.08	-132.95	75.33	638605.32	585395.56	32°36'32.065"N	104°01'02.818"W	22.97
8427.00	59.900	174.100	8373.39	159.56	-159.42	78.76	638608.76	585369.09	32°36'31.802"N	104°01'02.778"W	22.15
8459.00	66.400	176.200	8387.84	188.00	-187.86	81.16	638611.15	585340.66	32°36'31.521"N	104°01'02.751"W	21.14
8490.00	73.500	177.700	8398.46	217.06	-216.92	82.70	638612.69	585311.60	32°36'31.233"N	104°01'02.734"W	23.35
8518.00	79.600	178.400	8404.97	244.27	-244.12	83.63	638613.62	585284.40	32°36'30.964"N	104°01'02.725"W	21.92
8554.00	87.400	178.500	8409.04	279.99	-279.85	84.59	638614.58	585248.68	32°36'30.611"N	104°01'02.714"W	21.67
8586.00	88.000	178.400	8410.32	311.96	-311.81	85.46	638615.45	585216.72	32°36'30.294"N	104°01'02.705"W	1.90
8618.00	88.000	178.600	8411.44	343.93	-343.78	86.29	638616.29	585184.75	32°36'29.978"N	104°01'02.697"W	0.62
8650.00	87.900	178.500	8412.59	375.90	-375.75	87.10	638617.10	585152.78	32°36'29.662"N	104°01'02.688"W	0.44
8682.00	88.200	178.300	8413.67	407.87	-407.72	88.00	638617.99	585120.82	32°36'29.345"N	104°01'02.679"W	1.13
8713.00	88.800	178.500	8414.49	438.85	-438.70	88.86	638618.85	585089.84	32°36'29.039"N	104°01'02.670"W	2.04
8745.00	88.900	178.400	8415.13	470.83	-470.68	89.73	638619.72	585057.86	32°36'28.722"N	104°01'02.661"W	0.44
8777.00	88.800	178.000	8415.77	502.81	-502.65	90.73	638620.72	585025.89	32°36'28.406"N	104°01'02.650"W	1.29
8841.00	90.500	178.800	8416.16	566.79	-566.63	92.52	638622.51	584961.92	32°36'27.773"N	104°01'02.632"W	2.94
8905.00	90.800	179.300	8415.44	630.77	-630.61	93.58	638623.57	584897.94	32°36'27.140"N	104°01'02.622"W	0.91
8968.00	89.600	180.300	8415.22	693.77	-693.61	93.80	638623.79	584834.95	32°36'26.517"N	104°01'02.621"W	2.48
9032.00	89.500	179.600	8415.72	757.77	-757.61	93.86	638623.85	584770.95	32°36'25.883"N	104°01'02.623"W	1.10
9096.00	89.400	179.300	8416.33	821.76	-821.60	94.47	638624.46	584706.97	32°36'25.250"N	104°01'02.618"W	0.49
9159.00	89.500	179.700	8416.94	884.76	-884.60	95.02	638625.01	584643.98	32°36'24.627"N	104°01'02.614"W	0.65
9223.00	89.500	179.500	8417.50	948.76	-948.59	95.47	638625.46	584579.99	32°36'23.994"N	104°01'02.611"W	0.31
9287.00	89.900	180.900	8417.83	1012.75	-1012.59	95.24	638625.23	584515.99	32°36'23.360"N	104°01'02.615"W	2.28
9350.00	89.900	180.900	8417.94	1075.74	-1075.58	94.25	638624.25	584453.01	32°36'22.737"N	104°01'02.629"W	0.00
9414.00	90.300	182.200	8417.83	1139.72	-1139.56	92.52	638622.51	584389.04	32°36'22.104"N	104°01'02.652"W	2.13
9477.00	89.900	181.800	8417.72	1202.67	-1202.52	90.32	638620.32	584326.08	32°36'21.481"N	104°01'02.680"W	0.90
9541.00	89.900	181.600	8417.83	1266.64	-1266.49	88.42	638618.42	584262.12	32°36'20.848"N	104°01'02.704"W	0.31
9604.00	90.000	181.500	8417.89	1329.62	-1329.47	86.72	638616.71	584199.14	32°36'20.225"N	104°01'02.726"W	0.22
9668.00	89.900	180.900	8417.94	1393.60	-1393.45	85.38	638615.37	584135.16	32°36'19.592"N	104°01'02.744"W	0.95
9731.00	89.200	181.600	8418.44	1456.58	-1456.43	84.01	638614.00	584072.19	32°36'18.969"N	104°01'02.762"W	1.57
9795.00	89.300	181.400	8419.27	1520.55	-1520.41	82.33	638612.32	584008.22	32°36'18.336"N	104°01'02.784"W	0.35
9858.00	89.800	181.600	8419.77	1583.52	-1583.38	80.68	638610.68	583945.25	32°36'17.713"N	104°01'02.805"W	0.85
9922.00	89.500	180.700	8420.16	1647.50	-1647.37	79.40	638609.39	583881.27	32°36'17.080"N	104°01'02.823"W	1.48
9985.00	89.600	182.300	8420.65	1710.48	-1710.34	77.75	638607.74	583818.30	32°36'16.457"N	104°01'02.844"W	2.54
10049.00	89.600	181.800	8421.10	1774.43	-1774.30	75.46	638605.45	583754.35	32°36'15.824"N	104°01'02.873"W	0.78
10113.00	90.000	181.800	8421.32	1838.39	-1838.27	73.45	638603.44	583690.38	32°36'15.191"N	104°01'02.899"W	0.62
10176.00	89.900	181.700	8421.38	1901.36	-1901.24	71.52	638601.52	583627.42	32°36'14.568"N	104°01'02.924"W	0.22
10240.00	90.500	181.900	8421.16	1965.32	-1965.21	69.51	638599.51	583563.46	32°36'13.935"N	104°01'02.949"W	0.99
10303.00	90.300	181.800	8420.72	2028.29	-2028.17	67.48	638597.48	583500.50	32°36'13.312"N	104°01'02.975"W	0.35
10367.00	90.200	181.700	8420.44	2092.25	-2092.14	65.53	638595.52	583436.53	32°36'12.680"N	104°01'03.000"W	0.22
10430.00	90.100	181.700	8420.27	2155.22	-2155.11	63.66	638593.65	583373.56	32°36'12.057"N	104°01'03.024"W	0.16
10494.00	90.000	181.900	8420.22	2219.19	-2219.08	61.65	638591.64	583309.60	32°36'11.424"N	104°01'03.050"W	0.35
10558.00	90.400	182.000	8419.99	2283.14	-2283.04	59.47	638589.46	583245.64	32°36'10.791"N	104°01'03.078"W	0.64
10621.00	90.600	182.100	8419.44	2346.10	-2346.00	57.22	638587.21	583182.69	32°36'10.168"N	104°01'03.106"W	0.35



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Burton) Sec 6, T20S, R30E	Wellbore	No. 1H AWB
Facility	Burton 6 Fed No. 1H	Sidetrack from	No. 1H AWB PILOT at 8067.20 MD

WELLPATH DATA (198 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]
10685.00	91.500	182.900	8418.27	2410.02	-2409.93	54.42	638584.42	583118.77	32°36'09.536"N	104°01'03.141"W	1.88
10749.00	90.800	182.600	8416.99	2473.93	-2473.84	51.35	638581.35	583054.86	32°36'08.903"N	104°01'03.179"W	1.19
10812.00	91.200	183.100	8415.89	2536.83	-2536.75	48.22	638578.22	582991.96	32°36'08.281"N	104°01'03.218"W	1.02
10876.00	90.000	181.500	8415.22	2600.77	-2600.69	45.65	638575.65	582928.02	32°36'07.648"N	104°01'03.250"W	3.12
10940.00	89.500	181.400	8415.50	2664.75	-2664.67	44.04	638574.03	582864.05	32°36'07.015"N	104°01'03.271"W	0.80
11004.00	90.000	180.600	8415.77	2728.73	-2728.66	42.92	638572.91	582800.06	32°36'06.382"N	104°01'03.287"W	1.47
11067.00	90.600	181.400	8415.45	2791.72	-2791.65	41.82	638571.82	582737.08	32°36'05.759"N	104°01'03.302"W	1.59
11131.00	90.000	181.500	8415.11	2855.70	-2855.63	40.20	638570.20	582673.10	32°36'05.126"N	104°01'03.323"W	0.95
11194.00	90.500	180.700	8414.84	2918.68	-2918.62	38.99	638568.99	582610.12	32°36'04.503"N	104°01'03.339"W	1.50
11258.00	91.500	181.200	8413.72	2982.66	-2982.60	37.93	638567.93	582546.15	32°36'03.870"N	104°01'03.354"W	1.75
11322.00	91.100	180.600	8412.27	3046.63	-3046.57	36.92	638566.92	582482.18	32°36'03.237"N	104°01'03.368"W	1.13
11386.00	91.000	180.300	8411.09	3110.62	-3110.56	36.42	638566.42	582418.20	32°36'02.604"N	104°01'03.376"W	0.49
11449.00	91.000	179.400	8409.99	3173.61	-3173.55	36.59	638566.58	582355.21	32°36'01.980"N	104°01'03.376"W	1.43
11513.00	90.800	179.600	8408.99	3237.60	-3237.54	37.15	638567.14	582291.23	32°36'01.347"N	104°01'03.372"W	0.44
11577.00	90.800	179.400	8408.09	3301.59	-3301.53	37.70	638567.70	582227.24	32°36'00.714"N	104°01'03.367"W	0.31
11640.00	89.700	178.900	8407.82	3364.58	-3364.52	38.64	638568.63	582164.26	32°36'00.091"N	104°01'03.359"W	1.92
11704.00	88.800	179.700	8408.66	3428.57	-3428.51	39.42	638569.42	582100.27	32°35'59.458"N	104°01'03.352"W	1.88
11795.00	88.800	179.700	8410.56	3519.55	-3519.49	39.90	638569.89	582009.30	32°35'58.557"N	104°01'03.349"W	0.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 1H PBHL		8397.00	-4804.72	8.70	638538.70	580724.17	32°35'45.842"N	104°01'03.759"W	point
No. 1H TGT 1		8425.00	-1604.50	48.90	638578.90	583924.13	32°36'17.505"N	104°01'03.178"W	point

WELLPATH COMPOSITION Ref Wellbore: No. 1H AWB Ref Wellpath: No. 1H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8067.20	Generic gyro - northseeking (Standard)	Gyro	No. 1H AWB PILOT
8067.20	11704.00	NaviTrak (Standard)	MWD	No. 1H AWB
11704.00	11795.00	Blind Drilling (std)	Projection to bit	No. 1H AWB