



Cimarex Energy Co.

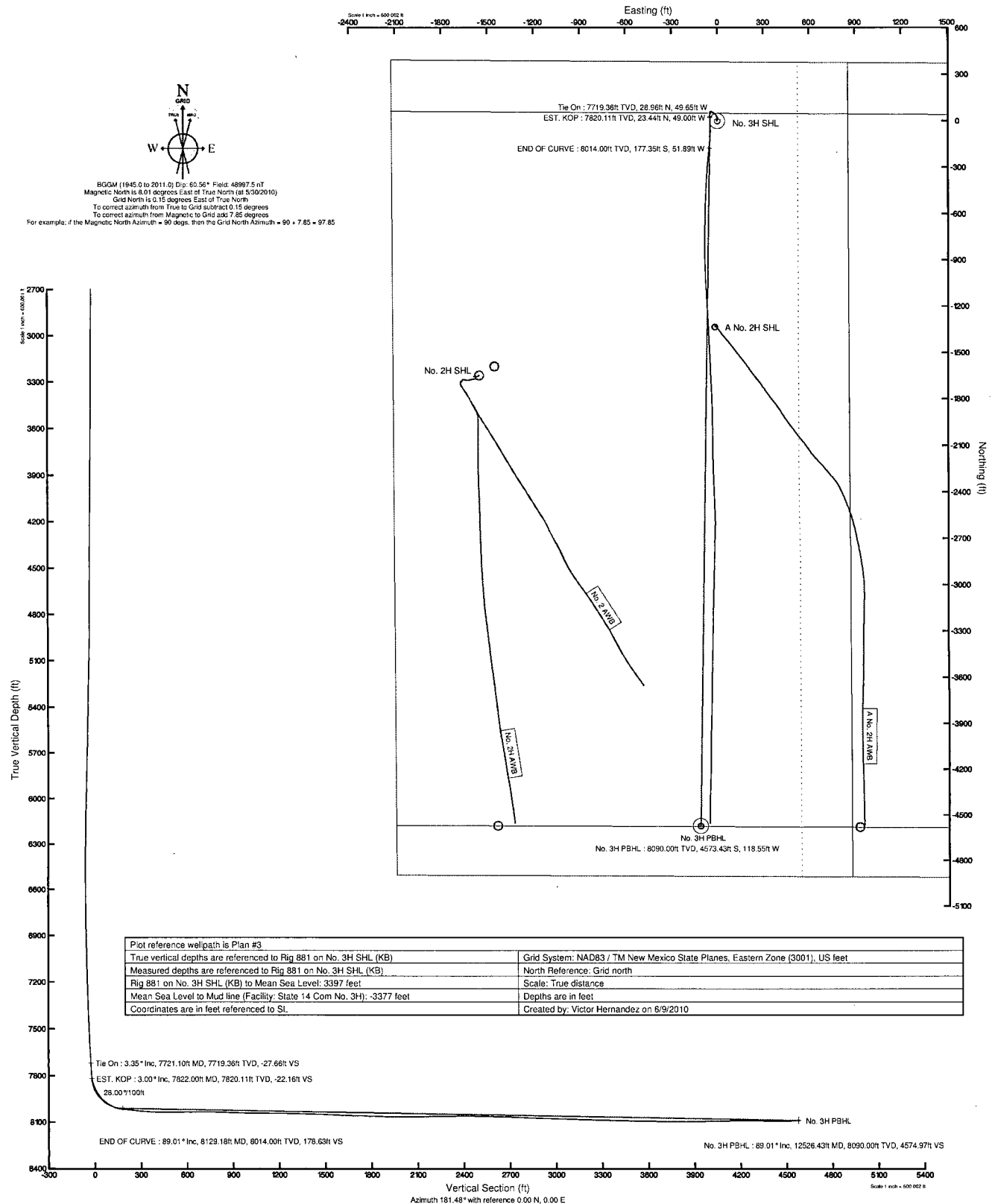
Location: Eddy County, NM
Field: (State) Sec 14, T19S, R29E
Facility: State 14 Com No. 3H

Slot: No. 3H SHL
Well: No. 3H
Wellbore: No. 3H PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	7721.10	3.350	167.170	7719.36	28.96	-49.65	0.00	-27.66
EST. KOP	7822.00	3.000	180.000	7820.11	23.44	-49.00	0.78	-22.16
END OF CURVE	8129.18	89.010	180.869	8014.00	-177.35	-51.89	0.00	178.63
No. 3H PBHL	12526.43	89.010	180.869	8090.00	-4573.43	-118.55	28.00	4574.97





Actual Wellpath Report

No. 3H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWB
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWB at 7768.30 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	Victor Hernandez
Scale	0.999918	Report Generated	6/9/2010 at 4:13:21 PM
Convergence at slot	0.15° East	Database/Source file	WA_Midland/No. 3H_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	629388.60	606461.20	32°40'00.773"N	104°02'49.908"W
Facility Reference Pt			629388.60	606461.20	32°40'00.773"N	104°02'49.908"W
Field Reference Pt			629388.60	606461.20	32°40'00.773"N	104°02'49.908"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig 881 on No. 3H SHL (KB) to GL	20.00ft
Horizontal Reference Pt	SL	Rig 881 on No. 3H SHL (KB) to Mean Sea Level	3397.00ft
Vertical Reference Pt	Rig 881 on No. 3H SHL (KB)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig 881 on No. 3H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.48°



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Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWB
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWB at 7768.30 MD

WELLPATH DATA (147 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	292.930	0.00	0.00	0.00	0.00	629388.60	606461.20	32°40'00.773"N	104°02'49.908"W	0.00
123.90	0.860	292.930	123.90	-0.34	0.36	-0.86	629387.74	606461.56	32°40'00.777"N	104°02'49.918"W	0.69
250.60	0.740	302.060	250.58	-1.10	1.17	-2.43	629386.17	606462.37	32°40'00.785"N	104°02'49.936"W	0.14
377.20	0.600	317.410	377.17	-2.00	2.09	-3.57	629385.03	606463.29	32°40'00.794"N	104°02'49.950"W	0.18
503.80	0.480	324.720	503.77	-2.90	3.01	-4.32	629384.28	606464.21	32°40'00.803"N	104°02'49.959"W	0.11
630.40	0.350	322.720	630.37	-3.62	3.75	-4.86	629383.74	606464.95	32°40'00.811"N	104°02'49.965"W	0.10
757.00	0.330	335.350	756.96	-4.25	4.39	-5.25	629383.35	606465.59	32°40'00.817"N	104°02'49.969"W	0.06
883.70	0.200	338.150	883.66	-4.78	4.93	-5.48	629383.12	606466.13	32°40'00.822"N	104°02'49.972"W	0.10
1010.30	0.300	349.640	1010.26	-5.31	5.46	-5.62	629382.98	606466.66	32°40'00.827"N	104°02'49.974"W	0.09
1136.90	0.300	348.230	1136.86	-5.96	6.11	-5.75	629382.85	606467.31	32°40'00.834"N	104°02'49.975"W	0.01
1263.50	0.400	36.190	1263.46	-6.64	6.79	-5.56	629383.04	606467.99	32°40'00.841"N	104°02'49.973"W	0.24
1390.10	0.430	38.590	1390.05	-7.38	7.52	-5.00	629383.60	606468.72	32°40'00.848"N	104°02'49.966"W	0.03
1516.80	0.600	75.940	1516.75	-7.94	8.05	-4.06	629384.54	606469.25	32°40'00.853"N	104°02'49.955"W	0.29
1643.40	0.600	63.170	1643.34	-8.43	8.51	-2.83	629385.77	606469.71	32°40'00.858"N	104°02'49.941"W	0.11
1770.00	0.520	86.690	1769.94	-8.80	8.84	-1.66	629386.94	606470.04	32°40'00.861"N	104°02'49.927"W	0.19
1896.60	0.540	70.900	1896.53	-9.05	9.07	-0.52	629388.08	606470.27	32°40'00.863"N	104°02'49.914"W	0.12
2023.20	1.030	59.210	2023.12	-9.87	9.85	1.02	629389.62	606471.05	32°40'00.871"N	104°02'49.896"W	0.41
2149.90	1.260	47.420	2149.79	-11.45	11.37	3.02	629391.62	606472.57	32°40'00.886"N	104°02'49.872"W	0.26
2276.50	1.220	100.140	2276.37	-12.21	12.08	5.37	629393.97	606473.28	32°40'00.893"N	104°02'49.845"W	0.87
2403.10	1.150	1.480	2402.95	-13.28	13.11	6.73	629395.33	606474.31	32°40'00.903"N	104°02'49.829"W	1.42
2529.70	1.070	350.920	2529.53	-15.71	15.55	6.58	629395.18	606476.75	32°40'00.927"N	104°02'49.831"W	0.17
2656.30	0.910	323.740	2656.11	-17.67	17.53	5.80	629394.40	606478.72	32°40'00.947"N	104°02'49.840"W	0.39
2783.00	0.840	293.680	2782.79	-18.82	18.71	4.35	629392.95	606479.91	32°40'00.958"N	104°02'49.857"W	0.36
2909.60	0.730	297.570	2909.38	-19.52	19.46	2.79	629391.39	606480.66	32°40'00.966"N	104°02'49.875"W	0.10
3036.20	0.670	307.250	3035.97	-20.31	20.28	1.48	629390.08	606481.48	32°40'00.974"N	104°02'49.890"W	0.10
3162.80	0.290	323.310	3162.57	-20.99	20.98	0.70	629389.30	606482.18	32°40'00.981"N	104°02'49.899"W	0.32
3289.40	0.210	291.080	3289.17	-21.32	21.32	0.29	629388.89	606482.52	32°40'00.984"N	104°02'49.904"W	0.13
3416.10	0.460	286.250	3415.87	-21.53	21.55	-0.41	629388.19	606482.75	32°40'00.986"N	104°02'49.912"W	0.20
3542.70	0.650	331.610	3542.46	-22.28	22.32	-1.24	629387.36	606483.52	32°40'00.994"N	104°02'49.922"W	0.37
3669.30	0.660	16.070	3669.05	-23.61	23.66	-1.38	629387.22	606484.85	32°40'01.007"N	104°02'49.923"W	0.39



Actual Wellpath Report

No. 3H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWB
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWB at 7768.30 MD

WELLPATH DATA (147 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]
3795.90	0.630	319.450	3795.65	-24.83	24.89	-1.63	629386.97	606486.08	32°40'01.020"N	104°02'49.926"W	0.48
3922.50	0.600	320.760	3922.24	-25.85	25.93	-2.50	629386.10	606487.13	32°40'01.030"N	104°02'49.937"W	0.03
4049.20	0.590	357.520	4048.93	-27.01	27.09	-2.95	629385.65	606488.29	32°40'01.041"N	104°02'49.942"W	0.30
4175.80	0.700	318.780	4175.52	-28.23	28.33	-3.49	629385.11	606489.52	32°40'01.054"N	104°02'49.948"W	0.35
4302.40	0.630	330.920	4302.12	-29.39	29.52	-4.34	629384.26	606490.71	32°40'01.065"N	104°02'49.958"W	0.12
4429.00	0.550	294.290	4428.71	-30.23	30.37	-5.23	629383.37	606491.57	32°40'01.074"N	104°02'49.968"W	0.30
4555.60	0.300	332.180	4555.31	-30.75	30.92	-5.94	629382.66	606492.11	32°40'01.079"N	104°02'49.977"W	0.29
4682.30	0.300	327.060	4682.00	-31.32	31.49	-6.27	629382.33	606492.69	32°40'01.085"N	104°02'49.980"W	0.02
4808.90	0.290	283.500	4808.60	-31.66	31.84	-6.76	629381.84	606493.04	32°40'01.088"N	104°02'49.986"W	0.17
4935.50	0.790	323.490	4935.20	-32.41	32.62	-7.59	629381.01	606493.82	32°40'01.096"N	104°02'49.996"W	0.47
5062.10	1.370	347.140	5061.77	-34.56	34.79	-8.45	629380.15	606495.99	32°40'01.118"N	104°02'50.006"W	0.57
5188.70	1.500	357.210	5188.34	-37.68	37.93	-8.87	629379.73	606499.12	32°40'01.149"N	104°02'50.011"W	0.22
5315.40	1.450	346.080	5314.99	-40.88	41.14	-9.33	629379.27	606502.33	32°40'01.181"N	104°02'50.016"W	0.23
5442.00	1.420	309.140	5441.56	-43.38	43.68	-10.94	629377.66	606504.88	32°40'01.206"N	104°02'50.035"W	0.72
5568.60	1.600	307.170	5568.11	-45.37	45.74	-13.56	629375.04	606506.94	32°40'01.226"N	104°02'50.065"W	0.15
5695.20	2.040	294.190	5694.65	-47.27	47.73	-17.03	629371.58	606508.93	32°40'01.246"N	104°02'50.106"W	0.47
5821.80	2.380	308.780	5821.16	-49.74	50.30	-21.13	629367.47	606511.50	32°40'01.272"N	104°02'50.154"W	0.52
5948.50	2.760	291.960	5947.73	-52.40	53.09	-26.01	629362.59	606514.29	32°40'01.299"N	104°02'50.211"W	0.66
6075.10	2.690	309.340	6074.19	-55.29	56.11	-31.13	629357.47	606517.31	32°40'01.329"N	104°02'50.271"W	0.65
6201.70	2.650	285.620	6200.66	-57.83	58.78	-36.25	629352.35	606519.98	32°40'01.356"N	104°02'50.330"W	0.87
6328.30	1.820	283.760	6327.16	-58.97	60.05	-41.02	629347.58	606521.25	32°40'01.369"N	104°02'50.386"W	0.66
6454.90	1.190	268.940	6453.71	-59.34	60.50	-44.29	629344.31	606521.70	32°40'01.373"N	104°02'50.424"W	0.58
6581.60	0.730	230.010	6580.40	-58.74	59.96	-46.22	629342.38	606521.16	32°40'01.368"N	104°02'50.447"W	0.61
6708.20	0.760	241.220	6706.99	-57.79	59.04	-47.58	629341.03	606520.23	32°40'01.359"N	104°02'50.463"W	0.12
6834.80	1.170	181.650	6833.57	-56.07	57.34	-48.35	629340.25	606518.54	32°40'01.342"N	104°02'50.472"W	0.81
6961.40	1.560	186.280	6960.13	-53.06	54.34	-48.58	629340.03	606515.53	32°40'01.312"N	104°02'50.475"W	0.32
7088.00	1.090	165.930	7086.70	-50.18	51.46	-48.47	629340.13	606512.65	32°40'01.284"N	104°02'50.473"W	0.52
7214.70	1.940	163.120	7213.36	-46.99	48.24	-47.56	629341.05	606509.43	32°40'01.252"N	104°02'50.463"W	0.67
7341.30	2.160	198.380	7339.88	-42.67	43.92	-47.69	629340.92	606505.12	32°40'01.209"N	104°02'50.465"W	0.99
7467.90	1.990	179.080	7466.40	-38.19	39.46	-48.40	629340.20	606500.66	32°40'01.165"N	104°02'50.473"W	0.57



Actual Wellpath Report

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Area	Eddy County, NM	Well	No. 3H
Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWB
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWB at 7768.30 MD

WELLPATH DATA (147 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]
7594.50	2.330	204.140	7592.91	-33.62	34.91	-49.42	629339.18	606496.11	32°40'01.120"N	104°02'50.485"W	0.79
7721.10	3.350	167.170	7719.36	-27.66	28.96	-49.65	629338.95	606490.15	32°40'01.061"N	104°02'50.488"W	1.61
7781.00	3.800	162.900	7779.15	-24.08	25.35	-48.68	629339.93	606486.55	32°40'01.025"N	104°02'50.477"W	0.87
7812.00	6.200	166.600	7810.03	-21.49	22.74	-47.99	629340.62	606483.94	32°40'01.000"N	104°02'50.469"W	7.81
7844.00	13.600	171.100	7841.53	-16.11	17.34	-47.00	629341.60	606478.54	32°40'00.946"N	104°02'50.457"W	23.23
7875.00	22.000	175.500	7871.02	-6.74	7.93	-45.98	629342.62	606469.13	32°40'00.853"N	104°02'50.446"W	27.42
7906.00	27.900	178.900	7899.12	6.30	-5.12	-45.39	629343.22	606456.08	32°40'00.724"N	104°02'50.439"W	19.58
7938.00	35.600	177.900	7926.31	23.10	-21.94	-44.90	629343.70	606439.26	32°40'00.557"N	104°02'50.434"W	24.12
7970.00	42.800	180.800	7951.09	43.29	-42.15	-44.71	629343.89	606419.06	32°40'00.357"N	104°02'50.432"W	23.21
8001.00	51.200	182.400	7972.21	65.94	-64.79	-45.37	629343.24	606396.42	32°40'00.133"N	104°02'50.441"W	27.36
8033.00	59.400	183.400	7990.42	92.22	-91.04	-46.71	629341.90	606370.17	32°39'59.874"N	104°02'50.457"W	25.75
8065.00	68.700	184.000	8004.40	120.94	-119.72	-48.57	629340.04	606341.49	32°39'59.590"N	104°02'50.480"W	29.11
8096.00	76.600	185.000	8013.64	150.46	-149.19	-50.89	629337.71	606312.02	32°39'59.298"N	104°02'50.508"W	25.67
8128.00	85.300	184.500	8018.67	181.98	-180.66	-53.51	629335.10	606280.56	32°39'58.987"N	104°02'50.540"W	27.23
8159.00	83.700	185.800	8021.64	212.78	-211.39	-56.28	629332.33	606249.83	32°39'58.683"N	104°02'50.573"W	6.64
8191.00	83.600	185.900	8025.18	244.49	-243.03	-59.52	629329.09	606218.19	32°39'58.370"N	104°02'50.612"W	0.44
8223.00	84.000	185.800	8028.64	276.21	-274.67	-62.76	629325.85	606186.55	32°39'58.057"N	104°02'50.651"W	1.29
8255.00	84.900	185.300	8031.73	307.98	-306.37	-65.84	629322.77	606154.85	32°39'57.744"N	104°02'50.688"W	3.21
8286.00	85.700	184.400	8034.27	338.82	-337.16	-68.45	629320.15	606124.07	32°39'57.439"N	104°02'50.719"W	3.88
8318.00	87.400	184.000	8036.20	370.72	-369.01	-70.79	629317.81	606092.22	32°39'57.124"N	104°02'50.748"W	5.46
8350.00	88.100	182.700	8037.45	402.68	-400.93	-72.66	629315.95	606060.30	32°39'56.808"N	104°02'50.771"W	4.61
8413.00	90.600	182.300	8038.17	465.66	-463.86	-75.41	629313.20	605997.38	32°39'56.186"N	104°02'50.805"W	4.02
8476.00	90.500	182.200	8037.56	528.65	-526.81	-77.88	629310.73	605934.43	32°39'55.563"N	104°02'50.836"W	0.22
8540.00	90.300	181.800	8037.12	592.65	-590.77	-80.11	629308.49	605870.48	32°39'54.930"N	104°02'50.864"W	0.70
8603.00	90.200	181.800	8036.84	655.65	-653.74	-82.09	629306.51	605807.52	32°39'54.307"N	104°02'50.889"W	0.16
8667.00	90.200	181.300	8036.62	719.65	-717.72	-83.82	629304.78	605743.54	32°39'53.674"N	104°02'50.911"W	0.78
8730.00	88.700	179.900	8037.22	782.63	-780.71	-84.48	629304.12	605680.56	32°39'53.051"N	104°02'50.921"W	3.26
8794.00	88.000	179.400	8039.07	846.57	-844.68	-84.09	629304.51	605616.59	32°39'52.418"N	104°02'50.918"W	1.34
8857.00	88.100	178.300	8041.21	909.47	-907.63	-82.83	629305.78	605553.65	32°39'51.795"N	104°02'50.906"W	1.75
8920.00	88.700	177.800	8042.97	972.33	-970.57	-80.69	629307.92	605490.72	32°39'51.172"N	104°02'50.883"W	1.24



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No. 3H AWP

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Area	Eddy County, NM	Well	No. 3H
Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWB
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWB at 7768.30 MD

WELLPATH DATA (147 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]
8984.00	89.000	177.000	8044.25	1036.15	-1034.49	-77.78	629310.82	605426.80	32°39'50.540"N	104°02'50.851"W	1.33
9047.00	89.500	176.400	8045.08	1098.93	-1097.38	-74.16	629314.45	605363.92	32°39'49.917"N	104°02'50.810"W	1.24
9111.00	89.500	176.900	8045.64	1162.70	-1161.26	-70.42	629318.19	605300.03	32°39'49.285"N	104°02'50.768"W	0.78
9174.00	89.800	176.400	8046.02	1225.47	-1224.16	-66.74	629321.87	605237.15	32°39'48.663"N	104°02'50.727"W	0.93
9237.00	89.000	177.200	8046.68	1288.26	-1287.05	-63.22	629325.39	605174.26	32°39'48.040"N	104°02'50.688"W	1.80
9300.00	87.800	177.600	8048.44	1351.07	-1349.96	-60.36	629328.24	605111.35	32°39'47.418"N	104°02'50.657"W	2.01
9364.00	88.000	177.200	8050.79	1414.87	-1413.85	-57.46	629331.14	605047.47	32°39'46.786"N	104°02'50.625"W	0.70
9427.00	88.100	176.400	8052.93	1477.62	-1476.72	-53.95	629334.66	604984.61	32°39'46.163"N	104°02'50.586"W	1.28
9491.00	87.600	177.800	8055.33	1541.39	-1540.59	-50.71	629337.89	604920.74	32°39'45.531"N	104°02'50.550"W	2.32
9554.00	87.600	177.200	8057.97	1604.18	-1603.47	-47.97	629340.64	604857.86	32°39'44.909"N	104°02'50.520"W	0.95
9618.00	88.300	177.300	8060.26	1667.96	-1667.36	-44.90	629343.71	604793.98	32°39'44.277"N	104°02'50.486"W	1.10
9681.00	88.700	177.300	8061.91	1730.77	-1730.27	-41.93	629346.67	604731.08	32°39'43.654"N	104°02'50.453"W	0.63
9744.00	87.800	177.900	8063.83	1793.60	-1793.18	-39.29	629349.31	604668.17	32°39'43.032"N	104°02'50.424"W	1.72
9806.00	88.300	178.900	8065.94	1855.47	-1855.12	-37.56	629351.04	604606.24	32°39'42.419"N	104°02'50.406"W	1.80
9870.00	88.700	178.800	8067.62	1919.38	-1919.09	-36.28	629352.32	604542.28	32°39'41.786"N	104°02'50.393"W	0.64
9933.00	90.200	179.400	8068.22	1982.32	-1982.07	-35.29	629353.31	604479.29	32°39'41.163"N	104°02'50.383"W	2.56
9997.00	90.500	179.400	8067.83	2046.28	-2046.07	-34.62	629353.98	604415.30	32°39'40.530"N	104°02'50.378"W	0.47
10060.00	90.800	179.300	8067.11	2109.23	-2109.06	-33.91	629354.70	604352.32	32°39'39.906"N	104°02'50.371"W	0.50
10123.00	90.800	178.800	8066.24	2172.17	-2172.04	-32.86	629355.74	604289.34	32°39'39.283"N	104°02'50.361"W	0.79
10186.00	91.000	178.000	8065.25	2235.07	-2235.01	-31.10	629357.50	604226.38	32°39'38.660"N	104°02'50.342"W	1.31
10250.00	91.300	177.900	8063.96	2298.93	-2298.96	-28.81	629359.79	604162.44	32°39'38.027"N	104°02'50.318"W	0.49
10313.00	90.300	178.500	8063.08	2361.82	-2361.92	-26.83	629361.77	604099.48	32°39'37.404"N	104°02'50.296"W	1.85
10376.00	90.000	177.500	8062.92	2424.70	-2424.88	-24.64	629363.97	604036.52	32°39'36.781"N	104°02'50.273"W	1.66
10440.00	88.700	177.800	8063.64	2488.56	-2488.82	-22.01	629366.59	603972.59	32°39'36.148"N	104°02'50.244"W	2.08
10503.00	88.800	177.300	8065.02	2551.39	-2551.75	-19.32	629369.28	603909.67	32°39'35.526"N	104°02'50.215"W	0.81
10566.00	88.000	181.300	8066.78	2614.31	-2614.71	-18.55	629370.05	603846.71	32°39'34.903"N	104°02'50.208"W	6.47
10630.00	87.700	182.100	8069.18	2678.26	-2678.63	-20.45	629368.15	603782.79	32°39'34.270"N	104°02'50.232"W	1.33
10693.00	88.000	181.400	8071.54	2741.22	-2741.56	-22.37	629366.23	603719.87	32°39'33.648"N	104°02'50.256"W	1.21
10757.00	87.900	181.500	8073.83	2805.18	-2805.50	-23.99	629364.61	603655.94	32°39'33.015"N	104°02'50.277"W	0.22
10820.00	88.200	181.500	8075.97	2868.14	-2868.44	-25.64	629362.97	603593.00	32°39'32.392"N	104°02'50.298"W	0.48



Actual Wellpath Report

No. 3H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWP
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWP at 7768.30 MD

WELLPATH DATA (147 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]
10883.00	88.400	180.600	8077.84	2931.11	-2931.40	-26.79	629361.81	603530.05	32°39'31.769"N	104°02'50.314"W	1.46
10947.00	88.100	181.700	8079.80	2995.08	-2995.35	-28.07	629360.53	603466.10	32°39'31.137"N	104°02'50.331"W	1.78
11010.00	88.000	181.900	8081.94	3058.04	-3058.29	-30.05	629358.55	603403.17	32°39'30.514"N	104°02'50.356"W	0.35
11073.00	88.200	181.200	8084.03	3121.00	-3121.23	-31.75	629356.85	603340.23	32°39'29.891"N	104°02'50.378"W	1.15
11137.00	88.300	181.200	8085.98	3184.97	-3185.19	-33.09	629355.51	603276.28	32°39'29.259"N	104°02'50.396"W	0.16
11200.00	88.500	180.900	8087.74	3247.95	-3248.15	-34.25	629354.35	603213.32	32°39'28.636"N	104°02'50.411"W	0.57
11264.00	88.800	181.200	8089.25	3311.93	-3312.12	-35.42	629353.18	603149.36	32°39'28.003"N	104°02'50.427"W	0.66
11327.00	88.500	181.100	8090.74	3374.91	-3375.09	-36.68	629351.92	603086.39	32°39'27.380"N	104°02'50.444"W	0.50
11391.00	88.200	180.700	8092.58	3438.88	-3439.06	-37.69	629350.91	603022.43	32°39'26.747"N	104°02'50.457"W	0.78
11454.00	89.000	181.400	8094.12	3501.86	-3502.03	-38.84	629349.76	602959.47	32°39'26.124"N	104°02'50.473"W	1.69
11517.00	89.200	181.500	8095.11	3564.85	-3565.00	-40.44	629348.17	602896.50	32°39'25.501"N	104°02'50.493"W	0.35
11580.00	89.100	181.000	8096.04	3627.84	-3627.98	-41.81	629346.79	602833.53	32°39'24.878"N	104°02'50.512"W	0.81
11644.00	89.200	180.800	8096.99	3691.83	-3691.96	-42.82	629345.79	602769.55	32°39'24.245"N	104°02'50.525"W	0.35
11707.00	89.100	180.500	8097.93	3754.82	-3754.95	-43.53	629345.07	602706.57	32°39'23.621"N	104°02'50.536"W	0.50
11771.00	89.600	180.600	8098.65	3818.80	-3818.94	-44.15	629344.46	602642.58	32°39'22.988"N	104°02'50.545"W	0.80
11834.00	91.400	182.000	8098.10	3881.80	-3881.92	-45.58	629343.03	602579.61	32°39'22.365"N	104°02'50.564"W	3.62
11898.00	91.400	181.700	8096.54	3945.78	-3945.87	-47.64	629340.96	602515.66	32°39'21.732"N	104°02'50.590"W	0.47
11961.00	90.800	180.500	8095.33	4008.76	-4008.84	-48.85	629339.75	602452.69	32°39'21.109"N	104°02'50.606"W	2.13
12024.00	91.200	180.200	8094.23	4071.74	-4071.83	-49.23	629339.37	602389.71	32°39'20.486"N	104°02'50.612"W	0.79
12087.00	90.400	181.300	8093.35	4134.73	-4134.82	-50.06	629338.54	602326.73	32°39'19.863"N	104°02'50.624"W	2.16
12151.00	90.300	180.600	8092.96	4198.72	-4198.81	-51.12	629337.48	602262.74	32°39'19.230"N	104°02'50.638"W	1.10
12214.00	90.000	181.800	8092.79	4261.72	-4261.79	-52.44	629336.16	602199.76	32°39'18.607"N	104°02'50.656"W	1.96
12278.00	89.400	181.900	8093.13	4325.72	-4325.76	-54.51	629334.10	602135.80	32°39'17.974"N	104°02'50.682"W	0.95
12341.00	89.800	181.000	8093.57	4388.72	-4388.74	-56.10	629332.50	602072.83	32°39'17.351"N	104°02'50.703"W	1.56
12404.00	90.100	180.800	8093.62	4451.71	-4451.73	-57.09	629331.52	602009.85	32°39'16.728"N	104°02'50.716"W	0.57
12461.00	90.200	180.600	8093.48	4508.71	-4508.72	-57.79	629330.82	601952.85	32°39'16.164"N	104°02'50.726"W	0.39
12512.00	90.200	180.600	8093.30	4559.70	-4559.72	-58.32	629330.29	601901.86	32°39'15.659"N	104°02'50.734"W	0.00



Actual Wellpath Report

No. 3H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(State) Sec 14, T19S, R29E	Wellbore	No. 3H AWB
Facility	State 14 Com No. 3H	Sidetrack from	No. 3 AWB at 7768.30 MD

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 3H PBHL		8090.00	-4573.43	-118.55	629270.06	601888.15	32°39'15.525"N	104°02'51.439"W	point

WELLPATH COMPOSITION					Ref Wellbore: No. 3H AWB		Ref Wellpath: No. 3H AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment		Wellbore	
0.00	7721.10	Gyrodata relative depth - Drop gyro or Multi-shot			GYRO <123.9 - 8101>		No. 3 AWB	
7721.10	12461.00	NaviTrak (Standard)			MWD <7781 - 12461>		No. 3H AWB	
12461.00	12512.00	Blind Drilling (std)			Projection to bit		No. 3H AWB	