

Results of Directional Survey

API number:	30-025-40308		
OGRID:		Operator:	CIMAREX ENERGY CO. OF COLORADO
		Property:	ADAMS STATE COM # 3H

surface	ULSTR:	J	06	T 21S	R 33E
				2310 FSL	1980 FEL

BH Loc	ULSTR:	O	07	T 21S	R 33E
18596 MD		11682.4	TVD	346 FSL	1902 FEL
				4934 FNL	

Top Perf/OH	ULSTR:	J	06	T 21S	R 33E
11501 MD		11465.2	TVD	2129 FSL	2008 FEL

Bot Perf/OH	ULSTR:	O	07	T 21S	R 33E
18535 MD		11682.0	TVD	407 FSL	1904 FEL
				4873 FNL	

	MD	N/S	E/W	VD
	11490	-173.27	-28.39	11457.79
TOP PERFS/OH	11501	-181.43	-28.48	11465.15
	11522	-197.02	-28.64	11479.21
	18535	-7183.47	76.34	11682.02
BOT PERFS/OH	18535	-7183.47	76.34	11682.02
	18546	-7194.46	76.72	11682.09

NEXT TO LAST	18546	-7194.46	76.72	11682.09
LAST READING	18596	-7244.43	78.47	11682.35
TD	18596	-7244.43	78.47	11682.35

Surface Location	2310 FS	1980 FE
Projected BHL	4934 FN	1902 FE
Location of		
Top Perfs/OH	2129 FS	2008 FE
Bottom Perfs/OH	4873 FN	1904 FE

SUMMARY of Subsurface Locations

Surface Location	J-06-21S-33E	2310 FS	1980 FE	Vert. Depth
Top Perfs/OH	J-06-21S-33E	2129 FS	2008 FE	11465.15
Bottom Perfs/OH	O-07-21S-33E	4873 FN	1904 FE	11682.02
Projected TD	O-07-21S-33E	4934 FN	1902 FE	11682.35

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End Of Well Report



INTEQ

End of Well Report

Cimarex Energy Co.

Lea County, NM

Adams State Com No.3H

Cactus 101

SUR: J-06-21s-33e, 2310/S & 1980/E
BHL: O-07-21s-33e, 4934/N & 1902/E
API # 30-025-40308

Well Specifications

Well Name: Adams State Com No. 3H
Start Date: 11/13/2011
Client: Cimarex Energy Co.
Rig Name: Cactus 101
County: Lea County, NM
Field: (Adams) Sec 6&7, T21S, R33E

Well Location:

NAD83 / TM New Mexico State Planes, Eastern Zone (3001)

Grid Coordinates

Easting: 764441.20'

Northing: 548939.20'

Geographical Coordinates

Latitude: 32°30'25.246"N

Longitude: 103°36'34.609"W

RT: 3,819' above M.S.L.

Date TD Reached: 12/8/2011

Final Depth MD: 18,596'

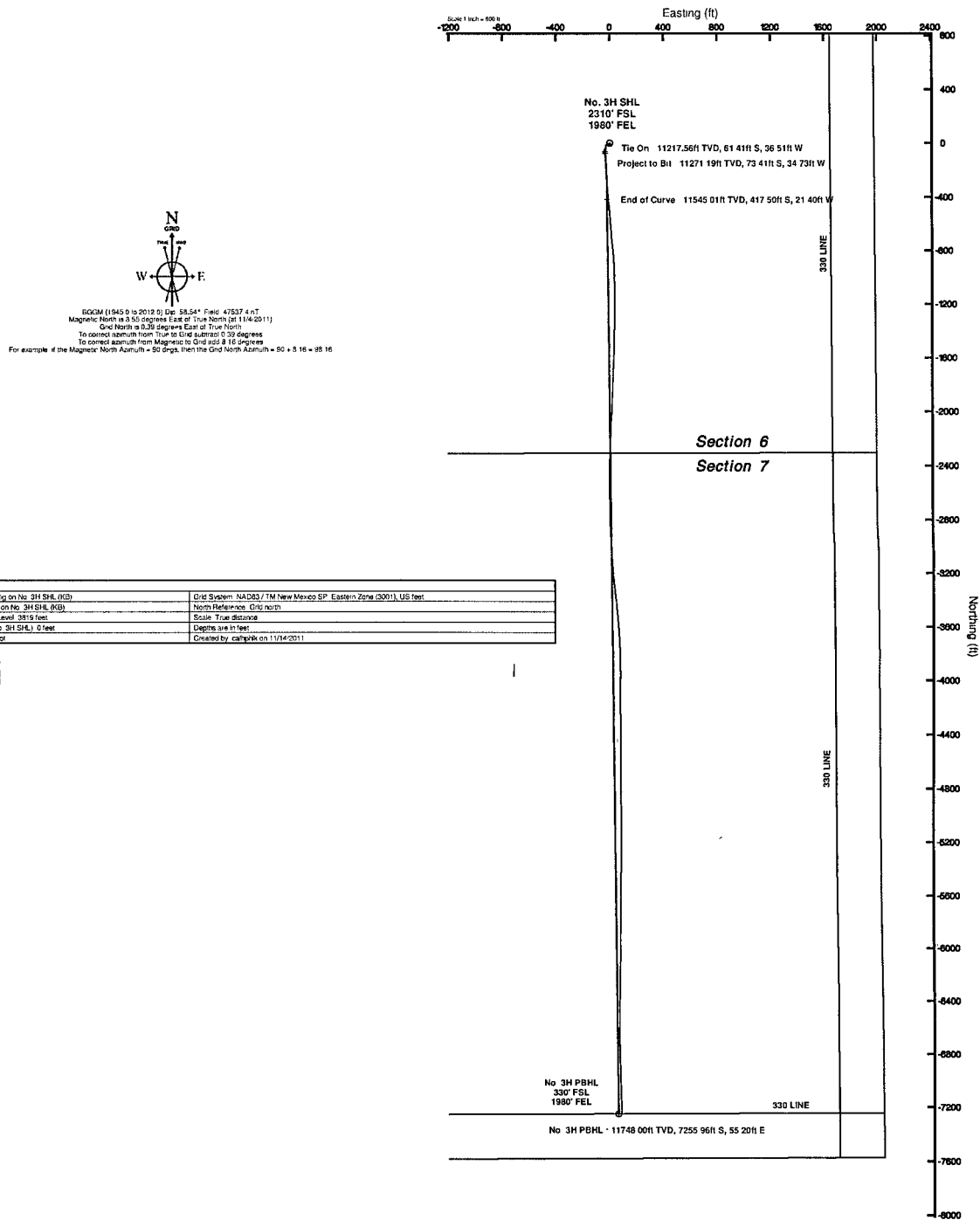
Final Depth TVD: 11,682.35'



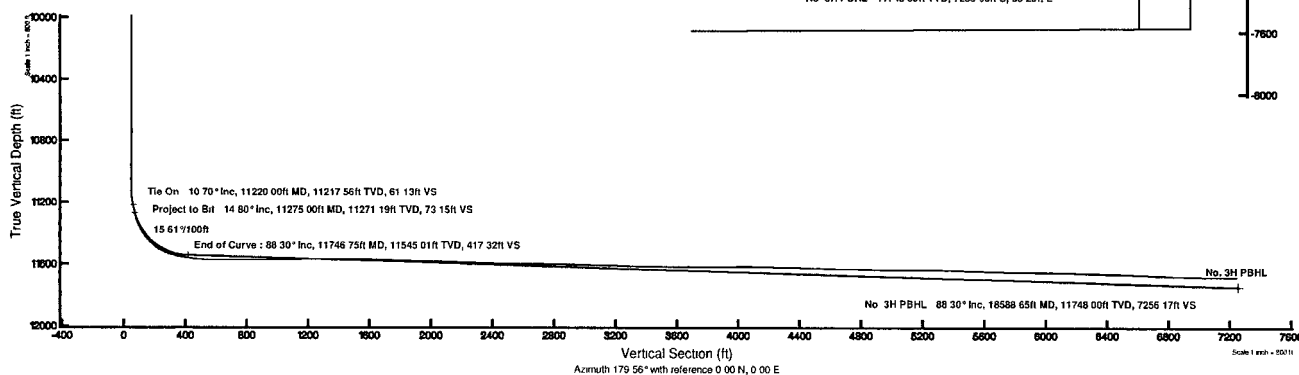
Cimarex Energy Co.
Location Lea County, NM
Field (Adams) Sec 6&7, T21S, R33E
Facility Adams State Com
Slot No. 3H SHL
Well No. 3H
Wellbore No. 3H PWB



Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	11220.00	10.700	171.600	11217.56	-61.41	-36.51	61.13
Project to Bit	11275.00	14.800	171.600	11271.19	-73.41	-34.73	73.15
End of Curve	11746.75	88.300	179.358	11545.01	-417.50	-21.40	417.32
No. 3H PWB	18588.65	88.300	179.358	11748.00	-7255.96	55.20	7256.17



For reference wellbore is Pan 2	
True vertical depths are referenced to the on No. 3H SHL (KB)	Old System: NAD83 / TM New Mexico SP Eastern Zone (2001), US feet
Measured depths are referenced to Rig on No. 3H SHL (KB)	North Reference: Old north
Rig on No. 3H SHL (KB) to Mean Sea Level: 3815 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot No. 3H SHL): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: camphill on 11/14/2011





Actual Wellpath Report

No. 3H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWB
Facility	Adams State Com		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Gentbry
Scale	0.999966	Report Generated	12/12/2011 at 3:53:16 PM
Convergence at slot	0.39° East	Database/Source file	WA Midland/No. 3H_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	548805.94	764255.63	764441.20	548939.20	32°30'25.246"N	103°36'34.609"W
Facility Reference Pt			0.00	0.00	30°59'18.404"N	106°03'38.987"W
Field Reference Pt			0.00	0.00	30°59'18.404"N	106°03'38.987"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 3H SHL (KB) to GL	3819.00ft
Horizontal Reference Pt	Slot	Rig on No. 3H SHL (KB) to Mean Sea Level	3819.00ft
Vertical Reference Pt	Rig on No. 3H SHL (KB)	Rig on No. 3H SHL (KB) to Mud Line at Slot (No. 3H SHL)	3819.00ft
MD Reference Pt	Rig on No. 3H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.56°



Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWP
Facility	Adams State Com		

WELLPATH DATA (253 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	270.150	0.00	0.00	0.00	0.00	764441.20	548939.20	32°30'25.246"N	103°36'34.609"W	0.00	
20.00	0.000	270.150	20.00	0.00	0.00	0.00	764441.20	548939.20	32°30'25.246"N	103°36'34.609"W	0.00	
100.00	0.320	270.150	100.00	0.00	0.00	-0.22	764440.98	548939.20	32°30'25.246"N	103°36'34.612"W	0.40	
200.00	0.280	286.010	200.00	-0.07	0.07	-0.74	764440.46	548939.27	32°30'25.246"N	103°36'34.618"W	0.09	
300.00	0.360	279.210	300.00	-0.20	0.19	-1.28	764439.92	548939.39	32°30'25.248"N	103°36'34.624"W	-0.09	
400.00	0.210	254.150	400.00	-0.20	0.19	-1.77	764439.43	548939.39	32°30'25.248"N	103°36'34.630"W	0.19	
500.00	0.330	264.310	499.99	-0.12	0.11	-2.23	764438.97	548939.31	32°30'25.247"N	103°36'34.635"W	0.13	
600.00	0.260	250.360	599.99	-0.02	0.00	-2.73	764438.47	548939.20	32°30'25.246"N	103°36'34.641"W	0.10	
700.00	0.450	227.760	699.99	0.31	-0.34	-3.24	764437.96	548938.86	32°30'25.242"N	103°36'34.647"W	0.23	
737.90	0.470	224.880	737.89	-0.52	-0.55	-3.46	764437.74	548938.65	32°30'25.240"N	103°36'34.649"W	0.08	
833.40	0.480	225.190	833.39	1.08	-1.11	-4.02	764437.18	548938.09	32°30'25.235"N	103°36'34.656"W	0.01	
928.80	0.580	230.450	928.78	1.66	-1.70	-4.67	764436.53	548937.50	32°30'25.229"N	103°36'34.664"W	0.12	
1024.30	0.560	239.510	1024.28	2.20	-2.24	-5.45	764435.75	548936.96	32°30'25.224"N	103°36'34.673"W	0.10	
1119.80	0.470	235.630	1119.77	2.65	-2.70	-6.17	764435.03	548936.50	32°30'25.219"N	103°36'34.681"W	0.10	
1215.30	0.480	202.000	1215.27	-3.24	-3.29	-6.65	764434.55	548935.91	32°30'25.214"N	103°36'34.687"W	0.29	
1310.80	0.660	204.490	1310.77	4.11	-4.16	-7.02	764434.18	548935.04	32°30'25.205"N	103°36'34.691"W	0.19	
1406.20	1.030	222.020	1406.16	5.24	-5.30	-7.83	764433.37	548933.90	32°30'25.194"N	103°36'34.701"W	0.47	
1501.70	1.400	234.450	1501.63	6.54	-6.61	-9.35	764431.85	548932.59	32°30'25.181"N	103°36'34.719"W	0.47	
1597.20	1.460	236.470	1597.10	7.88	-7.97	-11.31	764429.89	548931.24	32°30'25.168"N	103°36'34.742"W	0.08	
1692.70	1.320	236.410	1692.58	9.14	-9.25	-13.24	764427.96	548929.95	32°30'25.155"N	103°36'34.764"W	0.15	
1788.20	0.430	218.300	1788.06	10.03	-10.14	-14.38	764426.82	548929.06	32°30'25.146"N	103°36'34.778"W	0.96	
1883.60	0.320	213.730	1883.46	10.53	-10.64	-14.75	764426.45	548928.56	32°30'25.141"N	103°36'34.782"W	0.12	
1979.10	0.360	204.670	1978.96	11.02	-11.13	-15.02	764426.18	548928.07	32°30'25.136"N	103°36'34.785"W	0.07	
2074.60	0.330	221.430	2074.46	11.49	-11.61	-15.33	764425.87	548927.59	32°30'25.132"N	103°36'34.789"W	0.11	
2170.10	0.300	221.990	2169.96	11.88	-12.00	-15.68	764425.52	548927.20	32°30'25.128"N	103°36'34.793"W	0.03	
2265.60	0.380	221.270	2265.46	12.30	-12.43	-16.06	764425.14	548926.77	32°30'25.124"N	103°36'34.797"W	0.08	
2361.00	0.320	227.410	2360.85	12.72	-12.85	-16.46	764424.74	548926.36	32°30'25.120"N	103°36'34.802"W	0.07	
2456.50	0.190	205.610	2456.35	13.04	-13.17	-16.73	764424.47	548926.03	32°30'25.116"N	103°36'34.805"W	0.17	
2552.00	0.170	103.100	2551.85	13.22	-13.34	-16.66	764424.54	548925.86	32°30'25.115"N	103°36'34.805"W	0.29	
2647.50	0.730	74.670	2647.35	13.09	-13.21	-15.93	764425.27	548925.99	32°30'25.116"N	103°36'34.796"W	0.61	
2742.90	1.290	80.360	2742.73	12.77	-12.87	-14.29	764426.91	548926.33	32°30'25.119"N	103°36'34.777"W	0.60	
2838.40	1.460	89.270	2838.21	12.59	-12.68	-12.01	764429.19	548926.52	32°30'25.121"N	103°36'34.750"W	0.29	
2933.90	1.580	85.640	2933.67	12.49	-12.56	-9.48	764431.72	548926.64	32°30'25.122"N	103°36'34.721"W	0.16	
3029.40	1.790	78.800	3029.13	12.12	-12.17	-6.71	764434.49	548927.03	32°30'25.126"N	103°36'34.688"W	0.30	
3124.90	2.010	74.660	3124.58	11.41	-11.44	-3.63	764437.57	548927.76	32°30'25.133"N	103°36'34.652"W	0.27	
3220.30	2.020	77.960	3219.92	10.64	-10.65	-0.37	764440.83	548928.55	32°30'25.140"N	103°36'34.614"W	0.12	
3315.80	2.160	75.370	3315.36	9.86	-9.84	3.02	764444.22	548929.36	32°30'25.148"N	103°36'34.575"W	0.18	
3411.30	2.260	77.730	3410.79	9.04	-8.99	6.60	764447.80	548930.21	32°30'25.156"N	103°36'34.533"W	0.14	
3506.80	1.470	76.470	3506.23	8.37	-8.30	9.63	764450.83	548930.90	32°30'25.163"N	103°36'34.497"W	0.83	
3602.30	0.490	61.490	3601.72	7.90	-7.82	11.18	764452.38	548931.38	32°30'25.168"N	103°36'34.479"W	1.05	
3697.80	0.250	0.300	3697.22	7.50	-7.42	11.54	764452.74	548931.79	32°30'25.171"N	103°36'34.475"W	0.45	
3793.20	0.680	274.690	3792.62	7.24	-7.16	10.98	764452.18	548932.04	32°30'25.174"N	103°36'34.481"W	0.74	
3888.70	1.010	252.560	3888.11	7.44	-7.37	9.61	764450.81	548931.83	32°30'25.172"N	103°36'34.497"W	0.48	
3984.20	1.520	253.350	3983.58	8.04	-7.98	7.59	764448.79	548931.22	32°30'25.166"N	103°36'34.521"W	0.53	
4079.70	1.680	250.840	4079.04	8.84	-8.80	5.06	764446.26	548930.40	32°30'25.158"N	103°36'34.551"W	0.18	



Actual Wellpath Report

No. 3H AWP

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**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWB
Facility	Adams State Com		

WELLPATH DATA (253 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
4175.10	2.050	251.800	4174.39	9.81	-9.80	2.11	764443.31	548929.40	32°30'25.149"N	103°36'34.585"W	0.39	
4270.60	1.930	257.630	4269.84	10.67	-10.67	-1.08	764440.12	548928.53	32°30'25.140"N	103°36'34.622"W	0.25	
4366.10	1.910	260.060	4365.28	11.26	-11.29	-4.22	764436.98	548927.91	32°30'25.134"N	103°36'34.659"W	0.09	
4461.60	1.980	265.800	4460.73	11.63	-11.69	-7.43	764433.77	548927.51	32°30'25.130"N	103°36'34.697"W	0.22	
4557.10	1.550	262.220	4556.18	11.91	-11.98	-10.36	764430.84	548927.22	32°30'25.128"N	103°36'34.731"W	0.46	
4652.60	1.200	265.840	4651.65	12.14	-12.23	-12.63	764428.57	548926.97	32°30'25.125"N	103°36'34.757"W	0.38	
4748.00	1.240	270.360	4747.03	12.19	-12.30	-14.66	764426.54	548926.90	32°30'25.125"N	103°36'34.781"W	0.11	
4843.50	1.150	273.060	4842.51	12.11	-12.24	-16.65	764424.55	548926.96	32°30'25.126"N	103°36'34.804"W	0.11	
4939.00	1.030	273.340	4937.99	12.00	-12.14	-18.47	764422.74	548927.06	32°30'25.127"N	103°36'34.826"W	0.13	
5034.50	0.810	266.000	5033.48	11.98	-12.14	-20.00	764421.20	548927.06	32°30'25.127"N	103°36'34.843"W	0.26	
5129.90	0.660	254.200	5128.87	12.17	-12.33	-21.20	764420.00	548926.87	32°30'25.125"N	103°36'34.857"W	0.22	
5225.40	0.570	257.950	5224.37	12.41	-12.58	-22.19	764419.01	548926.62	32°30'25.123"N	103°36'34.869"W	0.10	
5320.90	0.570	254.000	5319.86	12.64	-12.81	-23.11	764418.09	548926.39	32°30'25.120"N	103°36'34.880"W	0.04	
5416.40	0.450	245.620	5415.36	12.92	-13.10	-23.91	764417.29	548926.10	32°30'25.118"N	103°36'34.889"W	0.15	
5511.90	0.360	216.880	5510.86	13.31	-13.49	-24.43	764416.77	548925.71	32°30'25.114"N	103°36'34.895"W	0.23	
5607.40	0.300	194.130	5606.36	13.79	-13.97	-24.67	764416.53	548925.23	32°30'25.109"N	103°36'34.898"W	0.15	
5702.80	0.300	175.720	5701.76	14.28	-14.47	-24.72	764416.49	548924.73	32°30'25.104"N	103°36'34.899"W	0.10	
5798.30	0.230	185.730	5797.25	14.72	-14.91	-24.72	764416.49	548924.29	32°30'25.100"N	103°36'34.899"W	0.09	
5893.80	0.080	111.250	5892.75	14.93	-15.12	-24.67	764416.53	548924.08	32°30'25.098"N	103°36'34.898"W	0.23	
5989.30	0.140	188.550	5988.25	15.07	-15.26	-24.63	764416.57	548923.94	32°30'25.096"N	103°36'34.898"W	0.15	
6084.80	0.070	226.260	6083.75	15.23	-15.42	-24.69	764416.51	548923.78	32°30'25.095"N	103°36'34.898"W	0.10	
6180.20	0.100	242.280	6179.15	15.31	-15.50	-24.80	764416.40	548923.71	32°30'25.094"N	103°36'34.900"W	0.04	
6275.70	0.090	278.160	6274.65	15.33	-15.52	-24.95	764416.25	548923.68	32°30'25.094"N	103°36'34.902"W	0.06	
6371.20	0.170	283.660	6370.15	15.29	-15.48	-25.16	764416.04	548923.72	32°30'25.094"N	103°36'34.904"W	0.08	
6466.70	0.270	285.210	6465.65	15.19	-15.39	-25.52	764415.68	548923.81	32°30'25.095"N	103°36'34.908"W	0.10	
6562.10	0.420	246.230	6561.05	15.27	-15.47	-26.05	764415.15	548923.73	32°30'25.094"N	103°36'34.914"W	0.28	
6657.60	0.520	282.190	6656.55	15.31	-15.52	-26.80	764414.40	548923.68	32°30'25.094"N	103°36'34.923"W	0.32	
6753.10	0.490	283.020	6752.04	15.12	-15.33	-27.62	764413.58	548923.87	32°30'25.096"N	103°36'34.933"W	0.03	
6848.60	0.400	277.480	6847.54	14.98	-15.20	-28.35	764412.85	548924.00	32°30'25.097"N	103°36'34.941"W	0.10	
6944.10	0.330	242.730	6943.04	15.06	-15.28	-28.92	764412.28	548923.92	32°30'25.096"N	103°36'34.948"W	0.24	
7039.60	0.340	217.090	7038.54	15.41	-15.63	-29.34	764411.86	548923.57	32°30'25.093"N	103°36'34.953"W	0.16	
7135.00	0.460	208.150	7133.94	15.97	-16.20	-29.69	764411.51	548923.00	32°30'25.087"N	103°36'34.957"W	0.14	
7230.50	0.500	200.230	7229.43	16.70	-16.93	-30.02	764411.19	548922.27	32°30'25.080"N	103°36'34.961"W	0.08	
7326.00	0.530	192.650	7324.93	17.52	-17.75	-30.26	764410.94	548921.45	32°30'25.072"N	103°36'34.964"W	0.08	
7421.50	0.580	199.840	7420.42	18.40	-18.63	-30.52	764410.68	548920.57	32°30'25.063"N	103°36'34.967"W	0.09	
7516.90	0.620	201.300	7515.82	19.33	-19.57	-30.87	764410.33	548919.63	32°30'25.054"N	103°36'34.971"W	0.04	
7612.40	0.870	194.510	7611.31	20.51	-20.75	-31.24	764409.96	548918.45	32°30'25.042"N	103°36'34.975"W	0.28	
7707.90	0.770	196.020	7706.80	21.83	-22.07	-31.60	764409.60	548917.13	32°30'25.029"N	103°36'34.980"W	0.11	
7803.40	0.650	174.580	7802.29	22.99	-23.23	-31.72	764409.48	548915.97	32°30'25.018"N	103°36'34.981"W	0.30	
7898.90	0.520	159.250	7897.79	23.93	-24.17	-31.52	764409.68	548915.03	32°30'25.009"N	103°36'34.979"W	0.21	
7994.40	0.510	163.410	7993.28	24.75	-24.98	-31.24	764409.96	548914.22	32°30'25.001"N	103°36'34.976"W	0.04	
8089.80	0.410	174.140	8088.68	25.49	-25.73	-31.09	764410.11	548913.47	32°30'24.993"N	103°36'34.974"W	0.14	
8185.30	0.420	175.560	8184.18	26.18	-26.42	-31.02	764410.18	548912.78	32°30'24.986"N	103°36'34.973"W	0.02	
8280.80	0.680	177.350	8279.67	27.10	-27.33	-30.97	764410.23	548911.87	32°30'24.977"N	103°36'34.973"W	0.27	
8376.30	0.890	180.050	8375.17	28.41	-28.64	-30.95	764410.26	548910.56	32°30'24.964"N	103°36'34.973"W	0.22	



Actual Wellpath Report

No. 3H AWP

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**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWB
Facility	Adams State Com		

WELLPATH DATA (253 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
8471.80	1.030	190.100	8470.65	29.99	-30.23	-31.10	764410.10	548908.97	32°30'24.949"N	103°36'34.975"W	0.23	
8567.20	1.310	197.640	8566.03	31.87	-32.11	-31.58	764409.62	548907.09	32°30'24.930"N	103°36'34.980"W	0.33	
8662.70	1.460	195.500	8661.50	34.08	-34.33	-32.23	764408.97	548904.88	32°30'24.908"N	103°36'34.988"W	0.17	
8758.20	1.230	198.640	8756.98	36.22	-36.47	-32.89	764408.31	548902.73	32°30'24.887"N	103°36'34.996"W	0.25	
8853.70	0.800	189.160	8852.46	37.84	-38.10	-33.32	764407.88	548901.10	32°30'24.871"N	103°36'35.001"W	0.48	
8949.10	1.270	171.070	8947.85	39.55	-39.80	-33.26	764407.94	548899.40	32°30'24.854"N	103°36'35.001"W	0.59	
9044.60	1.140	175.490	9043.33	41.54	-41.79	-33.02	764408.18	548897.41	32°30'24.834"N	103°36'34.998"W	0.17	
9140.10	1.820	167.810	9138.79	43.97	-44.22	-32.63	764408.57	548894.98	32°30'24.810"N	103°36'34.993"W	0.74	
9235.60	1.930	156.910	9234.24	46.94	-47.18	-31.68	764409.52	548892.02	32°30'24.781"N	103°36'34.983"W	0.39	
9331.10	1.750	156.630	9329.69	49.77	-50.00	-30.47	764410.73	548889.20	32°30'24.753"N	103°36'34.969"W	0.19	
9426.50	1.120	164.020	9425.06	52.01	-52.24	-29.63	764411.57	548886.97	32°30'24.731"N	103°36'34.959"W	0.69	
9522.00	0.560	236.190	9520.55	53.16	-53.39	-29.76	764411.44	548885.81	32°30'24.719"N	103°36'34.961"W	1.14	
9617.50	0.580	265.590	9616.05	53.45	-53.69	-30.63	764410.57	548885.51	32°30'24.716"N	103°36'34.971"W	0.30	
9713.00	0.510	293.270	9711.55	53.32	-53.56	-31.51	764409.69	548885.64	32°30'24.718"N	103°36'34.981"W	0.28	
9808.50	0.960	289.030	9807.04	52.88	-53.13	-32.65	764408.55	548886.07	32°30'24.722"N	103°36'34.994"W	0.47	
9904.00	1.110	277.810	9902.52	52.48	-52.74	-34.33	764406.88	548886.46	32°30'24.726"N	103°36'35.014"W	0.26	
9999.40	1.110	272.450	9997.90	52.30	-52.58	-36.16	764405.04	548886.62	32°30'24.728"N	103°36'35.035"W	0.11	
10094.90	1.130	280.080	10093.39	52.08	-52.37	-38.02	764403.19	548886.83	32°30'24.730"N	103°36'35.057"W	0.16	
10190.40	1.080	287.000	10188.87	51.64	-51.95	-39.80	764401.40	548887.26	32°30'24.734"N	103°36'35.078"W	0.15	
10285.90	0.730	283.300	10284.36	51.23	-51.54	-41.26	764399.94	548887.66	32°30'24.738"N	103°36'35.095"W	0.37	
10381.40	0.250	216.760	10379.85	51.25	-51.57	-41.97	764399.23	548887.63	32°30'24.738"N	103°36'35.103"W	0.70	
10476.80	0.450	124.950	10475.25	51.63	-51.95	-41.79	764399.41	548887.25	32°30'24.734"N	103°36'35.101"W	0.55	
10572.30	0.410	117.700	10570.75	52.01	-52.32	-41.18	764400.02	548886.88	32°30'24.731"N	103°36'35.094"W	0.07	
10667.80	0.600	358.300	10666.25	51.67	-51.98	-40.89	764400.31	548887.22	32°30'24.734"N	103°36'35.091"W	0.92	
10763.30	0.940	355.080	10761.74	50.39	-50.70	-40.98	764400.23	548888.50	32°30'24.747"N	103°36'35.091"W	0.36	
10858.80	0.640	21.530	10857.23	49.11	-49.43	-40.85	764400.35	548889.77	32°30'24.759"N	103°36'35.090"W	0.49	
10954.20	0.760	60.480	10952.62	48.31	-48.62	-40.10	764401.10	548890.58	32°30'24.767"N	103°36'35.081"W	0.50	
11045.00	0.400	95.880	11043.42	48.06	-48.36	-39.26	764401.94	548890.85	32°30'24.770"N	103°36'35.071"W	0.54	
11077.00	0.250	104.750	11075.42	48.09	-48.38	-39.08	764402.12	548890.82	32°30'24.769"N	103°36'35.069"W	0.49	
11109.00	1.790	168.430	11107.41	48.59	-48.89	-38.91	764402.29	548890.31	32°30'24.764"N	103°36'35.067"W	5.29	
11141.00	4.400	168.000	11139.36	50.29	-50.58	-38.56	764402.64	548888.62	32°30'24.748"N	103°36'35.063"W	8.16	
11172.00	8.000	169.500	11170.18	53.58	-53.87	-37.92	764403.28	548885.33	32°30'24.715"N	103°36'35.056"W	11.62	
11204.00	9.500	168.500	11201.80	58.36	-58.65	-36.99	764404.21	548880.56	32°30'24.668"N	103°36'35.046"W	4.71	
11220.00	10.700	171.600	11217.56	61.13	-61.41	-36.51	764404.69	548877.79	32°30'24.640"N	103°36'35.040"W	8.23	
11236.00	11.600	169.900	11233.25	64.19	-64.46	-36.01	764405.19	548874.74	32°30'24.610"N	103°36'35.035"W	5.99	
11268.00	13.000	170.500	11264.52	70.91	-71.18	-34.85	764406.35	548868.02	32°30'24.544"N	103°36'35.022"W	4.39	
11300.00	15.900	170.800	11295.50	78.80	-79.06	-33.55	764407.65	548860.14	32°30'24.466"N	103°36'35.007"W	9.07	
11331.00	19.900	171.600	11325.00	88.23	-88.47	-32.10	764409.10	548850.73	32°30'24.372"N	103°36'34.991"W	12.93	
11362.00	24.700	175.000	11353.67	99.91	-100.15	-30.77	764410.43	548839.05	32°30'24.257"N	103°36'34.976"W	16.03	
11394.00	29.700	176.700	11382.12	114.51	-114.74	-29.73	764411.47	548824.47	32°30'24.112"N	103°36'34.965"W	15.81	
11426.00	35.000	176.800	11409.15	131.60	-131.83	-28.76	764412.44	548807.38	32°30'23.943"N	103°36'34.955"W	16.56	
11458.00	40.700	179.200	11434.41	151.22	-151.44	-28.10	764413.10	548787.77	32°30'23.749"N	103°36'34.949"W	18.39	
11490.00	45.400	182.200	11457.79	173.05	-173.27	-28.39	764412.81	548765.94	32°30'23.533"N	103°36'34.954"W	16.02	
11522.00	50.500	179.100	11479.21	196.79	-197.02	-28.64	764412.57	548742.19	32°30'23.298"N	103°36'34.959"W	17.48	
11554.00	56.400	176.900	11498.26	222.48	-222.69	-27.72	764413.48	548716.52	32°30'23.044"N	103°36'34.950"W	19.25	



Actual Wellpath Report

No. 3H AWP

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**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWP
Facility	Adams State Com		

WELLPATH DATA (253 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
11586.00	62.200	175.200	11514.60	249.93	-250.13	-25.81	764415.39	548689.08	32°30'22.772"N	103°36'34.930"W	18.69	
11618.00	67.800	174.600	11528.11	278.82	-279.00	-23.23	764417.97	548660.21	32°30'22.487"N	103°36'34.902"W	17.58	
11649.00	73.700	174.800	11538.33	307.97	-308.13	-20.53	764420.67	548631.08	32°30'22.198"N	103°36'34.873"W	19.04	
11726.00	81.800	175.900	11554.65	382.95	-383.07	-14.45	764426.75	548556.14	32°30'21.456"N	103°36'34.808"W	10.61	
11757.00	82.100	175.400	11559.00	413.57	-413.67	-12.12	764429.08	548525.54	32°30'21.153"N	103°36'34.783"W	1.87	
11789.00	82.600	175.600	11563.26	445.21	-445.29	-9.63	764431.57	548493.92	32°30'20.840"N	103°36'34.757"W	1.68	
11821.00	83.100	175.000	11567.24	476.87	-476.94	-7.03	764434.17	548462.28	32°30'20.527"N	103°36'34.729"W	2.43	
11853.00	85.000	174.500	11570.56	508.58	-508.63	-4.12	764437.08	548430.59	32°30'20.213"N	103°36'34.697"W	6.14	
11884.00	86.700	175.000	11572.80	539.39	-539.42	-1.29	764439.91	548399.80	32°30'19.908"N	103°36'34.667"W	5.71	
11916.00	88.600	175.300	11574.11	571.27	-571.27	1.42	764442.61	548367.95	32°30'19.593"N	103°36'34.638"W	6.01	
11948.00	90.000	175.500	11574.50	603.18	-603.17	3.98	764445.18	548336.05	32°30'19.277"N	103°36'34.610"W	4.42	
11979.00	90.200	175.400	11574.45	634.10	-634.07	6.44	764447.64	548305.15	32°30'18.971"N	103°36'34.584"W	0.72	
12011.00	90.100	175.700	11574.36	666.02	-665.97	8.92	764450.12	548273.25	32°30'18.656"N	103°36'34.558"W	0.99	
12074.00	90.300	174.100	11574.14	728.81	-728.72	14.52	764455.72	548210.50	32°30'18.034"N	103°36'34.497"W	2.56	
12138.00	90.200	175.200	11573.86	792.57	-792.44	20.49	764461.69	548146.79	32°30'17.403"N	103°36'34.433"W	1.73	
12201.00	89.900	176.000	11573.81	855.42	-855.25	25.32	764466.52	548083.98	32°30'16.782"N	103°36'34.381"W	1.36	
12264.00	89.900	176.900	11573.92	918.33	-918.13	29.22	764470.42	548021.10	32°30'16.159"N	103°36'34.341"W	1.43	
12328.00	90.700	178.400	11573.58	982.29	-982.08	31.85	764473.05	547957.16	32°30'15.526"N	103°36'34.315"W	2.66	
12391.00	91.200	179.200	11572.54	1045.27	-1045.05	33.17	764474.37	547894.18	32°30'14.903"N	103°36'34.305"W	1.50	
12455.00	90.700	179.700	11571.48	1109.27	-1109.04	33.78	764474.98	547830.20	32°30'14.270"N	103°36'34.302"W	1.10	
12518.00	90.900	180.200	11570.60	1172.26	-1172.03	33.84	764475.04	547767.21	32°30'13.647"N	103°36'34.307"W	0.85	
12582.00	90.400	180.600	11569.87	1236.25	-1236.03	33.39	764474.59	547703.22	32°30'13.014"N	103°36'34.317"W	1.00	
12645.00	90.400	180.900	11569.43	1299.23	-1299.02	32.57	764473.76	547640.23	32°30'12.390"N	103°36'34.332"W	0.48	
12708.00	89.500	181.100	11569.49	1362.21	-1362.01	31.47	764472.67	547577.24	32°30'11.767"N	103°36'34.350"W	1.46	
12772.00	89.600	181.300	11569.99	1426.18	-1425.99	30.13	764471.32	547513.26	32°30'11.134"N	103°36'34.370"W	0.35	
12835.00	90.100	181.400	11570.16	1489.15	-1488.98	28.64	764469.84	547450.28	32°30'10.511"N	103°36'34.393"W	0.81	
12898.00	89.100	181.400	11570.60	1552.12	-1551.96	27.10	764468.30	547387.30	32°30'09.888"N	103°36'34.416"W	1.59	
12961.00	89.300	182.300	11571.48	1615.06	-1614.92	25.07	764466.27	547324.34	32°30'09.265"N	103°36'34.444"W	1.46	
13025.00	88.200	182.200	11572.87	1678.97	-1678.85	22.56	764463.76	547260.41	32°30'08.633"N	103°36'34.479"W	1.73	
13088.00	87.900	182.000	11575.02	1741.88	-1741.77	20.25	764461.45	547197.49	32°30'08.010"N	103°36'34.511"W	0.57	
13152.00	87.900	182.100	11577.36	1805.77	-1805.69	17.96	764459.16	547133.58	32°30'07.378"N	103°36'34.542"W	0.16	
13215.00	87.900	181.900	11579.67	1868.67	-1868.61	15.76	764456.96	547070.66	32°30'06.756"N	103°36'34.573"W	0.32	
13278.00	88.300	182.500	11581.76	1931.57	-1931.53	13.35	764454.55	547007.74	32°30'06.133"N	103°36'34.606"W	1.14	
13341.00	88.600	183.000	11583.46	1994.45	-1994.43	10.33	764451.53	546944.84	32°30'05.511"N	103°36'34.647"W	0.93	
13405.00	88.300	183.600	11585.19	2058.29	-2058.30	6.64	764447.84	546880.97	32°30'04.879"N	103°36'34.695"W	1.05	
13468.00	87.800	182.200	11587.34	2121.15	-2121.18	3.46	764444.66	546818.10	32°30'04.257"N	103°36'34.737"W	2.36	
13531.00	87.900	182.200	11589.70	2184.03	-2184.09	1.04	764442.24	546755.19	32°30'03.635"N	103°36'34.770"W	0.16	
13595.00	88.400	182.400	11591.77	2247.93	-2248.01	-1.53	764439.67	546691.28	32°30'03.003"N	103°36'34.805"W	0.84	
13658.00	87.800	182.300	11593.86	2310.82	-2310.92	-4.11	764437.09	546628.37	32°30'02.381"N	103°36'34.840"W	0.97	
13721.00	88.000	180.900	11596.16	2373.74	-2373.85	-5.87	764435.33	546565.44	32°30'01.758"N	103°36'34.866"W	2.24	
13785.00	88.200	180.800	11598.29	2437.68	-2437.81	-6.81	764434.39	546501.48	32°30'01.125"N	103°36'34.882"W	0.35	
13848.00	89.000	180.000	11599.83	2500.66	-2500.79	-7.25	764433.95	546438.50	32°30'00.502"N	103°36'34.892"W	1.80	
13912.00	89.500	179.100	11600.66	2564.65	-2564.78	-6.75	764434.45	546374.52	32°29'59.869"N	103°36'34.891"W	1.61	
13975.00	89.700	179.000	11601.10	2627.65	-2627.77	-5.71	764435.49	546311.53	32°29'59.246"N	103°36'34.884"W	0.35	
14038.00	90.100	178.700	11601.21	2690.64	-2690.75	-4.44	764436.76	546248.54	32°29'58.622"N	103°36'34.874"W	0.79	



Actual Wellpath Report

No. 3H AWP

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BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWP
Facility	Adams State Com		

WELLPATH DATA (253 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
14102.00	88.900	178.600	11601.77	2754.63	-2754.73	-2.93	764438.27	546184.57	32°29'57.989"N	103°36'34.862"W	1.88	
14165.00	88.900	178.300	11602.98	2817.61	-2817.70	-1.23	764439.97	546121.60	32°29'57.366"N	103°36'34.847"W	0.48	
14228.00	88.700	177.200	11604.30	2880.56	-2880.63	1.24	764442.44	546058.67	32°29'56.743"N	103°36'34.823"W	1.77	
14292.00	88.400	176.900	11605.92	2944.48	-2944.53	4.53	764445.73	545994.78	32°29'56.111"N	103°36'34.789"W	0.66	
14355.00	88.800	176.800	11607.46	3007.39	-3007.41	8.00	764449.19	545931.89	32°29'55.488"N	103°36'34.754"W	0.65	
14419.00	88.900	176.600	11608.74	3071.30	-3071.30	11.68	764452.88	545868.01	32°29'54.856"N	103°36'34.716"W	0.35	
14482.00	88.400	176.200	11610.23	3134.18	-3134.15	15.63	764456.83	545805.16	32°29'54.234"N	103°36'34.675"W	1.02	
14546.00	88.700	175.800	11611.85	3198.04	-3197.98	20.10	764461.30	545741.34	32°29'53.602"N	103°36'34.628"W	0.78	
14609.00	88.900	174.100	11613.17	3260.82	-3260.72	25.64	764466.84	545678.60	32°29'52.981"N	103°36'34.568"W	2.72	
14672.00	88.700	173.200	11614.49	3323.47	-3323.32	32.61	764473.81	545616.00	32°29'52.361"N	103°36'34.492"W	1.46	
14736.00	88.700	173.100	11615.94	3387.05	-3386.84	40.24	764481.44	545552.48	32°29'51.732"N	103°36'34.408"W	0.16	
14799.00	89.000	174.400	11617.20	3449.71	-3449.45	47.10	764488.29	545489.87	32°29'51.112"N	103°36'34.333"W	2.12	
14862.00	89.500	175.400	11618.03	3512.50	-3512.20	52.69	764493.89	545427.13	32°29'50.491"N	103°36'34.272"W	1.77	
14925.00	89.500	175.700	11618.58	3575.34	-3575.01	57.58	764498.78	545364.32	32°29'49.869"N	103°36'34.220"W	0.48	
14989.00	90.100	176.400	11618.80	3639.22	-3638.85	61.99	764503.19	545300.48	32°29'49.237"N	103°36'34.174"W	1.44	
15052.00	89.900	176.700	11618.80	3702.13	-3701.74	65.78	764506.98	545237.59	32°29'48.614"N	103°36'34.134"W	0.57	
15115.00	90.600	178.000	11618.53	3765.08	-3764.67	68.70	764509.89	545174.67	32°29'47.992"N	103°36'34.105"W	2.34	
15179.00	90.400	178.700	11617.97	3829.06	-3828.64	70.54	764511.74	545110.70	32°29'47.358"N	103°36'34.089"W	1.14	
15242.00	90.600	179.300	11617.42	3892.06	-3891.63	71.64	764512.83	545047.71	32°29'46.735"N	103°36'34.081"W	1.00	
15305.00	90.800	180.000	11616.65	3955.05	-3954.62	72.02	764513.22	544984.72	32°29'46.112"N	103°36'34.082"W	1.16	
15369.00	90.000	180.500	11616.20	4019.05	-4018.62	71.74	764512.94	544920.73	32°29'45.479"N	103°36'34.090"W	1.47	
15432.00	89.800	180.200	11616.31	4082.04	-4081.62	71.36	764512.56	544857.73	32°29'44.855"N	103°36'34.099"W	0.57	
15496.00	89.900	180.200	11616.48	4146.04	-4145.62	71.13	764512.33	544793.73	32°29'44.222"N	103°36'34.107"W	0.16	
15559.00	87.600	179.200	11617.85	4209.02	-4208.59	71.46	764512.66	544730.76	32°29'43.599"N	103°36'34.108"W	3.98	
15622.00	87.900	179.500	11620.33	4271.97	-4271.54	72.18	764513.38	544667.81	32°29'42.976"N	103°36'34.105"W	0.67	
15686.00	89.700	179.500	11621.67	4335.95	-4335.52	72.74	764513.93	544603.83	32°29'42.343"N	103°36'34.103"W	2.81	
15749.00	88.700	179.800	11622.55	4398.94	-4398.51	73.12	764514.32	544540.84	32°29'41.720"N	103°36'34.104"W	1.66	
15813.00	88.500	179.600	11624.11	4462.92	-4462.49	73.46	764514.65	544476.87	32°29'41.087"N	103°36'34.105"W	0.44	
15850.00	88.500	179.600	11625.08	4499.91	-4499.48	73.71	764514.91	544439.88	32°29'40.721"N	103°36'34.105"W	0.00	
15936.00	88.600	179.300	11627.25	4585.88	-4585.45	74.54	764515.74	544353.92	32°29'39.870"N	103°36'34.102"W	0.37	
15999.00	89.300	179.100	11628.41	4648.87	-4648.43	75.42	764516.62	544290.93	32°29'39.247"N	103°36'34.097"W	1.16	
16063.00	88.600	180.300	11629.58	4712.86	-4712.42	75.75	764516.95	544226.95	32°29'38.614"N	103°36'34.098"W	2.17	
16126.00	89.200	180.500	11630.79	4775.84	-4775.41	75.31	764516.51	544163.97	32°29'37.990"N	103°36'34.108"W	1.00	
16189.00	89.100	180.300	11631.73	4838.83	-4838.40	74.88	764516.07	544100.98	32°29'37.367"N	103°36'34.118"W	0.35	
16253.00	89.200	180.100	11632.67	4902.82	-4902.39	74.65	764515.85	544036.99	32°29'36.734"N	103°36'34.126"W	0.35	
16316.00	89.300	179.600	11633.50	4965.81	-4965.38	74.82	764516.01	543973.99	32°29'36.111"N	103°36'34.129"W	0.81	
16379.00	89.300	179.600	11634.27	5028.80	-5028.38	75.26	764516.45	543911.00	32°29'35.487"N	103°36'34.129"W	0.00	
16443.00	89.400	179.500	11635.00	5092.80	-5092.37	75.76	764516.96	543847.01	32°29'34.854"N	103°36'34.128"W	0.22	
16506.00	89.200	179.800	11635.76	5155.80	-5155.37	76.14	764517.34	543784.02	32°29'34.231"N	103°36'34.129"W	0.57	
16569.00	89.500	180.200	11636.48	5218.79	-5218.36	76.14	764517.34	543721.03	32°29'33.608"N	103°36'34.134"W	0.79	
16632.00	89.400	180.000	11637.08	5281.78	-5281.36	76.03	764517.23	543658.03	32°29'32.984"N	103°36'34.140"W	0.35	
16696.00	89.300	180.300	11637.81	5345.78	-5345.35	75.87	764517.06	543594.04	32°29'32.351"N	103°36'34.147"W	0.49	
16759.00	88.200	181.200	11639.18	5408.75	-5408.33	75.04	764516.24	543531.06	32°29'31.728"N	103°36'34.161"W	2.26	
16822.00	87.800	181.000	11641.38	5471.68	-5471.28	73.83	764515.03	543468.11	32°29'31.105"N	103°36'34.181"W	0.71	
16886.00	88.200	180.600	11643.62	5535.63	-5535.24	72.94	764514.14	543404.16	32°29'30.472"N	103°36'34.196"W	0.88	



Actual Wellpath Report

No. 3H AWP

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**BAKER
HUGHES**

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWP
Facility	Adams State Com		

WELLPATH DATA (253 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
16949.00	88.200	180.400	11645.60	5598.59	-5598.20	72.39	764513.59	543341.20	32°29'29.849"N	103°36'34.207"W	0.32	
17012.00	88.300	180.200	11647.52	5661.56	-5661.17	72.06	764513.26	543278.23	32°29'29.226"N	103°36'34.216"W	0.35	
17076.00	88.300	180.200	11649.42	5725.52	-5725.14	71.84	764513.04	543214.26	32°29'28.593"N	103°36'34.224"W	0.00	
17139.00	89.000	180.300	11650.90	5788.50	-5788.13	71.56	764512.76	543151.28	32°29'27.970"N	103°36'34.232"W	1.12	
17202.00	89.500	180.600	11651.73	5851.49	-5851.12	71.07	764512.27	543088.29	32°29'27.347"N	103°36'34.243"W	0.93	
17266.00	89.500	180.600	11652.29	5915.48	-5915.11	70.40	764511.60	543024.30	32°29'26.714"N	103°36'34.256"W	0.00	
17329.00	89.400	180.700	11652.89	5978.46	-5978.10	69.68	764510.88	542961.31	32°29'26.091"N	103°36'34.269"W	0.22	
17393.00	89.200	180.900	11653.67	6042.44	-6042.09	68.79	764509.99	542897.32	32°29'25.458"N	103°36'34.285"W	0.44	
17456.00	89.000	180.800	11654.66	6105.42	-6105.08	67.86	764509.05	542834.34	32°29'24.834"N	103°36'34.301"W	0.35	
17520.00	88.900	180.700	11655.83	6169.39	-6169.06	67.02	764508.22	542770.36	32°29'24.201"N	103°36'34.315"W	0.22	
17583.00	88.600	180.900	11657.21	6232.36	-6232.04	66.14	764507.34	542707.38	32°29'23.578"N	103°36'34.331"W	0.57	
17647.00	88.300	180.900	11658.94	6296.32	-6296.01	65.13	764506.33	542643.42	32°29'22.945"N	103°36'34.347"W	0.47	
17710.00	88.500	180.800	11660.70	6359.28	-6358.98	64.20	764505.40	542580.45	32°29'22.322"N	103°36'34.363"W	0.35	
17773.00	88.500	180.200	11662.35	6422.25	-6421.95	63.65	764504.85	542517.48	32°29'21.699"N	103°36'34.375"W	0.95	
17836.00	88.100	180.100	11664.22	6485.22	-6484.93	63.48	764504.68	542454.51	32°29'21.076"N	103°36'34.382"W	0.65	
17900.00	88.200	180.300	11666.28	6549.18	-6548.89	63.26	764504.46	542390.54	32°29'20.443"N	103°36'34.389"W	0.35	
17963.00	87.600	179.900	11668.59	6612.14	-6611.85	63.15	764504.35	542327.59	32°29'19.821"N	103°36'34.396"W	1.14	
18027.00	87.800	179.700	11671.16	6676.09	-6675.80	63.37	764504.57	542263.64	32°29'19.188"N	103°36'34.398"W	0.44	
18090.00	88.200	179.300	11673.36	6739.05	-6738.76	63.92	764505.12	542200.69	32°29'18.565"N	103°36'34.397"W	0.90	
18154.00	87.800	178.800	11675.59	6803.01	-6802.71	64.98	764506.18	542136.74	32°29'17.932"N	103°36'34.389"W	1.00	
18217.00	88.200	177.800	11677.79	6865.95	-6865.64	66.85	764508.05	542073.81	32°29'17.309"N	103°36'34.373"W	1.71	
18281.00	89.200	178.700	11679.24	6929.92	-6929.59	68.81	764510.00	542009.86	32°29'16.676"N	103°36'34.355"W	2.10	
18345.00	89.300	178.400	11680.08	6993.90	-6993.57	70.43	764511.62	541945.88	32°29'16.043"N	103°36'34.341"W	0.49	
18408.00	89.400	178.200	11680.80	7056.88	-7056.54	72.29	764513.49	541882.92	32°29'15.420"N	103°36'34.324"W	0.35	
18472.00	89.400	178.300	11681.47	7120.86	-7120.50	74.25	764515.45	541818.95	32°29'14.787"N	103°36'34.306"W	0.16	
18535.00	89.600	177.900	11682.02	7183.84	-7183.47	76.34	764517.53	541755.99	32°29'14.164"N	103°36'34.287"W	0.71	
18546.00	89.600	178.100	11682.09	7194.83	-7194.46	76.72	764517.92	541745.00	32°29'14.055"N	103°36'34.283"W	1.82	
18596.00	89.800	177.900	11682.35	7244.81	-7244.43	78.47	764519.66	541695.03	32°29'13.560"N	103°36'34.267"W	0.57	Proj. To Bit



Actual Wellpath Report

No. 3H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(Adams) Sec 6&7, T21S, R33E	Wellbore	No. 3H AWB
Facility	Adams State Com		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No. 3H PBHL		11748.00	-7255.96	55.20	764496.40	541683.50	32°29'13.448"N	103°36'34.539"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
20.00	10954.20	Generic gyro - northseeking (Standard)	Gyro < 100 - 10954.2 >	No. 3H AWB
10954.20	11220.00	NaviTrak (Standard)	MWD < 11045 - 11331 >	No. 3H AWB
11220.00	18596.00	NaviTrak (Standard)	MWD < 11220 - XXXXX >	No. 3H AWB