



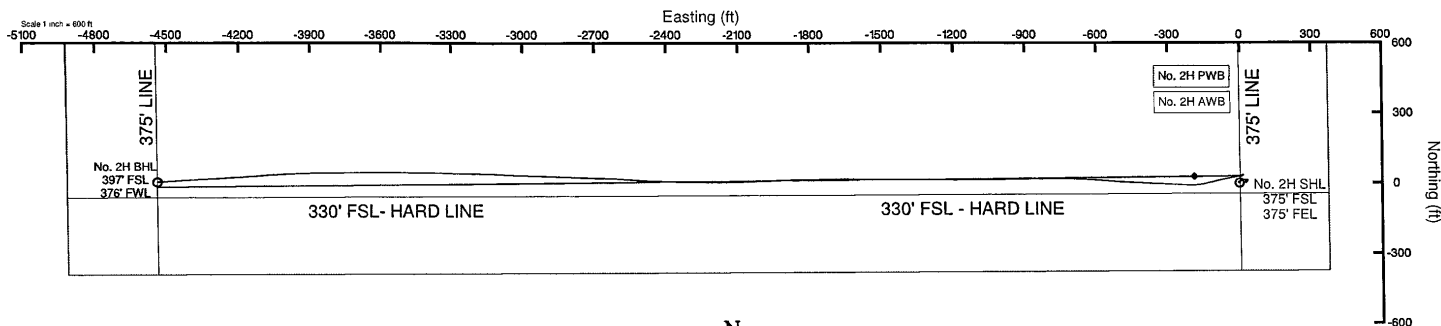
Cimarex Energy Co.

Location: Chaves County, NM
Field: (Midway) Sec 17, T15S, R31E
Facility: Midway 17 Fed No. 2H

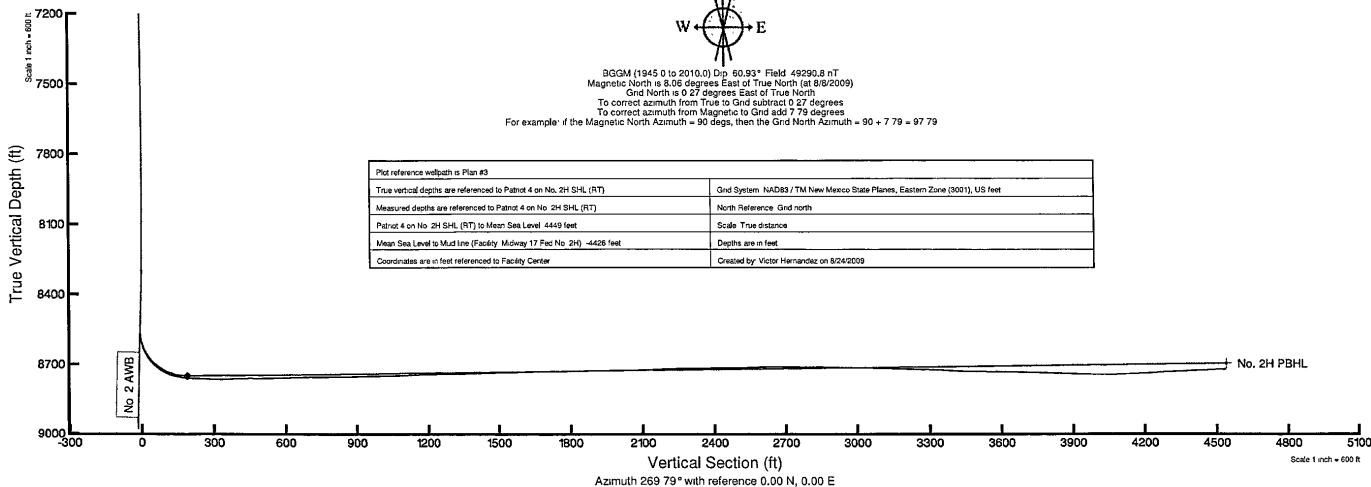
Slot: No. 2H SHL
Well: No. 2H
Wellbore: No. 2H PWB

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (%100ft)	VS (ft)
Tie On	8558.40	1.900	60.760	8557.55	29.51	6.76	0.00	-6.87
EST. KOP	8565.00	1.900	269.400	8564.15	29.56	6.74	55.79	-6.85
END OF CURVE	8866.19	90.711	269.420	8752.00	27.57	-189.86	29.49	189.76
No. 2H PBHL	13219.84	90.711	269.420	8698.00	-16.51	-4542.96	0.00	4542.99



BGGM (1945.0 to 2010.0) Dip: 60.93° Field: 49290.8 nT
Magnetic North is 8.06 degrees East of True North (at 8/8/2009)
Grid North is 0.27 degrees East of True North
To correct azimuth from True to Grid subtract 0.27 degrees
To correct azimuth from Magnetic to Grid add 7.79 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.79 = 97.79



Plot reference wellpath is Plan #3	
True vertical depths are referenced to Patrol 4 on No. 2H SHL (RT)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (2001), US feet
Measured depths are referenced to Patrol 4 on No. 2H SHL (RT)	North Reference: Grid north
Patrol 4 on No. 2H SHL (RT) to Mean Sea Level: 4449 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Midway 17 Fed No. 2H): -4426 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: Victor Hernandez on 8/24/2009



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 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	0.999936	Report Generated	8/24/2009 at 8:53:55 AM
Convergence at slot	0.27° East	Database/Source file	WA_Midland/No. 2H_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	693594.54	731406.95	33°00'34.740"N	103°50'11.924"W
Facility Reference Pt			693594.54	731406.95	33°00'34.740"N	103°50'11.924"W
Field Reference Pt			689006.90	731390.30	33°00'34.787"N	103°51'05.799"W

WELLPATH DATUM

Calculation method	Minimum curvature	Patriot 4 on No. 2H SHL (RT) to Facility Vertical Datum	23.00ft
Horizontal Reference Pt	Facility Center	Patriot 4 on No. 2H SHL (RT) to Mean Sea Level	4449.00ft
Vertical Reference Pt	Patriot 4 on No. 2H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Patriot 4 on No. 2H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.79°



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
0.00	0.000	313.430	0.00	0.00	0.00	0.00	693594.54	731406.95	0.00
100.00	0.420	313.430	100.00	0.27	0.25	-0.27	693594.27	731407.20	0.42
200.00	0.640	288.120	199.99	1.06	0.68	-1.06	693593.48	731407.63	0.32
300.00	0.450	298.570	299.99	1.94	1.04	-1.94	693592.60	731407.99	0.21
400.00	0.240	257.940	399.99	2.48	1.18	-2.49	693592.05	731408.13	0.31
500.00	0.330	301.810	499.99	2.93	1.29	-2.94	693591.60	731408.24	0.23
600.00	0.360	277.020	599.99	3.49	1.48	-3.49	693591.05	731408.43	0.15
700.00	0.320	297.560	699.98	4.05	1.65	-4.05	693590.49	731408.60	0.13
800.00	0.220	301.350	799.98	4.46	1.88	-4.47	693590.07	731408.83	0.10
870.30	0.170	35.700	870.28	4.51	2.03	-4.52	693590.02	731408.98	0.41
965.20	0.200	62.820	965.18	4.28	2.22	-4.29	693590.25	731409.17	0.10
1060.10	0.220	77.750	1060.08	3.96	2.34	-3.96	693590.58	731409.29	0.06
1154.00	0.190	87.920	1153.98	3.62	2.38	-3.63	693590.91	731409.33	0.05
1248.50	0.230	85.340	1248.48	3.28	2.40	-3.29	693591.25	731409.35	0.04
1343.50	0.340	79.900	1343.48	2.81	2.47	-2.82	693591.72	731409.42	0.12
1438.60	0.540	59.800	1438.58	2.14	2.74	-2.15	693592.39	731409.69	0.26
1532.80	0.620	49.990	1532.77	1.37	3.29	-1.38	693593.16	731410.24	0.14
1627.70	0.710	47.360	1627.67	0.54	4.02	-0.56	693593.98	731410.97	0.10
1722.80	0.870	48.610	1722.76	-0.44	4.90	0.42	693594.96	731411.85	0.17
1817.90	1.190	39.230	1817.84	-1.61	6.14	1.59	693596.13	731413.09	0.38
1912.80	1.480	60.690	1912.72	-3.31	7.50	3.28	693597.82	731414.45	0.60
2006.90	1.680	65.040	2006.78	-5.62	8.68	5.59	693600.13	731415.63	0.25
2101.80	1.650	74.230	2101.64	-8.20	9.64	8.16	693602.70	731416.59	0.28
2387.10	1.680	79.220	2386.82	-16.27	11.54	16.23	693610.76	731418.49	0.05
2482.00	1.460	84.400	2481.68	-18.84	11.92	18.80	693613.33	731418.86	0.28
2577.10	1.230	88.800	2576.76	-21.07	12.06	21.02	693615.56	731419.00	0.26
2672.10	1.150	89.900	2671.74	-23.04	12.08	22.99	693617.53	731419.03	0.09
2766.20	0.960	94.080	2765.82	-24.77	12.02	24.72	693619.26	731418.97	0.22
2861.40	0.760	100.540	2861.01	-26.18	11.85	26.14	693620.68	731418.80	0.23
2956.70	0.700	99.710	2956.30	-27.38	11.64	27.34	693621.87	731418.59	0.06



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
3052.00	0.590	98.190	3051.60	-28.44	11.47	28.40	693622.93	731418.42	0.12
3147.20	0.540	105.560	3146.79	-29.35	11.28	29.31	693623.85	731418.23	0.09
3242.30	0.530	109.540	3241.89	-30.20	11.01	30.16	693624.70	731417.96	0.04
3337.30	0.400	121.370	3336.88	-30.90	10.69	30.86	693625.39	731417.64	0.17
3432.40	0.280	133.030	3431.98	-31.35	10.36	31.31	693625.85	731417.31	0.15
3527.40	0.260	139.050	3526.98	-31.66	10.04	31.62	693626.16	731416.99	0.04
3622.40	0.260	163.150	3621.98	-31.86	9.67	31.82	693626.36	731416.62	0.11
3717.50	0.330	217.820	3717.08	-31.75	9.25	31.72	693626.26	731416.20	0.29
3812.50	0.510	224.880	3812.08	-31.28	8.73	31.25	693625.79	731415.68	0.20
3907.50	0.600	229.490	3907.07	-30.61	8.11	30.58	693625.11	731415.06	0.11
4002.50	0.560	216.760	4002.07	-29.95	7.41	29.92	693624.46	731414.36	0.14
4097.50	0.630	216.830	4097.06	-29.35	6.62	29.33	693623.87	731413.57	0.07
4192.80	0.650	223.870	4192.36	-28.66	5.82	28.64	693623.18	731412.77	0.09
4287.70	0.660	222.130	4287.25	-27.92	5.02	27.90	693622.44	731411.97	0.02
4382.80	0.640	216.110	4382.34	-27.24	4.19	27.22	693621.76	731411.14	0.07
4477.90	0.610	218.650	4477.44	-26.60	3.36	26.59	693621.13	731410.31	0.04
4572.80	0.630	215.650	4572.33	-25.98	2.54	25.97	693620.51	731409.49	0.04
4667.90	0.640	223.350	4667.43	-25.31	1.73	25.30	693619.84	731408.68	0.09
4762.80	0.580	228.580	4762.32	-24.58	1.03	24.58	693619.12	731407.98	0.09
4857.80	0.390	224.040	4857.32	-23.99	0.48	23.99	693618.53	731407.43	0.20
4952.80	0.230	222.790	4952.32	-23.64	0.11	23.64	693618.18	731407.06	0.17
5047.80	0.030	292.680	5047.32	-23.49	-0.02	23.49	693618.02	731406.93	0.23
5142.70	0.150	18.940	5142.22	-23.50	0.10	23.50	693618.04	731407.05	0.16
5237.60	0.310	3.280	5237.12	-23.56	0.48	23.56	693618.10	731407.43	0.18
5332.60	0.430	3.200	5332.11	-23.60	1.09	23.59	693618.13	731408.04	0.13
5427.70	0.450	357.940	5427.21	-23.61	1.82	23.60	693618.14	731408.77	0.05
5522.80	0.330	339.720	5522.31	-23.50	2.45	23.49	693618.03	731409.40	0.18
5617.80	0.360	322.830	5617.31	-23.23	2.94	23.22	693617.75	731409.89	0.11
5713.00	0.450	303.610	5712.51	-22.74	3.39	22.72	693617.26	731410.34	0.17
5808.20	0.610	298.660	5807.70	-21.98	3.84	21.97	693616.51	731410.79	0.17



Actual Wellpath Report

No. 2H AWP

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BAKER
HUGHES

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
5903.30	0.730	300.150	5902.79	-21.02	4.39	21.00	693615.54	731411.34	0.13
5998.40	0.800	293.710	5997.89	-19.89	4.96	19.87	693614.41	731411.91	0.12
6093.40	0.860	294.760	6092.88	-18.63	5.52	18.61	693613.15	731412.47	0.07
6187.50	0.830	298.420	6186.97	-17.40	6.14	17.37	693611.91	731413.09	0.07
6282.50	0.830	300.030	6281.96	-16.20	6.81	16.17	693610.71	731413.76	0.02
6377.50	0.840	304.200	6376.95	-15.03	7.55	15.00	693609.54	731414.50	0.06
6472.50	0.880	302.910	6471.94	-13.84	8.34	13.81	693608.35	731415.29	0.05
6567.90	0.880	303.800	6567.32	-12.62	9.14	12.59	693607.13	731416.09	0.01
6662.30	0.880	302.110	6661.71	-11.41	9.93	11.37	693605.91	731416.88	0.03
6852.30	0.880	304.830	6851.69	-8.98	11.54	8.94	693603.48	731418.49	0.02
6947.20	1.000	303.360	6946.58	-7.69	12.41	7.65	693602.19	731419.36	0.13
7042.10	0.990	304.680	7041.46	-6.33	13.33	6.28	693600.82	731420.28	0.03
7137.00	0.960	310.280	7136.35	-5.05	14.32	5.00	693599.54	731421.26	0.11
7232.00	0.980	310.680	7231.34	-3.83	15.36	3.78	693598.32	731422.31	0.02
7326.30	0.990	312.200	7325.62	-2.62	16.43	2.56	693597.10	731423.38	0.03
7421.30	0.980	311.250	7420.61	-1.41	17.52	1.35	693595.89	731424.47	0.02
7516.30	0.850	317.950	7515.60	-0.33	18.58	0.26	693594.80	731425.53	0.18
7611.30	0.640	332.240	7610.59	0.39	19.57	-0.46	693594.08	731426.52	0.29
7705.30	0.500	346.720	7704.58	0.72	20.43	-0.80	693593.74	731427.38	0.21
7800.30	0.520	353.880	7799.58	0.86	21.27	-0.94	693593.60	731428.22	0.07
7894.30	0.570	356.770	7893.58	0.93	22.16	-1.01	693593.53	731429.11	0.06
7989.30	0.500	4.910	7988.57	0.92	23.04	-1.00	693593.54	731429.99	0.11
8084.40	0.500	24.270	8083.67	0.71	23.83	-0.79	693593.75	731430.78	0.18
8179.40	0.620	37.970	8178.66	0.22	24.62	-0.31	693594.23	731431.57	0.19
8273.40	0.880	48.320	8272.65	-0.64	25.50	0.55	693595.09	731432.45	0.31
8368.30	1.340	54.510	8367.54	-2.09	26.63	1.99	693596.53	731433.58	0.50
8463.40	1.740	59.470	8462.60	-4.24	28.01	4.14	693598.68	731434.95	0.44
8558.40	1.900	60.760	8557.55	-6.87	29.51	6.76	693601.30	731436.46	0.17
8574.00	2.600	268.000	8573.15	-6.74	29.62	6.63	693601.17	731436.57	28.05
8604.00	11.700	262.400	8602.89	-3.03	29.19	2.93	693597.47	731436.14	30.39



Actual Wellpath Report

No. 2H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
8636.00	20.900	261.400	8633.57	5.85	27.91	-5.95	693588.59	731434.86	28.76
8668.00	30.100	258.200	8662.42	19.39	25.41	-19.48	693575.06	731432.36	29.06
8700.00	39.500	257.900	8688.67	37.25	21.63	-37.32	693557.22	731428.58	29.38
8731.00	48.700	256.300	8710.91	58.26	16.79	-58.32	693536.22	731423.74	29.89
8763.00	57.900	255.700	8730.01	83.15	10.58	-83.19	693511.36	731417.53	28.79
8794.00	68.200	256.000	8744.04	109.94	3.84	-109.95	693484.60	731410.79	33.24
8825.00	77.800	256.500	8753.09	138.72	-3.19	-138.71	693455.84	731403.76	31.01
8856.00	83.500	262.300	8758.13	168.79	-8.80	-168.76	693425.80	731398.15	26.05
8888.00	86.200	271.000	8761.01	200.58	-10.66	-200.54	693394.02	731396.29	28.36
8919.00	87.000	273.100	8762.85	231.49	-9.55	-231.46	693363.09	731397.40	7.24
8951.00	86.900	272.900	8764.55	263.40	-7.88	-263.37	693331.19	731399.07	0.70
8983.00	88.200	272.600	8765.92	295.33	-6.35	-295.31	693299.25	731400.60	4.17
9014.00	90.600	272.400	8766.24	326.29	-4.99	-326.27	693268.29	731401.96	7.77
9046.00	92.900	272.900	8765.27	358.23	-3.51	-358.22	693236.34	731403.44	7.36
9077.00	92.800	272.900	8763.72	389.15	-1.95	-389.14	693205.42	731405.00	0.32
9109.00	91.600	273.200	8762.50	421.07	-0.25	-421.07	693173.49	731406.70	3.87
9141.00	89.900	273.000	8762.08	453.01	1.48	-453.02	693141.55	731408.43	5.35
9172.00	89.700	273.100	8762.18	483.96	3.13	-483.98	693110.59	731410.08	0.72
9204.00	91.000	274.100	8761.99	515.89	5.14	-515.91	693078.66	731412.09	5.13
9236.00	91.900	274.800	8761.18	547.78	-7.62	-547.81	693046.77	731414.57	3.56
9267.00	91.900	275.200	8760.15	578.63	10.32	-578.67	693015.91	731417.27	1.29
9331.00	91.400	273.700	8758.31	642.39	15.29	-642.45	692952.13	731422.24	2.47
9394.00	90.800	271.300	8757.10	705.30	18.03	-705.37	692889.21	731424.98	3.93
9457.00	90.600	269.500	8756.33	768.29	18.47	-768.36	692826.23	731425.42	2.87
9513.00	90.400	269.400	8755.84	824.29	17.94	-824.36	692770.23	731424.89	0.40
9584.00	91.700	269.500	8754.54	895.27	17.26	-895.34	692699.26	731424.20	1.84
9647.00	91.200	269.000	8752.95	958.25	16.43	-958.32	692636.29	731423.38	1.12
9710.00	90.700	268.800	8751.90	1021.23	15.22	-1021.30	692573.31	731422.17	0.85
9773.00	92.100	269.500	8750.36	1084.21	14.29	-1084.27	692510.34	731421.24	2.48
9805.00	92.700	270.000	8749.02	1116.18	14.15	-1116.24	692478.37	731421.10	2.44



Actual Wellpath Report

No. 2H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELLPATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
9836.00	92.300	269.700	8747.67	1147.15	14.07	-1147.21	692447.41	731421.02	1.61
9868.00	91.200	269.900	8746.69	1179.14	13.96	-1179.20	692415.42	731420.90	3.49
9931.00	92.100	270.300	8744.88	1242.11	14.07	-1242.17	692352.45	731421.01	1.56
9994.00	91.800	270.000	8742.73	1305.07	14.23	-1305.13	692289.50	731421.18	0.67
10057.00	91.600	270.200	8740.87	1368.04	14.34	-1368.10	692226.53	731421.29	0.45
10121.00	91.300	270.300	8739.25	1432.02	14.62	-1432.08	692162.55	731421.57	0.49
10184.00	91.400	270.300	8737.76	1495.00	14.95	-1495.06	692099.58	731421.90	0.16
10247.00	91.100	270.500	8736.39	1557.98	15.39	-1558.05	692036.60	731422.34	0.57
10311.00	90.900	270.900	8735.27	1621.96	16.17	-1622.03	691972.62	731423.12	0.70
10342.00	91.400	270.400	8734.65	1652.95	16.52	-1653.02	691941.63	731423.47	2.28
10405.00	90.300	268.600	8733.71	1715.94	15.97	-1716.01	691878.64	731422.92	3.35
10469.00	91.300	268.700	8732.82	1779.92	14.46	-1779.99	691814.67	731421.41	1.57
10533.00	91.200	269.000	8731.42	1843.90	13.18	-1843.96	691750.70	731420.13	0.49
10596.00	90.400	267.500	8730.54	1906.87	11.26	-1906.92	691687.75	731418.21	2.70
10659.00	90.800	268.000	8729.88	1969.82	8.78	-1969.87	691624.80	731415.73	1.02
10722.00	90.900	267.900	8728.95	2032.78	6.53	-2032.82	691561.85	731413.48	0.22
10785.00	91.900	268.800	8727.41	2095.74	4.72	-2095.77	691498.90	731411.67	2.14
10848.00	92.400	269.400	8725.05	2158.69	3.73	-2158.72	691435.96	731410.68	1.24
10911.00	92.900	270.600	8722.13	2221.62	3.73	-2221.65	691373.03	731410.68	2.06
10975.00	90.700	270.000	8720.12	2285.59	4.06	-2285.62	691309.08	731411.01	3.56
11038.00	90.500	271.100	8719.46	2348.58	4.67	-2348.61	691246.09	731411.62	1.77
11101.00	90.700	272.100	8718.80	2411.54	6.43	-2411.58	691183.12	731413.38	1.62
11165.00	90.900	272.300	8717.91	2475.48	8.88	-2475.53	691119.18	731415.83	0.44
11228.00	92.100	274.700	8716.26	2538.32	12.73	-2538.38	691056.33	731419.68	4.26
11291.00	91.500	273.800	8714.28	2601.10	17.39	-2601.18	690993.54	731424.34	1.72
11354.00	90.200	271.200	8713.35	2664.01	20.14	-2664.10	690930.61	731427.09	4.61
11417.00	89.200	272.100	8713.68	2726.98	21.95	-2727.07	690867.65	731428.90	2.14
11480.00	89.500	272.300	8714.39	2789.92	24.37	-2790.02	690804.70	731431.32	0.57
11543.00	89.400	272.000	8715.00	2852.86	26.74	-2852.98	690741.75	731433.68	0.50
11606.00	88.700	271.500	8716.04	2915.81	28.66	-2915.94	690678.80	731435.61	1.37



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELL PATH DATA (188 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
11638.00	89.400	272.200	8716.57	2947.79	29.69	-2947.92	690646.82	731436.64	3.09
11703.00	88.700	272.300	8717.65	3012.72	32.24	-3012.86	690581.88	731439.19	1.09
11765.00	88.600	272.300	8719.11	3074.64	34.73	-3074.79	690519.95	731441.68	0.16
11828.00	88.400	272.500	8720.76	3137.56	37.37	-3137.71	690457.04	731444.32	0.45
11891.00	87.900	271.500	8722.79	3200.48	39.57	-3200.64	690394.11	731446.51	1.77
11954.00	88.300	271.600	8724.88	3263.41	41.27	-3263.58	690331.17	731448.22	0.65
12018.00	87.800	271.100	8727.06	3327.35	42.78	-3327.53	690267.23	731449.72	1.10
12081.00	87.500	270.800	8729.64	3390.28	43.82	-3390.47	690204.30	731450.77	0.67
12113.00	87.400	271.100	8731.07	3422.25	44.35	-3422.43	690172.34	731451.30	0.99
12144.00	88.000	270.300	8732.31	3453.22	44.73	-3453.40	690141.37	731451.68	3.22
12176.00	88.500	270.700	8733.29	3485.20	45.01	-3485.39	690109.39	731451.95	2.00
12207.00	89.400	270.400	8733.86	3516.19	45.30	-3516.38	690078.39	731452.25	3.06
12239.00	89.500	270.600	8734.16	3548.19	45.58	-3548.38	690046.40	731452.53	0.70
12271.00	89.100	270.300	8734.56	3580.18	45.84	-3580.37	690014.40	731452.78	1.56
12302.00	89.000	269.800	8735.07	3611.18	45.86	-3611.37	689983.41	731452.81	1.64
12334.00	89.100	269.800	8735.60	3643.17	45.75	-3643.36	689951.42	731452.70	0.31
12365.00	89.100	269.700	8736.09	3674.17	45.62	-3674.36	689920.42	731452.56	0.32
12397.00	88.600	269.600	8736.73	3706.16	45.42	-3706.35	689888.43	731452.37	1.59
12429.00	88.600	269.600	8737.51	3738.15	45.20	-3738.34	689856.45	731452.14	0.00
12460.00	88.500	269.700	8738.30	3769.14	45.01	-3769.33	689825.46	731451.95	-0.46
12492.00	88.200	269.800	8739.22	3801.13	44.87	-3801.32	689793.47	731451.81	0.99
12524.00	88.200	268.900	8740.22	3833.11	44.50	-3833.30	689761.49	731451.45	2.81
12555.00	88.200	268.600	8741.20	3864.09	43.83	-3864.28	689730.52	731450.78	0.97
12587.00	88.300	268.800	8742.17	3896.07	43.10	-3896.25	689698.54	731450.05	0.70
12619.00	87.900	268.500	8743.23	3928.05	42.35	-3928.23	689666.57	731449.30	1.56
12650.00	88.200	267.800	8744.29	3959.02	41.35	-3959.19	689635.61	731448.30	2.46
12682.00	88.300	267.000	8745.27	3990.97	39.90	-3991.15	689603.66	731446.85	2.52
12713.00	89.200	266.500	8745.94	4021.92	38.14	-4022.09	689572.72	731445.09	3.32
12745.00	90.600	266.200	8746.00	4053.86	36.10	-4054.02	689540.79	731443.05	4.47
12776.00	92.200	266.100	8745.24	4084.79	34.02	-4084.94	689509.87	731440.97	5.17



Actual Wellpath Report

No. 2H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Chaves County, NM	Well	No. 2H
Field	(Midway) Sec 17, T15S, R31E	Wellbore	No. 2H AWB
Facility	Midway 17 Fed No. 2H	Sidetrack from	No. 2 AWB at 8558.40 MD

WELLPATH DATA (188 stations) † = interpolated/extrapolated station									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
12808.00	92.400	265.900	8743.96	4116.69	31.79	-4116.84	689477.98	731438.74	0.88
12840.00	92.600	265.900	8742.56	4148.59	29.51	-4148.73	689446.09	731436.46	0.62
12903.00	93.500	266.600	8739.21	4211.38	25.39	-4211.50	689383.32	731432.34	1.81
12966.00	92.800	266.300	8735.75	4274.18	21.50	-4274.28	689320.54	731428.45	1.21
13029.00	92.700	266.900	8732.72	4337.01	17.77	-4337.10	689257.73	731424.71	0.96
13093.00	92.500	266.300	8729.82	4400.84	13.97	-4400.92	689193.91	731420.92	0.99
13155.00	92.600	266.600	8727.06	4462.68	10.14	-4462.74	689132.09	731417.09	0.51
13234.00†	92.600	266.600	8723.48	4541.47	5.46	-4541.52	689053.32	731412.41	0.00

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 2H BHL		8750.00	-16.51	-4542.96	689051.88	731390.44	33°00'34.786"N	103°51'05.271"W	point

WELLPATH COMPOSITION Ref Wellbore: No. 2H AWB Ref Wellpath: No. 2H AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8558.40	Gyrodata relative depth - Drop gyro or Multi-shot	GYRO	No. 2 AWB
8558.40	13155.00	NaviTrak (Standard)	MWD - 6 1/8 Open Hole (8574-13234)	No. 2H AWB
13155.00	13234.00	Blind Drilling (std)	Projection to bit	No. 2H AWB