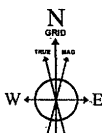
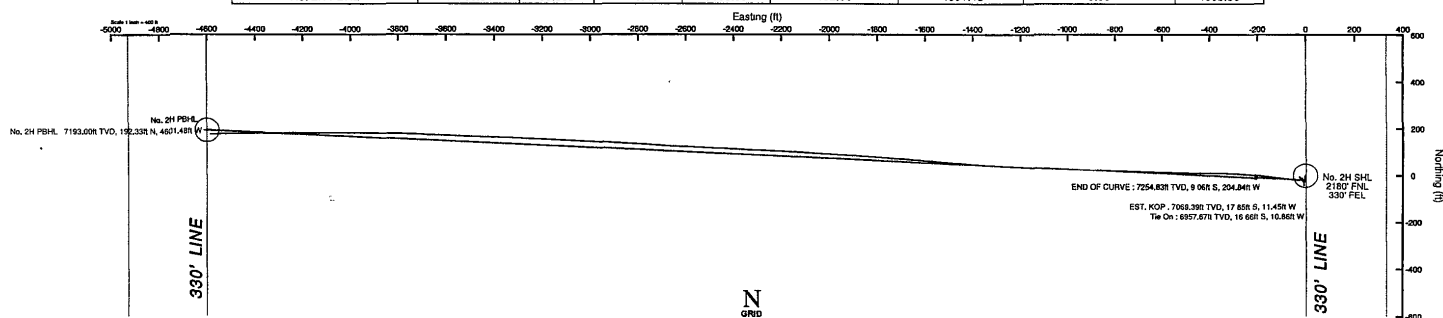


Location: Eddy County, NM
Field: (Glycerin) Sec 10, T16S, R29E
Facility: Glycerin 10 Fed Com No. 2H

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

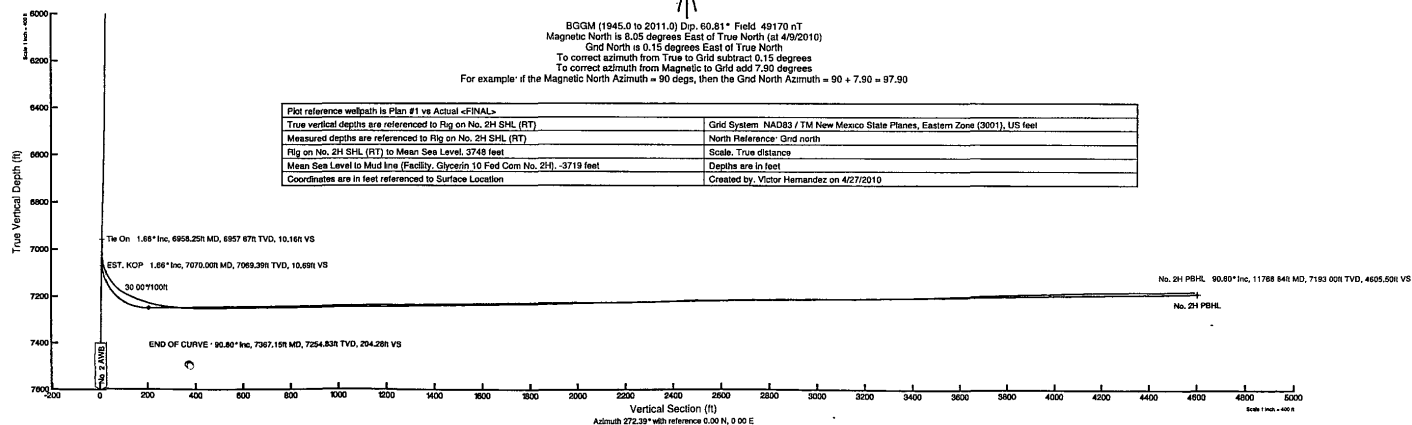
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6958.25	1.650	140.378	6957.67	-16.66	-10.86	0.00	10.16
EST. KOP	7070.00	1.650	272.000	7069.39	-17.65	-11.45	2.71	10.69
END OF CURVE	7367.15	90.805	272.623	7254.83	-9.06	-204.84	30.00	204.28
No. 2H PBHL	11768.84	90.805	272.623	7193.00	192.33	-4601.48	0.00	4605.50



BQGM (1945.0 to 2011.0) Dip: 80.81° Field: 49170 nT
Magnetic North is 8.05 degrees East of True North (at 4/9/2010)
Grid North is 0.15 degrees East of True North
To correct azimuth from True to Grid subtract 0.15 degrees
To correct azimuth from Magnetic to Grid add 7.90 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.90 = 97.90

Plot reference wellpath is Plan #1 vs Actual «FINAL»	
True vertical depths are referenced to Rig on No. 2H SHL (RT)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 2H SHL (RT)	North Reference: Grid north
Rig on No. 2H SHL (RT) to Mean Sea Level, 3748 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Glycerin 10 Fed Com No. 2H), -3719 feet	Depths are in feet
Coordinates are in feet referenced to Surface Location	Created by: Victor Hernandez on 4/27/2010





Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 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	0.999917	Report Generated	4/27/2010 at 10:51:11 AM
Convergence at slot	0.15° 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	626677.00	704899.90	32°56'14.899"N	104°03'18.601"W
Facility Reference Pt			626677.00	704899.90	32°56'14.899"N	104°03'18.601"W
Field Reference Pt			626677.00	704899.90	32°56'14.899"N	104°03'18.601"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 2H SHL (RT) to GL	29.00ft
Horizontal Reference Pt	Surface Location	Rig on No. 2H SHL (RT) to Mean Sea Level	3748.00ft
Vertical Reference Pt	Rig on No. 2H SHL (RT)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 2H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	272.39°



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 MD

WELLPATH DATA (137 stations)							
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
0.00	0.000	145.630	0.00	0.00	0.00	0.00	0.00
100.00	0.150	145.630	100.00	-0.08	-0.11	0.07	0.15
200.00	0.420	177.280	200.00	-0.19	-0.58	0.17	0.30
300.00	1.030	202.450	299.99	0.09	-1.78	-0.16	0.67
400.00	1.140	204.950	399.97	-0.76	-3.49	-0.91	0.09
500.00	1.180	206.440	499.95	1.55	-5.29	-1.77	0.08
600.00	1.140	207.130	599.93	2.39	-7.10	-2.69	0.04
700.00	0.870	187.770	699.92	2.87	-8.74	-3.24	0.43
800.00	0.850	181.340	799.91	2.93	-10.23	-3.36	0.10
900.00	0.900	166.200	899.89	-2.70	-14.73	-3.19	0.24
923.50	0.970	150.600	923.39	2.54	-12.09	-3.05	1.12
1017.60	0.900	146.650	1017.48	1.69	-13.40	-2.25	0.10
1111.60	0.760	145.080	1111.47	0.88	-14.53	-1.49	0.15
1206.60	0.700	148.070	1206.46	0.17	-15.53	-0.82	0.07
1300.50	0.670	143.920	1300.35	-0.49	-16.46	-0.99	0.06
1394.90	0.640	161.880	1394.75	-1.02	-17.41	0.30	0.22
1489.40	0.510	169.080	1489.24	-1.30	-18.32	0.54	0.16
1583.20	0.570	164.740	1583.04	-1.54	-19.18	0.74	0.08
1677.00	0.470	158.100	1676.84	-1.84	-19.99	1.01	0.12
1770.90	0.390	157.650	1770.73	-2.13	-20.64	1.27	0.09
1864.50	0.410	166.710	1864.33	-2.36	-21.26	1.47	0.07
1958.70	0.450	168.650	1958.53	-2.54	-21.96	1.62	0.05
2053.00	0.540	169.290	2052.82	-2.73	-22.76	1.78	0.10
2147.40	0.540	190.100	2147.22	-2.77	-23.63	1.78	0.21
2241.60	0.520	211.090	2241.42	-2.48	-24.47	1.46	0.22
2336.70	0.410	233.450	2336.51	-1.99	-25.08	0.94	0.26
2431.70	0.540	241.770	2431.51	-1.34	-25.49	0.28	0.15
2525.30	0.560	251.870	2525.11	-0.53	-25.84	-0.55	0.11
2619.30	0.760	269.060	2619.10	0.52	-25.99	-1.61	0.30
2712.80	0.780	276.430	2712.59	1.77	-25.93	-2.86	0.14



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 MD

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
2807.40	0.750	286.380	2807.18	3.02	-25.69	-4.09	0.14
2901.70	0.770	293.880	2901.47	4.20	-25.26	-5.26	0.11
2996.90	0.800	299.970	2996.66	5.39	-24.67	-6.42	0.09
3092.10	0.790	304.800	3091.86	6.53	-23.96	-7.54	0.07
3187.00	0.890	308.680	3186.75	7.68	-23.12	-8.65	0.12
3280.60	0.620	316.990	3280.34	8.63	-22.30	-9.56	0.31
3374.80	0.520	333.280	3374.53	9.20	-21.55	-10.10	0.20
3468.10	0.390	350.040	3467.83	9.47	-20.85	-10.35	0.20
3562.00	0.250	51.200	3561.73	9.38	-20.41	-10.25	0.37
3655.90	0.970	330.860	3655.62	9.65	-19.59	-10.47	1.02
3749.50	1.020	325.090	3749.21	10.56	-18.21	-11.34	0.12
3843.90	0.730	325.360	3843.60	11.44	-17.03	-12.16	0.31
3939.70	0.660	315.980	3939.39	12.20	-16.13	-12.89	0.14
4034.10	0.710	306.640	4033.78	13.08	-15.39	-13.74	0.13
4128.50	0.680	302.830	4128.18	14.05	-14.74	-14.68	0.06
4222.20	0.710	302.740	4221.87	15.03	-14.12	-15.63	0.03
4316.50	0.680	304.570	4316.16	16.01	-13.49	-16.58	0.04
4412.30	0.610	305.340	4411.96	16.91	-12.87	-17.47	0.07
4506.80	0.600	298.810	4506.45	17.78	-12.34	-18.31	0.07
4600.40	0.660	302.770	4600.05	18.68	-11.81	-19.19	0.08
4694.20	0.670	303.340	4693.84	19.62	-11.22	-20.11	0.01
4788.80	0.650	311.120	4788.43	20.51	-10.56	-20.97	0.10
4884.10	0.610	321.710	4883.73	21.27	-9.81	-21.69	0.13
4980.00	0.560	334.910	4979.62	21.81	-8.99	-22.21	0.15
5073.40	0.600	340.660	5073.02	22.21	-8.11	-22.56	0.08
5169.30	0.510	337.120	5168.91	22.57	-7.24	-22.90	0.10
5263.00	0.450	310.480	5262.61	23.04	-6.62	-23.34	0.24
5357.00	0.390	312.900	5356.61	23.58	-6.16	-23.85	0.07
5450.80	0.320	306.600	5450.41	24.04	-5.79	-24.30	0.09
5546.60	0.300	294.520	5546.21	24.49	-5.53	-24.74	0.07



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 MD

WELLPATH DATA (137 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
5640.50	0.270	275.500	5640.10	24.94	-5.40	-25.19	0.11
5734.40	0.230	272.720	5734.00	25.35	-5.37	-25.59	0.04
5828.30	0.160	172.570	5827.90	25.51	-5.49	-25.76	0.32
5922.30	0.350	134.380	5921.90	25.28	-5.82	-25.54	0.26
6016.00	0.500	132.710	6015.60	24.75	-6.30	-25.04	0.16
6110.00	0.820	130.030	6109.59	23.91	-7.01	-24.22	0.34
6203.60	0.780	128.680	6203.18	22.86	-7.84	-23.21	0.05
6298.00	0.610	119.770	6297.58	21.90	-8.49	-22.27	0.21
6391.80	0.810	119.450	6391.37	20.87	-9.07	-21.26	0.21
6485.70	0.930	123.360	6485.26	19.62	-9.84	-20.05	0.14
6580.60	1.160	119.840	6580.14	18.11	-10.71	-18.57	0.25
6674.10	1.410	120.110	6673.62	16.25	-11.76	-16.76	0.27
6767.60	1.530	125.820	6767.09	14.19	-13.07	-14.75	0.20
6863.40	1.600	132.210	6862.85	12.10	-14.72	-12.72	0.20
6958.25	1.660	140.376	6957.67	10.16	-16.66	-10.86	0.25
7047.00	5.400	261.700	7046.29	13.40	-18.26	-14.18	7.23
7078.00	15.100	269.300	7076.76	18.88	-18.52	-19.67	31.53
7110.00	24.800	272.700	7106.81	29.78	-18.25	-30.57	30.52
7142.00	34.500	274.200	7134.58	45.59	-17.27	-46.35	30.40
7173.00	44.000	275.900	7158.56	65.16	-15.52	-65.86	30.84
7206.00	53.700	277.200	7180.25	89.91	-12.67	-90.52	29.54
7237.00	63.500	277.700	7196.38	116.23	-9.23	-116.72	31.64
7269.00	67.400	277.500	7209.68	145.21	-5.38	-145.57	12.20
7300.00	71.100	276.700	7220.66	174.10	-1.80	-174.33	12.18
7332.00	73.200	275.700	7230.47	204.49	-1.48	-204.61	7.21
7363.00	76.900	274.500	7238.46	234.40	4.14	-234.43	12.51
7395.00	79.100	273.700	7245.12	265.69	6.38	-265.65	7.30
7427.00	83.000	273.000	7250.09	297.29	8.22	-297.20	12.38
7459.00	84.500	271.800	7253.58	329.10	9.56	-328.98	5.99
7490.00	87.600	270.100	7255.71	360.01	10.07	-359.90	11.40



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 MD

WELLPATH DATA (137 stations)							
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
7522.00	88.400	270.200	7256.83	391.96	10.15	-391.88	2.52
7554.00	89.400	269.900	7257.44	423.93	10.18	-423.87	3.26
7649.00	91.200	271.500	7256.95	518.88	11.34	-518.86	2.54
7744.00	91.000	271.300	7255.12	613.85	13.66	-613.81	0.30
7839.00	91.200	272.200	7253.30	708.82	16.56	-708.75	0.97
7934.00	90.900	272.000	7251.56	803.81	20.04	-803.67	0.38
8029.00	90.000	271.800	7250.81	898.80	23.19	-898.61	0.97
8124.00	90.500	271.900	7250.40	993.79	26.26	-993.56	0.54
8219.00	90.500	272.600	7249.57	1088.79	29.99	-1088.49	0.74
8314.00	90.800	272.700	7248.49	1183.78	34.38	-1183.38	0.33
8409.00	91.800	273.500	7246.34	1278.75	39.52	-1278.21	1.35
8504.00	91.100	274.100	7243.93	1373.69	45.81	-1372.97	0.97
8599.00	90.800	274.200	7242.36	1468.63	52.68	-1467.71	0.33
8694.00	91.200	274.500	7240.70	1563.56	59.89	-1562.42	0.53
8789.00	91.100	274.500	7238.79	1658.48	67.34	-1657.14	0.51
8884.00	90.400	274.200	7237.55	1753.41	74.55	-1751.83	0.80
8979.00	91.200	274.100	7236.22	1848.36	81.42	-1846.57	0.85
9074.00	92.200	274.200	7233.40	1943.27	88.29	-1941.28	1.06
9169.00	91.400	273.500	7230.42	2038.19	94.67	-2036.01	1.12
9264.00	90.400	273.800	7228.93	2133.16	100.70	-2130.88	0.90
9360.00	91.500	272.400	7227.34	2229.13	105.90	-2226.65	1.85
9455.00	91.200	272.400	7225.10	2324.10	109.88	-2321.54	0.32
9550.00	92.000	272.900	7222.45	2419.07	114.27	-2416.40	0.99
9645.00	91.000	272.500	7219.96	2514.03	118.75	-2511.26	1.13
9740.00	89.900	272.200	7219.21	2609.03	122.64	-2606.18	1.20
9835.00	91.500	273.800	7218.05	2704.01	127.61	-2701.03	2.38
9931.00	91.200	273.700	7215.79	2799.95	133.89	-2796.80	0.33
10025.00	90.700	273.000	7214.23	2893.93	139.38	-2890.63	0.92
10120.00	90.000	273.600	7213.65	2988.91	144.85	-2985.47	0.97
10215.00	89.600	272.600	7213.98	3083.90	149.99	-3080.33	1.13



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 MD

WELLPATH DATA (137 stations)							
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
10311.00	90.800	272.800	7213.65	3179.90	154.51	-3176.22	1.27
10406.00	91.700	272.600	7211.58	3274.87	158.98	-3271.09	0.97
10500.00	90.300	271.700	7209.93	3368.86	162.51	-3365.00	1.77
10595.00	92.200	272.200	7207.86	3463.83	165.74	-3459.92	2.07
10690.00	91.200	272.100	7205.04	3558.78	169.30	-3554.81	1.06
10785.00	92.000	272.300	7202.39	3653.74	172.95	-3649.70	0.87
10880.00	92.400	272.200	7198.74	3748.67	176.67	-3744.56	0.43
10975.00	91.500	271.200	7195.51	3843.61	179.49	-3839.46	1.42
11069.00	91.000	270.200	7193.46	3937.54	180.64	-3933.43	1.19
11164.00	91.700	270.300	7191.22	4032.45	181.05	-4028.40	0.74
11260.00	91.300	269.800	7188.71	4128.34	181.14	-4124.37	0.67
11355.00	91.100	269.600	7186.72	4223.21	180.64	-4219.35	0.30
11450.00	90.900	269.900	7185.06	4318.09	180.23	-4314.33	0.38
11545.00	90.300	269.200	7184.07	4412.97	179.48	-4409.32	0.97
11640.00	90.400	269.300	7183.49	4507.83	178.24	-4504.31	0.15
11672.00	90.200	269.300	7183.32	4539.78	177.84	-4536.31	0.62
11725.00	90.200	269.300	7183.14	4592.70	177.20	-4589.31	0.00



Actual Wellpath Report

No. 2H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Glycerin) Sec 10, T16S, R29E	Wellbore	No. 2H AWB
Facility	Glycerin 10 Fed Com No. 2H	Sidetrack from	No. 2 AWB at 6958.25 MD

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 2H PBHL		7193.00	192.33	-4601.48	622075.91	705092.22	32°56'16.919"N	104°04'12.586"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	6958.25	Gyrodata relative depth - Drop gyro or Multi-shot		GYRO <100 - 7498>		No. 2 AWB
6958.25	11672.00	NaviTrak (Standard)		MWD <7047 - 11672>		No. 2H AWB
11672.00	11725.00	Blind Drilling (std)		Projection to bit		No. 2H AWB