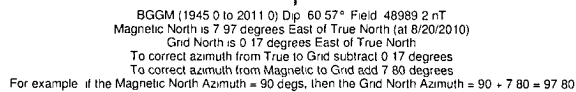


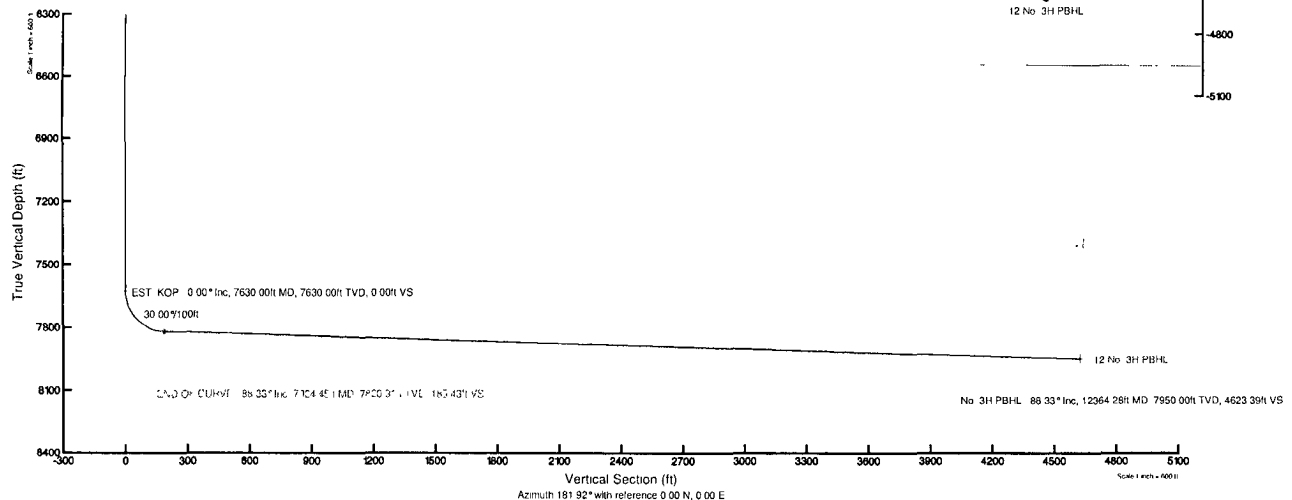
Location	Eddy County, NM	Slot	No 3H SHL
Field	Parkway	Well	No 3H
Facility	Parkway 12 State Com No 3H	Wellbore	No 3H PWB

CIMAREX



Spot reference wall path is Prelim. 1

True vertical depths are referenced to Rig on No. 3H SHL (GL)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (2001), US feet
Measured depths are referenced to Rig on No. 3H SHL (GL)	North Reference: Grid north
Rig on No. 3H SHL (GL) to Mean Sea Level: 3403 feet	Scale: True distance
Mean Sea Level to Mud line (Facility, Parkway 12 State Cor. No. 3H) : 3403 feet	Depths are in feet
Coordinates are in feet referenced to SL	Created by: Victor Hernandez on 8/20/2010





Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	Parkway	Wellbore	No. 3H PWB
Facility	Parkway 12 State Com No. 3H		

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	0.999919	Report Generated	8/20/2010 at 10:01:35 AM
Convergence at slot	0.17° East	Database/Source file	WA_Midland/No. 3H_PWB.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	635998.10	611748.80	32°40'52.912"N	104°01'32.407"W
Facility Reference Pt			635998.10	611748.80	32°40'52.912"N	104°01'32.407"W
Field Reference Pt			623994.14	604893.77	32°39'45.403"N	104°03'53.063"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 3H SHL (GL) to GL	0.00ft
Horizontal Reference Pt	SL	Rig on No. 3H SHL (GL) to Mean Sea Level	3403.00ft
Vertical Reference Pt	Rig on No. 3H SHL (GL)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 3H SHL (GL)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.92°



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co.**

Slot

No. 3H SHL

Area **Eddy County, NM**

Well

No. 3H

Field **Parkway**

Wellbore

No. 3H PWB

Facility **Parkway 12 State Com No. 3H**

WELLPATH DATA (51 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]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	181.924	0.00	0.00	0.00	0.00	635998.10	611748.80	32°40'52.912"N	104°01'32.407"W	0.00	Tie On
7630.00	0.000	181.924	7630.00	0.00	0.00	0.00	635998.10	611748.80	32°40'52.912"N	104°01'32.407"W	0.00	EST KOP
7730.00†	30.000	181.924	7725.49	25.59	-25.57	-0.86	635997.24	611723.23	32°40'52.659"N	104°01'32.417"W	30.00	
7830.00†	60.000	181.924	7795.40	95.49	-95.44	-3.21	635994.89	611653.37	32°40'51.968"N	104°01'32.447"W	30.00	
7924.45	88.334	181.924	7820.91	185.43	-185.33	-6.23	635991.88	611563.49	32°40'51.079"N	104°01'32.486"W	30.00	END OF CURVE
7930.00†	88.334	181.924	7821.07	190.98	-190.88	-6.41	635991.69	611557.94	32°40'51.024"N	104°01'32.488"W	0.00	
8030.00†	88.334	181.924	7823.97	290.94	-290.78	-9.77	635988.33	611458.05	32°40'50.035"N	104°01'32.531"W	0.00	
8130.00†	88.334	181.924	7826.88	390.90	-390.68	-13.12	635984.98	611358.15	32°40'49.047"N	104°01'32.573"W	0.00	
8230.00†	88.334	181.924	7829.79	490.86	-490.58	-16.48	635981.62	611258.26	32°40'48.059"N	104°01'32.616"W	0.00	
8330.00†	88.334	181.924	7832.70	590.82	-590.48	-19.83	635978.27	611158.37	32°40'47.070"N	104°01'32.659"W	0.00	
8430.00†	88.334	181.924	7835.60	690.77	-690.38	-23.19	635974.91	611058.47	32°40'46.082"N	104°01'32.701"W	0.00	
8530.00†	88.334	181.924	7838.51	790.73	-790.28	-26.55	635971.56	610958.58	32°40'45.094"N	104°01'32.744"W	0.00	
8630.00†	88.334	181.924	7841.42	890.69	-890.19	-29.90	635968.20	610858.69	32°40'44.105"N	104°01'32.787"W	0.00	
8730.00†	88.334	181.924	7844.33	990.65	-990.09	-33.26	635964.85	610758.79	32°40'43.117"N	104°01'32.829"W	0.00	
8830.00†	88.334	181.924	7847.24	1090.60	-1089.99	-36.61	635961.49	610658.90	32°40'42.129"N	104°01'32.872"W	0.00	
8930.00†	88.334	181.924	7850.14	1190.56	-1189.89	-39.97	635958.13	610559.01	32°40'41.140"N	104°01'32.914"W	0.00	
9030.00†	88.334	181.924	7853.05	1290.52	-1289.79	-43.32	635954.78	610459.11	32°40'40.152"N	104°01'32.957"W	0.00	
9130.00†	88.334	181.924	7855.96	1390.48	-1389.69	-46.68	635951.42	610359.22	32°40'39.163"N	104°01'33.000"W	0.00	
9230.00†	88.334	181.924	7858.87	1490.43	-1489.59	-50.04	635948.07	610259.33	32°40'38.175"N	104°01'33.042"W	0.00	
9330.00†	88.334	181.924	7861.77	1590.39	-1589.50	-53.39	635944.71	610159.44	32°40'37.187"N	104°01'33.085"W	0.00	
9430.00†	88.334	181.924	7864.68	1690.35	-1689.40	-56.75	635941.36	610059.54	32°40'36.198"N	104°01'33.128"W	0.00	
9530.00†	88.334	181.924	7867.59	1790.31	-1789.30	-60.10	635938.00	609959.65	32°40'35.210"N	104°01'33.170"W	0.00	
9630.00†	88.334	181.924	7870.50	1890.27	-1889.20	-63.46	635934.65	609859.76	32°40'34.222"N	104°01'33.213"W	0.00	
9730.00†	88.334	181.924	7873.40	1990.22	-1989.10	-66.81	635931.29	609759.86	32°40'33.233"N	104°01'33.256"W	0.00	
9830.00†	88.334	181.924	7876.31	2090.18	-2089.00	-70.17	635927.94	609659.97	32°40'32.245"N	104°01'33.298"W	0.00	
9930.00†	88.334	181.924	7879.22	2190.14	-2188.90	-73.53	635924.58	609560.08	32°40'31.257"N	104°01'33.341"W	0.00	
10030.00†	88.334	181.924	7882.13	2290.10	-2288.81	-76.88	635921.22	609460.18	32°40'30.268"N	104°01'33.384"W	0.00	
10130.00†	88.334	181.924	7885.03	2390.05	-2388.71	-80.24	635917.87	609360.29	32°40'29.280"N	104°01'33.426"W	0.00	
10230.00†	88.334	181.924	7887.94	2490.01	-2488.61	-83.59	635914.51	609260.40	32°40'28.291"N	104°01'33.469"W	0.00	
10330.00†	88.334	181.924	7890.85	2589.97	-2588.51	-86.95	635911.16	609160.50	32°40'27.303"N	104°01'33.511"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	Parkway	Wellbore	No. 3H PWB
Facility	Parkway 12 State Com No. 3H		

WELLPATH DATA (51 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]	Latitude	Longitude	DLS [°/100ft]	Comments
10430.00†	88.334	181.924	7893.76	2689.93	-2688.41	-90.30	635907.80	609060.61	32°40'26.315"N	104°01'33.554"W	0.00	
10530.00†	88.334	181.924	7896.67	2789.89	-2788.31	-93.66	635904.45	608960.72	32°40'25.326"N	104°01'33.597"W	0.00	
10630.00†	88.334	181.924	7899.57	2889.84	-2888.21	-97.02	635901.09	608860.82	32°40'24.338"N	104°01'33.639"W	0.00	
10730.00†	88.334	181.924	7902.48	2989.80	-2988.12	-100.37	635897.74	608760.93	32°40'23.350"N	104°01'33.682"W	0.00	
10830.00†	88.334	181.924	7905.39	3089.76	-3088.02	-103.73	635894.38	608661.04	32°40'22.361"N	104°01'33.725"W	0.00	
10930.00†	88.334	181.924	7908.30	3189.72	-3187.92	-107.08	635891.03	608561.15	32°40'21.373"N	104°01'33.767"W	0.00	
11030.00†	88.334	181.924	7911.20	3289.67	-3287.82	-110.44	635887.67	608461.25	32°40'20.384"N	104°01'33.810"W	0.00	
11130.00†	88.334	181.924	7914.11	3389.63	-3387.72	-113.79	635884.32	608361.36	32°40'19.396"N	104°01'33.853"W	0.00	
11230.00†	88.334	181.924	7917.02	3489.59	-3487.62	-117.15	635880.96	608261.47	32°40'18.408"N	104°01'33.895"W	0.00	
11330.00†	88.334	181.924	7919.93	3589.55	-3587.52	-120.51	635877.60	608161.57	32°40'17.419"N	104°01'33.938"W	0.00	
11430.00†	88.334	181.924	7922.83	3689.50	-3687.42	-123.86	635874.25	608061.68	32°40'16.431"N	104°01'33.981"W	0.00	
11530.00†	88.334	181.924	7925.74	3789.46	-3787.33	-127.22	635870.89	607961.79	32°40'15.443"N	104°01'34.023"W	0.00	
11630.00†	88.334	181.924	7928.65	3889.42	-3887.23	-130.57	635867.54	607861.89	32°40'14.454"N	104°01'34.066"W	0.00	
11730.00†	88.334	181.924	7931.56	3989.38	-3987.13	-133.93	635864.18	607762.00	32°40'13.466"N	104°01'34.108"W	0.00	
11830.00†	88.334	181.924	7934.47	4089.34	-4087.03	-137.28	635860.83	607662.11	32°40'12.478"N	104°01'34.151"W	0.00	
11930.00†	88.334	181.924	7937.37	4189.29	-4186.93	-140.64	635857.47	607562.21	32°40'11.489"N	104°01'34.194"W	0.00	
12030.00†	88.334	181.924	7940.28	4289.25	-4286.83	-144.00	635854.12	607462.32	32°40'10.501"N	104°01'34.236"W	0.00	
12130.00†	88.334	181.924	7943.19	4389.21	-4386.73	-147.35	635850.76	607362.43	32°40'09.512"N	104°01'34.279"W	0.00	
12230.00†	88.334	181.924	7946.10	4489.17	-4486.64	-150.71	635847.41	607262.53	32°40'08.524"N	104°01'34.322"W	0.00	
12330.00†	88.334	181.924	7949.00	4589.12	-4586.54	-154.06	635844.05	607162.64	32°40'07.536"N	104°01'34.364"W	0.00	
12364.28	88.334	181.924	7950.00†	4623.39	-4620.78	-155.21	635842.90	607128.40	32°40'07.197"N	104°01'34.379"W	0.00	No 3H PBHL



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	Parkway	Wellbore	No. 3H PWB
Facility	Parkway 12 State Com No. 3H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) 12 No. 3H PBHL	12364.28	7950.00	-4620.78	-155.21	635842.90	607128.40	32°40'07.197"N	104°01'34.379"W	point

SURVEY PROGRAM Ref Wellbore: No. 3H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	12364.28	NaviTrak (Standard)		No. 3H PWB