



Cimarex Energy Co.

Location Lea County, NM
Field (State DR) Sec 16, T19S, R32E
Facility State DR No 6H

Slot No 6H SHL
Well No 6H
Wellbore No 6H PWB

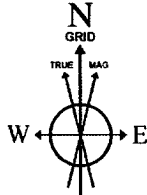


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0 00	0 00	181 983	0 00	0 00	0 00	0 00	0 00
Est KOP	9196 00	0 00	181 983	9196 00	0 00	0 00	0 00	0 00
End of Curve	9514 74	89 248	181 983	9400 61	-201 82	-6 99	28 00	201 94
No 6 PBHL	13278 63	89 248	181 983	9450 00	-3963 14	-137 21	0 00	3965 51

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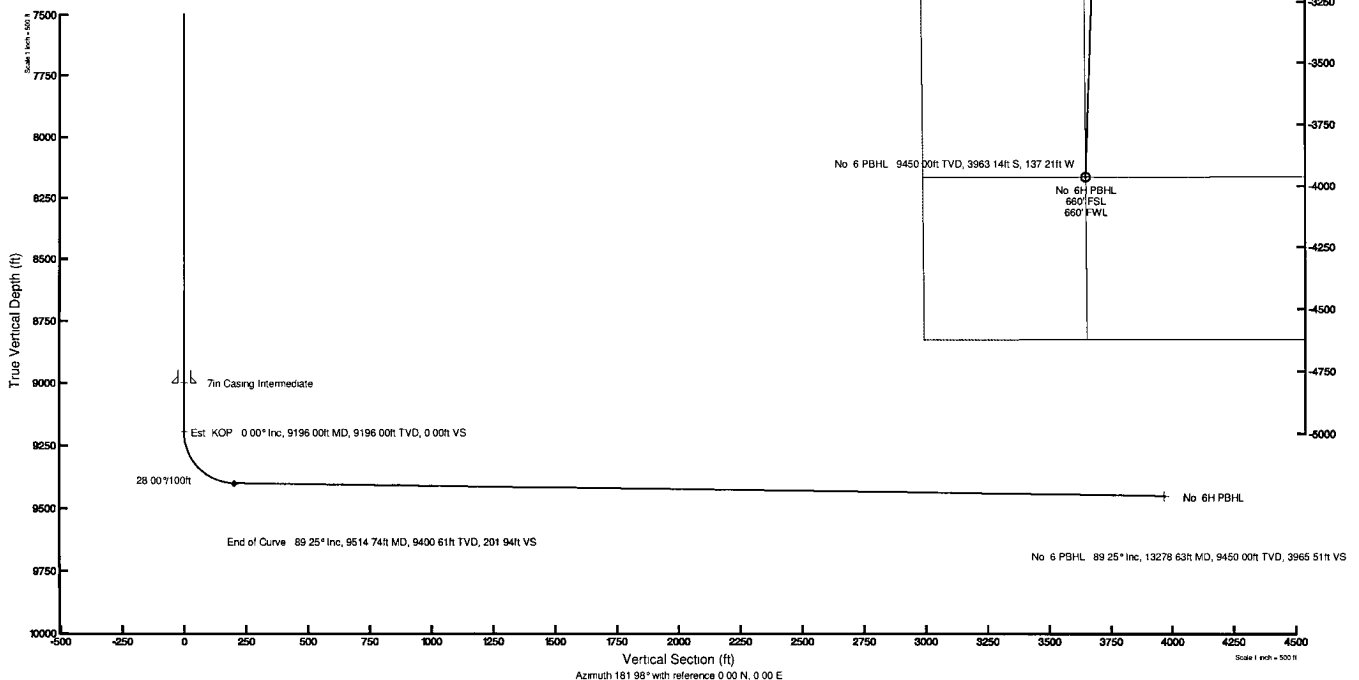


BGGM (1945 0 to 2011 0) Dip 60 60° Field 49012 1 nT
Magnetic North is 7 85 degrees East of True North (at 8/9/2010)
Grid North is 0 30 degrees East of True North

To correct azimuth from True to Grid subtract 0 30 degrees
To correct azimuth from Magnetic to Grid add 7 55 degrees

For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7 55 = 97 55

Well reference wellpath is P16m 2	
True vertical depths are referenced to Rig on No. 6 SHL (GL)	Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 6 SHL (GL)	North Reference Grid north
Rig on No. 6 SHL (GL) to Mean Sea Level 3617 feet	Scale True distance
Mean Sea Level to Mud line (Facility State DR No 6H) 3617 feet	Depths are in feet
Coordinates are in feet referenced to SL	Created by Victor Hernandez on 8/9/2010





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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Lea County, NM	Well	No. 6H
Field	(State DR) Sec 16, T19S, R32E	Wellbore	No. 6H PWB
Facility	State DR No. 6H		

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	0.999943	Report Generated	8/9/2010 at 11:13:26 AM
Convergence at slot	0.30° East	Database/Source file	WA_Midland/No. 6H_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	712495.00	606429.50	32°39'57.197"N	103°46'37.695"W
Facility Reference Pt			712495.00	606429.50	32°39'57.197"N	103°46'37.695"W
Field Reference Pt			712327.80	606759.10	32°40'00.467"N	103°46'39.631"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 6 SHL (GL) to GL	0.00ft
Horizontal Reference Pt	SL	Rig on No. 6 SHL (GL) to Mean Sea Level	3617.00ft
Vertical Reference Pt	Rig on No. 6 SHL (GL)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 6 SHL (GL)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.98°

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Area	Lea County, NM	Well	No. 6H
Field	(State DR) Sec 16, T19S, R32E	Wellbore	No. 6H PWB
Facility	State DR No. 6H		

WELLPATH DATA (44 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	181.983	0.00	0.00	0.00	0.00	712495.00	606429.50	32°39'57.197"N	103°46'37.695"W	0.00	Tie On
9196.00	0.000	181.983	9196.00	0.00	0.00	0.00	712495.00	606429.50	32°39'57.197"N	103°46'37.695"W	0.00	Est KOP
9296.00†	28.000	181.983	9292.07	23.95	-23.94	-0.83	712494.17	606405.56	32°39'56.960"N	103°46'37.706"W	28.00	
9396.00†	56.000	181.983	9365.64	90.20	-90.15	-3.12	712491.88	606339.36	32°39'56.305"N	103°46'37.737"W	28.00	
9496.00†	84.000	181.983	9399.51	183.24	-183.13	-6.34	712488.66	606246.38	32°39'55.385"N	103°46'37.781"W	28.00	
9514.74	89.248	181.983	9400.61	201.94	-201.82	-6.99	712488.01	606227.69	32°39'55.200"N	103°46'37.789"W	28.00	End of Curve
9596.00†	89.248	181.983	9401.68	283.19	-283.02	-9.80	712485.20	606146.49	32°39'54.397"N	103°46'37.827"W	0.00	
9696.00†	89.248	181.983	9402.99	383.18	-382.95	-13.26	712481.74	606046.57	32°39'53.408"N	103°46'37.874"W	0.00	
9796.00†	89.248	181.983	9404.30	483.18	-482.89	-16.72	712478.28	605946.64	32°39'52.420"N	103°46'37.920"W	0.00	
9896.00†	89.248	181.983	9405.61	583.17	-582.82	-20.18	712474.82	605846.72	32°39'51.431"N	103°46'37.967"W	0.00	
9996.00†	89.248	181.983	9406.93	683.16	-682.75	-23.64	712471.36	605746.79	32°39'50.443"N	103°46'38.013"W	0.00	
10096.00†	89.248	181.983	9408.24	783.15	-782.68	-27.10	712467.90	605646.87	32°39'49.454"N	103°46'38.060"W	0.00	
10196.00†	89.248	181.983	9409.55	883.14	-882.61	-30.56	712464.44	605546.94	32°39'48.466"N	103°46'38.107"W	0.00	
10296.00†	89.248	181.983	9410.86	983.13	-982.54	-34.02	712460.99	605447.01	32°39'47.477"N	103°46'38.153"W	0.00	
10396.00†	89.248	181.983	9412.17	1083.12	-1082.47	-37.48	712457.53	605347.09	32°39'46.488"N	103°46'38.200"W	0.00	
10496.00†	89.248	181.983	9413.49	1183.11	-1182.41	-40.94	712454.07	605247.16	32°39'45.500"N	103°46'38.246"W	0.00	
10596.00†	89.248	181.983	9414.80	1283.11	-1282.34	-44.40	712450.61	605147.24	32°39'44.511"N	103°46'38.293"W	0.00	
10696.00†	89.248	181.983	9416.11	1383.10	-1382.27	-47.86	712447.15	605047.31	32°39'43.523"N	103°46'38.340"W	0.00	
10796.00†	89.248	181.983	9417.42	1483.09	-1482.20	-51.32	712443.69	604947.39	32°39'42.534"N	103°46'38.386"W	0.00	
10896.00†	89.248	181.983	9418.74	1583.08	-1582.13	-54.78	712440.23	604847.46	32°39'41.546"N	103°46'38.433"W	0.00	
10996.00†	89.248	181.983	9420.05	1683.07	-1682.06	-58.23	712436.77	604747.54	32°39'40.557"N	103°46'38.479"W	0.00	
11096.00†	89.248	181.983	9421.36	1783.06	-1782.00	-61.69	712433.31	604647.61	32°39'39.568"N	103°46'38.526"W	0.00	
11196.00†	89.248	181.983	9422.67	1883.05	-1881.93	-65.15	712429.85	604547.68	32°39'38.580"N	103°46'38.573"W	0.00	
11296.00†	89.248	181.983	9423.98	1983.05	-1981.86	-68.61	712426.39	604447.76	32°39'37.591"N	103°46'38.619"W	0.00	
11396.00†	89.248	181.983	9425.30	2083.04	-2081.79	-72.07	712422.93	604347.83	32°39'36.603"N	103°46'38.666"W	0.00	
11496.00†	89.248	181.983	9426.61	2183.03	-2181.72	-75.53	712419.47	604247.91	32°39'35.614"N	103°46'38.712"W	0.00	
11596.00†	89.248	181.983	9427.92	2283.02	-2281.65	-78.99	712416.01	604147.98	32°39'34.626"N	103°46'38.759"W	0.00	
11696.00†	89.248	181.983	9429.23	2383.01	-2381.58	-82.45	712412.55	604048.06	32°39'33.637"N	103°46'38.805"W	0.00	
11796.00†	89.248	181.983	9430.54	2483.00	-2481.52	-85.91	712409.09	603948.13	32°39'32.648"N	103°46'38.852"W	0.00	
11896.00†	89.248	181.983	9431.86	2582.99	-2581.45	-89.37	712405.63	603848.21	32°39'31.660"N	103°46'38.899"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Lea County, NM	Well	No. 6H
Field	(State DR) Sec 16, T19S, R32E	Wellbore	No. 6H PWB
Facility	State DR No. 6H		

WELLPATH DATA (44 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
11996.00†	89.248	181.983	9433.17	2682.99	-2681.38	-92.83	712402.17	603748.28	32°39'30.671"N	103°46'38.945"W	0.00	
12096.00†	89.248	181.983	9434.48	2782.98	-2781.31	-96.29	712398.71	603648.35	32°39'29.683"N	103°46'38.992"W	0.00	
12196.00†	89.248	181.983	9435.79	2882.97	-2881.24	-99.75	712395.25	603548.43	32°39'28.694"N	103°46'39.038"W	0.00	
12296.00†	89.248	181.983	9437.11	2982.96	-2981.17	-103.21	712391.79	603448.50	32°39'27.705"N	103°46'39.085"W	0.00	
12396.00†	89.248	181.983	9438.42	3082.95	-3081.11	-106.67	712388.34	603348.58	32°39'26.717"N	103°46'39.132"W	0.00	
12496.00†	89.248	181.983	9439.73	3182.94	-3181.04	-110.13	712384.88	603248.65	32°39'25.728"N	103°46'39.178"W	0.00	
12596.00†	89.248	181.983	9441.04	3282.93	-3280.97	-113.59	712381.42	603148.73	32°39'24.740"N	103°46'39.225"W	0.00	
12696.00†	89.248	181.983	9442.35	3382.93	-3380.90	-117.05	712377.96	603048.80	32°39'23.751"N	103°46'39.271"W	0.00	
12796.00†	89.248	181.983	9443.67	3482.92	-3480.83	-120.51	712374.50	602948.88	32°39'22.763"N	103°46'39.318"W	0.00	
12896.00†	89.248	181.983	9444.98	3582.91	-3580.76	-123.97	712371.04	602848.95	32°39'21.774"N	103°46'39.365"W	0.00	
12996.00†	89.248	181.983	9446.29	3682.90	-3680.69	-127.43	712367.58	602749.02	32°39'20.785"N	103°46'39.411"W	0.00	
13096.00†	89.248	181.983	9447.60	3782.89	-3780.63	-130.89	712364.12	602649.10	32°39'19.797"N	103°46'39.458"W	0.00	
13196.00†	89.248	181.983	9448.92	3882.88	-3880.56	-134.35	712360.66	602549.17	32°39'18.808"N	103°46'39.504"W	0.00	
13278.63	89.248	181.983	9450.00†	3965.51	-3963.14	-137.21	712357.80	602466.60	32°39'17.991"N	103°46'39.543"W	0.00	No 6 PBHL

HOLE & CASING SECTIONS: Ref Wellbore: No. 6H PWB Ref Wellpath: Prelim_2									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	0.00	4800.00	4800.00	0.00	4800.00	0.00	0.00	0.00	0.00
7in Casing Intermediate	0.00	9000.00	9000.00	0.00	9000.00	0.00	0.00	0.00	0.00



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Area	Lea County, NM	Well	No. 6H
Field	(State DR) Sec 16, T19S, R32E	Wellbore	No. 6H PWB
Facility	State DR No. 6H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 6H PBHL	13278.63	9450.00	3963.14	137.21	712357.80	602466.60	32°39'17.99"N	103°46'39.543"W	point

SURVEY PROGRAM Ref Wellbore: No. 6H PWB Ref Wellpath: Prelim_2				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	13278.63	NaviTrak (Standard)		No. 6H PWB