



Cimarex Energy Co.

Location Lea County, NM
Field (State HH) Sec 36 T19S, R32E
Facility State HH No. 3H

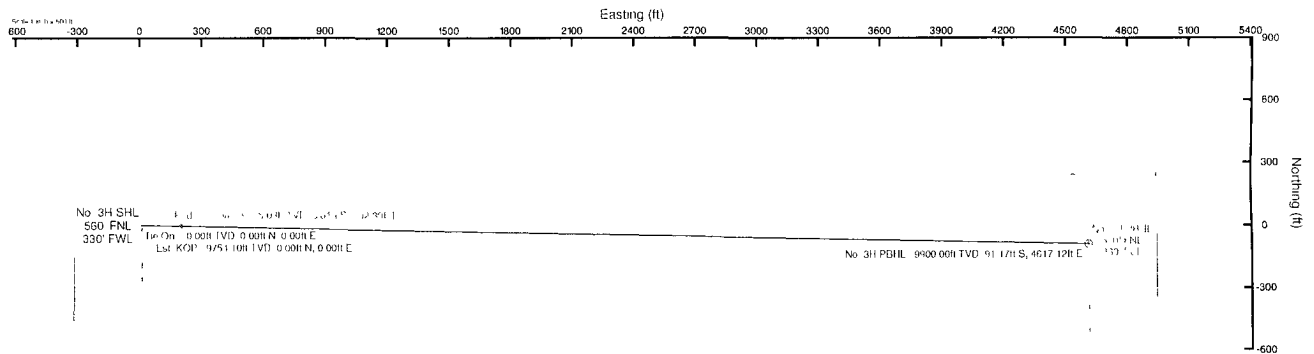
Slot No 3H SHL
Well No 3H
Wellbore No 3H PWB



INTEQ

Well Profile Data

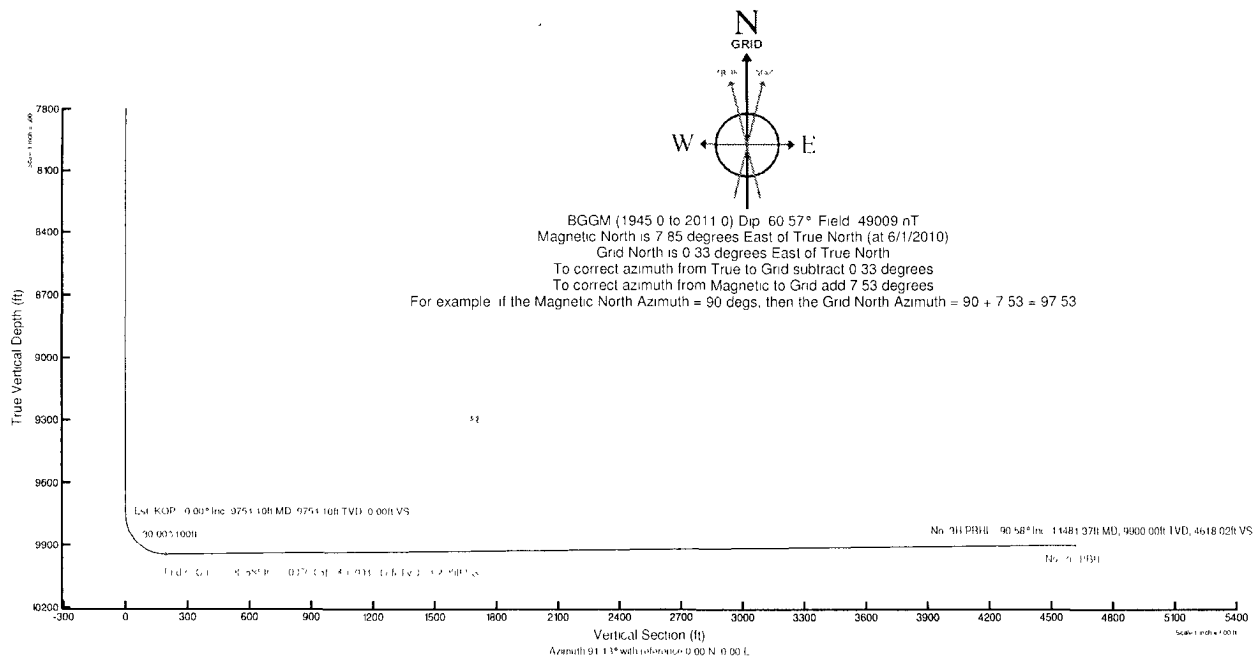
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	91.131	0.00	0.00	0.00	0.00	0.00
Est KOP	9754.10	0.000	91.131	9754.10	0.00	0.00	0.00	0.00
End of Curve	10000.05	30.534	91.131	9945.05	61	102.89	70.66	90.33
No 3H PBHL	14481.37	90.584	91.131	9900.00	-91.17	4617.12	0.00	4618.02



Plot reference wellpath is Prelim 1

True vertical depths are referenced to Rig on No 3H SHL (GL)
Measured depths are referenced to Rig on No 3H SHL (GL)
Rig on No 3H SHL (GL) to Mean Sea Level 3570 feet
Mean Sea Level to Mud line (Facility State HH No 3H) -3570 feet
Coordinates are in feet referenced to Slot Location

Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
North Reference: Grid north
Scale: True distance
Depths are in feet
Created by: Roland Flores on 6/1/2010





Planned Wellpath Report

Prelim 1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 3H PWB
Facility	State HH 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	Florroll
Scale	0.999949	Report Generated	6/1/2010 at 2:36:43 PM
Convergence at slot	0.33° 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	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W
Facility Reference Pt			727956.80	590734.00	32°37'21.054"N	103°43'37.870"W
Field Reference Pt			730941.22	588045.42	32°36'54.281"N	103°43'03.157"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 3H SHL (GL) to Ground Level	0.00ft
Horizontal Reference Pt	Slot Location	Rig on No. 3H SHL (GL) to Mean Sea Level	3570.00ft
Vertical Reference Pt	Rig on No. 3H SHL (GL)	Ground Level 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	91.13°



Planned Wellpath Report

Prelim 1
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Operator	Cimarex Energy Co.	Slot	No. 3H SHL
Area	Lea County, NM	Well	No. 3H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 3H PWB
Facility	State HH No. 3H		

WELLPATH DATA (148 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	91.131	0.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	Tie On
100 00	0.000	91.131	100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
200 00	0.000	91.131	200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
300 00	0.000	91.131	300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
400 00	0.000	91.131	400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
500 00	0.000	91.131	500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
600 00	0.000	91.131	600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
700 00	0.000	91.131	700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
800 00	0.000	91.131	800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
900 00	0.000	91.131	900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1000 00	0.000	91.131	1000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1100 00	0.000	91.131	1100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1200 00	0.000	91.131	1200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1300 00	0.000	91.131	1300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1400 00	0.000	91.131	1400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1500 00	0.000	91.131	1500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1600 00	0.000	91.131	1600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1700 00	0.000	91.131	1700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1800 00	0.000	91.131	1800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
1900 00	0.000	91.131	1900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2000 00	0.000	91.131	2000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2100 00	0.000	91.131	2100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2200 00	0.000	91.131	2200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2300 00	0.000	91.131	2300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2400 00	0.000	91.131	2400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2500 00	0.000	91.131	2500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2600 00	0.000	91.131	2600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2700 00	0.000	91.131	2700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2800 00	0.000	91.131	2800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
2900 00	0.000	91.131	2900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	



Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co.**

Slot **No. 3H SHL**

Area **Lea County, NM**

Well **No. 3H**

Field **(State HH) Sec 36, T19S, R32E**

Wellbore **No. 3H PWB**

Facility **State HH No. 3H**

WELLPATH DATA (148 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
3000.00†	0.000	91.131	3000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3100.00†	0.000	91.131	3100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3200.00†	0.000	91.131	3200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3300.00†	0.000	91.131	3300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3400.00†	0.000	91.131	3400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3500.00†	0.000	91.131	3500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3600.00†	0.000	91.131	3600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3700.00†	0.000	91.131	3700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3800.00†	0.000	91.131	3800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
3900.00†	0.000	91.131	3900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4000.00†	0.000	91.131	4000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4100.00†	0.000	91.131	4100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4200.00†	0.000	91.131	4200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4300.00†	0.000	91.131	4300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4400.00†	0.000	91.131	4400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4500.00†	0.000	91.131	4500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4600.00†	0.000	91.131	4600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4700.00†	0.000	91.131	4700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4800.00†	0.000	91.131	4800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
4900.00†	0.000	91.131	4900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5000.00†	0.000	91.131	5000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5100.00†	0.000	91.131	5100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5200.00†	0.000	91.131	5200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5300.00†	0.000	91.131	5300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5400.00†	0.000	91.131	5400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5500.00†	0.000	91.131	5500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5600.00†	0.000	91.131	5600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5700.00†	0.000	91.131	5700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5800.00†	0.000	91.131	5800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
5900.00†	0.000	91.131	5900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	



Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co.**

Slot **No. 3H SHL**

Area **Lea County, NM**

Well **No. 3H**

Field **(State HH) Sec 36, T19S, R32E**

Wellbore **No. 3H PWB**

Facility **State HH No. 3H**

WELLPATH DATA (148 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
6000.00†	0.000	91.131	6000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6100.00†	0.000	91.131	6100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6200.00†	0.000	91.131	6200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6300.00†	0.000	91.131	6300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6400.00†	0.000	91.131	6400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6500.00†	0.000	91.131	6500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6600.00†	0.000	91.131	6600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6700.00†	0.000	91.131	6700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6800.00†	0.000	91.131	6800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
6900.00†	0.000	91.131	6900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7000.00†	0.000	91.131	7000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7100.00†	0.000	91.131	7100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7200.00†	0.000	91.131	7200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7300.00†	0.000	91.131	7300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7400.00†	0.000	91.131	7400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7500.00†	0.000	91.131	7500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7600.00†	0.000	91.131	7600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7700.00†	0.000	91.131	7700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7800.00†	0.000	91.131	7800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
7900.00†	0.000	91.131	7900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8000.00†	0.000	91.131	8000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8100.00†	0.000	91.131	8100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8200.00†	0.000	91.131	8200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8300.00†	0.000	91.131	8300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8400.00†	0.000	91.131	8400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8500.00†	0.000	91.131	8500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8600.00†	0.000	91.131	8600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8700.00†	0.000	91.131	8700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8800.00†	0.000	91.131	8800.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
8900.00†	0.000	91.131	8900.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	



Planned Wellpath Report

Prelim 1

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co.**Slot **No. 3H SHL**Area **Lea County, NM**Well **No. 3H**Field **(State HH) Sec 36, T19S, R32E**Wellbore **No. 3H PWB**Facility **State HH No. 3H**

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9000.00†	0.000	91.131	9000.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9100.00†	0.000	91.131	9100.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9200.00†	0.000	91.131	9200.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9300.00†	0.000	91.131	9300.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9400.00†	0.000	91.131	9400.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9500.00†	0.000	91.131	9500.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9600.00†	0.000	91.131	9600.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9700.00†	0.000	91.131	9700.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	
9754.10	0.000	91.131	9754.10	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	Est KOP
9800.00†	13.770	91.131	9799.56	5.49	-0.11	5.49	727962.29	590733.89	32°37'21.053"N	103°43'37.806"W	30.00	
9900.00†	43.770	91.131	9886.22	53.07	-1.05	53.06	728009.86	590732.95	32°37'21.041"N	103°43'37.249"W	30.00	
10000.00†	73.770	91.131	9937.47	137.61	-2.72	137.58	728094.37	590731.28	32°37'21.020"N	103°43'36.261"W	30.00	
10056.05	90.584	91.131	9945.08	192.93	-3.81	192.89	728149.68	590730.19	32°37'21.006"N	103°43'35.615"W	30.00	End of Curve
10100.00†	90.584	91.131	9944.63	236.88	-4.68	236.84	728193.62	590729.32	32°37'20.995"N	103°43'35.101"W	0.00	
10200.00†	90.584	91.131	9943.61	336.88	-6.65	336.81	728293.59	590727.35	32°37'20.970"N	103°43'33.932"W	0.00	
10300.00†	90.584	91.131	9942.59	436.87	-8.63	436.79	728393.56	590725.38	32°37'20.944"N	103°43'32.764"W	0.00	
10400.00†	90.584	91.131	9941.57	536.87	-10.60	536.76	728493.53	590723.40	32°37'20.919"N	103°43'31.595"W	0.00	
10500.00†	90.584	91.131	9940.55	636.86	-12.57	636.74	728593.50	590721.43	32°37'20.894"N	103°43'30.426"W	0.00	
10600.00†	90.584	91.131	9939.54	736.86	-14.55	736.71	728693.47	590719.45	32°37'20.869"N	103°43'29.257"W	0.00	
10700.00†	90.584	91.131	9938.52	836.85	-16.52	836.69	728793.45	590717.48	32°37'20.844"N	103°43'28.088"W	0.00	
10800.00†	90.584	91.131	9937.50	936.85	-18.50	936.66	728893.42	590715.50	32°37'20.818"N	103°43'26.920"W	0.00	
10900.00†	90.584	91.131	9936.48	1036.84	-20.47	1036.64	728993.39	590713.53	32°37'20.793"N	103°43'25.751"W	0.00	
11000.00†	90.584	91.131	9935.46	1136.84	-22.44	1136.62	729093.36	590711.56	32°37'20.768"N	103°43'24.582"W	0.00	
11100.00†	90.584	91.131	9934.44	1236.83	-24.42	1236.59	729193.33	590709.58	32°37'20.743"N	103°43'23.413"W	0.00	
11200.00†	90.584	91.131	9933.42	1336.83	-26.39	1336.57	729293.30	590707.61	32°37'20.718"N	103°43'22.245"W	0.00	
11300.00†	90.584	91.131	9932.41	1436.82	-28.37	1436.54	729393.27	590705.63	32°37'20.692"N	103°43'21.076"W	0.00	
11400.00†	90.584	91.131	9931.39	1536.82	-30.34	1536.52	729493.24	590703.66	32°37'20.667"N	103°43'19.907"W	0.00	
11500.00†	90.584	91.131	9930.37	1636.81	-32.32	1636.49	729593.21	590701.69	32°37'20.642"N	103°43'18.738"W	0.00	
11600.00†	90.584	91.131	9929.35	1736.81	-34.29	1736.47	729693.18	590699.71	32°37'20.617"N	103°43'17.570"W	0.00	
11700.00†	90.584	91.131	9928.33	1836.80	-36.26	1836.44	729793.15	590697.74	32°37'20.591"N	103°43'16.401"W	0.00	



Planned Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co.**
Area **Lea County, NM**
Field **(State HH) Sec 36, T19S, R32E**
Facility **State HH No. 3H**

Slot **No. 3H SHL**
Well **No. 3H**
Wellbore **No. 3H PWB**

WELLPATH DATA (148 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
11800.00†	90.584	91.131	9927.31	1936.80	-38.24	1936.42	729893.12	590695.76	32°37'20.566"N	103°43'15.232"W	0.00	
11900.00†	90.584	91.131	9926.29	2036.79	-40.21	2036.39	729993.09	590693.79	32°37'20.541"N	103°43'14.063"W	0.00	
12000.00†	90.584	91.131	9925.28	2136.79	-42.19	2136.37	730093.06	590691.82	32°37'20.516"N	103°43'12.895"W	0.00	
12100.00†	90.584	91.131	9924.26	2236.78	-44.16	2236.34	730193.03	590689.84	32°37'20.491"N	103°43'11.726"W	0.00	
12200.00†	90.584	91.131	9923.24	2336.77	-46.14	2336.32	730293.00	590687.87	32°37'20.465"N	103°43'10.557"W	0.00	
12300.00†	90.584	91.131	9922.22	2436.77	-48.11	2436.29	730392.97	590685.89	32°37'20.440"N	103°43'09.388"W	0.00	
12400.00†	90.584	91.131	9921.20	2536.76	-50.08	2536.27	730492.94	590683.92	32°37'20.415"N	103°43'08.220"W	0.00	
12500.00†	90.584	91.131	9920.18	2636.76	-52.06	2636.25	730592.91	590681.94	32°37'20.390"N	103°43'07.051"W	0.00	
12600.00†	90.584	91.131	9919.16	2736.75	-54.03	2736.22	730692.88	590679.97	32°37'20.364"N	103°43'05.882"W	0.00	
12700.00†	90.584	91.131	9918.14	2836.75	-56.01	2836.20	730792.85	590678.00	32°37'20.339"N	103°43'04.713"W	0.00	
12800.00†	90.584	91.131	9917.13	2936.74	-57.98	2936.17	730892.82	590676.02	32°37'20.314"N	103°43'03.545"W	0.00	
12900.00†	90.584	91.131	9916.11	3036.74	-59.96	3036.15	730992.79	590674.05	32°37'20.288"N	103°43'02.376"W	0.00	
13000.00†	90.584	91.131	9915.09	3136.73	-61.93	3136.12	731092.76	590672.07	32°37'20.263"N	103°43'01.207"W	0.00	
13100.00†	90.584	91.131	9914.07	3236.73	-63.90	3236.10	731192.73	590670.10	32°37'20.238"N	103°43'00.038"W	0.00	
13200.00†	90.584	91.131	9913.05	3336.72	-65.88	3336.07	731292.70	590668.13	32°37'20.213"N	103°42'58.870"W	0.00	
13300.00†	90.584	91.131	9912.03	3436.72	-67.85	3436.05	731392.67	590666.15	32°37'20.187"N	103°42'57.701"W	0.00	
13400.00†	90.584	91.131	9911.01	3536.71	-69.83	3536.02	731492.64	590664.18	32°37'20.162"N	103°42'56.532"W	0.00	
13500.00†	90.584	91.131	9910.00	3636.71	-71.80	3636.00	731592.61	590662.20	32°37'20.137"N	103°42'55.363"W	0.00	
13600.00†	90.584	91.131	9908.98	3736.70	-73.77	3735.97	731692.58	590660.23	32°37'20.112"N	103°42'54.195"W	0.00	
13700.00†	90.584	91.131	9907.96	3836.70	-75.75	3835.95	731792.55	590658.26	32°37'20.086"N	103°42'53.026"W	0.00	
13800.00†	90.584	91.131	9906.94	3936.69	-77.72	3935.92	731892.52	590656.28	32°37'20.061"N	103°42'51.857"W	0.00	
13900.00†	90.584	91.131	9905.92	4036.69	-79.70	4035.90	731992.49	590654.31	32°37'20.036"N	103°42'50.688"W	0.00	
14000.00†	90.584	91.131	9904.90	4136.68	-81.67	4135.87	732092.46	590652.33	32°37'20.010"N	103°42'49.520"W	0.00	
14100.00†	90.584	91.131	9903.88	4236.68	-83.65	4235.85	732192.43	590650.36	32°37'19.985"N	103°42'48.351"W	0.00	
14200.00†	90.584	91.131	9902.87	4336.67	-85.62	4335.83	732292.40	590648.38	32°37'19.960"N	103°42'47.182"W	0.00	
14300.00†	90.584	91.131	9901.85	4436.67	-87.59	4435.80	732392.37	590646.41	32°37'19.934"N	103°42'46.013"W	0.00	
14400.00†	90.584	91.131	9900.83	4536.66	-89.57	4535.78	732492.34	590644.44	32°37'19.909"N	103°42'44.845"W	0.00	
14481.37	90.584	91.131	9900.00†	4618.02	-91.17	4617.12	732573.68	590642.83	32°37'19.889"N	103°42'43.894"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	Lea County, NM	Well	No. 3H
Field	(State HH) Sec 36, T19S, R32E	Wellbore	No. 3H PWB
Facility	State HH No. 3H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 3H PBHL	14481.37	9900.00	-91.17	4617.12	732573.68	590642.83	32°37'19.889"N	103°42'43.894"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	14481.37	NaviTrak (Standard)		No. 3H PWB