



Cimarex Energy Co.

Location: Lea County, NM
Field: (Tres Equis) Sec 6, T24S, R33E
Facility: Tres Equis State No. 13

Slot: No. 13 SHL
Well: No. 13
Wellbore: No. 13 PWB

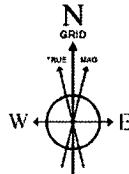


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0 00	0 000	179 641	0 00	0 00	0 00	0 00	0.00
Est KOP	9023 00	0 000	179 641	9023 00	0 00	0 00	0 00	0.00
EOC	9764 41	88 969	179 641	9500 39	-468 87	2 94	12 00	468 88
No 13 PBHL	13912 56	88 969	179 641	9575 00	-4616 26	28 90	0 00	4616 35

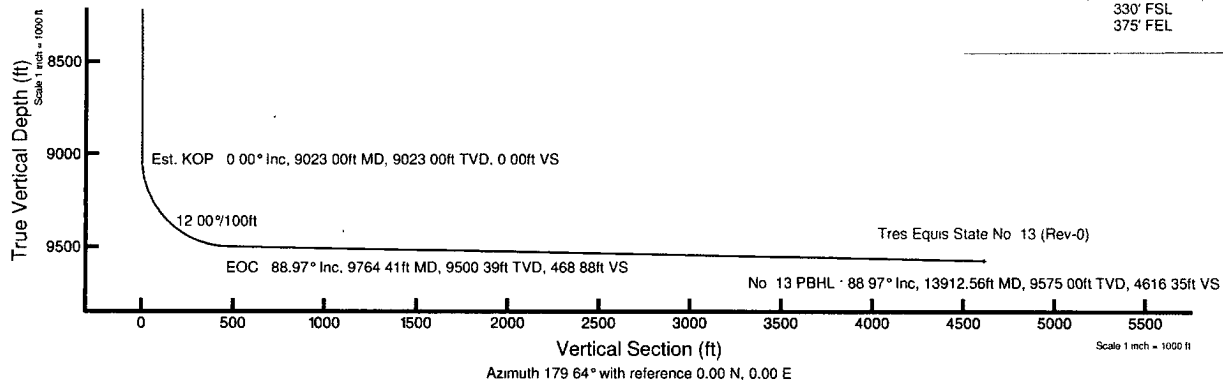
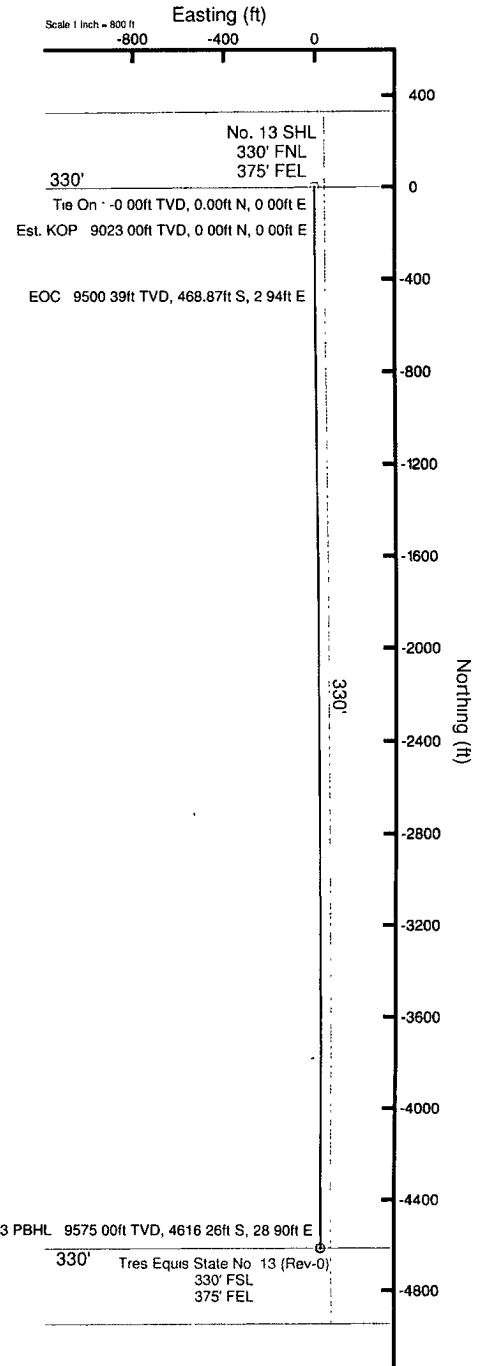
Plot reference wellpath is Rev-A 0

True vertical depths are referenced to Rig on No. 13 SHL (RT)	Grid System NAD83 / TM New Mexico SP Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 13 SHL (RT)	North Reference Gnd north
Rig on No. 13 SHL (RT) to Mean Sea Level 3656 feet	Scale True distance
Mean Sea Level to Mud line (At Slot No. 13 SHL) -3656 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by harkol on 4/9/2012



BGGM (1945 0 to 2013 0) Dip 60 15° Field 48551 4 nT
Magnetic North is 7 58 degrees East of True North (at 4/9/2012)
Grid North is 0 39 degrees East of True North
To correct azimuth from True to Grid subtract 0 39 degrees
To correct azimuth from Magnetic to Grid add 7 19 degrees

For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7 19 = 97 19



Azimuth 179 64° with reference 0.00 N, 0.00 E



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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 13 SHL
Area	Lea County, NM	Well	No. 13
Field	(Tres Equis) Sec 6, T24S, R33E	Wellbore	No. 13 PWB
Facility	Tres Equis State No. 13		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Harrkol
Scale	0.999967	Report Generated	4/9/2012 at 3:39:07 PM
Convergence at slot	0.39° East	Database/Source file	WA Midland/No._13_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W
Facility Reference Pt			766778.00	456569.10	32°15'11.084"N	103°36'14.674"W
Field Reference Pt			763911.80	456554.80	32°15'11.134"N	103°36'48.051"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 13 SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No. 13 SHL (RT) to Mean Sea Level	3656.00ft
Vertical Reference Pt	Rig on No. 13 SHL (RT)	Rig on No. 13 SHL (RT) to Mud Line at Slot (No. 13 SHL)	0.00ft
MD Reference Pt	Rig on No. 13 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.64°



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BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 13 SHL
Area	Lea County, NM	Well	No. 13
Field	(Tres Equis) Sec 6, T24S, R33E	Wellbore	No. 13 PWB
Facility	Tres Equis State No. 13		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	179.641	0.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Tie On
100.00†	0.000	179.641	100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
200.00†	0.000	179.641	200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
300.00†	0.000	179.641	300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
400.00†	0.000	179.641	400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
500.00†	0.000	179.641	500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
600.00†	0.000	179.641	600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
700.00†	0.000	179.641	700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
800.00†	0.000	179.641	800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
900.00†	0.000	179.641	900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1000.00†	0.000	179.641	1000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1100.00†	0.000	179.641	1100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1200.00†	0.000	179.641	1200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Rustler
1300.00†	0.000	179.641	1300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1400.00†	0.000	179.641	1400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1420.00†	0.000	179.641	1420.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Salt
1500.00†	0.000	179.641	1500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1600.00†	0.000	179.641	1600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1700.00†	0.000	179.641	1700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1800.00†	0.000	179.641	1800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
1900.00†	0.000	179.641	1900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2000.00†	0.000	179.641	2000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2100.00†	0.000	179.641	2100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2200.00†	0.000	179.641	2200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2300.00†	0.000	179.641	2300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2400.00†	0.000	179.641	2400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2500.00†	0.000	179.641	2500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2600.00†	0.000	179.641	2600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2700.00†	0.000	179.641	2700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2800.00†	0.000	179.641	2800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
2900.00†	0.000	179.641	2900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3000.00†	0.000	179.641	3000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3100.00†	0.000	179.641	3100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3200.00†	0.000	179.641	3200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3300.00†	0.000	179.641	3300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Castille
3400.00†	0.000	179.641	3400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3500.00†	0.000	179.641	3500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3600.00†	0.000	179.641	3600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3700.00†	0.000	179.641	3700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3800.00†	0.000	179.641	3800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
3900.00†	0.000	179.641	3900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4000.00†	0.000	179.641	4000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4100.00†	0.000	179.641	4100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4200.00†	0.000	179.641	4200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4300.00†	0.000	179.641	4300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 13 SHL
Area	Lea County, NM	Well	No. 13
Field	(Tres Equis) Sec 6, T24S, R33E	Wellbore	No. 13 PWB
Facility	Tres Equis State No. 13		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4400.00†	0.000	179.641	4400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4500.00†	0.000	179.641	4500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4600.00†	0.000	179.641	4600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4700.00†	0.000	179.641	4700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4800.00†	0.000	179.641	4800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
4900.00†	0.000	179.641	4900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5000.00†	0.000	179.641	5000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Delaware
5100.00†	0.000	179.641	5100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5200.00†	0.000	179.641	5200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5300.00†	0.000	179.641	5300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5400.00†	0.000	179.641	5400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5500.00†	0.000	179.641	5500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5600.00†	0.000	179.641	5600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5700.00†	0.000	179.641	5700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5800.00†	0.000	179.641	5800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
5900.00†	0.000	179.641	5900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6000.00†	0.000	179.641	6000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6100.00†	0.000	179.641	6100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6200.00†	0.000	179.641	6200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6300.00†	0.000	179.641	6300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6400.00†	0.000	179.641	6400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6500.00†	0.000	179.641	6500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6600.00†	0.000	179.641	6600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6700.00†	0.000	179.641	6700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6800.00†	0.000	179.641	6800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
6900.00†	0.000	179.641	6900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7000.00†	0.000	179.641	7000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7100.00†	0.000	179.641	7100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7200.00†	0.000	179.641	7200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7300.00†	0.000	179.641	7300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7400.00†	0.000	179.641	7400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7500.00†	0.000	179.641	7500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7600.00†	0.000	179.641	7600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7700.00†	0.000	179.641	7700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7800.00†	0.000	179.641	7800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
7900.00†	0.000	179.641	7900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8000.00†	0.000	179.641	8000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8100.00†	0.000	179.641	8100.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8200.00†	0.000	179.641	8200.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8300.00†	0.000	179.641	8300.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8400.00†	0.000	179.641	8400.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8500.00†	0.000	179.641	8500.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8575.00†	0.000	179.641	8575.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Basal Brushy Canyon
8600.00†	0.000	179.641	8600.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8700.00†	0.000	179.641	8700.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	



Planned Wellpath Report

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BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 13 SHL
Area	Lea County, NM	Well	No. 13
Field	(Tres Equis) Sec 6, T24S, R33E	Wellbore	No. 13 PWB
Facility	Tres Equis State No. 13		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8800.00†	0.000	179.641	8800.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
8900.00†	0.000	179.641	8900.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Bone Spring
9000.00†	0.000	179.641	9000.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	
9023.00	0.000	179.641	9023.00	0.00	0.00	0.00	766778.00	456569.10	32°15'11.084"N	103°36'14.674"W	0.00	Est. KOP
9100.00†	9.240	179.641	9099.67	6.20	-6.20	0.04	766778.04	456562.90	32°15'11.023"N	103°36'14.674"W	12.00	
9200.00†	21.240	179.641	9195.97	32.43	-32.43	0.20	766778.20	456536.67	32°15'10.763"N	103°36'14.675"W	12.00	
9300.00†	33.240	179.641	9284.72	78.12	-78.12	0.49	766778.49	456490.98	32°15'10.311"N	103°36'14.675"W	12.00	
9318.51†	35.461	179.641	9300.00	88.56	-88.56	0.55	766778.55	456480.54	32°15'10.208"N	103°36'14.675"W	12.00	Upper Bone Spring Shale
9400.00†	45.240	179.641	9362.03	141.26	-141.26	0.88	766778.88	456427.84	32°15'09.687"N	103°36'14.675"W	12.00	
9500.00†	57.240	179.641	9424.52	219.10	-219.09	1.37	766779.37	456350.01	32°15'08.916"N	103°36'14.676"W	12.00	
9600.00†	69.240	179.641	9469.46	308.23	-308.22	1.93	766779.93	456260.89	32°15'08.035"N	103°36'14.676"W	12.00	
9700.00†	81.240	179.641	9494.90	404.75	-404.74	2.53	766780.53	456164.37	32°15'07.079"N	103°36'14.677"W	12.00	
9764.41	88.969	179.641	9500.39	468.88	-468.87	2.94	766780.94	456100.25	32°15'06.445"N	103°36'14.677"W	12.00	EOC
9800.00†	88.969	179.641	9501.03	504.46	-504.45	3.16	766781.16	456064.67	32°15'06.093"N	103°36'14.678"W	0.00	
9900.00†	88.969	179.641	9502.83	604.44	-604.43	3.78	766781.78	455964.69	32°15'05.103"N	103°36'14.678"W	0.00	
10000.00†	88.969	179.641	9504.63	704.43	-704.41	4.41	766782.41	455864.71	32°15'04.114"N	103°36'14.679"W	0.00	
10100.00†	88.969	179.641	9506.42	804.41	-804.40	5.04	766783.04	455764.73	32°15'03.125"N	103°36'14.679"W	0.00	
10200.00†	88.969	179.641	9508.22	904.39	-904.38	5.66	766783.66	455664.75	32°15'02.135"N	103°36'14.680"W	0.00	
10300.00†	88.969	179.641	9510.02	1004.38	-1004.36	6.29	766784.29	455564.78	32°15'01.146"N	103°36'14.681"W	0.00	
10400.00†	88.969	179.641	9511.82	1104.36	-1104.34	6.91	766784.91	455464.80	32°15'00.157"N	103°36'14.681"W	0.00	
10500.00†	88.969	179.641	9513.62	1204.35	-1204.32	7.54	766785.54	455364.82	32°14'59.167"N	103°36'14.682"W	0.00	
10600.00†	88.969	179.641	9515.42	1304.33	-1304.30	8.17	766786.17	455264.84	32°14'58.178"N	103°36'14.682"W	0.00	
10700.00†	88.969	179.641	9517.22	1404.31	-1404.29	8.79	766786.79	455164.86	32°14'57.189"N	103°36'14.683"W	0.00	
10800.00†	88.969	179.641	9519.01	1504.30	-1504.27	9.42	766787.42	455064.88	32°14'56.199"N	103°36'14.684"W	0.00	
10900.00†	88.969	179.641	9520.81	1604.28	-1604.25	10.04	766788.04	454964.91	32°14'55.210"N	103°36'14.684"W	0.00	
11000.00†	88.969	179.641	9522.61	1704.27	-1704.23	10.67	766788.67	454864.93	32°14'54.221"N	103°36'14.685"W	0.00	
11100.00†	88.969	179.641	9524.41	1804.25	-1804.21	11.30	766789.30	454764.95	32°14'53.231"N	103°36'14.686"W	0.00	
11200.00†	88.969	179.641	9526.21	1904.23	-1904.20	11.92	766789.92	454664.97	32°14'52.242"N	103°36'14.686"W	0.00	
11300.00†	88.969	179.641	9528.01	2004.22	-2004.18	12.55	766790.55	454564.99	32°14'51.252"N	103°36'14.687"W	0.00	
11400.00†	88.969	179.641	9529.81	2104.20	-2104.16	13.17	766791.17	454465.01	32°14'50.263"N	103°36'14.687"W	0.00	
11500.00†	88.969	179.641	9531.61	2204.18	-2204.14	13.80	766791.80	454365.04	32°14'49.274"N	103°36'14.688"W	0.00	
11600.00†	88.969	179.641	9533.40	2304.17	-2304.12	14.43	766792.42	454265.06	32°14'48.284"N	103°36'14.689"W	0.00	
11700.00†	88.969	179.641	9535.20	2404.15	-2404.11	15.05	766793.05	454165.08	32°14'47.295"N	103°36'14.689"W	0.00	
11800.00†	88.969	179.641	9537.00	2504.14	-2504.09	15.68	766793.68	454065.10	32°14'46.306"N	103°36'14.690"W	0.00	
11900.00†	88.969	179.641	9538.80	2604.12	-2604.07	16.30	766794.30	453965.12	32°14'45.316"N	103°36'14.691"W	0.00	
12000.00†	88.969	179.641	9540.60	2704.10	-2704.05	16.93	766794.93	453865.14	32°14'44.327"N	103°36'14.691"W	0.00	
12100.00†	88.969	179.641	9542.40	2804.09	-2804.03	17.56	766795.55	453765.16	32°14'43.338"N	103°36'14.692"W	0.00	
12200.00†	88.969	179.641	9544.20	2904.07	-2904.01	18.18	766796.18	453665.19	32°14'42.348"N	103°36'14.692"W	0.00	
12300.00†	88.969	179.641	9546.00	3004.06	-3004.00	18.81	766796.81	453565.21	32°14'41.359"N	103°36'14.693"W	0.00	
12400.00†	88.969	179.641	9547.79	3104.04	-3103.98	19.43	766797.43	453465.23	32°14'40.370"N	103°36'14.694"W	0.00	
12500.00†	88.969	179.641	9549.59	3204.02	-3203.96	20.06	766798.06	453365.25	32°14'39.380"N	103°36'14.694"W	0.00	
12600.00†	88.969	179.641	9551.39	3304.01	-3303.94	20.68	766798.68	453265.27	32°14'38.391"N	103°36'14.695"W	0.00	
12700.00†	88.969	179.641	9553.19	3403.99	-3403.92	21.31	766799.31	453165.29	32°14'37.402"N	103°36'14.695"W	0.00	
12800.00†	88.969	179.641	9554.99	3503.97	-3503.91	21.94	766799.94	453065.32	32°14'36.412"N	103°36'14.696"W	0.00	
12900.00†	88.969	179.641	9556.79	3603.96	-3603.89	22.56	766800.56	452965.34	32°14'35.423"N	103°36'14.697"W	0.00	



Planned Wellpath Report

Rev-A.0
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 13 SHL
Area	Lea County, NM	Well	No. 13
Field	(Tres Equis) Sec 6, T24S, R33E	Wellbore	No. 13 PWB
Facility	Tres Equis State No. 13		

WELLPATH DATA (146 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13000.00†	88.969	179.641	9558.59	3703.94	-3703.87	23.19	766801.19	452865.36	32°14'34.434"N	103°36'14.697"W	0.00	
13100.00†	88.969	179.641	9560.38	3803.93	-3803.85	23.81	766801.81	452765.38	32°14'33.444"N	103°36'14.698"W	0.00	
13200.00†	88.969	179.641	9562.18	3903.91	-3903.83	24.44	766802.44	452665.40	32°14'32.455"N	103°36'14.699"W	0.00	
13300.00†	88.969	179.641	9563.98	4003.89	-4003.81	25.07	766803.07	452565.42	32°14'31.465"N	103°36'14.699"W	0.00	
13400.00†	88.969	179.641	9565.78	4103.88	-4103.80	25.69	766803.69	452465.45	32°14'30.476"N	103°36'14.700"W	0.00	
13500.00†	88.969	179.641	9567.58	4203.86	-4203.78	26.32	766804.32	452365.47	32°14'29.487"N	103°36'14.700"W	0.00	
13600.00†	88.969	179.641	9569.38	4303.84	-4303.76	26.94	766804.94	452265.49	32°14'28.497"N	103°36'14.701"W	0.00	
13700.00†	88.969	179.641	9571.18	4403.83	-4403.74	27.57	766805.57	452165.51	32°14'27.508"N	103°36'14.702"W	0.00	
13800.00†	88.969	179.641	9572.98	4503.81	-4503.72	28.20	766806.20	452065.53	32°14'26.519"N	103°36'14.702"W	0.00	
13900.00†	88.969	179.641	9574.77	4603.80	-4603.71	28.82	766806.82	451965.55	32°14'25.529"N	103°36'14.703"W	0.00	
13912.56	88.969	179.641	9575.00†	4616.35	-4616.26	28.90	766806.90	451953.00	32°14'25.405"N	103°36'14.703"W	0.00	No. 13 PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) Tres Equis State No. 13 (Rev-0)	13912.56	9575.00	-4616.26	28.90	766806.90	451953.00	32°14'25.405"N	103°36'14.703"W	point

SURVEY PROGRAM - Ref Wellbore: No. 13 PWB Ref Wellpath: Rev-A.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	13912.56	NaviTrak (Standard)		No. 13 PWB