

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

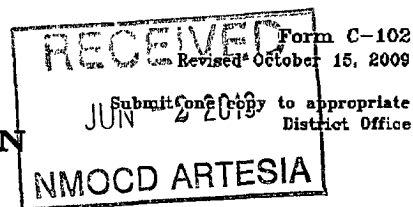
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505



WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37873	Pool Code 60660	Pool Name Turkey Track; Bone Spring Wildcat
Property Code	Property Name PARKWAY "11 STATE COM	Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3380'

Surface Location

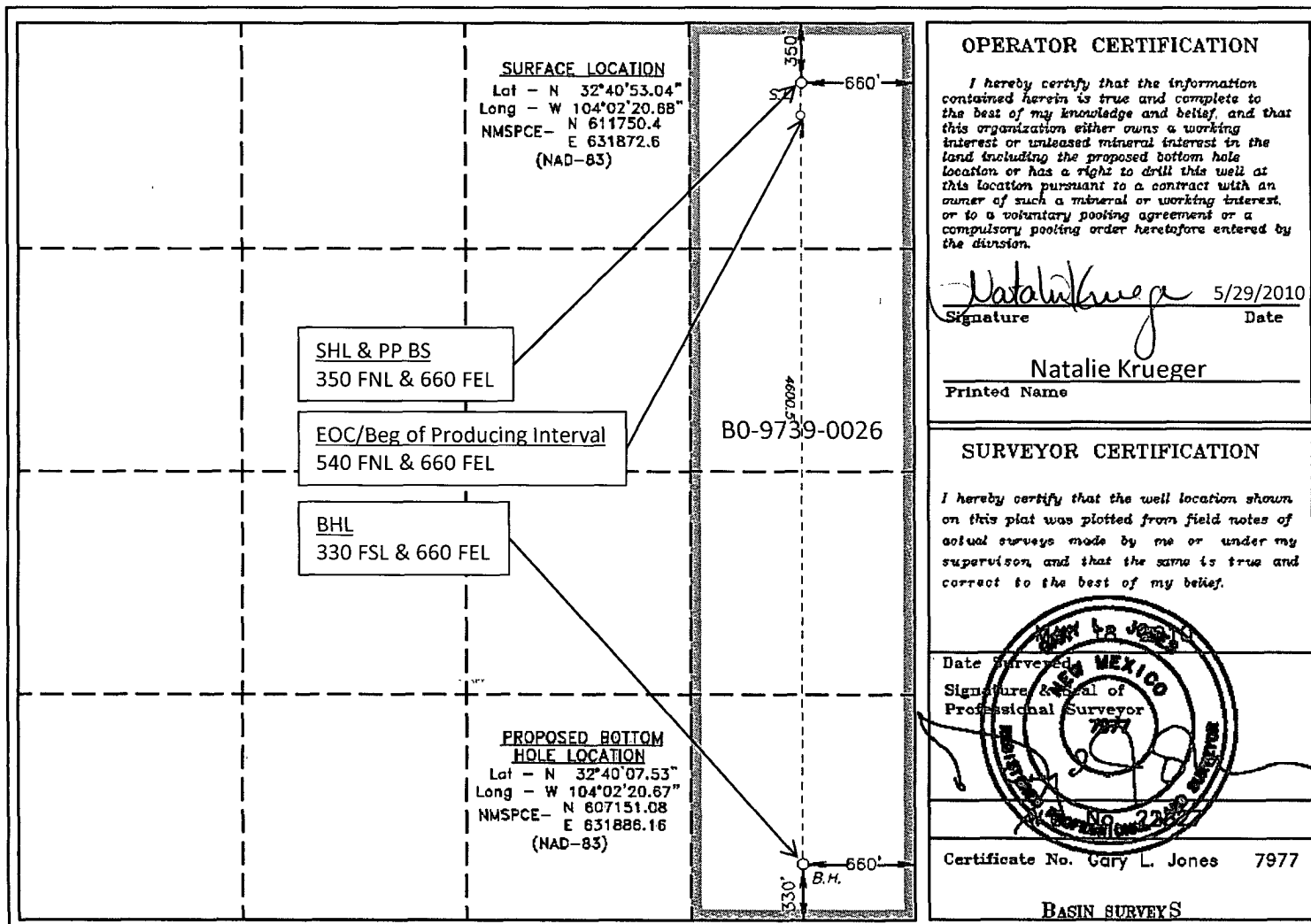
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	11	19 S	29 E		350	NORTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	11	19 S	29 E		330	SOUTH	660	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Natalie Krueger 5/29/2010
Signature Date
Natalie Krueger
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Surveyed
Signature & Seal of Professional Surveyor
Certificate No. Gary L. Jones 7977
BASIN SURVEYS

Mud, Casing, Cementing, and BOP Attachment
Parkway 11 State Com No. 1
Cimarex Energy Co. of Colorado
Unit A, Section 11
T19S-R29E, Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

Location: SHL 350 FNL & 660 FEL
BHL 330 FSL & 660 FEL

Elevation above sea level: 3380' GR

Proposed drilling depth: Pilot Hole 8100' Lateral MD 12448' Lateral TVD 7950'

Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 450'	8.4 - 8.6	28	NC	FW
0' to 2500'	10.0	30-32	NC	Brine water
0' to 8100'	8.4 - 9.5	30-32	NC	FW, brine
7739' to 12236'	8.4	28-32	NC	2% KCl

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Proposed drilling Plan

Drill pilot hole to 8100.' Set 7" to 7679' and then fiberglass tubing from 7679' to 8100.' Cement to 2300' and kick off 6.125" hole @ 7739.' Drill to TD @ 12448' and put in PEAK completion liner from TOL @ 7639' to TD. No cement required on PEAK liner.

Accepted for record - NMOCD

Mud, Casing, Cementing, and BOP Attachment
Parkway 11 State Com No. 1
 Cimarex Energy Co. of Colorado
 Unit O, Section 15
 T19S-R29E, Eddy County, NM

Casing & Cementing Plan:

String	Hole Size	Depth		Casing OD		Weight	Collar	Grade
Surface	17½"	0'	to 450'	New	13¾"	48#	STC	H-40
Intermediate	12¼"	0'	to 2500'	New	9⅝"	40#	LTC	J/K-55
Production	8¾"	0'	to 7679'	New	7"	26#	LTC	P-110
Fiberglass	8¾"	7679'	to 8100'	New	2⅞"	2.18#		IJ
Lateral Pt. 1	6⅝"	7639'	to 12448'	New	4½"	11.6#	LTC	P-110

Cementing Plan:

Surface Lead: 260 sk Premium Plus + 2% CaCl 14.8 ppg 1.35 yld
Tail: 260 sk Premium Plus + 2% CaCl 14.8 ppg 1.35 yld
TOC Surface

Intermediate Lead: 500 sks EconoCem + 2% Cacl + 3% salt + 3 lbm gilsonite 2.06 ft3/sk 12.5 ppg
Tail: 215 sks HalCem + 1% CaCl 1.34 ft3/sk 14.8 ppg
TOC Surface

Production Lead: 340 sx EconoCem + 5lbm/sk Gilsonite 2.48 cf/sk 11.9 ppg
Tail: 420 sx Halcem 15.6 ppg 1.19 cf/sk
TOC 2300'

Lateral No cement needed. Peak completion assembly.

Fresh water zones will be protected by setting 13¾" casing at 450 and cementing to surface. Hydrocarbon zones will be protected by setting 9⅝" casing at 2500' and cementing to surface, and by setting 7" casing at 7679' and fiberglass to 8100' and cementing to 2300.'

<u>Collapse Factor</u>	<u>Burst Factor</u>	<u>Tension Factor</u>
1.125	1.125	1.6

Pressure control Equipment:

Exhibit "E". A 13¾" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000.' A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be nipped up and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling. From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

We are requesting a variance for testing the 13¾" surface casing from Onshore Order No. 2, which states that all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500 psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. We are requesting to test the 13¾" casing to 1000 psi using rig pumps. The BOP will be tested to 3000 psi by an independent service company.

Cimarex Energy Co.

Location: Eddy County, NM

Field: (Parkway) Sec 15, T19S, R29E

Facility: Parkway St 11 Com No. 1H

Slot: No 1H SHL

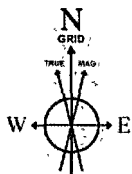
Well: No. 1H

Wellbore: No. 1H 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	179 831	0 00	0 00	0 00	0 00	0 00
Est KOP	7739 10	0 000	179 831	7739 10	0 00	0 00	0 00	0 00
End of Curve	8038.24	89 741	179 831	7930.08	-190.12	0 56	30 00	190 12
No 1H PBHL	12447.88	89 741	179 831	7950 00	-4599 70	13 56	0 00	4599 72

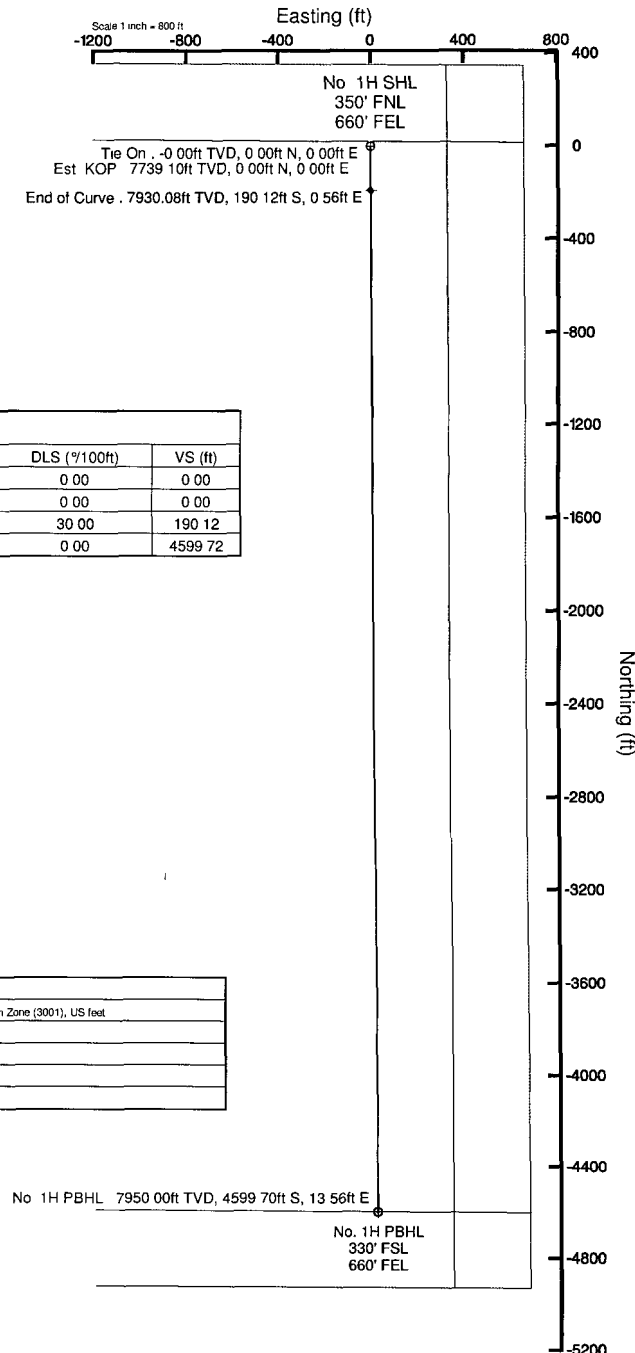


BGGM (1945 0 to 2011 0) Dip 60.57° Field 49007.8 nT
Magnetic North is 8.01 degrees East of True North (at 5/28/2010)
Grid North is 0.16 degrees East of True North
To correct azimuth from True to Grid subtract 0.16 degrees
To correct azimuth from Magnetic to Grid add 7.85 degrees

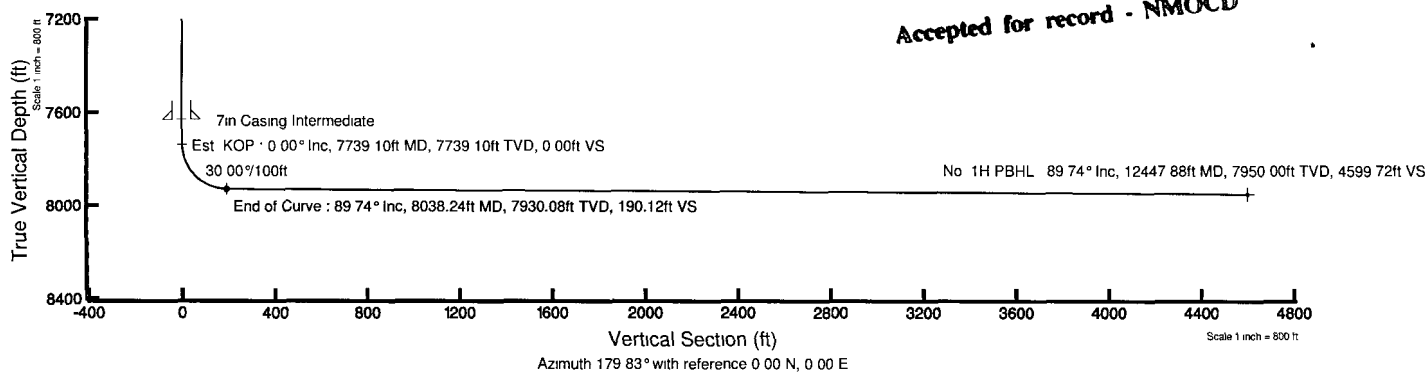
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.85 = 97.85

Plot reference wellpath is Prelim 1

True vertical depths are referenced to Rig on No 1H SHL (GL)	Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No 1H SHL (GL)	North Reference Grid north
Rig on No 1H SHL (GL) to Mean Sea Level 3380 feet	Scale True distance
Mean Sea Level to Mud line (Facility Parkway St 11 Com No 1H) -3380 feet	Depths are in feet
Coordinates are in feet referenced to Slot Location	Created by Roland Flores on 5/28/2010



Accepted for record - NMOCD





Planned Wellpath Report

Prelim 1
Page 1 of 6



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 1H PWB
Facility	Parkway St 11 Com No. 1H		

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	0.999918	Report Generated	5/28/2010 at 4:23:02 PM
Convergence at slot	0.16° East	Database/Source file	WA_Midland/No. 1H_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	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W
Facility Reference Pt			631872.60	611750.40	32°40'53.044"N	104°02'20.677"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. 1H SHL (GL) to Ground Level	0.00ft
Horizontal Reference Pt	Slot Location	Rig on No. 1H SHL (GL) to Mean Sea Level	3380.00ft
Vertical Reference Pt	Rig on No. 1H SHL (GL)	Ground Level to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (GL)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.83°

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Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 1H PWB
Facility	Parkway St 11 Com No. 1H		

WELLPATH DATA (128 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	179.831	0.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	Tie On
100.00†	0.000	179.831	100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
200.00†	0.000	179.831	200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
300.00†	0.000	179.831	300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
400.00†	0.000	179.831	400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
500.00†	0.000	179.831	500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
600.00†	0.000	179.831	600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
700.00†	0.000	179.831	700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
800.00†	0.000	179.831	800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
900.00†	0.000	179.831	900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1000.00†	0.000	179.831	1000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1100.00†	0.000	179.831	1100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1200.00†	0.000	179.831	1200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1300.00†	0.000	179.831	1300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1400.00†	0.000	179.831	1400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1500.00†	0.000	179.831	1500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1600.00†	0.000	179.831	1600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1700.00†	0.000	179.831	1700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1800.00†	0.000	179.831	1800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
1900.00†	0.000	179.831	1900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2000.00†	0.000	179.831	2000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2100.00†	0.000	179.831	2100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2200.00†	0.000	179.831	2200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2300.00†	0.000	179.831	2300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2400.00†	0.000	179.831	2400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2500.00†	0.000	179.831	2500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2600.00†	0.000	179.831	2600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2700.00†	0.000	179.831	2700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2800.00†	0.000	179.831	2800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
2900.00†	0.000	179.831	2900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	

Accepted for record - NMOCD



Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 1H PWB
Facility	Parkway St 11 Com No. 1H		

WELLPATH DATA (128 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	179.831	3000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3100.00†	0.000	179.831	3100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3200.00†	0.000	179.831	3200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3300.00†	0.000	179.831	3300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3400.00†	0.000	179.831	3400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3500.00†	0.000	179.831	3500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3600.00†	0.000	179.831	3600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3700.00†	0.000	179.831	3700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3800.00†	0.000	179.831	3800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
3900.00†	0.000	179.831	3900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4000.00†	0.000	179.831	4000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4100.00†	0.000	179.831	4100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4200.00†	0.000	179.831	4200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4300.00†	0.000	179.831	4300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4400.00†	0.000	179.831	4400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4500.00†	0.000	179.831	4500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4600.00†	0.000	179.831	4600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4700.00†	0.000	179.831	4700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4800.00†	0.000	179.831	4800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
4900.00†	0.000	179.831	4900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5000.00†	0.000	179.831	5000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5100.00†	0.000	179.831	5100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5200.00†	0.000	179.831	5200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5300.00†	0.000	179.831	5300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5400.00†	0.000	179.831	5400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5500.00†	0.000	179.831	5500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5600.00†	0.000	179.831	5600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5700.00†	0.000	179.831	5700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5800.00†	0.000	179.831	5800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
5900.00†	0.000	179.831	5900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	

Accepted for record - NMOCD



Planned Wellpath Report

Prelim 1
Page 4 of 6



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 1H PWB
Facility	Parkway St 11 Com No. 1H		

WELLPATH DATA (128 stations) † = interpolated/extrapolated station												Comments
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]	
6000.00†	0.000	179.831	6000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6100.00†	0.000	179.831	6100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6200.00†	0.000	179.831	6200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6300.00†	0.000	179.831	6300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6400.00†	0.000	179.831	6400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6500.00†	0.000	179.831	6500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6600.00†	0.000	179.831	6600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6700.00†	0.000	179.831	6700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6800.00†	0.000	179.831	6800.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
6900.00†	0.000	179.831	6900.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7000.00†	0.000	179.831	7000.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7100.00†	0.000	179.831	7100.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7200.00†	0.000	179.831	7200.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7300.00†	0.000	179.831	7300.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7400.00†	0.000	179.831	7400.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7500.00†	0.000	179.831	7500.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7600.00†	0.000	179.831	7600.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7700.00†	0.000	179.831	7700.00	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	
7739.10	0.000	179.831	7739.10	0.00	0.00	0.00	631872.60	611750.40	32°40'53.044"N	104°02'20.677"W	0.00	Est KOP
7800.00†	18.270	179.831	7798.97	9.63	-9.63	0.03	631872.63	611740.77	32°40'52.949"N	104°02'20.677"W	30.00	
7900.00†	48.270	179.831	7881.63	63.86	-63.86	0.19	631872.79	611686.54	32°40'52.412"N	104°02'20.677"W	30.00	
8000.00†	78.270	179.831	7926.10	152.16	-152.16	0.45	631873.05	611598.25	32°40'51.538"N	104°02'20.677"W	30.00	
8038.24	89.741	179.831	7930.08	190.12	-190.12	0.56	631873.16	611560.29	32°40'51.163"N	104°02'20.677"W	30.00	End of Curve
8100.00†	89.741	179.831	7930.36	251.89	-251.88	0.74	631873.34	611498.54	32°40'50.552"N	104°02'20.677"W	0.00	
8200.00†	89.741	179.831	7930.81	351.88	-351.88	1.04	631873.64	611398.55	32°40'49.562"N	104°02'20.676"W	0.00	
8300.00†	89.741	179.831	7931.27	451.88	-451.88	1.33	631873.93	611298.56	32°40'48.573"N	104°02'20.676"W	0.00	
8400.00†	89.741	179.831	7931.72	551.88	-551.88	1.63	631874.23	611198.57	32°40'47.583"N	104°02'20.676"W	0.00	
8500.00†	89.741	179.831	7932.17	651.88	-651.88	1.92	631874.52	611098.58	32°40'46.594"N	104°02'20.676"W	0.00	
8600.00†	89.741	179.831	7932.62	751.88	-751.88	2.22	631874.82	610998.59	32°40'45.604"N	104°02'20.676"W	0.00	
8700.00†	89.741	179.831	7933.07	851.88	-851.88	2.51	631875.11	610898.60	32°40'44.615"N	104°02'20.675"W	0.00	

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Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 1H PWB
Facility	Parkway St 11 Com No. 1H		

WELLPATH DATA (128 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
8800.00†	89.741	179.831	7933.52	951.88	-951.87	2.81	631875.41	610798.61	32°40'43.626"N	104°02'20.675"W	0.00	
8900.00†	89.741	179.831	7933.98	1051.88	-1051.87	3.10	631875.70	610698.62	32°40'42.636"N	104°02'20.675"W	0.00	
9000.00†	89.741	179.831	7934.43	1151.88	-1151.87	3.40	631876.00	610598.63	32°40'41.647"N	104°02'20.675"W	0.00	
9100.00†	89.741	179.831	7934.88	1251.88	-1251.87	3.69	631876.29	610498.63	32°40'40.657"N	104°02'20.674"W	0.00	
9200.00†	89.741	179.831	7935.33	1351.87	-1351.87	3.99	631876.59	610398.64	32°40'39.668"N	104°02'20.674"W	0.00	
9300.00†	89.741	179.831	7935.78	1451.87	-1451.87	4.28	631876.88	610298.65	32°40'38.678"N	104°02'20.674"W	0.00	
9400.00†	89.741	179.831	7936.23	1551.87	-1551.87	4.58	631877.17	610198.66	32°40'37.689"N	104°02'20.674"W	0.00	
9500.00†	89.741	179.831	7936.69	1651.87	-1651.86	4.87	631877.47	610098.67	32°40'36.700"N	104°02'20.674"W	0.00	
9600.00†	89.741	179.831	7937.14	1751.87	-1751.86	5.16	631877.76	609998.68	32°40'35.710"N	104°02'20.673"W	0.00	
9700.00†	89.741	179.831	7937.59	1851.87	-1851.86	5.46	631878.06	609898.69	32°40'34.721"N	104°02'20.673"W	0.00	
9800.00†	89.741	179.831	7938.04	1951.87	-1951.86	5.75	631878.35	609798.70	32°40'33.731"N	104°02'20.673"W	0.00	
9900.00†	89.741	179.831	7938.49	2051.87	-2051.86	6.05	631878.65	609698.71	32°40'32.742"N	104°02'20.673"W	0.00	
10000.00†	89.741	179.831	7938.94	2151.87	-2151.86	6.34	631878.94	609598.72	32°40'31.752"N	104°02'20.673"W	0.00	
10100.00†	89.741	179.831	7939.40	2251.86	-2251.86	6.64	631879.24	609498.73	32°40'30.763"N	104°02'20.672"W	0.00	
10200.00†	89.741	179.831	7939.85	2351.86	-2351.85	6.93	631879.53	609398.74	32°40'29.774"N	104°02'20.672"W	0.00	
10300.00†	89.741	179.831	7940.30	2451.86	-2451.85	7.23	631879.83	609298.75	32°40'28.784"N	104°02'20.672"W	0.00	
10400.00†	89.741	179.831	7940.75	2551.86	-2551.85	7.52	631880.12	609198.76	32°40'27.795"N	104°02'20.672"W	0.00	
10500.00†	89.741	179.831	7941.20	2651.86	-2651.85	7.82	631880.42	609098.77	32°40'26.805"N	104°02'20.672"W	0.00	
10600.00†	89.741	179.831	7941.65	2751.86	-2751.85	8.11	631880.71	608998.78	32°40'25.816"N	104°02'20.671"W	0.00	
10700.00†	89.741	179.831	7942.11	2851.86	-2851.85	8.41	631881.01	608898.79	32°40'24.826"N	104°02'20.671"W	0.00	
10800.00†	89.741	179.831	7942.56	2951.86	-2951.84	8.70	631881.30	608798.80	32°40'23.837"N	104°02'20.671"W	0.00	
10900.00†	89.741	179.831	7943.01	3051.86	-3051.84	9.00	631881.60	608698.81	32°40'22.848"N	104°02'20.671"W	0.00	
11000.00†	89.741	179.831	7943.46	3151.86	-3151.84	9.29	631881.89	608598.82	32°40'21.858"N	104°02'20.671"W	0.00	
11100.00†	89.741	179.831	7943.91	3251.85	-3251.84	9.59	631882.19	608498.83	32°40'20.869"N	104°02'20.670"W	0.00	
11200.00†	89.741	179.831	7944.36	3351.85	-3351.84	9.88	631882.48	608398.84	32°40'19.879"N	104°02'20.670"W	0.00	
11300.00†	89.741	179.831	7944.82	3451.85	-3451.84	10.18	631882.78	608298.85	32°40'18.890"N	104°02'20.670"W	0.00	
11400.00†	89.741	179.831	7945.27	3551.85	-3551.84	10.47	631883.07	608198.86	32°40'17.900"N	104°02'20.670"W	0.00	
11500.00†	89.741	179.831	7945.72	3651.85	-3651.83	10.77	631883.37	608098.87	32°40'16.911"N	104°02'20.670"W	0.00	
11600.00†	89.741	179.831	7946.17	3751.85	-3751.83	11.06	631883.66	607998.88	32°40'15.921"N	104°02'20.669"W	0.00	
11700.00†	89.741	179.831	7946.62	3851.85	-3851.83	11.36	631883.96	607898.89	32°40'14.932"N	104°02'20.669"W	0.00	

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Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 1H PWB
Facility	Parkway St 11 Com No. 1H		

WELLPATH DATA (128 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†	89.741	179.831	7947.07	3951.85	-3951.83	11.65	631884.25	607798.90	32°40'13.943"N	104°02'20.669"W	0.00	
11900.00†	89.741	179.831	7947.53	4051.85	-4051.83	11.95	631884.54	607698.91	32°40'12.953"N	104°02'20.669"W	0.00	
12000.00†	89.741	179.831	7947.98	4151.85	-4151.83	12.24	631884.84	607598.92	32°40'11.964"N	104°02'20.669"W	0.00	
12100.00†	89.741	179.831	7948.43	4251.84	-4251.83	12.54	631885.13	607498.93	32°40'10.974"N	104°02'20.668"W	0.00	
12200.00†	89.741	179.831	7948.88	4351.84	-4351.82	12.83	631885.43	607398.94	32°40'09.985"N	104°02'20.668"W	0.00	
12300.00†	89.741	179.831	7949.33	4451.84	-4451.82	13.13	631885.72	607298.95	32°40'08.995"N	104°02'20.668"W	0.00	
12400.00†	89.741	179.831	7949.78	4551.84	-4551.82	13.42	631886.02	607198.96	32°40'08.006"N	104°02'20.668"W	0.00	
12447.88	89.741	179.831	7950.00†	4599.72	-4599.70	13.56	631886.16	607151.08	32°40'07.532"N	104°02'20.668"W	0.00	No. 1H PBHL

HOLE & CASING SECTIONS Ref Wellbore: No. 1H PWB Ref Wellpath: Prelim 1

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	2500.00	2500.00	0.00	2500.00	0.00	0.00	0.00	0.00
7in Casing Intermediate	0.00	7630.00	7630.00	0.00	7630.00	0.00	0.00	0.00	0.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H PBHL	12447.88	7950.00	-4599.70	13.56	631886.16	607151.08	32°40'07.532"N	104°02'20.668"W	point

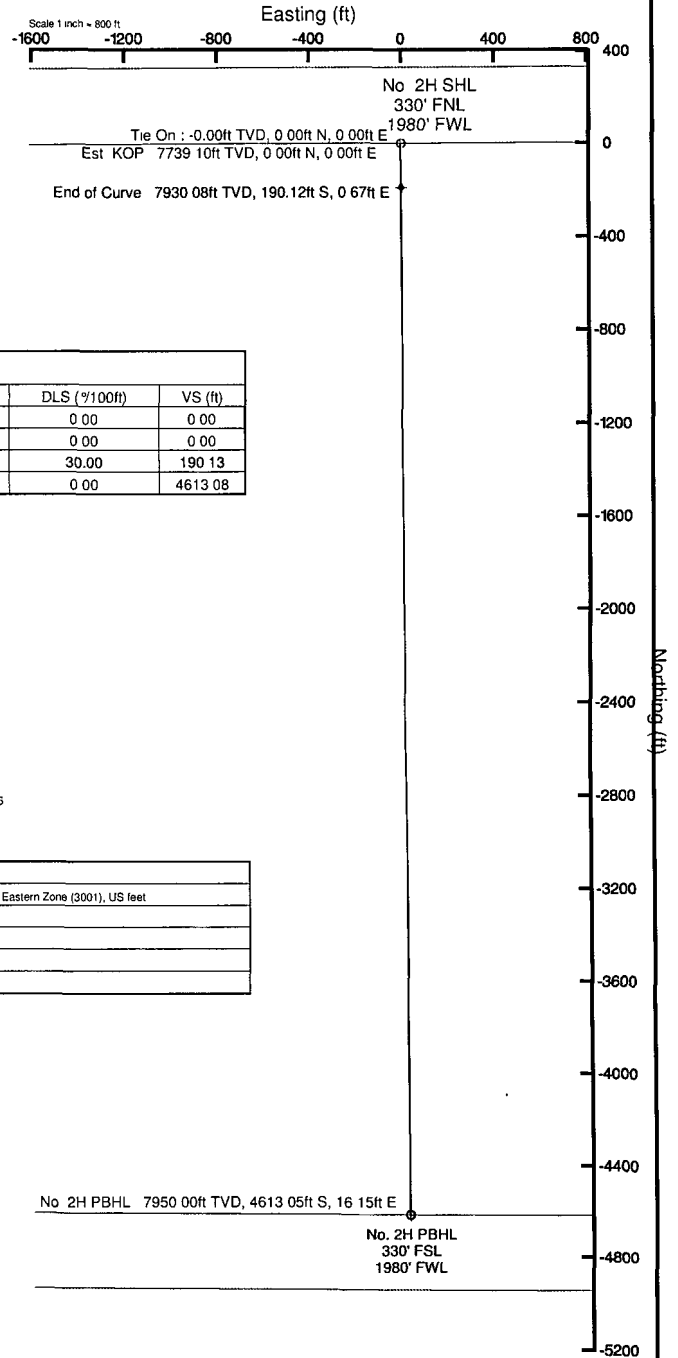
SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Prelim 1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	12447.88	NaviTrak (Standard)		No. 1H PWB

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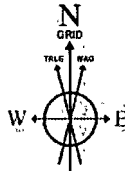
Cimarex Energy Co.

Location: Eddy County, NM Slot: No. 2H SHL
Field: (Parkway) Sec 15, T19S, R29E Well: No. 2H
Facility: Parkway St 11 com No. 2H Wellbore: No. 2H PWB



Well Profile Data

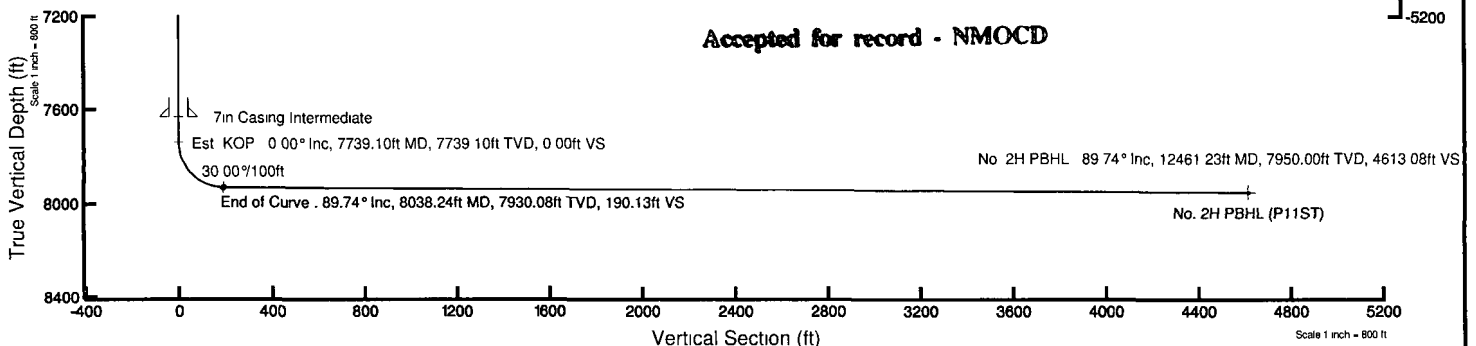
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0 00	0 000	179 799	0 00	0 00	0 00	0 00	0 00
Est KOP	7739 10	0 000	179.799	7739 10	0 00	0 00	0 00	0 00
End of Curve	8038.24	89.742	179 799	7930.08	-190 12	0.67	30.00	190 13
No. 2H PBHL	12461 23	89 742	179 799	7950 00	-4613 05	16 15	0 00	4613 08



BGGM (1945 0 to 2011 0) Dip 60 57° Field 49006 9 nT
Magnetic North is 8 01 degrees East of True North (at 5/28/2010)
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 86 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7 86 = 97 86

Plot reference wellpath is Prelim 1	
True vertical depths are referenced to Rig on No. 2H SHL (GL)	Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 2H SHL (GL)	North Reference Grid north
Rig on No. 2H SHL (GL) to Mean Sea Level 3361 feet	Scale True distance
Mean Sea Level to Mud line (Facility Parkway St 11 com No. 2H) -3361 feet	Depths are in feet
Coordinates are in feet referenced to Slot Location	Created by Roland Flores on 5/28/2010

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Planned Wellpath Report

Prelim 1

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 2H PWB
Facility	Parkway St 11 com No. 2H		

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	0.999918	Report Generated	5/28/2010 at 4:53:20 PM
Convergence at slot	0.15° East	Database/Source file	WA_Midland/No. 2H_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	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W
Facility Reference Pt			629229.50	611779.60	32°40'53.404"N	104°02'51.602"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. 2H SHL (GL) to Ground Level	0.00ft
Horizontal Reference Pt	Slot Location	Rig on No. 2H SHL (GL) to Mean Sea Level	3361.00ft
Vertical Reference Pt	Rig on No. 2H SHL (GL)	Ground Level to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 2H SHL (GL)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.80°

Accepted for record - NMOCD



Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 2H PWB
Facility	Parkway St 11 com No. 2H		

WELLPATH DATA (128 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	179.799	0.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	Tie On
100.00†	0.000	179.799	100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
200.00†	0.000	179.799	200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
300.00†	0.000	179.799	300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
400.00†	0.000	179.799	400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
500.00†	0.000	179.799	500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
600.00†	0.000	179.799	600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
700.00†	0.000	179.799	700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
800.00†	0.000	179.799	800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
900.00†	0.000	179.799	900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1000.00†	0.000	179.799	1000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1100.00†	0.000	179.799	1100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1200.00†	0.000	179.799	1200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1300.00†	0.000	179.799	1300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1400.00†	0.000	179.799	1400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	47
1500.00†	0.000	179.799	1500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1600.00†	0.000	179.799	1600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1700.00†	0.000	179.799	1700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1800.00†	0.000	179.799	1800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
1900.00†	0.000	179.799	1900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2000.00†	0.000	179.799	2000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2100.00†	0.000	179.799	2100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2200.00†	0.000	179.799	2200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2300.00†	0.000	179.799	2300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2400.00†	0.000	179.799	2400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2500.00†	0.000	179.799	2500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2600.00†	0.000	179.799	2600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2700.00†	0.000	179.799	2700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2800.00†	0.000	179.799	2800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
2900.00†	0.000	179.799	2900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	

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Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 2H PWB
Facility	Parkway St 11 com No. 2H		

WELLPATH DATA (128 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	179.799	3000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3100.00†	0.000	179.799	3100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3200.00†	0.000	179.799	3200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3300.00†	0.000	179.799	3300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3400.00†	0.000	179.799	3400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3500.00†	0.000	179.799	3500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3600.00†	0.000	179.799	3600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3700.00†	0.000	179.799	3700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3800.00†	0.000	179.799	3800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
3900.00†	0.000	179.799	3900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4000.00†	0.000	179.799	4000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4100.00†	0.000	179.799	4100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4200.00†	0.000	179.799	4200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4300.00†	0.000	179.799	4300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4400.00†	0.000	179.799	4400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4500.00†	0.000	179.799	4500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4600.00†	0.000	179.799	4600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4700.00†	0.000	179.799	4700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4800.00†	0.000	179.799	4800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
4900.00†	0.000	179.799	4900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5000.00†	0.000	179.799	5000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5100.00†	0.000	179.799	5100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5200.00†	0.000	179.799	5200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5300.00†	0.000	179.799	5300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5400.00†	0.000	179.799	5400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5500.00†	0.000	179.799	5500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5600.00†	0.000	179.799	5600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5700.00†	0.000	179.799	5700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5800.00†	0.000	179.799	5800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
5900.00†	0.000	179.799	5900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	

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Planned Wellpath Report

Prelim 1

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 2H PWB
Facility	Parkway St 11 com No. 2H		

WELLPATH DATA (128 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	179.799	6000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6100.00†	0.000	179.799	6100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6200.00†	0.000	179.799	6200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6300.00†	0.000	179.799	6300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6400.00†	0.000	179.799	6400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6500.00†	0.000	179.799	6500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6600.00†	0.000	179.799	6600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6700.00†	0.000	179.799	6700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6800.00†	0.000	179.799	6800.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
6900.00†	0.000	179.799	6900.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7000.00†	0.000	179.799	7000.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7100.00†	0.000	179.799	7100.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7200.00†	0.000	179.799	7200.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7300.00†	0.000	179.799	7300.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7400.00†	0.000	179.799	7400.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7500.00†	0.000	179.799	7500.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7600.00†	0.000	179.799	7600.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7700.00†	0.000	179.799	7700.00	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	
7739.10	0.000	179.799	7739.10	0.00	0.00	0.00	629229.50	611779.60	32°40'53.404"N	104°02'51.602"W	0.00	Est. KOP
7800.00†	18.270	179.799	7798.97	9.63	-9.63	0.03	629229.53	611769.97	32°40'53.309"N	104°02'51.602"W	30.00	
7900.00†	48.270	179.799	7881.63	63.86	-63.86	0.22	629229.72	611715.74	32°40'52.772"N	104°02'51.601"W	30.00	
8000.00†	78.270	179.799	7926.10	152.16	-152.16	0.53	629230.03	611627.46	32°40'51.899"N	104°02'51.600"W	30.00	
8038.24	89.742	179.799	7930.08	190.13	-190.12	0.67	629230.17	611589.49	32°40'51.523"N	104°02'51.600"W	30.00	End of Curve
8100.00†	89.742	179.799	7930.36	251.89	-251.88	0.88	629230.38	611527.74	32°40'50.912"N	104°02'51.600"W	0.00	
8200.00†	89.742	179.799	7930.81	351.88	-351.88	1.23	629230.73	611427.75	32°40'49.923"N	104°02'51.599"W	0.00	
8300.00†	89.742	179.799	7931.26	451.88	-451.88	1.58	629231.08	611327.76	32°40'48.933"N	104°02'51.598"W	0.00	
8400.00†	89.742	179.799	7931.71	551.88	-551.88	1.93	629231.43	611227.77	32°40'47.944"N	104°02'51.597"W	0.00	
8500.00†	89.742	179.799	7932.16	651.88	-651.88	2.28	629231.78	611127.78	32°40'46.954"N	104°02'51.596"W	0.00	
8600.00†	89.742	179.799	7932.61	751.88	-751.88	2.63	629232.13	611027.79	32°40'45.965"N	104°02'51.595"W	0.00	
8700.00†	89.742	179.799	7933.06	851.88	-851.87	2.98	629232.48	610927.80	32°40'44.975"N	104°02'51.594"W	0.00	

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Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 2H PWB
Facility	Parkway St 11 com No. 2H		

WELLPATH DATA (128 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
8800.00†	89.742	179.799	7933.51	951.88	-951.87	3.33	629232.83	610827.81	32°40'43.986"N	104°02'51.593"W	0.00	
8900.00†	89.742	179.799	7933.96	1051.88	-1051.87	3.68	629233.18	610727.82	32°40'42.997"N	104°02'51.592"W	0.00	
9000.00†	89.742	179.799	7934.41	1151.88	-1151.87	4.03	629233.53	610627.83	32°40'42.007"N	104°02'51.591"W	0.00	
9100.00†	89.742	179.799	7934.86	1251.88	-1251.87	4.38	629233.88	610527.84	32°40'41.018"N	104°02'51.590"W	0.00	
9200.00†	89.742	179.799	7935.32	1351.87	-1351.87	4.73	629234.23	610427.85	32°40'40.028"N	104°02'51.589"W	0.00	
9300.00†	89.742	179.799	7935.77	1451.87	-1451.86	5.08	629234.58	610327.86	32°40'39.039"N	104°02'51.588"W	0.00	
9400.00†	89.742	179.799	7936.22	1551.87	-1551.86	5.43	629234.93	610227.87	32°40'38.049"N	104°02'51.587"W	0.00	
9500.00†	89.742	179.799	7936.67	1651.87	-1651.86	5.78	629235.28	610127.88	32°40'37.060"N	104°02'51.586"W	0.00	
9600.00†	89.742	179.799	7937.12	1751.87	-1751.86	6.13	629235.63	610027.89	32°40'36.071"N	104°02'51.585"W	0.00	
9700.00†	89.742	179.799	7937.57	1851.87	-1851.86	6.48	629235.98	609927.90	32°40'35.081"N	104°02'51.584"W	0.00	
9800.00†	89.742	179.799	7938.02	1951.87	-1951.86	6.83	629236.33	609827.91	32°40'34.092"N	104°02'51.583"W	0.00	
9900.00†	89.742	179.799	7938.47	2051.87	-2051.85	7.18	629236.68	609727.92	32°40'33.102"N	104°02'51.582"W	0.00	
10000.00†	89.742	179.799	7938.92	2151.87	-2151.85	7.53	629237.03	609627.93	32°40'32.113"N	104°02'51.582"W	0.00	
10100.00†	89.742	179.799	7939.37	2251.87	-2251.85	7.88	629237.38	609527.94	32°40'31.123"N	104°02'51.581"W	0.00	
10200.00†	89.742	179.799	7939.82	2351.86	-2351.85	8.23	629237.73	609427.95	32°40'30.134"N	104°02'51.580"W	0.00	
10300.00†	89.742	179.799	7940.27	2451.86	-2451.85	8.58	629238.08	609327.96	32°40'29.145"N	104°02'51.579"W	0.00	
10400.00†	89.742	179.799	7940.72	2551.86	-2551.85	8.93	629238.43	609227.97	32°40'28.155"N	104°02'51.578"W	0.00	
10500.00†	89.742	179.799	7941.17	2651.86	-2651.84	9.28	629238.78	609127.98	32°40'27.166"N	104°02'51.577"W	0.00	
10600.00†	89.742	179.799	7941.62	2751.86	-2751.84	9.63	629239.13	609027.99	32°40'26.176"N	104°02'51.576"W	0.00	
10700.00†	89.742	179.799	7942.07	2851.86	-2851.84	9.98	629239.48	608928.00	32°40'25.187"N	104°02'51.575"W	0.00	
10800.00†	89.742	179.799	7942.52	2951.86	-2951.84	10.34	629239.83	608828.01	32°40'24.197"N	104°02'51.574"W	0.00	
10900.00†	89.742	179.799	7942.97	3051.86	-3051.84	10.69	629240.18	608728.02	32°40'23.208"N	104°02'51.573"W	0.00	
11000.00†	89.742	179.799	7943.42	3151.86	-3151.84	11.04	629240.53	608628.03	32°40'22.218"N	104°02'51.572"W	0.00	
11100.00†	89.742	179.799	7943.87	3251.85	-3251.83	11.39	629240.88	608528.04	32°40'21.229"N	104°02'51.571"W	0.00	
11200.00†	89.742	179.799	7944.32	3351.85	-3351.83	11.74	629241.23	608428.05	32°40'20.240"N	104°02'51.570"W	0.00	
11300.00†	89.742	179.799	7944.77	3451.85	-3451.83	12.09	629241.58	608328.06	32°40'19.250"N	104°02'51.569"W	0.00	
11400.00†	89.742	179.799	7945.22	3551.85	-3551.83	12.44	629241.93	608228.07	32°40'18.261"N	104°02'51.568"W	0.00	
11500.00†	89.742	179.799	7945.67	3651.85	-3651.83	12.79	629242.28	608128.08	32°40'17.271"N	104°02'51.567"W	0.00	
11600.00†	89.742	179.799	7946.12	3751.85	-3751.83	13.14	629242.63	608028.09	32°40'16.282"N	104°02'51.566"W	0.00	
11700.00†	89.742	179.799	7946.57	3851.85	-3851.83	13.49	629242.99	607928.10	32°40'15.292"N	104°02'51.565"W	0.00	

Accepted for record - NMOC



Planned Wellpath Report

Prelim 1
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Parkway) Sec 15, T19S, R29E	Wellbore	No. 2H PWB
Facility	Parkway St 11 com No. 2H		

WELLPATH DATA (128 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†	89.742	179.799	7947.02	3951.85	-3951.82	13.84	629243.34	607828.11	32°40'14.303"N	104°02'51.564"W	0.00	
11900.00†	89.742	179.799	7947.47	4051.85	-4051.82	14.19	629243.69	607728.12	32°40'13.314"N	104°02'51.564"W	0.00	
12000.00†	89.742	179.799	7947.92	4151.85	-4151.82	14.54	629244.04	607628.13	32°40'12.324"N	104°02'51.563"W	0.00	
12100.00†	89.742	179.799	7948.37	4251.84	-4251.82	14.89	629244.39	607528.14	32°40'11.335"N	104°02'51.562"W	0.00	
12200.00†	89.742	179.799	7948.82	4351.84	-4351.82	15.24	629244.74	607428.15	32°40'10.345"N	104°02'51.561"W	0.00	
12300.00†	89.742	179.799	7949.27	4451.84	-4451.82	15.59	629245.09	607328.16	32°40'09.356"N	104°02'51.560"W	0.00	
12400.00†	89.742	179.799	7949.72	4551.84	-4551.81	15.94	629245.44	607228.17	32°40'08.366"N	104°02'51.559"W	0.00	
12461.23	89.742	179.799	7950.00†	4613.08	-4613.05	16.15	629245.65	607166.94	32°40'07.761"N	104°02'51.558"W	0.00	No 2H PBHL

HOLE & CASING SECTIONS Ref Wellbore: No. 2H PWB Ref Wellpath: Prelim 1									
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	2500.00	2500.00	0.00	2500.00	0.00	0.00	0.00	0.00
7in Casing Intermediate	0.00	7630.00	7630.00	0.00	7630.00	0.00	0.00	0.00	0.00

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 2H PBHL (P11ST)	12461.23	7950.00	-4613.05	16.15	629245.65	607166.94	32°40'07.761"N	104°02'51.558"W	point

SURVEY PROGRAM Ref Wellbore: No. 2H PWB Ref Wellpath: Prelim 1				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	12461.23	NaviTrak (Standard)		No. 2H PWB

Accepted for record - NMOCD

Mud, Casing, Cementing, and BOP Attachment

Parkway 11 State Com No. 2

Cimarex Energy Co. of Colorado

Unit C, Section 11

T19S-R29E, Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

Location: SHL 330 FNL & 1980 FWL
BHL 330 FSL & 1980 FWL

Elevation above sea level: 3361' GR

Proposed drilling depth: Pilot Hole 8100' Lateral MD 12461' Lateral TVD 7950'

Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 450'	8.4 - 8.6	28	NC	FW
0' to 2500'	10.0	30-32	NC	Brine water
0' to 8100'	8.4 - 9.5	30-32	NC	FW, brine
7739' to 12461'	8.4	28-32	NC	2% KCl

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Proposed drilling Plan

Drill pilot hole to 8100.' Set 7" to 7679' and then fiberglass tubing from 7679' to 8100.' Cement to 2300' and kick off 6.125" hole @ 7739.' Drill to TD @ 12461' and put in PEAK completion liner from TOL @ 7639' to TD. No cement required on PEAK liner.

Accepted for record - NMOCD

Mud, Casing, Cementing, and BOP Attachment
Parkway 11 State Com No. 2
 Cimarex Energy Co. of Colorado
 Unit O, Section 15
 T19S-R29E, Eddy County, NM

Casing & Cementing Plan:

String	Hole Size	Depth		Casing OD		Weight	Collar	Grade
Surface	17½"	0'	to 450'	New	13¾"	48#	STC	H-40
Intermediate	12¼"	0'	to 2500'	New	9⅝"	40#	LTC	J/K-55
Production	8¾"	0'	to 7679'	New	7"	26#	LTC	P-110
Fiberglass	8¾"	7679'	to 8100'	New	2⅞"	2.18#		IJ
Lateral Pt. 1	6⅝"	7639'	to 12461'	New	4½"	11.6#	LTC	P-110

Cementing Plan:

Surface Lead: 260 sk Premium Plus + 2% CaCl 14.8 ppg 1.35 yld
Tail: 260 sk Premium Plus + 2% CaCl 14.8 ppg 1.35 yld
TOC Surface

Intermediate Lead: 500 sks EconoCem + 2% Cacl + 3% salt + 3 lbm gilsonite 2.06 ft3/sk 12.5 ppg
Tail: 215 sks HalCem + 1% CaCl 1.34 ft3/sk 14.8 ppg
TOC Surface

Production Lead: 340 sx EconoCem + 5lbm/sk Gilsonite 2.48 cf/sk 11.9 ppg
Tail: 420 sx Halcem 15.6 ppg 1.19 cf/sk
TOC 2300'

Lateral No cement needed. Peak completion assembly.

Fresh water zones will be protected by setting 13¾" casing at 450 and cementing to surface. Hydrocarbon zones will be protected by setting 9⅝" casing at 2500' and cementing to surface, and by setting 7" casing at 7679' and fiberglass to 8100' and cementing to 2300.'

<u>Collapse Factor</u>	<u>Burst Factor</u>	<u>Tension Factor</u>
1.125	1.125	1.6

Pressure control Equipment:

Exhibit "E". A 13¾" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000.' A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be nipped up and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling. From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

We are requesting a variance for testing the 13¾" surface casing from Onshore Order No. 2, which states that all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500 psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. We are requesting to test the 13¾" casing to 1000 psi using rig pumps. The BOP will be tested to 3000 psi by an independent service company.

Accepted for record - NMOCD