

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**RECEIVED**  
**CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505  
**JAN 07 2011**  
**HOBBSOCD**

WELL API NO. 30-025-39887
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name State HH Com
8. Well Number 003
9. OGRID Number 162683
10. Pool name or Wildcat Gem; Bone Spring

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
Cimarex Energy Co. of Colorado

3. Address of Operator  
600 N. Marienfeld, Ste. 600; Midland, TX 79701

4. Well Location  
SHL Unit Letter D : 560 feet from the North line and 330 feet from the West line  
Section 36 Township 19S Range 32E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
3570 GR

Pit or Below-grade Tank Application  or Closure

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: \_\_\_\_\_ Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	COMMENCE DRILLING OPNS <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please see attached revised C-102 and preliminary directional plan for this well. Spacing unit has changed and well has been placed in the Gem; Bone Spring pool.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit  or an (attached) alternative OCD-approved plan .

SIGNATURE Natalie Krueger TITLE Regulatory Analyst DATE January 6, 2011

Type or print name Natalie Krueger email address: nkrueger@cimarex.com Telephone No. 432-620-1936

**For State Use Only**

APPROVED BY: [Signature] TITLE PETROLEUM ENGINEER DATE JAN 10 2011  
Conditions of Approval (if any): \_\_\_\_\_

DISTRICT I  
1825 N. French Dr., Hobbs, NM 88240

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 15, 2009

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

**RECEIVED**

Submit one copy to appropriate District Office

JAN 07 2011

HOBBSUCD

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-27417	Pool Code 27220	Pool Name Gem; Bone Spring
Property Code 300556	Property Name STATE HH COM	Well Number 3
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3570'

Surface Location

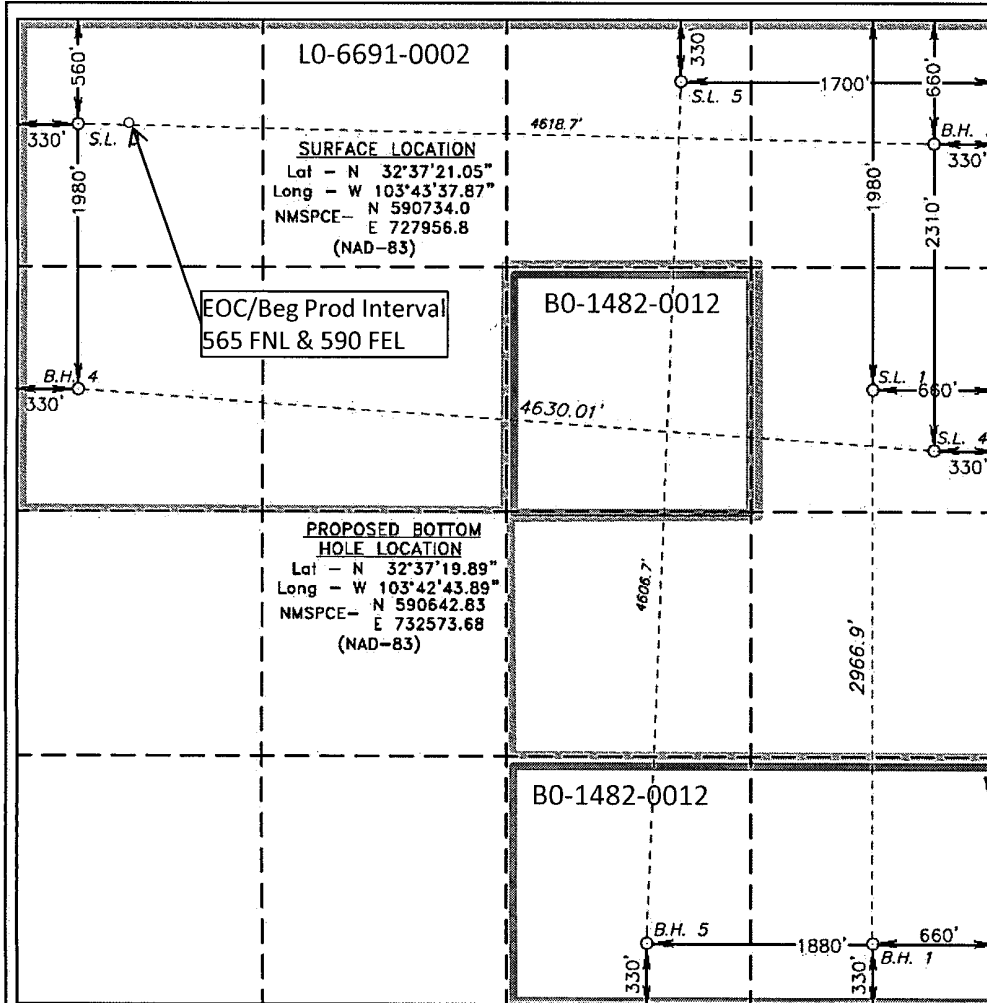
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	36	19 S	32 E		560	NORTH	330	WEST	LEA

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
A	36	19 S	32 E		660	NORTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
480		P	

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.

*Zeno Farris* 1/6/2011  
Signature Date

Zeno Farris  
Printed Name

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**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: 1/6/2011  
Signature: [Signature]  
Seal of Professional Surveyor 7977

Certificate No. Gary L. Jones 7977

**BASIN SURVEYS**



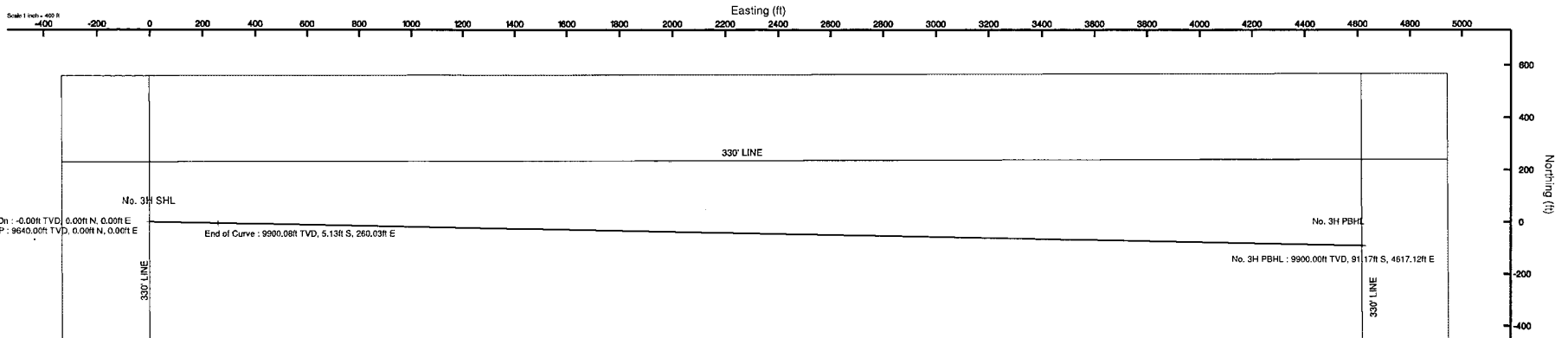
# Cimarex Energy Co.

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

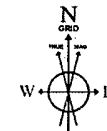
Slot: No. 3H SHL  
 Well: No. 3H  
 Wellbore: No. 3H PWB



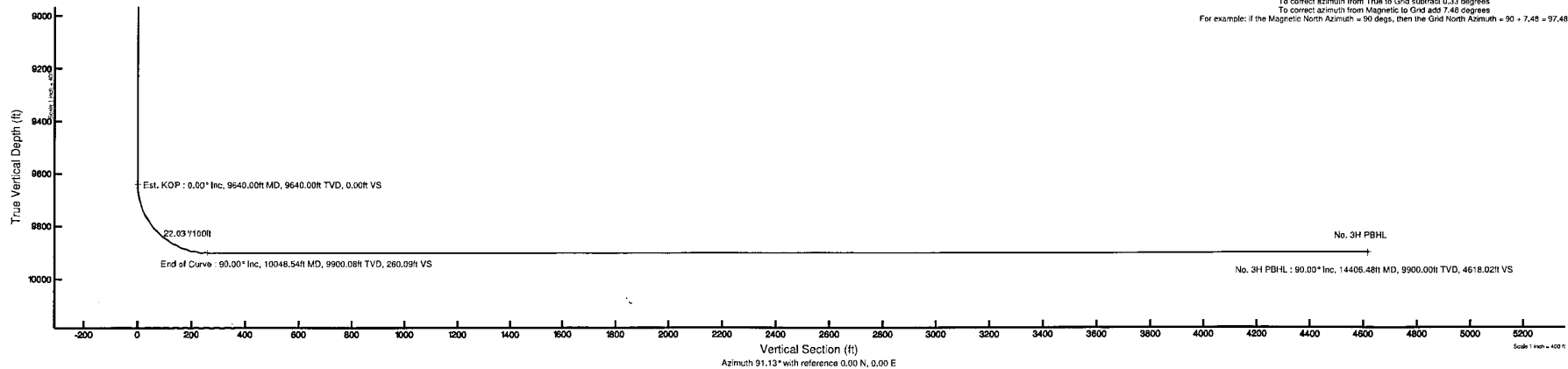
Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (7/100ft)	VS (ft)
Tie On	0.00	0.000	91.131	0.00	0.00	0.00	0.00	0.00
Est. KOP	9640.00	0.000	91.131	9640.00	0.00	0.00	0.00	0.00
End of Curve	10048.54	90.001	91.131	9900.08	-5.13	260.03	22.03	260.09
No. 3H PBHL	14406.48	90.001	91.131	9900.00	-91.17	4617.12	0.00	4618.02



Plot reference wellpath is Prefm_3	
True vertical depths are referenced to Rig on No. 3H SHL (GL)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 3H SHL (GL)	North Reference: Grid north
Rig on No. 3H SHL (GL) to Mean Sea Level: 3570 feet	Scale: True distance
Mean Sea Level to Mudline (Facility: State HH No. 3H): -3570 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gameocr on 1/6/2011



BGGM (1945.0 to 2011.0) Dip: 60.55° Field: 48978.3 nT  
 Magnetic North is 7.40 degrees East of True North (at 10/6/2010)  
 Grid North is 0.33 degrees East of True North  
 To correct azimuth from True to Grid subtract 0.33 degrees  
 To correct azimuth from Magnetic to Grid add 7.40 degrees  
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.40 = 97.40





# Planned Wellpath Report

Prelim\_3

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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		

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	Gomeoscr
Scale	0.999949	Report Generated	1/6/2011 at 1:46:33 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	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 3  
Page 2 of 5



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
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	
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	



# Planned Wellpath Report

Prelim\_3

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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
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	
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

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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		

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
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	
9640.00	0.000	91.131	9640.00	0.00	0.00	0.00	727956.80	590734.00	32°37'21.054"N	103°43'37.870"W	0.00	Est. KOP
9700.00†	13.218	91.131	9699.47	6.89	-0.14	6.89	727963.69	590733.86	32°37'21.053"N	103°43'37.789"W	22.03	
9800.00†	35.248	91.131	9790.10	47.68	-0.94	47.67	728004.47	590733.06	32°37'21.042"N	103°43'37.312"W	22.03	
9900.00†	57.278	91.131	9858.81	119.49	-2.36	119.47	728076.26	590731.64	32°37'21.024"N	103°43'36.473"W	22.03	
10000.00†	79.308	91.131	9895.57	211.83	-4.18	211.79	728168.58	590729.82	32°37'21.001"N	103°43'35.394"W	22.03	
10048.54	90.001	91.131	9900.08	260.09	-5.13	260.03	728216.82	590728.87	32°37'20.989"N	103°43'34.830"W	22.03	End of Curve
10100.00†	90.001	91.131	9900.08	311.55	-6.15	311.49	728268.27	590727.85	32°37'20.976"N	103°43'34.228"W	0.00	
10200.00†	90.001	91.131	9900.08	411.55	-8.13	411.47	728368.24	590725.88	32°37'20.951"N	103°43'33.060"W	0.00	
10300.00†	90.001	91.131	9900.08	511.55	-10.10	511.45	728468.22	590723.90	32°37'20.926"N	103°43'31.891"W	0.00	
10400.00†	90.001	91.131	9900.07	611.55	-12.07	611.43	728568.20	590721.93	32°37'20.900"N	103°43'30.722"W	0.00	
10500.00†	90.001	91.131	9900.07	711.55	-14.05	711.41	728668.17	590719.95	32°37'20.875"N	103°43'29.553"W	0.00	
10600.00†	90.001	91.131	9900.07	811.55	-16.02	811.39	728768.15	590717.98	32°37'20.850"N	103°43'28.384"W	0.00	
10700.00†	90.001	91.131	9900.07	911.55	-18.00	911.37	728868.12	590716.00	32°37'20.825"N	103°43'27.215"W	0.00	
10800.00†	90.001	91.131	9900.07	1011.55	-19.97	1011.35	728968.10	590714.03	32°37'20.800"N	103°43'26.047"W	0.00	
10900.00†	90.001	91.131	9900.06	1111.55	-21.95	1111.33	729068.07	590712.06	32°37'20.774"N	103°43'24.878"W	0.00	
11000.00†	90.001	91.131	9900.06	1211.55	-23.92	1211.31	729168.05	590710.08	32°37'20.749"N	103°43'23.709"W	0.00	
11100.00†	90.001	91.131	9900.06	1311.55	-25.89	1311.29	729268.02	590708.11	32°37'20.724"N	103°43'22.540"W	0.00	
11200.00†	90.001	91.131	9900.06	1411.55	-27.87	1411.27	729368.00	590706.13	32°37'20.699"N	103°43'21.371"W	0.00	
11300.00†	90.001	91.131	9900.06	1511.55	-29.84	1511.25	729467.97	590704.16	32°37'20.674"N	103°43'20.203"W	0.00	
11400.00†	90.001	91.131	9900.06	1611.55	-31.82	1611.23	729567.95	590702.18	32°37'20.648"N	103°43'19.034"W	0.00	
11500.00†	90.001	91.131	9900.05	1711.55	-33.79	1711.21	729667.92	590700.21	32°37'20.623"N	103°43'17.865"W	0.00	
11600.00†	90.001	91.131	9900.05	1811.55	-35.77	1811.19	729767.90	590698.24	32°37'20.598"N	103°43'16.696"W	0.00	
11700.00†	90.001	91.131	9900.05	1911.55	-37.74	1911.17	729867.87	590696.26	32°37'20.573"N	103°43'15.527"W	0.00	
11800.00†	90.001	91.131	9900.05	2011.55	-39.71	2011.15	729967.85	590694.29	32°37'20.547"N	103°43'14.359"W	0.00	
11900.00†	90.001	91.131	9900.05	2111.55	-41.69	2111.14	730067.82	590692.31	32°37'20.522"N	103°43'13.190"W	0.00	
12000.00†	90.001	91.131	9900.04	2211.55	-43.66	2211.12	730167.80	590690.34	32°37'20.497"N	103°43'12.021"W	0.00	
12100.00†	90.001	91.131	9900.04	2311.55	-45.64	2311.10	730267.77	590688.36	32°37'20.472"N	103°43'10.852"W	0.00	
12200.00†	90.001	91.131	9900.04	2411.55	-47.61	2411.08	730367.75	590686.39	32°37'20.446"N	103°43'09.683"W	0.00	
12300.00†	90.001	91.131	9900.04	2511.55	-49.59	2511.06	730467.72	590684.42	32°37'20.421"N	103°43'08.514"W	0.00	
12400.00†	90.001	91.131	9900.04	2611.55	-51.56	2611.04	730567.70	590682.44	32°37'20.396"N	103°43'07.346"W	0.00	
12500.00†	90.001	91.131	9900.04	2711.55	-53.53	2711.02	730667.67	590680.47	32°37'20.371"N	103°43'06.177"W	0.00	
12600.00†	90.001	91.131	9900.03	2811.55	-55.51	2811.00	730767.65	590678.49	32°37'20.345"N	103°43'05.008"W	0.00	
12700.00†	90.001	91.131	9900.03	2911.55	-57.48	2910.98	730867.63	590676.52	32°37'20.320"N	103°43'03.839"W	0.00	
12800.00†	90.001	91.131	9900.03	3011.55	-59.46	3010.96	730967.60	590674.55	32°37'20.295"N	103°43'02.670"W	0.00	
12900.00†	90.001	91.131	9900.03	3111.55	-61.43	3110.94	731067.58	590672.57	32°37'20.270"N	103°43'01.502"W	0.00	
13000.00†	90.001	91.131	9900.03	3211.55	-63.41	3210.92	731167.55	590670.60	32°37'20.244"N	103°43'00.333"W	0.00	
13100.00†	90.001	91.131	9900.02	3311.55	-65.38	3310.90	731267.53	590668.62	32°37'20.219"N	103°42'59.164"W	0.00	
13200.00†	90.001	91.131	9900.02	3411.55	-67.36	3410.88	731367.50	590666.65	32°37'20.194"N	103°42'57.995"W	0.00	



# Planned Wellpath Report

Prelim\_3

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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
13300.00†	90.001	91.131	9900.02	3511.55	-69.33	3510.86	731467.48	590664.67	32°37'20.168"N	103°42'56.826"W	0.00	
13400.00†	90.001	91.131	9900.02	3611.55	-71.30	3610.84	731567.45	590662.70	32°37'20.143"N	103°42'55.658"W	0.00	
13500.00†	90.001	91.131	9900.02	3711.55	-73.28	3710.82	731667.43	590660.73	32°37'20.118"N	103°42'54.489"W	0.00	
13600.00†	90.001	91.131	9900.01	3811.55	-75.25	3810.80	731767.40	590658.75	32°37'20.093"N	103°42'53.320"W	0.00	
13700.00†	90.001	91.131	9900.01	3911.55	-77.23	3910.78	731867.38	590656.78	32°37'20.067"N	103°42'52.151"W	0.00	
13800.00†	90.001	91.131	9900.01	4011.55	-79.20	4010.76	731967.35	590654.80	32°37'20.042"N	103°42'50.982"W	0.00	
13900.00†	90.001	91.131	9900.01	4111.55	-81.18	4110.75	732067.33	590652.83	32°37'20.017"N	103°42'49.813"W	0.00	
14000.00†	90.001	91.131	9900.01	4211.55	-83.15	4210.73	732167.30	590650.85	32°37'19.991"N	103°42'48.645"W	0.00	
14100.00†	90.001	91.131	9900.01	4311.55	-85.12	4310.71	732267.28	590648.88	32°37'19.966"N	103°42'47.476"W	0.00	
14200.00†	90.001	91.131	9900.00	4411.55	-87.10	4410.69	732367.25	590646.91	32°37'19.941"N	103°42'46.307"W	0.00	
14300.00†	90.001	91.131	9900.00	4511.55	-89.07	4510.67	732467.23	590644.93	32°37'19.915"N	103°42'45.138"W	0.00	
14400.00†	90.001	91.131	9900.00	4611.55	-91.05	4610.65	732567.20	590642.96	32°37'19.890"N	103°42'43.969"W	0.00	
14406.48	90.001	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

HOLE & CASING SECTIONS Ref Wellbore: No. 3H PWB Ref Wellpath: Prelim_3									
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	0.00	4500.00	4500.00	0.00	4500.00	0.00	0.00	0.00	0.00
8.75in Open Hole	4500.00	14406.80	9906.80	4500.00	NA	0.00	0.00	NA	NA

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	14406.48	9900.00	-91.17	4617.12	732573.68	590642.83	32°37'19.889"N	103°42'43.894"W	point	
2nd Bone Spring Sand										

SURVEY PROGRAM Ref Wellbore: No. 3H PWB Ref Wellpath: Prelim_3				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	14406.48	NaviTrak (Standard)		No. 3H PWB