

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

JUN 23 2009

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Cimarex Energy Co. of Colorado

3a. Address
5215 N. O'Connor Blvd., Ste. 1500; Irving, TX 75039

3b. Phone No. (include area code)
972-401-3111

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL 130 FNL & 940 FEL 27-25S-26E
BHL 2295 FNL & 682 FEL

5. Lease Serial No.
SHL Fee Surf & Minerals BHL NM-94840

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

NM-122363

8. Well Name and No.
Chosa Draw 27 Federal Com No. 2

9. API Well No.
30-015-36453

10. Field and Pool, or Exploratory Area
Cottonwood Draw; Delaware, North

11. County or Parish, State
Eddy County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Add second lateral (Ramsey)
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Chosa Draw 27 Federal Com No. 2 is currently completed horizontally in the Cherry Canyon from 3082' MD/2934' TVD to 4996' MD/2936' TVD with a PEAK liner. Cimarex would like to re-enter the well and add a second lateral in the Ramsey section of the Delaware formation as shown on the attached pages.

Drilling plan is shown on the attached page. Also attached are a new C-102 and a preliminary directional plan for the horizontal.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

**SUBJECT TO LIKE
APPROVAL BY STATE**

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Natalie Krueger
Signature

Title

Regulatory Analyst

Date

June 18, 2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

Conditions of Approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

APPROVED

JUN 20 2009

WESLEY W. INGRAM
PETROLEUM ENGINEER

Drilling Plan
Chosa Draw 27 Federal Com No. 2 - Second Lateral
 Cimarex Energy Co. of Colorado
SHL 130 FNL & 940 FEL
Current (1st) BHL 2295 FNL & 682 FEL
Proposed (2nd) BHL 2313 FNL & 350 FEL
 27-25S-26E, Eddy County, NM

Casing

Hole	Hole Size	Depth	Casing OD	Weight	Thread	Collar	Grade	Status
<i>Surface</i>	12 $\frac{1}{4}$	0' to 406'	New 8 $\frac{1}{2}$	24#	8-R	STC	J-55	In place
<i>Production A</i>	7 $\frac{1}{8}$	0' to 792'	New 5 $\frac{1}{2}$	17#	8-R	BTC	J-55	In place
<i>Production B</i>	7 $\frac{1}{8}$	792' to 3082'	New 5 $\frac{1}{2}$	17#	8-R	LTC	J-55	In place
<i>1st Lateral</i>	4 $\frac{3}{4}$	2646' to 4785'	New 2 $\frac{1}{2}$	6.5#	8-R	EUE	L-80	In place
<i>2nd Lateral</i>	4 $\frac{3}{4}$	1566' to 4010'	New 2 $\frac{1}{2}$ "	6.5#	8-R	EUE	L-80	Proposed

Kill well. ND WH & NU 5K BOP. BOP will be tested to 3000 psi by an independent service company. POOH w/ rods and production tubing.

Set RBP @ 2550' w/ 2 sx sand. Set whipstock plug @ 1678' and mill window from 1656' to 1671.' Kick off 4 $\frac{3}{4}$ " upper (Ramsey) lateral @ 1666' and drill to TD @ 4010' MD and 1864' TVD using 9.8-10.0 # Saturated Brine drilling mud.

Install 2 $\frac{1}{2}$ " PEAK liner with RSBP @ 1566' for initial flush production. Afterward, release RSBP and PEAK liner 5' inside the upper lateral. Release RBP @ 2550' and begin producing from both laterals. Rod pump will be used.

DISTRICT I
1825 N French Dr., Hobbs, NM 88340

DISTRICT II
1901 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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name CHOSA DRAW "27" FEDERAL COM	Well Number 2
OGRID No.	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3251'

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	27	25 S	26 E		130	NORTH	940	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
H	27	25 S	26 E		2313	NORTH	350	EAST	EDDY

Dedicated Acres 80	Joint or Infill	Consolidation Code C	Order No.
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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

	SURFACE LOCATION Lat - N32°06'27.73" Long - W104°16'30.02" NMSPCE- N 402923.3 E 559397.3 (NAD-83)	Proposed Ramsey Lateral SHL 130 FNL & 940 FEL KOP 156 FNL & 945 FEL EOC 338 FNL & 888 FEL BHL 2313 FNL & 350 FEL Current Cherry Canyon BHL 2295 FNL & 682 FEL	Fee surface & minerals NM-94840	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 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. <i>Natalie Krueger</i> 6/18/2009 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. MARCH 4 2008 Date Surveyed Signature <i>Gary L. Jones</i> Professional Surveyor No. 7977 Certificate No. Gary L. Jones 7977			
	BASIN SURVEYS			

Magnetic Calculator Results: Chosa Draw 27 Fed #2 Lat #2

Geomagnetic Model : IGRF200510

Latitude : 32° 6' 27.727 N

Longitude : 104° 16' 30.019 W

Sample Date : 2009/05/19

Vertical Depth : 0.00

Azimuth of Magnetic North: 8.132° True

Magnetic Declination : 8.132°E from True North

Dip Angle from Horizontal: 60.019°

Magnetic Field Strength : 48727 nT

Magnetic Field X value : 24105 nT

Magnetic Field Y value : 3444 nT

Magnetic Field Z value : 42207 nT

Magnetic Field Horizontal: 24350 nT

Magnetic Azimuth Apply : 8.10 to convert to Grid North

Gyroscope Azimuth Apply : -0.03 to convert to Grid North

Cimarex Energy Co.

Eddy County (NM83E)

Sec 27-T25S-R26E

Chosa Draw "27" Fed Com #2H

Lateral #2

Plan: 05-19-09

Standard Planning Report

19 May, 2009

Quantum Drilling Motors

Planning Report

Database: EDM 2003.16 Single User Db
 Company: Cimarex Energy Co.
 Project: Eddy County (NM83E)
 Site: Sec 27-T25S-R26E
 Well: Chosa Draw "27" Fed Com #2H
 Wellbore: Lateral #2
 Design: 05-19-09

Local Co-ordinate Reference: Well Chosa Draw "27" Fed Com #2H
 TVD Reference: WELL @ 0.00ft (Original Well Elev)
 MD Reference: WELL @ 0.00ft (Original Well Elev)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project	Eddy County (NM83E)	System Datum:	Mean Sea Level
Map System:	US State Plane 1983		
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 27-T25S-R26E				
Site Position:		Northing:	398,100.700 ft	Latitude:	32° 5' 40.000 N
From:	Map	Easting:	559,691.100 ft	Longitude:	104° 16' 26.634 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.03 °

Well	Chosa Draw "27" Fed Com #2H					
Well Position	+N-S	0.00 ft	Northing:	402,923.300 ft	Latitude:	32° 6' 27.727 N
	+E-W	0.00 ft	Easting:	559,397.300 ft	Longitude:	104° 16' 30.019 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft.	Ground Level:	0.00 ft	

Wellbore	Lateral #2				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF200510	2009/05/19	8.13	60.02	48,727

Design	05-19-09				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	1,665.80	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	164.87	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
1,665.80	2.18	90.46	1,665.14	-26.13	-4.56	0.00	0.00	0.00	0.00	
1,962.86	89.72	164.76	1,854.00	-207.65	52.04	30.00	29.47	25.01	74.32	
4,009.74	89.72	164.76	1,864.00	-2,182.53	590.04	0.00	0.00	0.00	0.00	CD 27 Fed #2H PB

Quantum Drilling Motors

Planning Report

Database: EDM 2003.16 Single User Db
 Company: Cimarex Energy Co.
 Project: Eddy County (NM83E)
 Site: Sec 27-T25S-R26E
 Well: Chosa Draw "27" Fed Com #2H
 Wellbore: Lateral #2
 Design: 05-19-09

Local Co-ordinate Reference: Well Chosa Draw "27" Fed Com #2H
 TVD Reference: WELL @ 0.00ft (Original Well Elev)
 MD Reference: WELL @ 0.00ft (Original Well Elev)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/S (ft)	+E/W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,665.80	2.18	90.46	1,665.14	-26.13	-4.56	24.03	0.00	0.00	0.00
Tie in to GYRO / KOP 30/100									
1,700.00	11.05	153.93	1,699.10	-29.08	-2.47	27.43	30.00	25.93	185.58
1,800.00	40.90	162.34	1,788.00	-69.82	12.01	70.54	30.00	29.85	8.41
1,802.66	41.70	162.41	1,790.00	-71.50	12.54	72.29	30.00	29.96	2.53
Bell Canyon									
1,887.57	67.15	163.88	1,839.00	-137.08	32.26	140.75	30.00	29.97	1.74
Ramsey Ss									
1,900.00	70.87	164.04	1,843.45	-148.24	35.47	152.36	30.00	29.98	1.26
1,962.86	89.72	164.76	1,854.00	-207.65	52.04	214.04	30.00	29.98	1.14
EOC - Hold to TD									
2,000.00	89.72	164.76	1,854.18	-243.48	61.81	251.17	0.00	0.00	0.00
2,100.00	89.72	164.76	1,854.67	-339.96	88.09	351.17	0.00	0.00	0.00
2,200.00	89.72	164.76	1,855.16	-436.45	114.38	451.17	0.00	0.00	0.00
2,300.00	89.72	164.76	1,855.65	-532.93	140.66	551.17	0.00	0.00	0.00
2,400.00	89.72	164.76	1,856.13	-629.41	166.95	651.17	0.00	0.00	0.00
2,500.00	89.72	164.76	1,856.62	-725.89	193.24	751.17	0.00	0.00	0.00
2,600.00	89.72	164.76	1,857.11	-822.38	219.52	851.17	0.00	0.00	0.00
2,700.00	89.72	164.76	1,857.60	-918.86	245.81	951.17	0.00	0.00	0.00
2,800.00	89.72	164.76	1,858.08	-1,015.34	272.09	1,051.16	0.00	0.00	0.00
2,900.00	89.72	164.76	1,858.57	-1,111.82	298.38	1,151.16	0.00	0.00	0.00
3,000.00	89.72	164.76	1,859.06	-1,208.30	324.67	1,251.16	0.00	0.00	0.00
3,100.00	89.72	164.76	1,859.54	-1,304.79	350.95	1,351.16	0.00	0.00	0.00
3,200.00	89.72	164.76	1,860.03	-1,401.27	377.24	1,451.16	0.00	0.00	0.00
3,300.00	89.72	164.76	1,860.51	-1,497.75	403.52	1,551.16	0.00	0.00	0.00
3,400.00	89.72	164.76	1,861.00	-1,594.23	429.81	1,651.16	0.00	0.00	0.00
3,500.00	89.72	164.76	1,861.49	-1,690.72	456.10	1,751.15	0.00	0.00	0.00
3,600.00	89.72	164.76	1,861.97	-1,787.20	482.38	1,851.15	0.00	0.00	0.00
3,700.00	89.72	164.76	1,862.46	-1,883.68	508.67	1,951.15	0.00	0.00	0.00
3,800.00	89.72	164.76	1,862.94	-1,980.16	534.95	2,051.15	0.00	0.00	0.00
3,900.00	89.72	164.76	1,863.42	-2,076.64	561.24	2,151.15	0.00	0.00	0.00
4,000.00	89.72	164.76	1,863.91	-2,173.13	587.52	2,251.15	0.00	0.00	0.00
4,009.74	89.72	164.76	1,864.00	-2,182.53	590.04	2,260.88	0.00	0.00	0.00
TD at 4009.74 - CD 27 Fed #2H PBHL									

Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
CD 27 Fed #2H PBHL	- plan hits target	0.00	0.00	1,864.00	-2,182.53	590.04	400,740.768	559,987.340	32° 6' 6.125 N	104° 16' 23.173 W
- Point										

Quantum Drilling Motors

Planning Report

Database: EDM 2003.16 Single User Db
Company: Cimarex Energy Co.
Project: Eddy County (NM83E)
Site: Sec 27-T25S-R26E
Well: Chosa Draw "27" Fed Com #2H
Wellbore: Lateral #2
Design: 05-19-09

Local Co-ordinate Reference: Well Chosa Draw "27" Fed Com #2H
TVD Reference: WELL @ 0 00ft (Original Well Elev)
MD Reference: WELL @ 0 00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,589.60	1,589.00	Base Salt		0.00	
1,802.66	1,790.00	Bell Canyon		0.00	
1,887.57	1,839.00	Ramsey Ss		0.00	
996.32	996.00	Top Salt		0.00	
	1,883.00	Olds Ss		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,665.80	1,665.14	-26.13	-4.56	Tie in to GYRO / KOP 30/100
1,962.86	1,854.00	-207.65	52.04	EOC - Hold to TD
4,009.74	1,864.00	-2,182.53	590.04	TD at 4009.74

Cimarex Energy Co.

Project: Eddy County (NM835)
 Site: Sec 27-T25S-R25E
 Well: Chosa Draw #27 Fed Com #2H
 Wellbore: Lateral #2
 Design: 05-19-09
 Plan Version

WELL DETAILS: Chosa Draw #27" Fed Com #2H

+N/-S +E/-W Northing Easting Latitude Longitude
 0.00 0.00 402923.300 559397.300 32° 6' 27.727 N 104° 16' 30.019 W

GL: 3251.0' KB ELEV: 3271.0'



Alignments to Grid North
 Total Correction: 9.10°
 Magnetic Field
 Strength: 48727 nT
 Dip Angle: 60.02°
 Date: 2009/05/19
 Model: IGRF200510

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
CD 27 Fed #2H PBHL	1864.00	-2182.53	590.04	400740.768	559987.340	Point

PLAN DETAILS

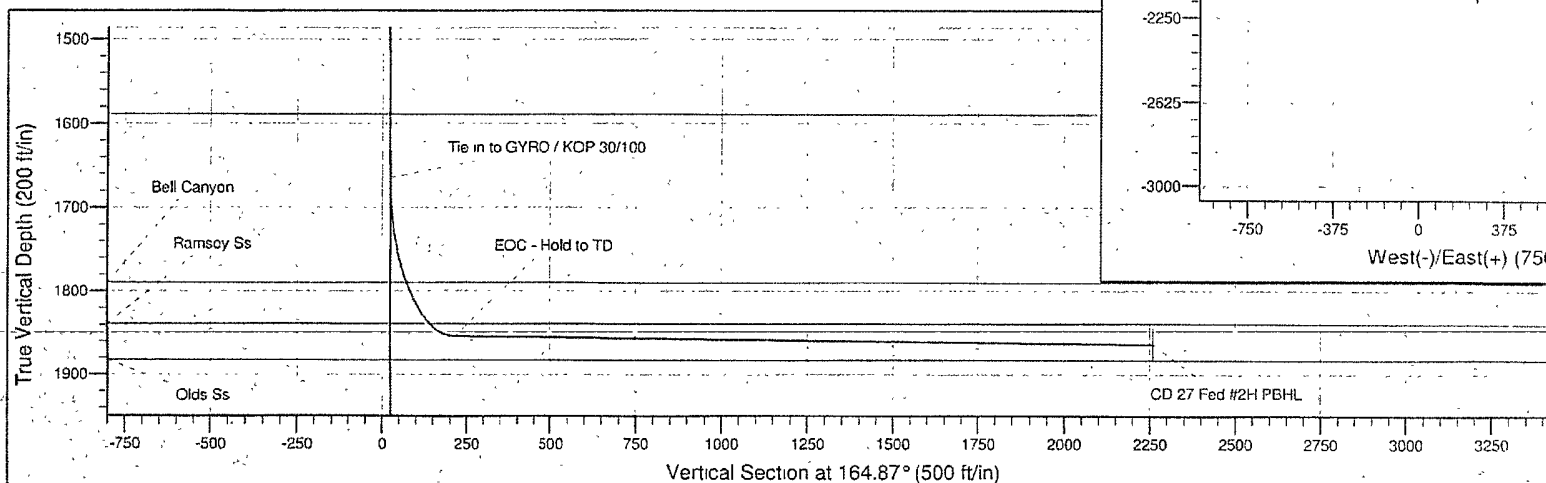
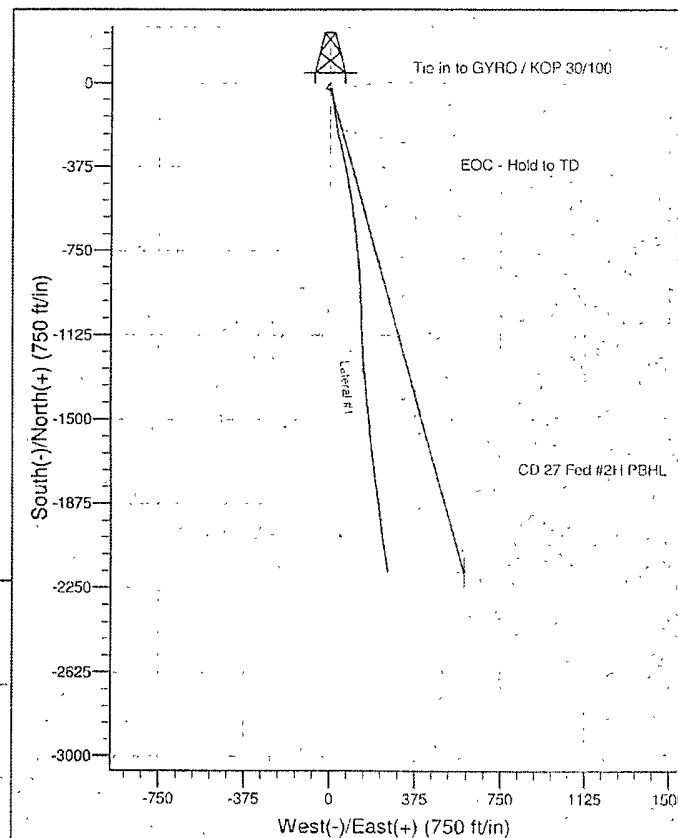
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFac	VSec	Target
1665.80	2.18	90.46	1665.14	-26.13	-4.56	0.00	0.00	24.03	
1962.86	89.72	164.76	1854.00	-207.65	52.04	30.00	74.32	214.04	
4009.74	89.72	164.76	1864.00	-2182.53	590.04	0.00	0.00	2260.88	CD 27 Fed #2H PBHL

ANNOTATIONS

TVD	MD	Annotation
1665.14	1665.80	Tie in to GYRO / KOP 30/100
1854.00	1962.86	EOC - Hold to TD
1864.00	4009.74	TD at 4009.74

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
996.00	996.32	Olds Ss
1589.00	1589.60	Top Salt
1790.00	1802.66	Base Salt
1839.00	1887.57	Bell Canyon
		Ramsey Ss



**Chosa Draw 27 Federal Com No. 2
30-015-36453
Cimarex Energy Co. of Colorado
June 20, 2009
Conditions of Approval**

- 1. If surface disturbance beyond the existing pad is planned, approval must also be received for that disturbance.**
- 2. Closed loop system required.**
- 3. Cave/karst requirements for berming as per original APD are also in effect.**

WWI 062009