

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

New Mexico Oil Conservation Division, District I

1625 N. French Drive
Hobbs, NM 88240

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

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HOBBSDO

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 600 N. Marienfeld St., Ste. 600; Midland, TX 79701	3b. Phone No. (include area code) 432-571-7800
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL 375 FSL & 375 FEL 18-15S-31E BHL 375 FSL & 375 FWL	

5. Lease Serial No. LC-064900 SHL Fee BHL Fee
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No Pending
8. Well Name and No. Franklin 18 Federal Com No. 4
9. API Well No 30-005-29090
10. Field and Pool, or Exploratory Area Abo Wildcat
11. County or Parish, State Chaves 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 Change BHL
	☐ 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 achieve the preferred orientation for intersecting fractures, Cimarex has changed the BHL for this well as shown below:

Permitted Location

18-15S-31E
SHL 375 FSL & 375 FEL
BHL 375 FSL & 375 FWL
Chaves County, NM

New Proposed Location

18-15S-31E
SHL 375 FSL & 375 FEL
BHL 330 FNL & 375 FEL
Chaves County, NM

Please see attached revised plat, new preliminary directional plan, and revised drilling plans.

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

Natalie Krueger

Signature

Title

Regulatory

Date

November 19, 2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/S/ DAVID R. GLASS

Title

PETROLEUM ENGINEER

Date

NOV 24 2009

Office

ROSWELL FIELD 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)

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Drilling Plan Revisions
Franklin 18 Federal Com No. 4
 18-15S-31E
 SHL 375 FSL & 375 FEL BHL 330 FNL & 375 FEL
 Chaves County, NM

Drilling Plan

After drilling and setting surface and intermediate casing, drill to vertical TD 9500' and log. Set 7" casing to 8335' and cross over to 2 $\frac{7}{8}$ " 2000 psi IJ fiberglass tubing underneath to 9500' and cement in place. Drill out of the bottom of the 7" with a 6 $\frac{1}{8}$ " bit and through cement and fiberglass tubing to KOP @ 8395' and kick off to drill the lateral. The fiberglass tubing effectively circulates cement to surface and plugs back the open hole.

Drill to lateral TD (13079' MD, 8615' TVD). Run 4 $\frac{1}{2}$ " PEAK liner from RSB packer @ 8295' to TD @ 13079.' Run 4 $\frac{1}{2}$ " LTC from TD to EOC and BTC from liner hanger to EOC. Frac through PEAK completion liner.

Casing Plan

String	Hole Size	Depth	Casing OD	Weight	Collar	Grade
<i>Surface</i>	17 $\frac{1}{2}$ "	0' to 340'	New 13 $\frac{3}{8}$ "	48#	STC	H-40
<i>Intermediate</i>	12 $\frac{3}{4}$ "	0' to 3950'	New 9 $\frac{5}{8}$ "	40#	LTC	J/K-55
<i>Production</i>	8 $\frac{3}{4}$ "	0' to 8335'	New 7"	26#	LTC	P-110
<i>Fiberglass</i>	8 $\frac{3}{4}$ "	8335' to 9500'	New 2 $\frac{7}{8}$ "	2.18#		IJ
<i>Lateral Pt 1</i>	6 $\frac{1}{8}$ "	8295' to 8694'	New 4 $\frac{1}{2}$ "	11.6#	BTC	P-110
<i>Lateral Pt 2</i>	6 $\frac{1}{8}$ "	8694' to 13079'	New 4 $\frac{1}{2}$ "	11.6#	LTC	P-110

Cementing Plan

Surface Lead: 400 sx Premium Plus + 2% CaCl₂ (wt 14.8, yld 1.35)
Tail: 400 sx Premium Plus + 2% CaCl₂ (wt 14.8, yld 1.35)
TOC Surface

Intermediate Lead: 950 sx Econocem + 3% Salt + 2% CaCl₂ + 3 lbm/sk Gilsonite (wt 11.7, yld 2.06)
Tail: 215 sks Premium Plus + 1% CaCl₂ (wt 14.8, yld 1.34)
TOC Surface

Production Lead: 450 sx EconoCem + 3% Salt + 5lbm/sk Gilsonite (yld 1.71)
Tail: 335 sx Halcem (wt 14.8, yld 1.34)
TOC 3750'

Lateral No cement needed. Peak completion assembly.

Fresh water zones will be protected by setting 13 $\frac{3}{8}$ " casing at 340' and cementing to surface. Hydrocarbon zones will be protected by setting 9 $\frac{5}{8}$ " casing at 3950' and cementing to surface, and by setting 7" casing at 8335' and fiberglass to 9500' and cementing to 3750.'

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 SURVEY OF LAND INQUIRY
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DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Bravos Rd., Artec, NM 87410

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

NM 87219
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 NM 87410
 DEC 02 2009
 NM 87601
HOBBSOCD

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

Submit to Appropriate District Office

State Lease - 4 Copies
 Fee Lease - 3 Copies

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-005-29090	Pool Code	Pool Name Abo Wildcat	Well Number 4
Property Code 37526	Property Name FRANKLIN "18" FEDERAL COM		Elevation 4431'
OGARD No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO		

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	15 S	31 E		375	SOUTH	375	EAST	CHAVES

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	18	15 S	31 E		330	NORTH	375	EAST	CHAVES
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
160		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

BOTTOM HOLE LOCATION
 Lat - N33°01'20.05"
 Long - W103°51'14.07"
 NMSPC- N 735961.787
 E 688281.632
 (NAD-83)

BHL
 330 FNL & 375 FEL

Proposed Producing Interval

EOC
 565 FSL & 376 FEL

SHL & P.P. Abo
 375 FSL & 375 FEL

SURFACE LOCATION
 Lat - N33°00'34.79"
 Long - W103°51'14.08"
 NMSPC- N 731387.6
 E 688302.0
 (NAD-83)

LC-064900

Fee Surface & Minerals

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 released 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.
 Signature Zeno Farris Date 11/19/2009
 Printed Name Zeno Farris

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 MAY 15 2008
 Signature Gary L. Jones
 Professional Surveyor
 Certificate No. 7977
 BASIN SURVEYS

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Planned Wellpath Report

Prelim_2
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Chaves County, NM	Well	No. 4H
Field	(Franklin) Sec 18, T15S, R31E	Wellbore	No. 4H PWB
Facility	Franklin 18 Fed Com No. 4H		

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	Victor Hernandez
Scale	0.999934	Report Generated	11/18/2009 at 5:00:10 PM
Convergence at slot	0.26° East	Database/Source file	WA_Midland/No. 4H_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	688302.00	731387.60	33°00'34.792"N	103°51'14.077"W
Facility Reference Pt			688302.00	731387.60	33°00'34.792"N	103°51'14.077"W
Field Reference Pt			688326.60	735962.00	33°01'20.052"N	103°51'13.544"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 4H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 4H SHL (RT) to Mean Sea Level	4449.00ft
Vertical Reference Pt	Rig on No. 4H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 4H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	359.74°

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Planned Wellpath Report

Prelim 2
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Chaves County, NM	Well	No. 4H
Field	(Franklin) Sec 18, T15S, R31E	Wellbore	No. 4H PWB
Facility	Franklin 18 Fed Com No. 4H		

WELLPATH DATA (50 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]	DLS [°/100ft]	Comments
0.00	0.000	359.745	0.00	0.00	0.00	0.00	688302.00	731387.60	0.00	Tie On
8395.00	0.000	359.745	8395.00	0.00	0.00	0.00	688302.00	731387.60	0.00	KOP
8495.00†	30.000	359.745	8490.49	25.59	25.59	-0.11	688301.89	731413.19	30.00	
8595.00†	60.000	359.745	8560.40	95.49	95.49	-0.43	688301.57	731483.09	30.00	
8693.74	89.621	359.745	8585.98	189.72	189.72	-0.84	688301.16	731577.31	30.00	EOC
8695.00†	89.621	359.745	8585.99	190.99	190.98	-0.85	688301.15	731578.57	0.00	
8795.00†	89.621	359.745	8586.65	290.98	290.98	-1.30	688300.70	731678.56	0.00	
8895.00†	89.621	359.745	8587.31	390.98	390.98	-1.74	688300.26	731778.55	0.00	
8995.00†	89.621	359.745	8587.98	490.98	490.97	-2.19	688299.81	731878.54	0.00	
9095.00†	89.621	359.745	8588.64	590.98	590.97	-2.63	688299.37	731978.53	0.00	
9195.00†	89.621	359.745	8589.30	690.97	690.97	-3.08	688298.92	732078.52	0.00	
9295.00†	89.621	359.745	8589.96	790.97	790.96	-3.52	688298.48	732178.51	0.00	
9395.00†	89.621	359.745	8590.62	890.97	890.96	-3.97	688298.03	732278.50	0.00	
9495.00†	89.621	359.745	8591.28	990.97	990.96	-4.41	688297.59	732378.49	0.00	
9595.00†	89.621	359.745	8591.95	1090.97	1090.96	-4.86	688297.14	732478.48	0.00	
9695.00†	89.621	359.745	8592.61	1190.96	1190.95	-5.30	688296.70	732578.47	0.00	
9795.00†	89.621	359.745	8593.27	1290.96	1290.95	-5.75	688296.25	732678.46	0.00	
9895.00†	89.621	359.745	8593.93	1390.96	1390.95	-6.19	688295.81	732778.45	0.00	
9995.00†	89.621	359.745	8594.59	1490.96	1490.94	-6.64	688295.36	732878.44	0.00	
10095.00†	89.621	359.745	8595.25	1590.96	1590.94	-7.08	688294.92	732978.43	0.00	
10195.00†	89.621	359.745	8595.92	1690.95	1690.94	-7.53	688294.47	733078.42	0.00	
10295.00†	89.621	359.745	8596.58	1790.95	1790.93	-7.97	688294.03	733178.41	0.00	
10395.00†	89.621	359.745	8597.24	1890.95	1890.93	-8.42	688293.58	733278.40	0.00	
10495.00†	89.621	359.745	8597.90	1990.95	1990.93	-8.87	688293.14	733378.39	0.00	
10595.00†	89.621	359.745	8598.56	2090.94	2090.92	-9.31	688292.69	733478.38	0.00	
10695.00†	89.621	359.745	8599.23	2190.94	2190.92	-9.76	688292.24	733578.37	0.00	
10795.00†	89.621	359.745	8599.89	2290.94	2290.92	-10.20	688291.80	733678.36	0.00	
10895.00†	89.621	359.745	8600.55	2390.94	2390.91	-10.65	688291.35	733778.35	0.00	
10995.00†	89.621	359.745	8601.21	2490.94	2490.91	-11.09	688290.91	733878.34	0.00	
11095.00†	89.621	359.745	8601.87	2590.93	2590.91	-11.54	688290.46	733978.33	0.00	

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Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Chaves County, NM	Well	No. 4H
Field	(Franklin) Sec 18, T15S, R31E	Wellbore	No. 4H PWB
Facility	Franklin 18 Fed Com No. 4H		

WELLPATH DATA (50 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]	DLS [°/100ft]	Comments
11195.00†	89.621	359.745	8602.53	2690.93	2690.90	-11.98	688290.02	734078.32	0.00	
11295.00†	89.621	359.745	8603.20	2790.93	2790.90	-12.43	688289.57	734178.31	0.00	
11395.00†	89.621	359.745	8603.86	2890.93	2890.90	-12.87	688289.13	734278.30	0.00	
11495.00†	89.621	359.745	8604.52	2990.92	2990.89	-13.32	688288.68	734378.29	0.00	
11595.00†	89.621	359.745	8605.18	3090.92	3090.89	-13.76	688288.24	734478.28	0.00	
11695.00†	89.621	359.745	8605.84	3190.92	3190.89	-14.21	688287.79	734578.27	0.00	
11795.00†	89.621	359.745	8606.51	3290.92	3290.89	-14.65	688287.35	734678.26	0.00	
11895.00†	89.621	359.745	8607.17	3390.92	3390.88	-15.10	688286.90	734778.25	0.00	
11995.00†	89.621	359.745	8607.83	3490.91	3490.88	-15.54	688286.46	734878.24	0.00	
12095.00†	89.621	359.745	8608.49	3590.91	3590.88	-15.99	688286.01	734978.23	0.00	
12195.00†	89.621	359.745	8609.15	3690.91	3690.87	-16.43	688285.57	735078.22	0.00	
12295.00†	89.621	359.745	8609.81	3790.91	3790.87	-16.88	688285.12	735178.21	0.00	
12395.00†	89.621	359.745	8610.48	3890.90	3890.87	-17.33	688284.68	735278.20	0.00	
12495.00†	89.621	359.745	8611.14	3990.90	3990.86	-17.77	688284.23	735378.19	0.00	
12595.00†	89.621	359.745	8611.80	4090.90	4090.86	-18.22	688283.79	735478.18	0.00	
12695.00†	89.621	359.745	8612.46	4190.90	4190.86	-18.66	688283.34	735578.17	0.00	
12795.00†	89.621	359.745	8613.12	4290.90	4290.85	-19.11	688282.89	735678.16	0.00	
12895.00†	89.621	359.745	8613.78	4390.89	4390.85	-19.55	688282.45	735778.15	0.00	
12995.00†	89.621	359.745	8614.45	4490.89	4490.85	-20.00	688282.00	735878.14	0.00	
13078.65	89.621	359.745	8615.00	4574.54	4574.50	-20.37	688281.63	735961.79	0.00	No. 4H PBHL

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Planned Wellpath Report

Prelim_2
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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Chaves County, NM	Well	No. 4H
Field	(Franklin) Sec 18, T15S, R31E	Wellbore	No. 4H PWB
Facility	Franklin 18 Fed Com No. 4H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 4H PBHL	13078.65	8615.00	4574.50	-20.37	688281.63	735961.79	33°01'20.052"N	103°51'14.072"W	point

SURVEY PROGRAM Ref Wellbore: No. 4H PWB Ref Wellpath: Prelim_2

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	13078.65	NaviTrak (Standard)		No. 4H PWB

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