

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

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 <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM-4313
2. Name of Operator Cimarex Energy Co. of Colorado		6. If Indian, Allottee or Tribe Name
3a. Address PO Box 140907; Irving, TX 75014-0907	3b. Phone No. (include area code) 972-401-3111	7. If Unit or CA/Agreement, Name and/or No. Nm 71014 A Pipeline Deep Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2300' FSL & 1650' FEL 6-19S-34E		8. Well Name and No. Pipeline Deep 6 Federal No. 1
		9. API Well No. 30-025-37547
		10. Field and Pool, or Exploratory Area Quail Ridge; Morrow, North (Gas)
		11. County or Parish, State Lea County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input checked="" type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompletion 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.)

Well is currently producing 90 mcfpd & 5 bopd from Morrow perfs @ 13039' - 13263'.

Propose to re-enter well and set CIBP at 12990' w 35' cement and perf & test several Atoka intervals between 12532' - 12560' per attached procedure.

If unsuccessful, propose to set CIBP at 12480' w 35' cement and perf & test several Bone Spring intervals between 9176' and 10716' per attached procedure.

Please note that if the Bone Spring completion is tested and productive, the well will no longer be in the Pipeline Deep Unit.

APPROVED

OCT 23 2006

LES BABYAK
PETROLEUM ENGINEER

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

Zeno Farris

Signature

Zeno Farris

Title

Manager Operations Administration

Date

October 3, 2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Chris Williams

OC DISTRICT SUPERVISOR/GENERAL MANAGER

Date

FEB 06 2007

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.

Office

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)



Cimarex Energy Company

Pipeline Deep 6 Fed #1

Atoka/Bonesprings Completion Procedure (version 1.0)

Sec 6-T9S-R34E, 2300' FSL & 1750' FEL
Quail Ridge Field
Lea County, New Mexico

Intermediate Casing: 9 5/8" 40# K-55 set from Surface to 3,428'
100% Burst: 3,950 psi
Production Casing: 5 1/2" 17# P-110 LTC set from Surface to 13,573'. PBTD: +/- 13,476'. DV Tool @
8,489'. Marker Joint at +/- 11,137'.
100% Burst: 10,226 psi. 100% Collapse: 7,480 psi

1. Prep location for completion operations. MIRU completion unit, flowback tank, choke manifold and flowline. Maximum anticipated reservoir pressure is 4,500 psi.
2. Check for pressure on all casing strings. Bleed pressure to FB tank and check for flow.

Atoka

3. Spot one frac tank containing 480 bbls 7% KCL water w/10% methanol and 2 gpt LS-300 - referred to as **KCL mix water**.
4. Kill well as necessary with KCL-mix. ND wellhead, NU 5K psi BOP.
5. Release 5 1/2" Arrowset 1X MOD packer, load hole with +/-300 bbls of KCL-Mix and POOH with 400 jts of 2 3/8" L-80, packer and WLEG. Stand tubing back.
6. Send packer in to be redressed.
7. RU XXX WL unit and RIH with 5 1/2" CIBP. Set CIBP at 12990'. Dump 35' cement cap on top of plug.
8. RU Kill truck to test CIBP to 5,000 psi.
9. Once plug tests, perforate from the bottom up per the following schedule with 4" Ported Gun with 23 gm charge (or equivalent) to achieve 0.42" EHD in 5-1/2" casing at 120 phasing, 3 spf. Correlate to HES CBL/GR dated 4-21-06.
 - o 12,552-12,560, 3spf 21 holes
 - o 12,536-12,532 3spf 27 holes
10. PU and WL set 5 1/2" Arrowset 1X MOD packer with 1.87" X-Profile Nipple (top) and 1.781" WLEG. Set packer at +/- 12,480'
11. RDMO WL unit.
12. RIH w/ 2 3/8" Tubing and on/off tool. Latch into packer @ +/- 12,480'

13. RU 10K psi rate pump truck to breakdown perms. Acidize perms with 2,100 gals of 7.5% HCL with 1.0 gpt Corrosion Inhibitor, 2.0 gpt Amphoteric Surfactant, Iron Control for 5,000 ppm total iron, and 10% Methanol using 72 7/8" RCN Balls. Acidize at 4.0-5.0 bpm. If ballout occurs, surge balls and finish flushing well. Well should be flushed and overflushed by 24 bbls using the KCL-MIX. Record ISIP, 5 min, 10 min, 15 min, 30 min and 60 min. Have service company e-mail 2 sec ASCII file to maudas@cimerex.com and jblevins@sierra-engineering.net.
14. RU to flow/swab test zone.
15. After 3 to 5 days of testing, prepare to RIH with tandem pressure bombs for a 72 hr buildup. If well tests at 0.75+ MMCFD, then RIH with bombs with well flowing before shutting in.
16. Once bombs are pulled, evaluate for fracture stimulating.
17. **Frac procedure to follow based on flow/swab testing and BHP analysis.**

Bonesprings

18. Once testing of Atoka is complete, prepare to complete in Bonesprings.
19. ND Wellhead, NU 5 k BOP.
20. POOH with tubing and packer.
21. ND BOP. NU 10K 7 1/16" Frac Valve.
22. RU WL. Prepare to RIH with 5 1/2" CIBP. Set Bridge plug at +/- 12480'. Dump bail 35' of cement on top of plug. Test plug to +/- 5,000 psi.
23. POOH with setting tool.
24. Prepare to perforate 3rd Bonesprings Sand from bottom up per the following schedule with 4" Ported Gun with 23 gm charge (or equivalent) to achieve 0.42" EHD in 5-1/2" casing at 120 phasing,
Correlate log to HES CBL/GR Log dated 4-21-06

Total Shots		Shots/ft		top shot		bot shot	
21	shots	2	sht/ft	from	10706	to	10716
37	shots	2	sht/ft	from	10652	to	10670
28	shots	1	sht/ft	from	10620	to	10647
86	shots	across			10620	to	10716

25. RDMO WL unit.
26. Spot **20cleaned** frac tanks. Fill 20 tanks each with 480 bbls of fresh water w/ biocide. A frac supervisor should spot the tanks and provide biocide. Fluids will be continuous-mixed. No gel may be put into the frac tanks.
27. Proppant Bulk Equipment will consist of 2 Bulk Unit set up for a **Blender**. Order a total of **525,000 lbs** of 20/40 PR-6000 or equivalent.

28. MIRU frac equipment for a **single-day / four-stage** frac job as follows for 60 bpm at 5,800 psi:
 Wellhead rated for 10,000 psi. Stage Head Capable of a running a 5 1/2" Composite Frac Plug Through. No casing saver to be used.
 Hydration Unit/Tank for 2.0 min hydration time
 Blender capable of 75 bpm.
 Fluid QA Van
 Primary Horsepower: 8,530 HHP
 Standby HHP to guarantee 60 bpm will be achieved throughout the treatment
Acid Transport with XXX gals of 28% HCl with 2.0 gpt AcidGel, 2.0 gpt Corrosion Inhibitor, 2.0 gpt Non-Emulsifier, and 5.0 gpt Iron Control. **Acid will be cut on the fly with water to dilute to 15% and maintain rate while flushing.****
 Computer Monitor Vehicle rigged to monitor two Pressure Transducers
 Blender Densitometer, In-line High Pressure Densitometer, and Real-time Viscosity
29. Prime up pumps, and verify flowmeter agreement. Pressure test lines against the Frac Valve to 10,000 psi and hold for 5 min. An acceptable test will have a final bleed-off rate of less than **100 psi/min**.
30. Open Frac Valve and note SICP. Establish injection water with gel, then begin pumping 2,750 gals of 15% acid at 6-10 BPM. Perform the fracturing treatment per the attached Pump Schedule spreadsheet. Do not exceed a **maximum allowable pressure of 9,000 psi**. Displace the well as pressures allow.
31. RD Frac Equipment. RU Wireline to set Composite Frac Plug at +/- 9,774. Test to 1,000 psi over shut-in pressure..
32. Perforate 2nd. Stage as follows w/ 4" Casing Gun with 120 deg Phasing 23 gram charge to obtain a 0.42 inch min EHD and FP of at least 8 inches.

Total Shots		Shots/ft			top shot		bot shot	
13	shots	3	sh/ft	from	9666	to	9670	
13	shots	3	sh/ft	from	9650	to	9654	
13	shots	3	sh/ft	from	9640	to	9644	
13	shots	3	sh/ft	from	9618	to	9622	
52	shots	across			9618	to	9670	

33. POOH with Perforating Guns. RU Frac Equipment.
34. Pressure test lines against the Frac Valve to 10,000 psi and hold for 5 min. An acceptable test will have a final bleed-off rate of less than **100 psi/min**.
35. Open Frac Valve and note SICP. Establish rate and perform the fracturing treatment per the attached 2nd. Stage Pump Schedule spreadsheet. Do not exceed a **maximum allowable pressure of 9,000 psi**. Displace the well as pressures allow.
36. RD Frac Equipment. RU Wireline to set Composite Frac Plug at +/- 9,595'. Test to 1,000 psi over shut-in pressure.
37. Perforate 3rd Stage as follows w/ 4" Casing Gun with 120 deg Phasing 23 gram charge to obtain a 0.42 inch min EHD and FP of at least 8 inches. ****Breakdown first setting with water before finishing perforating runs.**

Total Shots	Shots/ft			top shot	bot shot
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30	shots	3	sht/ft	from	9560	to	9570
30	shots	3	sht/ft	from	9420	to	9430

38. POOH with Perforating Guns. RU Frac Equipment.
39. Pressure test lines against the Frac Valve to 10,000 psi and hold for 5 min. An acceptable test will have a final bleed-off rate of less than **100 psi/min**.
40. Open Frac Valve and note SICP. Establish rate and perform the fracturing treatment per the attached 3rd Stage Pump Schedule spreadsheet. Do not exceed a **maximum allowable pressure of 9,000 psi**. Displace the well as pressures allow.
41. RD Frac Equipment. RU Wireline to set Composite Frac Plug at +/- 9,275'. Test to 1,000 psi over shut-in pressure.
42. Perforate 4th Stage as follows w/ 4" Casing Gun with 120 deg Phasing 23 gram charge to obtain a 0.42 inch min EHD and FP of at least 8 inches. ****Breakdown first setting with water before finishing perforating runs.**

Total Shots		Shots/ft			top shot		bot shot
75	shots	3	sht/ft	from	9176	to	9201
75	shots		across		9176	to	9201

43. POOH with Perforating Guns. RU Frac Equipment.
44. Pressure test lines against the Frac Valve to 10,000 psi and hold for 5 min. An acceptable test will have a final bleed-off rate of less than **100 psi/min**.
45. Open Frac Valve and note SICP. Establish rate and perform the fracturing treatment per the attached 4th Stage Pump Schedule spreadsheet. Do not exceed a **maximum allowable pressure of 9,000 psi**. Displace the well as pressures allow.
46. RD Frac Equipment.
47. Once all stages on the Bonesprings Completion are finished. Prepare to RIH to drill out plugs.
48. After all plugs are drilled out, wait on order to run production assembly.
49. Prepare to turn over to production.

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

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37547	Pool Code	Pool Name Atoka Gas Wildcat
Property Code	Property Name PIPELINE DEEP 6 FEDERAL	Well Number 1
OGRID No. 162683	Operator Name Cimarex Energy Co. of Colorado	Elevation 3804'

Surface Location

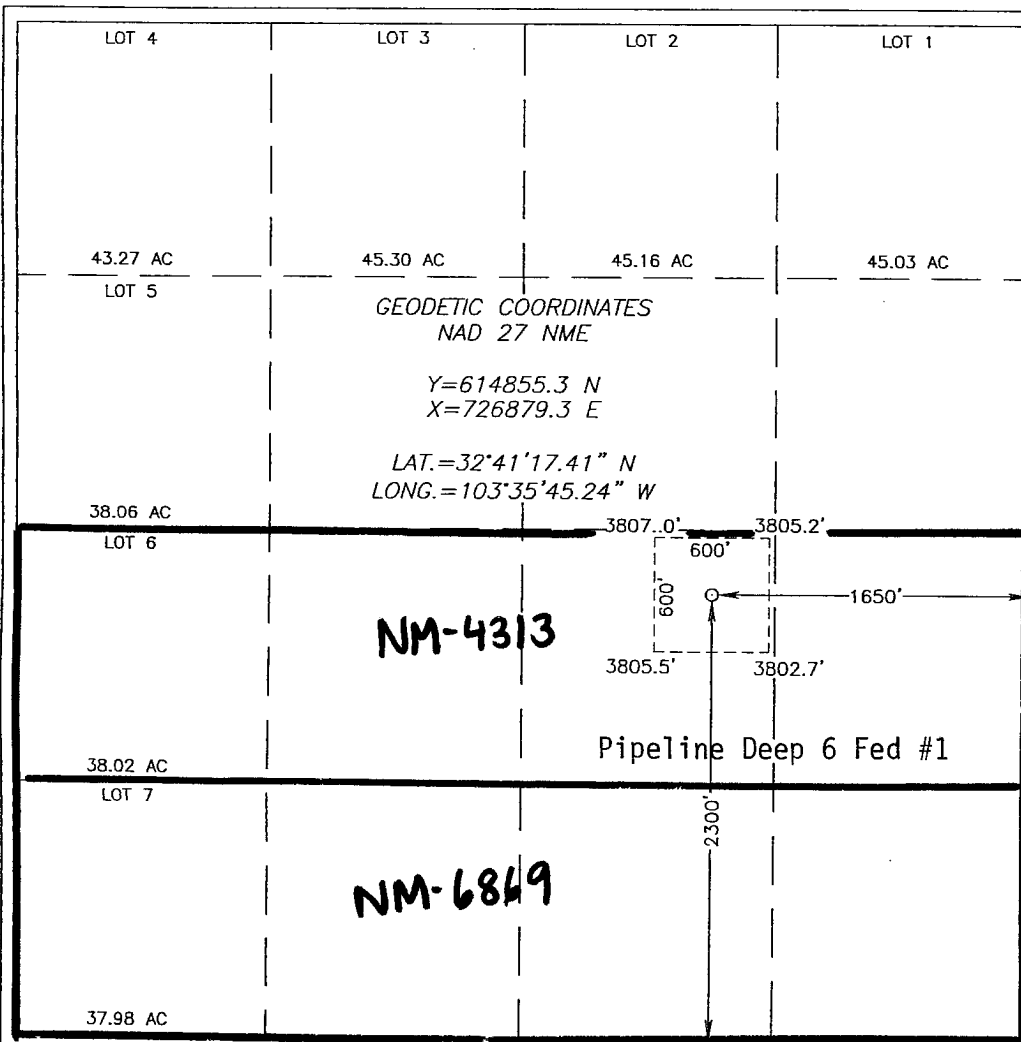
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	6	19-S	34-E		2300	SOUTH	1650	EAST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
316	N	U	NSL on file for Morrow-will amend to include Atoka if neces:

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 the the information
contained herein is true and complete to the
best of my knowledge and belief.

Zeno Farris

Signature

Zeno Farris

Printed Name

Mgr Operations Admin

Title

October 3, 2006

Date

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.

NOVEMBER 9, 2005

Date Surveyed

JR

Signature & Seal of
Professional Surveyor

Ronald J. Edson 11/11/05
05-11-1753

Certificate No. GARY EDSON 12641
RONALD J. EDSON 3239

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Form C-102

Revised JUNE 10, 2003

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025=37547	Pool Code	Pool Name E-K; Bone Spring
Property Code	Property Name PIPELINE DEEP 6 FEDERAL	Well Number 1
OGRID No. 162683	Operator Name Cimarex Energy Co. of Colorado	Elevation 3804'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	6	19-S	34-E		2300	SOUTH	1650	EAST	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
Dedicated Acres 80	Joint or Infill N	Consolidation Code	Order No. NSL Pending						

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

LOT 4	LOT 3	LOT 2	LOT 1
43.27 AC	45.30 AC	45.16 AC	45.03 AC
LOT 5	GEODETIC COORDINATES NAD 27 NME $Y=614855.3$ N $X=726879.3$ E $LAT.=32^{\circ}41'17.41''$ N $LONG.=103^{\circ}35'45.24''$ W		
38.06 AC	LOT 6	3807.0' 3805.2' 600' 600' 3805.5' 3802.7' NM-4313 Pipeline Deep 6 Fed #1	
38.02 AC	LOT 7	2300'	
37.98 AC			

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Zeno Farris

Signature

Zeno Farris

Printed Name

Mgr Operations Admin

Title

October 3, 2006

Date

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.

NOVEMBER 9, 2005

Date Surveyed

JR

Signature & Seal of Professional Surveyor

Ronald J. Eidson 11/11/05

05.11.1753

Certificate No. GARY EIDSON 12641

RONALD J. EIDSON 3239