Form 3160-5 (April 2004)

## UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OM B No 1004-0137 Expires March 31, 2007

## BUREAU OF LAND MANAGEMENT

5 Lease Senal No. NM-112915\_ SL VB 1139

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If Indian, Allottee or Tribe Name

	nis form for proposals ell. Use Form 3160 - 3			O II IIIdiaii,	Another of Thoe Name	
SUBMIT IN TRIPLICATE- Other instructions on reverse side.				7 If Unit or CA/Agreement, Name and/or No CA-NM 28667  8 Well Name and No Forehand Ranch 27 State Com # 1H  9. API Well No		
1. Type of Well Gas Well Other Other						
2 Name of Operator Caza Operating, LLC						
3a Address 3b Phone No (include area code) 200 North Loraine, Suite 1550, Midland, Texas 79701 432 682 7424			area code)	30 015 39844  10 Field and Pool, or Exploratory Area		
4 Location of Well (Footage, Sec., 252' FNL & 1900 FEL, Sec 27		,	E OF NOTICE, F	11 County o	t, Bone Spring or Parish, State county, New Mexico	
TYPE OF SUBMISSION	TYPE OF ACTION					
Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture Treat New Construction Plug and Abandon Plug Back	Production (St Reclamation Recomplete Temporarily A Water Disposal	bandon	Water Shut-Off Well Integrity Other	
If the proposal is to deepen dire	ectionally or recomplete horizon	tally, give subsurface location	ns and measured and tr	ue vertical depth	rk and approximate duration thereof is of all pertinent markers and zones eports shall be filed within 30 days	

**OCD Artesia** 

determined that the site is ready for final inspection)

Caza Operating Request a variance to the plug back slurry submitted in the revised casing design. We will use this slurry in conjunction with a oriented open hole whipstock. The whipstock will be used in lieu of a high strength kick off plug. We've determined this is the most economic way to Kick off the horizontal portion of the well. Attached is the plug recipe and strengths. Plug will be set through whipstock once it has been oriented & anchored via 2-3/8" tubing tail

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

Pipe hung below whipstock.

Accepted for record NMOCD169 pln | 2012

SEE ATTACHED FOR CONDITIONS OF APPROVAL

OCT 1 8 2012

NMOCD ARTESIA

14 I hereby certify that the foregoing is true and correct Name (Printed/Typed)				
Richard L Wright	tle Operation Manage	er		
Signature Kahangh Wight De	ate 10-15-2012	ADDROVED		
THIS SPACE FOR FEDERAL OR STATE OFFICE USE				
Approved by	_ Title	Dete 1 5 2012		
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	WESLEY W. INGRAM		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to Fafiyld partitle by Carenty For the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction				



Proposal No: 847250289A

## CAZA OPERATING LLC FOREHAND RANCH '27' STATE COM 1H

API # 30-015-39844-0000 FOREHAND RANCH Field 27B-23S-27E Eddy County, New Mexico October 10, 2012

## **Cement Proposal**

Prepared for:

Richard Wright

Prepared by:

Bud Roberts Field Engineer

Service Point:

BJS, ARTESIA

Bus Phone:

505-7463140

Fax:

575-746-2235

Service Representatives:

MATTHEW A POST Account Manager Houston, Texas

Powered by

# **PowerVision**

Opèrator Name: Well Name: **CAZA OPERATING LLC** 

FOREHAND RANCH '27' STATE COM 1H

Job Description: Date:

Plug (9,200 - 6,800) October 10, 2012



**Proposal No:** 847250289A

### **JOB AT A GLANCE**

Depth (TVD)

9.200 ft

Depth (MD)

9,200 ft

**Hole Size** 

8.75 in

**Pump Via** 

Drill Pipe 4 1/2" O.D. (3.640" .I.D) 20

**Total Mix Water Required** 

4,715 gals

**Slurry** 

Class C

755 sacks

Density

14.8 ppg

Yield

1.33 cf/sack

Displacement

**Displacement** 

84 bbls

Operator Name: Well Name: Job Description:

Date:

CAZA OPERATING LLC

FOREHAND RANCH '27' STATE COM 1H

Plug (9,200 - 6,800) October 10, 2012



**Proposal No: 847250289A** 

### **FLUID SPECIFICATIONS**

PLUG NO.	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT		
1 .	1006 /	1.33	<ul><li>755 sacks Class C Cement + 0.2% bwoc FL-52</li><li>+ 1% bwoc FL-62 + 0.3% bwoc CD-32 + 55.4%</li><li>Fresh Water</li></ul>		
Displacement			= 84.4 bbls Displacement		
CEMENT PROPE	ERTIES		•		
			PLUG		
			NO.1		
Slurry Weight	(ppg)		14.80		
Slurry Yield (cf	f/sack)		1.33		
Amount of Mix	Water (gps)		6.24		
Estimated Pumping Time - 70 BC (HH:MM)			3:23		
COMPRESSIV	/E STRENGTH				
4.75 hrs @	166 ° F (psi)		500		
8 hrs @ 166 ° F (psi) 12 hrs @ 166 ° F (psi)			1044		
			1389		
24 hrs @ 1	66 ° F (psi)		1782		
RHEOLOGIE	S				

<u>600</u> <u>300</u> <u>200</u>

105

75

180

100

10

9

44

## **PLUG GEOMETRY**

PLUG NO.

1

	PLUG TOP		PLUG Bottom	
1	6800 ft	to	9200 ft	with 8.75 inch Open Hole

@ 80°F

Operator: Well Name: Date:

CAZA OPERATING LLC FOREHAND RANCH '27' STATE COM 1H

October 10, 2012



Proposal No: 847250289A

### **PRODUCT DESCRIPTIONS**

#### **CD-32**

A patented, free-flowing, water soluble polymer that is an efficient and effective dispersant for primary and remedial cementing.

#### **Class C Cement**

Intended for use from surface to 6000 ft., and for conditions requiring high early strength and/or sulfate resistance.

#### FL-52

A water soluble, high molecular weight fluid loss additive used in medium to low density slurries. It is functional from low to high temperature ranges.

#### FL-62

A patented dry blend of water soluble polymers that are formulated to control the loss of fluid during cementing operations. A dispersant and bonding additive are proportioned to deliver consistent performance and control fluid loss in primary and squeeze cementing applications at low to moderate temperatures.

## Forehand Ranch 27 State Com 1H 30-015-39844 Caza Operating, LLC October 15, 2012 Conditions of Approval

- 1. The Communitization Agreement number for this well is NMNM-128667, but this agreement has not been approved.
- 2. The procedure for this whipstock and plug indicates that there is a possibility that if the pipe is moved more than 12" to verify the shear that it may be difficult to reenter the whipstock bore to pump the cement plug. Therefore, the operator shall set a neat Class H cement plug at the bottom of the hole from 9200' 8900' to cover the top of the Wolfcamp formation. Contact BLM 575-361-2822 for a witness of the tag at 8900' or shallower.
- 3. After tag of Wolfcamp plug, operator is approved to install the whipstock system and place a cement plug using the tail pipe. However, since the depth is still greater than 7500' Class H cement is required. The Class C cement proposed is not approved.

WWI 101512