Form 3 160-5 (June 1990)

1. Type of Well

Well

Name of Operator

3. Address and Telephone No.

CONOCO INC

CONOCO INC

4. Location of Well (Footage, Sec., T. R. M. or Survey Description)

10 DESTA DR. STE. 430E, MIDLAND, TX. 79705-4500

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED Budget Bureau No. 1004-0135

Expires: March 3 1,1993 5. Lease Designation and Seriai No.

6. If Indian, Allonee or Tribe Name

Jicarilla B

9. API Well No.

13M

8. Well Name and No.

Cont 106

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICA TE

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

7. If Unit or CA, Agreement Designation

30-039-25773

10. Field and Pool, or Exploratory Area

Blanco MV/Basin Dakota

	NL & 1040' FWL 6, T26N, R4W	11. County of Parish, State
		Rio Arriba, NM
CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTIC	E, REPORT, OR OTHER DATA
TYPE OF SUBMISSION		OF ACTION
Notice of Intent Subsequent Repon Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other	Change of Plans New Construction Non-Routine Fracrunng Water Shut-Off Conversion to Injection Dispose Water 1Nole: Reponresults of multiple compition on Wdl Completion or Recompletion Report and Log form.)
13. Describe Proposed or Completed Operations (Clearly state a	l pertinent details, and give pertinent dates, including estimate	ed date of starting any proposed work. If well is directionally drilled

This is notice that the casing plan has been changed according to the attached revised Well Plan Outline. This reflects the changes requested in your letter of January 28, 1999 returning the Sundry dated 12/15/98 unapproved.

2/5/99 Title Sr. Property Analyst Lands and Mineral Resources 1 2 1993 (This space for Conditions of approval if any

BLM(6), SHEAR, PONCA, COST ASST, FILE ROOM

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 junsdiction.

REVISED WELL PLAN OUTLINE

(7" Casing to TD)

WELL NAM JICATIIIA B No. 13M
LOCATION: SEC 36, UNIT D, T-26N, R-4W, RIO ARRIBA CO., NM

EST. GL =

7089

EST. KB =

•	_	_	_	
7	4	^	2	

DI		FORMATION		TYPE OF	T	CASING	IED AC	IFORMATIC:		
-		TOPS &	DRILLING		luc: -	CASING	FRAC	FORMATION	MUD	T
ام	MD	TYPE	PROBLEMS	FORMATION	HOLE			PRESSURE		
	טוייי	1166	FRODLEMS	EVALUATION	SIZE	SIZE DEPTH	psi/ft	PSI	WT TYPE	E DA
ᡥ	_	•			12-1/4"	9-5/8" 36# K-55 ST&C @ 300' CIRC CMT			8.4 - 8.6# SPUD MUD	1
ļ						CIRC CMT	 	NORMAL	SPUD MUD	\perp
ŀ					8-3/4"				8.4 - 8.8#	
ŀ	-								GEL/POLYMER	ı
ļ							J		MAINTAIN MW AS	
	-				ł				MAINTAIN MW AS LOW AS POSSIBLE	
1	_			İ	1					1
F					İ		Ī			
ŀ	\dashv				1				1	
E	\dashv								İ	
							l		1	
2	\dashv			ļ	1				İ	ı
Ē	\exists		1				1			
F	\dashv		1]	I		İ	1	1	
r	\neg		1		I					1
þ	\exists							İ		
F							1		CONTROL FLUID LOSS	
3		OJAM @ 3063'	POSSIBLE LOST CIRC.						PRIOR TO OJAM	
F	\neg	FRLD @ 3369'							1	
E	\dashv	LIVED ES 2200							1	
Γ				1			i i			1
F	\Box	PCCF @ 3673'	POSSIBLE SEVERE LOSSES	5						
b	\exists	LEWS @ 3839"		1			j i			1
4										
F	二				1					
E	ᅼ			1						1
	_]	OUD 4								
F	7	CHRA @ 4604'							1	1
E	\exists									
5				1		DV TOOL SET @ 5100'				
F	\dashv	CLFH/MV @ 5314'	PROBABLE LOST RETURNS			DV TOOL SET @ 5100' (200'-400' ABOVE CLFH) CMT TO SURFACE				
F	٣	CLFH/MV @ 5314' MENF @ 5430'	PROBABLE LOST RETURNS IF FLUID IN HOLE			OM: TO SURFACE	0.5	583 PSI		
L]	ł
-	\dashv									
F	⊐'r	PTLK @ 5818'		ĺ						
6		;								
+	<u></u> ا،	MNCS @ 6282'							[
F	\exists					,				
1	4]	
\vdash	\dashv									
_F	Π'	J. GLLP @ 6929']				ļ	
7-	Ц,	A. GLLP @ 7168'								
		565 & 1100								
F	4					7* 26# J-55	l			
-	الـــ	OCT @ 7486'	PROBABLE LOST RETURNS IF FLUID IN HOLE			STC @ 0-500* 7" 23# J-55	1			
F	<u> </u>	SRHN @ 7798' SRRS DKOT @ 7864'	2010 114 11022			7" 23# J-55 STC @500' to 6100'	- 1		ADD 38 KCI & CEDO SUC-	
F	_	i		CASED HOLE LOGS	8-3/4"	7* 26# J-55	0.5	860 PSI	ADD 2% KCI @ GRRS DKOT 8.4 - 8.8#	
⁸	- F	PAGU @ 8070'	· · · · · · · · · · · · · · · · · · ·	PULSED NEUTRON		STC @6100' to 8132'		BHT = 175 deg F , BHP=2500	GEL/POLYMER	
\vdash	Э.	IOTE: Permit to 8432				CMT TO DV TOOL AT TOP OFCLE				

DATE

PREPARED:

Ricky Joyen Ted Kelly DRILLING ENGINEER

RES. ENGINEER

PROD. ENGINEER

10:58 AM

Operator: CONOCO INC. | Well Name: Jicarilla B #13M

Project ID: | Location: Rio Arriba CO, NM

Design Parameters:

<u>Design Factors:</u>

psi/ft Collapse : 1.125 : 0.457 Mud weight (8.80 ppg) : 1.00 Burst Shut in surface pressure : 8 Round : 1.80 (J) Internal gradient (burst) : 0.457 psi/ft (J) Buttress : 1.60 Annular gradient (burst) : 0.000 Body Yield : 1.50 Tensile load is determined using buoyed weight Service rating is "Sweet"

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	e Joir		Depth feet)	Drift (in.)	Cost
1 2 3	500 5,600 2,032	7" 7" 7"	26.00 23.00 26.00	J-55 J-55 J-55	5 ST&C	2		6.151 6.241 6.151	
	Load (psi)	Collapse Strgth (psi)		Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	_	S.F.
1 2 3	229 2789 3717	3595 3140 4320	9.999 1.126 1.162	228 2788 3717	4980 4360 4980	21.84 1.56 1.34	168.44 157.19 45.72	284	1.98 J 1.81 J 7.30 J

Prepared by : T. Kelly, , Date : 02-05-1999

Remarks

Design is for a Production string.

Minimum segment length for the 8,132 foot well is 1,500 feet.

The mud gradient and bottom hole pressures (for burst) are $0.457~\mathrm{psi/ft}$ and

3,717 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1993 pricing model. (Version 1.1G)

Schlumberger Dowell

ζ.

9.625" Surface Pipe

Big A Rig 42 Conoco Inc. Phone 320-8107

JICARILLA B 13M

Set 9.625" Casing at +/- 300' lifting Cement up to SURFACE in a 12.25" Hole.

CLASS G + 2% CALCIUM CHLORIDE + 0.25 PPS CELLOPHANE

(300)*(2.00%)*(0.3132 ft/cu.ft.) Divided by 1.19 yield = 158 sacks Cement

- 1 Pump 20 bbl Water
- 2 Mix and pump 158 sx Cement Slurry
- 3 Drop Wooden plug and displace with fresh water

System #1: Type

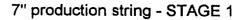
Class B Conce UOM
Add 1 S1 2.00 %BWOC
Add 2 D29 0.25 PPS

System #1 Mix 15.60 PPG
Yield: 1.19 Ft.3/Sk.
Mix Water: 5.19 Gals./sk.
Total Liquid: 5.19 Gals./sk.
Fluid loss 800 ml 30 min.

Thickening time 3 hr

Comp. Strength 1000 psi in 12 hours
Comp. Strength 2200 psi in 24 hours
Free Water <1.0 ml in 2 hours

Marty Hupp Sales Engineer 505-325-5096 Fax: 505-327-0317





Conoco Inc. Phone 320-8107

JICARILLA B No. 13M STAGE No. 1 Set 7" Casing at +/- 8132' lifting Cement up to DV tool @ 5100' in a 8.75" Hole.

One Cement Slurry mixed at 13.5 ppg with 75% excess

(8132-5100)*(1.75%)*(0.1503 ft/cu.ft.) Divided by 1.37 yield = 582 sacks Cement

- 1 Pump 10 bbls w/10 gallons D122a and 5 gal J477
- 2 Pump 20 bbl CW100
- 3 Pump 10 bbl Water with 1 gallon L64
- 4 Mix and pump 582 sx Cement Slurry AT 13.5 PPG
- 5 Drop plugs and displace with fresh water and open DV Tool

	582 SACKS	
System	50/50 + 2% Gel	7" LONGSTRING
Class	В	Concentr. UOM
Poz	D48 POZ	50 %BWOC
Add 1	D20 Gel	2 %BWOC
Add 2	D29 Cellophane	0.25 PPS
Add 3	D46 Antifoam	0.1 %BWOC
Add 4	B14 Fluid Loss	0.4 %BWOC
Add 5	D65 Dispersant	0.2 %BWOC
Add 6	D800 RETARDER	0.1 %BWOC
	System #1 Mix Weight :	13.5 PPG
	Yield:	1.37 Ft.3/Sk.
	Mix Water :	6.05 Gals./sk.
	Total Liquid :	6.05 Gals./sk.
	Fluid Loss :	336 ml/30 min.
	Free Water	0.5 ml/2 hour
	Compressive Strength:	750 psi/12 hour
	Compressive Strength:	1250 psi/24 hour
	Thickening Time	3.5 hours @ 150 f

STAGE # 2

Cement up to surface in a 8.75" Hole from DV tool set @ 5100'.

7" production string - STAGE 2

125% excess

 $(5100)^*(2.25\%)^*(0.1503 \text{ ft/cu.ft.}) = 1725 \text{ cubic feet.}$

100 sacks of tail cement = 138 cubic feet

1725 cubic feet - 138 cubic feet = 1587 cubic feet of lead cement

1587 cubic feet divided by 2.86 yield for 555 sacks lead cement

- 1 Pump 10 bbl Water
- 2 Pump 20 bbl CW100 water spacer
- 3 Pump 10 bbl Water
- 4 Mix and pump 555 sx Lead Cement Slurry AT 11.4 PPG
- 5 Mix and pump 100 sx tail cement at 13.5 ppg
- 6 Drop plug and displace with fresh water and close DV Tool

	555 SACKS LEAD CEMENT		100 SAC	KS TAIL SLURRY
System #1:	LEAD SLURRY B + 3% D79 + 0.25#/SK + 0.1% D46	System	Type	
Class	B Concentr UOM	Class	B C	Concen UOM
	D79 E 3 %BWOC	Poz	D35	50 %BWOC
Add 1	D29 Ce 0.25 PPS	Add 1	D20	2 %BWOC
Add 2	D46 An 0.1 %BWOC	Add 2	S1	2 %BWOC
		Add 3	D42	5 PPS
	·	Add 4	D29	0.25 PPS
		Add 5	D46	0.1 %BWOC
		Add 6	D65	0.15 %BWOC
	ı			
	System 11.4 PPG		System	13.5 PPG
	Yield: 2.86 Ft.3/Sk.		Yield :	1.38 Ft.3/Sk.
	Mix Wa 17.64 Gals./sk.		Mix VVa	6.07 Gals./sk.
	Total Li 17.64 Gals./sk.		Total Li	6.07 Gals./sk.
	Fluid L 700 ml/30 min.		Fluid L	550 ml/30 min.
	Free W 1 ml/2 hour		Free W	1 ml/2 hour
	Compr 250 psi/12 hour		Compr	800 psi/12 hour
	Compr 600 psi/24 hour		Compr	1250 psi/24 hour
	Thicke 6 hours @120 f		Thicke	3.5 hours @120 f

Marty Hupp Sales Engineer 505-325-5096 Fax: 505-327-0317