Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

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 TRIPLICATE

5. Lease Designation and Serial No.: NM 015150

6. If Indian, Allonee or Tribe Name:

7. If Unit or CA, Agreement Designation:

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

8. Well Name and No.: Stove Canyon #1

2. Name of Operator: CONOCO INC.

9. API Well No.: 30-045-29480

3. Address and Telephone No.: 10 DESTA DR. STE. 430E, MIDLAND, TX. 79705-4500 915-686-5794

10. Field and Pool, or Exploratory Area:

4. Location of Well (Footage, Sec., T. R. M. or Survey Description)
1940' FSL & 1320' FWL, Sec. 1, T27N, R8W

1940' FSL & 1320' FWL, Sec. K 1, T27N, R8W

11. County or Parish, State: San Juan County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Repon	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracrunng
	☐ Casing Repair	☐ Water Shut-Off
	☒ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Reponresultsof multiplecompltiononWdl Completion or Recompletion Report and Log form.)

13. Describe Proposed or Compieted Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Conoco Inc. proposes to alter the original casing plan that was originally submitted under the APD. Attached you will find the procedure that we are requesting that the BLM approve.

RECEIVED
JAN 15 1998
OIL CON. DIV.
DIST. 3

98 JAN -8 A11:52
070 FARMINGTON, NM
RECEIVED
BLM

14. I hereby certify that the foregoing is true and correct

Signed Mike L. Mankin Title Mike L. Mankin, Right-of-Way Agent Date 12/17/97

(This space for Federal or State office use)

Approved by /S/ Duane W. Spencer Title _____ Date JAN 12 1998

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 jurisdiction.

*See Instruction on Reverse Side

NMOCD

Stove Canyon #1 — Draft Completion Procedure
REVISION #2 (after 12/4/97 mtg).

Notes: PRE-COMPLETION/TESTING MTG WILL BE HELD JUST PRIOR TO THIS (AFTER OPEN HOLE LOGS ARE RUN) UP IN FARMINGTON. PROCEDURE WILL BE FINALIZED AT THAT TIME. PROCEDURE BELOW IS PLANNING DRAFT.

ALL FEDERAL, STATE & LOCAL RULES & REGULATIONS RELATING TO OIL & GAS OPERATIONS MUST BE ADHERED TO AT ALL TIMES, AS WELL AS ALL CONOCO SAFETY
PROCEDURES.

Draft Procedure Assumes:

5 1/2", P 11O , 23#, LT&C production casing from surface to TD. 16#, CLass H cement (FL 32 + BA 58 system) from TD up to 11,500' (8 1/2" hole).

NOTE 1 -- Conoco/BJ Rationale for running cement only to 11,500':

a. To SAFELY cement the entire casing string to shoe, without creating excessive ECD to cause breakdown of Penn formation during cementing, staging of the cement job would be necessary (ie, installing stage tool in csg). Due to necessity of high pressue acid frac stimulation down casing for the completions, coupled with inherent risks of stage tool seal leaking, staging not recommended.

b. By only doing single stage cement job (rotating pipe to ensure good bond, etc) over the entire Penn interval, a good,safe & low damaging (ie, for fractured formation) cement job can be assured over test interval. In addition, if Penn test unsuccessful, cost savings will be realized in not pumping upper stage cement slurry, coupled with better pipe recovery. By getting better pipe recovery, a more effective P&A procedure can also be achieved.

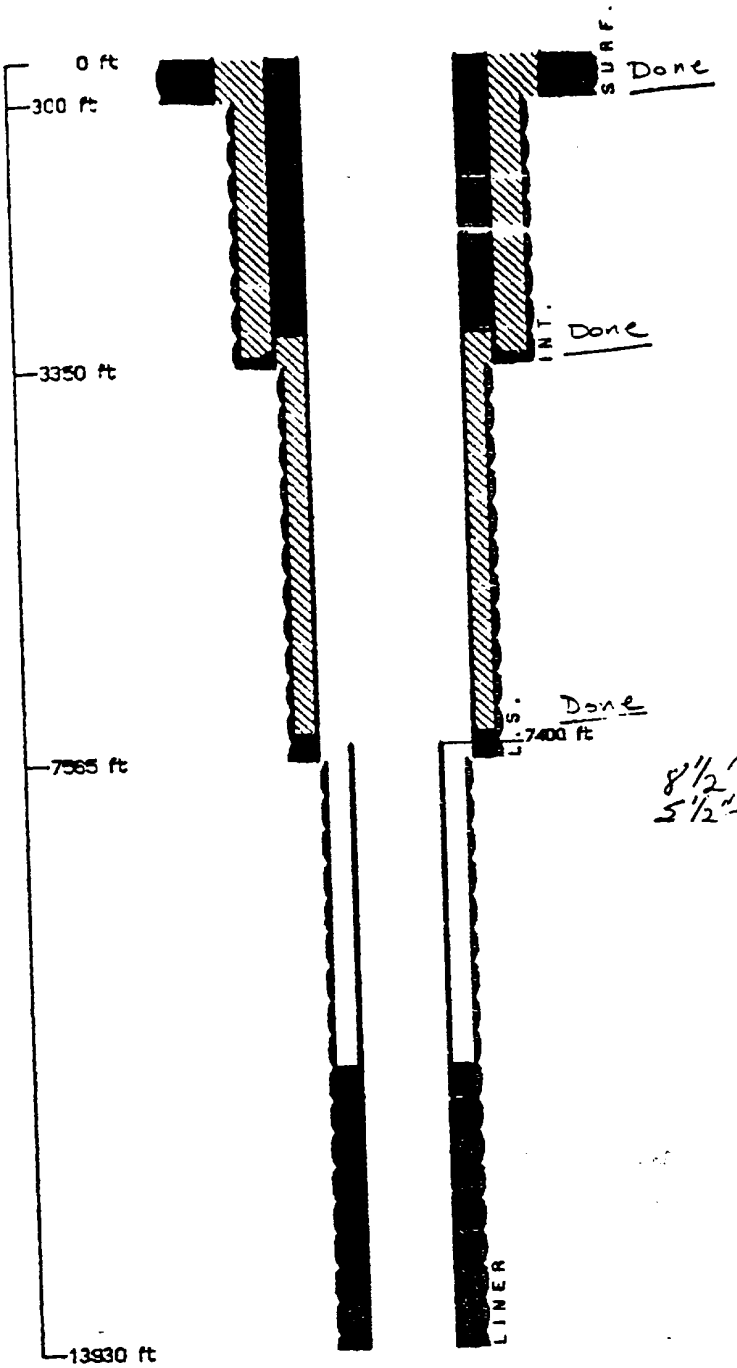
c. IF zones above 11,500' are identified as test candidates, or the Penn tests prove succesful, the upper section of the 5 1/2" (from 11,500' to the shoe) will be cemented, by installing a plug @ TOC, shooting squeeze holes just above, and circulating.

NOTE 2 — 7" liner w/ 5" bottom liner may be necessary if hole problems encountered. if 6" hole drilled for lower liner, may be problem w/ coring & logging -- Schlumberger requests 6 1/2" hole.

BHT: 305 F ; BHP: 5500-6500 psi ;Avg perm: 10 md ; Acid sol: 95%
Min horz stress: 9700-8-9800 @ 12,500' ; Young's Mod: 10,000 psi
Poisson's : 0.3-0.33 ; TD: 13,930' ; Hydrocarbon: Dry gas (w/ pot for H2S,CO2)

Max pressure rating, 5 1/2" casing : 10,800# (80% of 13,500#)
Drift dia: 4.545"

BJ SERVICES COMPANY
Wellbore Schematic



SURFACE CASING

[illegible] in HOLE
[illegible] in [illegible] lb/ft CASING
9.33 lb/gal, 20.00 bbls WATER to [illegible] ft
15.60 lb/gal, 810 SKS CLASS B to 0 ft
with 115 % excess

INTERMEDIATE CSG.

17 1/2 in HOLE
13 3/8 in 61.00 lb/ft CASING
8.40 lb/gal, 40.00 bbls MUD CLEAN I to 0 ft
9.33 lb/gal, 10.00 bbls WATER to 0 ft
11.00 lb/gal, 20.00 bbls SCAV to 0 ft
12.10 lb/gal, 1785 SKS 35:65 POZ(BASE B) to 0 ft
with 70 % excess
15.80 lb/gal, 100 SKS CLASS B to 3227 ft
with 0 % excess

INTERMEDIATE 2

12 1/4 in HOLE
9 5/8 in 47.00 lb/ft CASING
DRILLING MUD
8.34 lb/gal, 20.00 bbls KCL 1% to 2115 ft
9.33 lb/gal, 15.00 bbls WATER to 2437 ft
11.00 lb/gal, 20.00 bbls SCAV to 2678 ft
12.00 lb/gal, 990 SKS 35:65 POZ(BASE B) to 3000 ft
with 70 % excess
16.00 lb/gal, 125 SKS CLASS H to 7248 ft
with 25 % excess

8 1/2" → 5 1/2" →

LINER

8 1/2 in HOLE
5 1/2 in 23.00 lb/ft CASING
8.40 lb/gal, 20.00 bbls MUD CLEAN I to 10846 ft
9.33 lb/gal, 10.00 bbls WATER to 11173 ft
11.00 lb/gal, 10.00 bbls SCAV to 11337 ft
16.00 lb/gal, 570 SKS CLASS H to 11500 ft
with 50 % excess

CONOCO
STOVE CANYON 1
SEC.1,T27N,R8W

FM100051

BJ SERVICES COMPANY

CEMENTING RECOMMENDATION

LINER

VOLUME CALCULATIONS

2430 FT X	0.2291 CU-FT/FT WITH	50 % EXCESS	=	835 CU-FT
40 FT X	0.1189 CU-FT/FT WITH	0 % EXCESS	=	5 CU-FT (INSIDE PIPE)
		TOTAL SLURRY VOLUME:		840 CU-FT
				150 BBLS

SPACERS:
20.0 BBL MUD CLEAN I @ 8.40 LB/GAL
10.0 BBL WATER @ 8.33 LB/GAL
10.0 BBL SCAV @ 11.00 LB/GAL

SLURRY NO.	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
1	840	/ 1.48 =	570 SACKS CLASS H
			+ 35.000 % SILICA FLOUR + 0.900 % FL-25
			+ 0.300 % CD-32 + 0.100 % SM
			+ 0.450 % R-8 + 51.610 % WATER

Slurry being modified as shown below.

DISPLACEMENT FLUID: 249.6 BBL WATER @ 8.33 LB/GAL

CEMENT PROPERTIES

	SLURRY NO.1
SLURRY WEIGHT (LB/GAL)	16.00
SLURRY YIELD (CU-FT PER SACK)	1.48
AMOUNT OF MIX WATER (GALS PER SACK)	5.82
ESTIMATED PUMP TIME (HH:MM)	4:17

H + 35% S-8C + 6% BA-58 + .65% FL-32 + .4% R-3
coarse silica flour — silica fume — fluid loss — retarder

16.5 PPG +/-

Bring cement from TD to +/- 11,000'

Need: 50cc or less
Ø free water

Tom bell Tests:
UCA
BP Settling test
Gas test

BJ SERVICES COMPANY

CEMENTING RECOMMENDATION

LINER

OPERATOR	CONOCO
WELL	STOVE CANYON # 1
LOCATION	SEC.1,T27N,R8W
COUNTY, STATE	SAN JUAN, NM
FORMATION	OURAY
PREPARED BY	LOREN L. DIEDE
DATE	NOVEMBER 13, 1997

ANNULAR GEOMETRIES

ANNULAR I.D. (IN)	DEPTH (FT)
8.681 CASING	7565
8 1/2 HOLE	13930

SUSPENDED PIPES

DIAMETER (IN)		DEPTH (FT)	WEIGHT (LB/FT)
O.D.	I.D.		
5 1/2	4.670	13930	23.000

3 1/2 IN DRILL PIPE TO 7400 FT

DEPTH TOP OF LINER 7400 FT
FLOAT COLLAR SET AT 13890 FT

MUD DENSITY (WATER BASED) 10.000 LB/GAL
ESTIMATED STATIC TEMP. 300 DEG F
ESTIMATED CIRC. TEMP. 243 DEG F