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

5. Lease Designation and Serial No.
SF-079043

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
NEBU

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

8. Well Name and No.
NEBU 308

2. Name of Operator
Amoco Production Company

Attention:
Lori Arnold

9. API Well No.
3004528985

3. Address and Telephone No.
P.O. Box 800, Denver, Colorado 80201

(303) 830-5651

10. Field and Pool, or Exploratory Area
Basin Dakota

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1070 FNL 1025 FEL Sec. 33 T 31N R 7W

11. County or Parish, State
San Juan New Mexico

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 Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other APD Revision	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed 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.)*

Amoco Production Company requests your review & approval of the attached casing, liner and cementing revisions for the application for permit to drill approved on 7/21/93.

If you have any questions in regards to this matter you can contact Lori Arnold at the number listed above.

CONFIDENTIAL

RECEIVED
SEP 22 1993
OIL CON. DIV.
DIST. 3

RECEIVED
BLM
93 SEP 13 PM 12:50
070 FARMINGTON, NM

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

Signed Lori Arnold Title Business Analyst Date 09-10-1993

(This space for Federal or State office use)

Approved by _____ Title _____ Date

Conditions of approval, if any:

APPROVED
AS AMENDED
SEP 15 1993
DISTRICT MANAGER

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 Instructions on Reverse Side

NMOCD

FINAL COPY

AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM

File: H:\group\srbu\nmexdk\dak13f46.wk3
Revision Date: 09/07/93

Lease: Northeast Blanco Unit
Well No. 308
Field: Basin Dakota
County: San Juan, New Mexico
Location: 1070' FNL x 1025' FEL, Sec. 33, T31N, R7W
Formerly Reference Well #8

OBJECTIVE: Evaluate and develop Pictured Cliff, Mesa Verde and Dakota reserves.

METHOD OF DRILLING

TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 – TD

LOG PROGRAM

Type	Depth Interval	
HRI–DIL–CAL–NGT–GR	SFC to TD	Mud Hole
FDC–CNL	SFC to TD	Mud Hole
MICROLOG	TD + 1000'	Mud Hole
MRI	*ICP to Top Fruitland (6" tool)	
	**TD to PCP (4.5" tool)	
Epithermal Neutron/ Spectral Density/Temp Log	PCP – ICP	Air Hole
DIL–Cal–GR	PCP – ICP	Air Hole

REMARKS:
Magnetic Resonance Image (MRI), pulls at 7'/min.
(409) 836 – 2955 (Numar, Brenham District).
*Contact Roger Gierhart (303/830–5053) for authorization.
**Contact Harry TerBest (303/830–6038) for authorization.

SPECIAL TESTS

TYPE	DEPTH INTERVAL, ETC
None	

Remarks:

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

6,545 Est. GL Elev. 6,561 Est. KB Elev.

Marker	Depth (ft)	SS Elev. (ft)
Ojo Alamo	2,441	4,120
Fruitland	3,076	3,485
Pictured Cliffs *	3,396	3,165
Lewis Shale	3,756	2,805
Cliff House *	5,446	1,115
Menefee *	5,561	1,000
Point Lookout *	6,731	(170)
Mancos Shale	7,131	(570)
Greenhorn	7,739	(1,178)
Dakota #	7,921	(1,360)
TOTAL DEPTH:	8,351	(1,790)

Probable completion interval
* Possible pay.
OJO ALAMO IS POSSIBLE USEABLE WATER.

DRILL CUTTING SAMPLES		DRILLING TIME	
FREQUENCY	DEPTH	FREQUENCY	DEPTH
20'	PCP – TD	Geolograph	0 – TD

Remarks:
Mudlogging Program:
Mudlogger to monitor chromatograph 100' above Cliff House to TD.
Full two man mudlogging services for Dakota Mud Up to TD.

MUD PROGRAM:

Approx Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L, cc's/30 min
0' – 400'	SPUD	8.5 – 9.0	Sufficient to clean hole and maintain hole conditions for logs.	
400'–INT CSG	LSND	8.8 – 11.0		
INT CSG– T. Greenhorn	AIR	–		
T. Greenhorn – TD	LSND	9.5 – 10		

REMARKS:

* Use minimum mud weight to control formation pressures.

CASING PROGRAM:

Casing String	Estimated Depth (ft)	Casing Size	Hole Size	Landing Point, Cement, Etc
Conductor				
Surface	400	13–3/8"	17–1/2"	1,2
Intermediate	3,906	9–5/8"	12–1/4"	1,2,3
Protective	7,739	7"	8–3/4"	2,4
Production	8,351	4–1/2"	6–1/4"	2,5

Remarks:
1. Circulate cement to surface.
2. Southern Rockies Drilling Team to design cement programs.
3. Casing set 150' into Lewis Shale.
4. Casing set at top of Greenhorn Limestone.
5. Casing set 50' into Morrison.

GENERAL REMARKS:
Southern Rockies Dakota Engineer to design completion program.

REVISED FOR LARGER CASING PROGRAM & TO REVISE LOGGING PROGRAM.

Form 46 Reviewed by:
Logging program reviewed by:

PREPARED BY:	APPROVED:	APPROVED:
F. Seidel/H. TerBest		
Form 46 7–84bw	For Production Dept	For Exploration Dept

Formerly Reference Well #8

Amoco proposes to drill the well to further develop the Dakota reservior.
The well will be drilled to the surface casing point using native mud.
The well will then be drilled to the intermediate casing point with a non-dispersed mud system.
The protective hole will be drilled with air to the top of the Greenhorn were protective casing will be set.
The production hole will be drilled with a non-dispersed mud system to TD.

Surface Casing:

Quanity (ft)	Size (in)	Wt. (ppf)	Description	Cement program
400	13.375	61	J-55, ST&C	625 cf Class B, 2% CaCl2 + 0.25 #/sx Flocele. 1.18 cf/sx, 15.6 ppg

Hole size 17.5", 125% excess, circulate cement to surface.

Intermediate Casing:

Quanity (ft)	Size (in)	Wt. (ppf)	Description	Cement program
3906	9.625	36	J-55, LT&C	* 2 stage

* 1st Stg Tail: 641 cf Class B, 0.4% CFR-3, 0.4% Halad 344, 5 #/sx Gilsonite, + 0.25 #/sx Flocele. 1.29 cf/sx, 15.11 ppg.

Top of Fruitland Coal 3076 ft
Stage tool depth 2976 ft, 100' above top of Fruitland Coal.

* 2nd Stg Lead: 1922 cf Class B, 65:35:6, 7#/sx salt, 0.375 #/sx Flocele, 5% Calseal, 2% Microbond. 1.8 cf/sx, 13.0 ppg.

* 2nd Stg Tail: 129 cf Class B, 0.4% CFR-3, 0.4% Halad 344, 5 #/sx Gilsonite, + 0.25 #/sx Flocele. 1.29 cf/sx, 15.6 ppg.

Hole size 12.25", 120% excess, circulate cement to surface.

Protective Casing:

Quanity (ft)	Size (in)	Wt. (ppf)	Description	Cement program
7739	7	23	J-55, LT&C	* 2 stage

* 1st Stg Tail: 672 cf Class B, 50/50 poz, 2% gel, 0.4% Halad 413, 0.1% SCR 100, 5 #/sx Gilsonite, 5% Microbond HT, 0.4% VersaSet, 0.25 #/sx Flocele. 1.35 cf/sx, 13.4 ppg.

Top Picture Cliffs 3396 ft Est TCMT 3296
Top of Mesa Verde 5446 ft
Stage tool depth 4946 ft, 500' above top of Mesa Verde.

* 2nd Stg Tail: 352 cf Class B, 50/50 poz, 2% gel, 0.4% Halad 413, 5 #/sx Gilsonite, 5% Microbond HT, 0.4% VersaSet, 0.25 #/sx Flocele. 1.35 cf/sx, 13.4 ppg.

Hole size 8.75", 60% excess, circulate cement to surface.

Production Liner:

Quanity (ft)	Size (in)	Wt. (ppf)	Description	Cement program
812	4.5	11.6	N-80, LT&C	* single stage

* 1st Stg Tail: 146 cf Class G, 35% SSA 1, 1.0% CFR 3, 0.5% Halad 24, 0.25 #/sx Flocele. 1.56 cf/sx, 15.6 ppg.

Estimated Total Depth 8351 ft
Estimated Top of Liner 7539 ft 100' overlap into intermediate casing.

Hole size 6.25", 60% excess, tie cement back.

BY: FRANK SEIDEL/BARRY PEISER 09/07/93
= input depths from form 46 in shaded areas to calculate cement volumes.
H:\GROUP\SRBU\NMEXDK\CMTFORM.WK3