Form 31@0-5 (June 1990)

representations as to any matter within its jurisdiction.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

BUREA	U OF LAND MANAGEMENT RECE	EIVE
SUNDRY NO	5. Lease Designation and Serial No. SF-079010	
Do not use this form for prop Use "APPLIC	osals to drill or to deepen or reentry to a different reservoing	\$. Sindian, Allottee or Tribe Name
	070 PANAII	7 Winit or CA, Agreement Designation
1. Type of Well Oil Ges Well Well Other	<u> </u>	B. Well Name and No.
2. Name of Operator	Attention:	NEBU 307
Amoco Production Company	Julie L. Acevedo	9. API Well No.
3. Address and Telephone No.	3004528984	
P.O. Box 800, Denver, Colorado	o 80201	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or		Basin Dakota/S. Los Pinos Fruitland
4. Location of aven in Sociage, Sect, 1., 11., 11., 5.	11. County or Parish, State	
1780FNL 790FWL	Sec. 24 T 31N R 7W	San Juan New Mexico
12. CHECK APPROPRI	IATE BOX(s) TO INDICATE NATURE OF NOTI	CE , REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF AC	
Notice of Intent Subsequent Report Final Abandonment Notice	F	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.
subsurface locations and measured and true Amoco Production Company	(Clearly state all pertinent details, and give pertinent dates, including estimated dates vertical depths for all markers and zones pertinent to this work.)* requests your approval of the attached casing, liner and	
nermit to drill approved on 7.	/23/93	

NOV 9 1993
OIL COM DIA NOIST. S

			
14. I hereby certify that the foregoing is true and correct Signed	Title	Sr. Staff Assistant	09-20-1993
(This space for Federal of State office use)			
Approved by Conditions of approval, if any:	Title	AF	PPROVED
The LOCAL Consider 1991, makes it a crime for any person knowingly and willfully to m	ake to any department	or agency of the United States any false, fiction	OF Biraghant MCConts or

* See Instructions on Reverse Side

DISTRICT MANAGER

FINAL COPY

AMOCO PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

File: H:\group\srbu\nmexdk\dakæf46.wk3
Revision Date: 09/15/93

Lease: Northeast Blanco Unit County: San Juan, New Mexico Well No. 307

Field: Basin Dakota

Location: 1780' FNL x 790' FWL, Sec. 24, T31N, R7W

Formerly Reference Well #7

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

METHOD (OF DRILLING		APPROXIMATE DEPTH	IS OF GEOLOG	ICAL MARKER	
TYPE OF TOOLS	DEPTH OF DRILLING		6,409 Est. GL Elev.		6,425 Est, KB Elev.	
Rotary	0 – TD		Marker	Depth (ft)	SS Elev. (ft)	
LOG PROGRAM			Ojo Alamo	2,315		
Туре	Depth Interval		Fruitland	3,017	3,408	
HRI-DIL-CAL-NGT-GR	SFC to TD	Mud Hole	Pictured Cliffs *	3,227	3,198	
FDC-CNL	SFC to TD	Mud Hole	Lewis Shale	3,475	2,950	
MICROLOG	TD + 1000'	Mud Hole	Cliff House *	5,358	1,067	
/RI		ruitland (6" tool)	Menefee *	5,378	1,047	
	**TD to PCP (4.5" tool)	Point Lookout *	5,683	742	
Epithermal Neutron/			Mancos Shale	5,753	672	
Spectral Density/Temp Log	PCP - ICP	Air Hole	Greenhorn	7,681	(1,256)	
DIL-Cal-GR	PCP - ICP	Air Hole	Dakota #	7,870	(1,445)	
REMARKS:	•		TOTAL DEPTH:	8,155	(1,730)	
Magnetic Resonance Image (MRI), pulls at 7'/min.		# Probable completion interval				
(409) 836 – 2955 (Numar, Bre			* Possible pay.			
*Contact Roger Gierhart (303/			OJO ALAMO IS POSS	IBLE USEABLE	WATER.	
**Contact Harry TerBest (303/830-6038) for authorization.		DRILL CUTTING SA	AMPLES	DRILLING	3 TIME	
SPECIAL	. TESTS		FREQUENCY	DEPTH	FREQUENCY	DEPTH
TYPE	DEPTH INTER	VAL, ETC	20'	PCP - TD	Geolograph	0 – TD
			Remarks:			
None			Mudlogging Program:			
Remarks:			Mudlogger to monitor ch	romatograph 100	' above Cliff Hous	e to TD.
			Full two man mudlogging	services for Dak	ota Mud Up to TD	
MUD PROGRAM:			1			
Approx Interval	Type Mud	Weight, #	/gal Vis, sec/qt		W/L, cc's/30 min	
0' - 400'	SPUD	8.5 - 9.0	Sufficient to d	lean hole and ma	aintain hole condit	ions for logs
400'-ICP	LSND	8.8 - 11.0		•		J
ICP - PCP	AIR	_				
PCP - 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 (SCP)	400	13-3/8"	17-1/2"	1,2	
Intermediate (ICP)	3,625	9-5/8"	12-1/4"	1,2,3	
Protective (PCP)	7,850	7*	8-3/4"	2,4	
Production (TD)	8,155	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 20' above top of Dakota.
- 5. Casing set 50' into Morrison.

GENERAL REMARKS:

Southern Rockies Dakota Engineer to design completion program.

REVISED FOR LARGER CASING PROGRAM, LOGGING PROGRAM AND FOR DEEPER PROTECTIVE CASING POINT (FROM T. GREENHORN TO 20' ABOVE DAKOTA).

Form 46 Reviewed by:	Logging program reviewed by	1 1
PREPARED BY:	APPROVED:	APPROVED:
F. Seidel/H. TerBest	II. K. Paule	UD-10 (1 1)
Form 46 7-84bw	For Production Dept	4059/15/93 For Exploration Dept

Formerly Reference Well #7

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 20' above the top of the Dakotawere 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

400 13.375 61 J-55, ST&C

Cement program

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

3625 9.625

9.625 36 J-55, LT&C

* 2 stage

* 1st Stg Tail:

488 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

3017 ft

Stage tool depth

2917 ft, 100' above top of Fruitland Coal.

* 2nd Stg Lead:

1881 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)

7850

Wt. (ppf) Description

23 J-55, LT&C

Cement program

* 2 stage

* 1st Stg Tail:

720 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

3227 ft Est TCMT 3127

Top of Mesa Verde

5358 ft

Stage tool depth

4858 ft, 500' above top of Mesa Verde.

* 2nd Stg Tail:

380 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)

ize (in) Wt. (ppf) Description

Cement program

505 4.5

4.5 11.6 N-80, LT&C

* single stage

* 1st Stg Tail:

78 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

8155 ft

Estimated Top of Liner

7650 ft 200' overlap into intermediate casing.

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

BY: FRANK SEIDEL/BARRY PEISER

09/15/93

= input depths from form 46 in shaded areas to calculate cement volumes.

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