

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.

070 FARMINGTON, NM

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

2. Name of Operator Attention:  
Amoco Production Company Julie L. Acevedo

3. Address and Telephone No.  
P.O. Box 800, Denver, Colorado 80201 (303) 830-6003

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
940FSL 1660FEL Sec. 12 T 31N R 5W

5. Lease Designation and Serial No.  
SF078762

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
Rosa Unit #131

9. API Well No.

10. Field and Pool, or Exploratory Area  
Basin Dakota

11. County or Parish, State  
Rio Arriba New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Revise APD</u>	<input type="checkbox"/> 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 approval of the attached casing, liner and cementing revisions for the application for permit to drill submitted on 6/10/93.

**RECEIVED**  
SEP - 3 1993  
OIL CON. DIV. I  
DIST. 3

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

Signed

Title

Sr. Staff Assistant

Date

08-09-1993

(This space for Federal or State office use)

Approved by

Title

Conditions of approval, if any:

**APPROVED**

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.

**DISTRICT MANAGER**

FINAL COPY

AMOCO PRODUCTION COMPANY  
DRILLING AND COMPLETION PROGRAMFile: H:\group\srbu\nmexdk\dak20f46.wk3  
Revision Date: 08/05/93Lease: Rosa Unit  
County: Rio Arriba, New Mexico  
Formerly Reference Well #20Well No. 131  
Location: 940' FSL x 1660' FEL, Sec. 12, T31N, R5W

Field: Basin Dakota

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

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	6,642 Est. GL Elev.		6,658 Est. KB Elev.	
Rotary	0 - TD	Marker	Depth (ft)	SS Elev. (ft)	
<b>LOG PROGRAM</b>		Ojo Alamo	2,726	3,932	
Type	Depth Interval	Fruitland	2,846	3,812	
DIL - CAL - NGT - GR	SFC to TD	Pictured Cliffs *	3,502	3,156	
FDC - CNL	SFC to TD	Lewis Shale	4,193	2,465	
MICROLOG	TD + 1000'	Cliff House	5,650	1,008	
MRI	*ICP to Top Fruitland (6" tool)	Menefee	5,799	859	
	**TD to PCP (4.5" tool)	Point Lookout	5,933	725	
		Mancos Shale	6,433	225	
		Greenhorn	8,023	(1,365)	
		Dakota #	8,209	(1,551)	
			8,533	(1,875)	
<b>REMARKS:</b>		<b>TOTAL DEPTH:</b>			
Magnetic Resonance Image (MRI), pulls at 7'/min.		# Probable completion interval			
(409) 836 - 2955 (Numar, Brenham District).		* Possible pay.			
*Contact Roger Gierhart (303/830-5053) for authorization.		<b>OJO ALAMO IS POSSIBLE USEABLE WATER.</b>			
**Contact Harry TerBest (303/830-6038) for authorization.		<b>DRILL CUTTING SAMPLES</b>			
<b>SPECIAL TESTS</b>		FREQUENCY		<b>DRILLING TIME</b>	
TYPE	DEPTH INTERVAL, ETC	DEPTH		FREQUENCY	
None		20'		Geolograph	
Remarks:		Mud Up Pt - TD		0 - TD	
		Remarks:			
		Mudlogging Program:			
		Mudlogger to monitor chromatograph 100' above Cliff House to TD.			
		Full one man mudlogging services for Dakota Mud Up to TD.			
<b>MUD PROGRAM:</b>					
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. Dakota	AIR	-			
T. Dakota - TD	LSND	9.5 - 10			

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## 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	4,343	9-5/8"	12-1/4"	1,2,3
Protective	8,023	7"	8-3/4"	2,4
Production	8,533	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 100' - 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.

Form 46 Reviewed by:

PREPARED BY:

F. Seidel/R. Gierhart/H. TerBest

Form 46 7-84bw

Logging program reviewed by:

APPROVED:

J. R. Kuntaleo  
For Production Dept

APPROVED:

For Exploration Dept

RW #20

Amoco proposes to drill the well to further develop the Dakota reservoir.

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 where protective casing will be set.

The production hole will be drilled with a non-dispersed mud system to TD.

Surface Casing:

Quantity (ft)	Size (in)	Weight (ppf)	Description	Cement program
400	13.375	68	J-55, ST&C	625 cf Class B, 2% CaCl <sub>2</sub> + 0.25 #/sx Flocele. 1.18 cf/sx, 15.6 ppg

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

Intermediate Casing:

Quantity (ft)	Size (in)	Weight (ppf)	Description	Cement program
4343	9.625	36	J-55, LT&C	* 2 stage

\* 1st Stg Tail: 1100 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 2846 ft  
Stage tool depth 2746 ft, 100' above top of Fruitland Coal.

\* 2nd Stg Lead: 1763 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:

Quantity (ft)	Size (in)	Weight (ppf)	Description	Cement program
8023	7	23	J-55, LT&C	* 2 stage

\* 1st Stg Tail: 691 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 3502 ft Est Top Cmt 3402  
Top of Mesa Verde 5650 ft  
Stage tool depth 5150 ft, 500' above top of Mesa Verde.

\* 2nd Stg Tail: 351 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:

Quantity (ft)	Size (in)	Weight (ppf)	Description	Cement program
610	4.5	11.6	N-80, LT&C	* single stage

\* 1st Stg Tail: 124 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 8533 ft  
Estimated Top of Liner 7923 ft 100' overlap into intermediate casing.

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

BY: FRANK SEIDEL/BARRY PEISER

08/05/93

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

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