Form \$160-5 (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

CLINIDAY NO	TICES AND REPORTS ON W	FILS LUCEN	5. Lease Designation and Serial	No.
	iosals to drill or to deepen or reentry to a d	T1 5/	SF-080	
	ATION FOR PERMIT - " for such proposa	s	6. If Indian, Allottee or Tribe No	sme
		50 6 IP <b>23</b> - E	<u>   1:50                                   </u>	
			7. If Unit or CA, Agreement D	esignation
	· 10. 5	<u> </u>	JOH MM	
1. Type of Well Oil Gas				
Well Well Other			8. Well Name and No.	0 #113
2. Name of Operator  Amoco Production Company	Attention:	aavada	San Juan Unit 32	-9 #113
3. Address and Telephone No.	Julie L. A	cevedo	30045	28987
P.O. Box 800, Denver, Colorad	o 80201		10. Field and Pool, or Explorate	
4. Location of Well (Footage, Sec., T., R., M., or	Survey Description)		Basin D	akota
		1,	11. County or Parish, State	
1450FNL 990FWL	Sec. 9 T 31N R 9V	٧	San Juan	New Mexico
0.150/	LATE DOWN TO INDICATE MA	TUDE OF NOTICE D		
	ATE BOX(s) TO INDICATE NA		EPORT, OR OTHER	DATA
TYPE OF SUBMISSION		TYPE OF ACTION		<del></del>
	- Abandonment		Change of Plans	
Notice of Intent	Recompletion		New Construction	
	Plugging Back		Non-Routine Fracturing	
Subsequent Report	Casing Repair Altering Casing		Water Shut-Off Conversion to Injection	
Final Abandonment Notice	Other APD Re	vision	Dispose Water	
		(Note: Repor Recompletio	rt results of multiple completion on Report and Log form. )	n Well Completion or
permit to drill approved on 8/	regards to this matter please contact.	ma!	0-6003.  NOV OIL CON	
14. I hereby certify that the foregoing is true and Signed	correct Title	Sr. Staff Assi	stant Date	09-22-1993
(This space for Federal or State office use)				
Approved by	Title		Date	
Conditions of approval, if any:			л О п п О	VED
Title 18 U.S.C. Section 1001, makes it a crime fo	or any person knowingly and willfully to make to any depa	rtment or agency of the United State	s any false, ficticious, or fraudule	

File: H:\group\srbu\nmexdk\dak27f46.wk3
Revision Date: 09/22/93

Lease: San Juan 32-9 Unit County: San Juan, New Mexico Formerly Reference Well #27

Well No. 113 Field: Basin Dakota Location: 1450' FNL x 990' FWL, Sec. 9, T31N, R9W

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

METHOD (	OF DRILLING		APPROXIMATE DEPTH	S OF GEOLOG	ICAL MARKER	
TYPE OF TOOLS	DEPTH OF D	RILLING	6,706 Est. GL Elev.		6,722 Est. KB Elev.	
Rotary	0 - TD		Marker	Depth (ft)	SS Elev. (ft)	
LOG PROGRAM		Ojo Alamo	2,267	4,455		
Type	Depth Interva	l	Fruitland	3,187	3,535	
HRI-DIL-CAL-NGT-GR	SFC to TD	Mud Hole	Pictured Cliffs *	3,582	3,140	
FDC-CNL	SFC to TD	Mud Hole	Lewis Shale	3,717	3,005	
MICROLOG	TD + 1000'	Mud Hole	Cliff House *	5,442	1,280	
MRI	*ICP to Top F	ruitland (6° tool)	Menefee *	5,499	1,223	
	**TD to PCP	(4.5" tool)	Point Lookout *	5,824	898	
Epithermal Neutron/		,	Mancos Shale	5,998	724	
Spectral Density/Temp Log	PCP - ICP	Air Hole	Greenhorn Limestone	7,847	(1,125)	
DIL-Cal-GR	PCP - ICP	Air Hole	Graneros Shale	7,902	(1,180)	
REMARKS:			Dakota #	7,984	(1,262)	
Magnetic Resonance Image (MRI), pulls at 7'/min.		TOTAL DEPTH:	8,442	(1,720)		
(409) 836 - 2955 (Numar, Brenham District).		# Probable completion interval, * Possible completion interval.				
*Contact Roger Gierhart (303/	830-5053) for au	thorization.	OJO ALAMO IS POSSI	BLE USEABLE	WATER.	
**Contact Harry TerBest (303/830-6038) for authorization.		DRILL CUTTING SAMPLES DRILLING TIME			TIME	
SPECIAL TESTS		FREQUENCY	DEPTH	FREQUENCY	DEPTH	

#### Formerly Reference Well #27

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 Dakota 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

 3867
 9.625
 36 J-55, LT&C
 \* 2 stage

\* 1st Stg Tail: 537 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 3187 ft

Stage tool depth 3087 ft, 100' above top of Fruitland Coal.

\* 2nd Stg Lead: 1998 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 7964 7 23 J-55, LT&C \*2 stage

\* 1st Stg Tail: 727 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 3582 ft Est TCMT 3482

Top of Mesa Verde 5442 ft

Stage tool depth 4942 ft, 500' above top of Mesa Verde.

\* 2nd Stg Tail: 323 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 4.5 11.6 N-80, LT&C \* single stage

\* 1st Stg Tail: 117 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 8442 ft

Estimated Top of Liner 7764 ft 200' overlap into intermediate casing.

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

BY: FRANK SEIDEL/BARRY PEISER 09/22/93

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

H:\GROUP\SRBU\NMEXDK\CMTFORM.WK3

Form 3160-5 (June 1990)

Approved by

Conditions of approval, if any:

## 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	Expires: March 31, 1993
Do not use this form for prop	TICES AND REPORTS ON WELLS  osals to drill or to deepen or reentry to a different reservoir.  ATION FOR PERMIT - " for such proposals	5. Léase Désignation and Serial No.  SF-080376  6. If Indian, Allottee or Tribe Name
USB AFFLICA		23 FM 1: 50 7. If Unit or CA, Agreement Designation 17 2 2 3 1 1 1 1 1
1. Type of Well Oil Well Gas Well Other		8. Well Name and No. San, Juan Unit 32-9 #113
Name of Operator     Amoco Production Company     Address and Telephone No.	Julie L. Acevedo	San Juan Unit 32-9 #113 9. API Well No. 3004528987
P.O. Box 800, Denver, Colorado	80201	10. Field and Pool, or Exploratory Area
		Basin Dakota
4. Location of Weil (Footage, Sec., T., R., M., or	Survey Description	11. County or Parish, State
1450FNL 990FWL	Sec. 9 T 31N R 9W	San Juan New Mexico
12. CHECK APPROPRI	ATE BOX(s) TO INDICATE NATURE OF NOTICE	, REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent  Subsequent Report  Final Abandonment Notice		Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water  Report results of multiple completion on Well Completion or npletion Report and Log form. }
Amoco Production Company permit to drill approved on 8/	regards to this matter please contact Julie Acevedo at 30:	3-830-6003.
14. I hereby certify that the fgregoing is true and	/	NOV \$ 1393 OIL C

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, figure or representations as to any matter within its jurisdiction.

APPROVED

## **FINAL COPY**

## AMOCO PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

File: H:\group\srbu\nmexdk\dak27f46.wk3
Revision Date: 09/22/93

Lease: San Juan 32-9 Unit County: San Juan, New Mexico Formerly Reference Well #27 Well No. 113

Field: Basin Dakota

Location: 1450' FNL x 990' FWL, Sec. 9, T31N, R9W

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

METHOD OF DRILLING APPROXIMATE DEPTHS OF GEOLOGICAL MARKER TYPE OF TOCLS DEPTH OF DRILLING 6,706 Est. GL Elev. 6,722 Est. KB Elev. Marker Depth (ft) SS Elev. (ft) Rotary LOG PROGRAM Ojo Alamo 2,267 4,455 Depth Interval Fruitland 3,187 3,535 Туре HRI-DIL-CA .-NGT-GR SFC to TD Mud Hole Pictured Cliffs \* 3,582 3,140 Lewis Shale FDC-CNL SFC to TD Mud Hole 3,717 3,005 **MICROLOG** Mud Hole TD + 1000 Cliff House \* 5,442 1,280 MRI \*ICP to Top Fruitland (6" tool) Menefee \* 5,499 1,223 \*\*TD to PCP (4.5" tool) Point Lookout \* 5,824 898 Epithermal Neutron/ Mancos Shale 5.998 724 Spectral Dens ty/Temp Log PCP - ICP Greenhorn Limestone 7,847 (1,125)Air Hole PCP - ICP DIL-Cal-GR Air Hole Graneros Shale 7,902 (1,180)REMARKS: 7,984 Dakota # (1,262)Magnetic Resonance Image (MRI), pulls at 7'/min. TOTAL DEPTH: 8,442 (1,720)(409) 836 - 2355 (Numar, Brenham District). # Probable completion interval, \* Possible completion interval. OJO ALAMO IS POSSIBLE USEABLE WATER. \*Contact Roger Gierhart (303/830-5053) for authorization. \*\*Contact Har y TerBest (303/830-6038) for authorization. DRILL CUTTING SAMPLES DRILLING TIME SPECIAL TESTS DEPTH **FREQUENCY FREQUENCY** DEPTH TYPE DEPTH INTERVAL, ETC 20' PCP - TD 0 - TD Geolograph Remarks: None Mudlogging Program: Mudlogger to monitor chromatograph 100' above Cliff House to TD. Remarks: Full two man mudlogging services for Dakota Mud Up to TD. MUD PROGEAM: Weight, #/gai Vis, sec/qt W/L, cc's/30 min Approx Interval Type Mud 0 - SCP SPUD 8.5 - 9.0Sufficient to clean hole and maintain hole conditions for logs. SCP - ICP LSND 8.8 - 11.0ICP - PCP AIR PCP - TD LSND 9.5 - 10REMARKS:

<sup>\*</sup> Use minimum mud weight to control formation pressures.

CASING PRC GF	RAM:			
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)	3,867	9-5/8	12-1/4"	1,2,3
Protective (PC 2)	7,964	7"	8-3/4"	2,4
Production (TL)	8,442	4-1/2"	6-1/4"	2,5

## Remarks:

- 1. Circulate cament to surface.
- 2. Southern Fockies 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 RI MARKS:**

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

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