

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. SF - 078139	
2. Name of Operator AMOCO PRODUCTION COMPANY		6. If Indian, Allottee or Tribe Name	
3a. Address P.O. BOX 3092 HOUSTON, TX 77253		7. If Unit or CA/Agreement, Name and/or No.	
3b. Phone No. (include area code) Ph: 281.366.4487 Fx: 281.366.0700		8. Well Name and No. E. E. ELLIOTT B 8M	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 27 T30N R9W Mer SWSE 730FSL 2420FEL 36.46600 N Lat, 107.46000 W Lon 15		9. API Well No. 30-045-30608	
		10. Field and Pool, or Exploratory BASIN DAKOTA/BLANCO MESAVERDE	
		11. County or Parish, and State SAN JUAN COUNTY, NM	

12. CHECK APPROPRIATE BOX(ES) 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"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> APDCH
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Application for Permit to Drill for the subject well was submitted on 03/21/2001. Sundry Notice of Location change was submitted on 06/06/2001. Application was approved on 06/13/2001. Amoco Production Company respectfully submits for your approval amendments to our drilling and completion Program as per the attached two (2) documents. The major change is in the casing and cementing program.

The subject well also requires NMOCD approval for a Non-Standard drilling location for the Basin Dakota completion. A request for an exception to the Non-Standard well location was submitted 06/18/2001, to the NMOCD under a separate application.

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #5066 verified by the BLM Well Information System For AMOCO PRODUCTION COMPANY, sent to the Farmington Committed to AFMSS for processing by Maurice Johnson on 06/19/2001 ()</b>	
Name (Printed/Typed) MARY CORLEY	Title AUTHORIZED REPRESENTATIVE
Signature	Date 06/18/2001

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By _____	Title _____	Date 7/3/01
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office _____

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

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**AMOCO PRODUCTION COMPANY  
DRILLING AND COMPLETION PROGRAM**

**Prospect Name:** E.E. Elliott B  
**Lease:** E.E. ELLIOTT B  
**County:** San Juan  
**State:** New Mexico  
**Date:** June 18, 2001

**Well No:** 8M  
**Surface Location:** 27-30N-9W, 730 FSL,2415 FEL  
**Field:** Blanco Mesaverde/Basin Dakota

**OBJECTIVE:** Drill 450' below the base of the Greenhorn Limestone, set 4 1/2" production casing, Stimulate LS, CH, MF, PL and DK intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 5836		Estimated KB: 5850	
Rotary	0 - TD	MARKER		SUBSEA	MEAS. DEPTH
<b>LOG PROGRAM</b> <b>TYPE</b> <u>OPEN HOLE</u> GR-Induction Density/Neutron  <u>CASED HOLE</u> GR-CCL-TDT CBL		Ojo Alamo		4529	1321
		Fruitland Coal	*	3851	1999
		Pictured Cliffs	*	3299	2551
		Lewis Shale	#	3171	2679
		Cliff House	#	1686	4164
		Menefee Shale	#	1516	4334
		Point Lookout	#	1101	4749
		Mancos		940	4910
		Greenhorn		-936	6786
		Bentonite Marker		-990	6840
		Two Wells	#	-1031	6881
		Dakota MB	#	-1180	7030
		Burro Canyon	*	-1327	7177
		Morrison	*	-1377	7227
		TOTAL DEPTH		-1377	7227
		# Probable completion interval		* Possible Pay	
<b>SPECIAL TESTS</b> TYPE None REMARKS:		<b>DRILL CUTTING SAMPLES</b>		<b>DRILLING TIME</b>	
		FREQUENCY	DEPTH	FREQUENCY	DEPTH
		10 feet	Production hole	Geolograph	0-TD

MUD PROGRAM:					
Approx. Interval	Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120-135 3 jts.	Spud	8.6-9.2			
120-135 - 2779 (1)	Water/LSND	8.6-9.2		<6	
2779 - 7177	Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean wellbore			
7177 7227 (2)	LSND	9.0-9.2		<6	

**REMARKS:**

- (1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.  
 (2) Mud up 50' above Morrison +/-.

CASING PROGRAM: (Normally, tubular goods allocation letter specifies casing sizes to be used. Hole sizes will be governed by Contract)						
Casing String	Estimated Depth	Casing Size	Grade	Weight	Hole Size	Landing Pt, Cmt, Etc.
Surface/Conductor	120-135	9 5/8"	H-40 ST&C	32#	12.25"	1
Intermediate 1	2779	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	7227	4 1/2"	J-55	11.6#	6.25"	3

**REMARKS:**

- (1) Circulate Cement to Surface  
 (2) Set casing 100' into Lewis Shale  
 (3) Bring cement 100' above 7" shoe

**CORING PROGRAM:**

None

**COMPLETION PROGRAM:**

Rigless, 4-6 Stage Limited Entry Hydraulic Frac

**GENERAL REMARKS:**

Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

Form 46 Reviewed by: Logging program reviewed by: N/A

<b>PREPARED BY:</b>	<b>APPROVED:</b>	<b>DATE:</b>	
HGJ/MNP		June 11, 2001	
		Version 1.0	

## Amoco Production Company BOP Pressure Testing Requirements

Well Name: E.E. Elliott B  
County: San Juan

8M  
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1321		
Fruitland Coal	1999		
PC	2551		
Lewis Shale	2679		
Cliff House	4164	500	0
Menefee Shale	4334		
Point Lookout	4749	600	0
Mancos	4910		
Dakota	6881	2600	1520

\*\* Note: Determined using the following formula:  $ABHP - (.22 \times TVD) = ASP$

Requested BOP Pressure Test Exception: 3000 psi

Well Name: E E Elliot B8M

Location: 27-30N-9W, 730 FSL,2415 FEL

County: San Juan

State: New Mexico

Field: Blanco Mesaverde / Basin Dakota

API No.

Well Flac

Formation: Dakota MesaVerde

KB Elev (est) 5850

GL Elev. (est) 5836

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)	Cmt Cir. Out (bbl.)
Surface	135	12.25	9.625	ST&C	Surface	NA	
Intermediate	2770	8.75	7	LT&C	Surface	NA	
Production -	7227	6.25	4.5	?	2670	NA	

Casing Properties: (No Safety Factor Included)

Casing String	Size (in.)	Weight (lb/ft)	Grade	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Drift (in.)
Surface	9.625		32 H-40	3370	1400	254	0.0787	8.845
Intermediate	7		20 K-55	3740	2270	234	0.0405	6.456
Production -	4.5		11.6 J-55	5350	4960	154	0.0155	3.875

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:
			PV <20
			YP <10
			Fluid Loss<15
0 - SCP	Water/Spud	8.6-9.2	
SCP - ICP	Water/LSND	8.6-9.2	
ICP - ICP2	Gas/Air Mist	NA	
ICP2 - TD	LSND	8.6 - 9.2	

Cementing Program:

	Surface	Intermediate	Production
Excess %, Bit	100%	80	10
Excess %, Caliper	NA	NA	30
BHST (est deg. F)	60	120	160
Pipe Movement	NA	Rotate/Reciprocate	Rotate/Reciprocate
Rate, Max (bpm)	7	4	2
Rate Recommended (bpm)	6	4	2
Pressure, Max (psi)	200	2000	2000
Shoe Joint	40	80	40
Batch Mix	NA	NA	NA
Circulating prior cmtng (hr)	0.5	1.5	2
Time Between Stages, (hr)	NA	NA	NA
Special Instructions	1,6,7	1,6,8	2,4,6
1. Do not wash pumps and lines.			
2. Wash pumps and lines.			
3. Reverse out			
4. Run Blend Test on Cement			
5. Record Rate, Pressure, and Density on 3.5" disk			
6. Confirm densitometer with pressurized mud scales			
7. 1" cement to surface if cement is not circulated.			
8. If cement is not circulated to surface, run temp. survey 10-12 hr. after landing plug.			

Notes:

\*Do not wash up on top of plug. Wash lines before displacing production cement job to minmize drillout.

\*\*\* Run TMD cased hole logs to identify pay; Perforating and CH logs can be run rigless.

Surface:

Preflush	20 bbl.	FreshWater
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# Cementing Program

Slurry 1	73 sx Class G Cement	85 cuft
TOC@Surface	+ 2% CaCl <sub>2</sub> (accelerator)	
	0.25 #/sk Cellophane Flake (lost circulation additive)	0.3132 cuft/ft OH
	0.1% D46 antifoam	100 % excess

Slurry Properties:	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water (gal/sk)
Slurry 1	15.8	1.16	4.95

Casing Equipment:

- 9-5/8", 8R, ST&C
- 1 Guide Shoe
- 1 Top Wooden Plug
- 1 Autofill insert float valve
- 4 Centralizers
- 1 Stop Ring
- 1 Thread Lock Compound

## Intermediate:

Fresh Water	20 bbl	fresh water
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Lead	207 sx Class "G" Cement	601 cuft
Slurry 1	+ 3% D79 extender	
TOC@Surface	+ 2% S1 Calcium Chloride	
	+1/4 #/sk. Cellophane Flake	
	+ 0.1% D46 antifoam'	
Tail	107 sx 50/50 Class "G"/Poz	135 cuft
Slurry 2	+ 2% gel (extender)	
500 ft fill	0.1% D46 antifoam	0.1503 cuft/ft OH
	+1/4 #/sk. Cellophane Flake	0.1746 cuft/ft csg ann
	+ 2% CaCl <sub>2</sub> (accelerator)	80 % excess

Slurry Properties:	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water (gal/sk)
Slurry 1	11.4	2.9	17.77
Slurry 2	13.5	1.27	5.72

Casing Equipment:

- 7", 8R, ST&C
- 1 Float Shoe (autofill with minimal LCM in mud)
- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring
- 10 Centralizers (one in middle of first joint, then every third collar)
- 2 Fluidmaster vane centralizers @ base of Ojo
- 7 Centralizers one every 4th joint from Ojo to base of surface casing
- 1 Top Rubber Plug
- 1 Thread Lock Compound

## Production:

Fresh Water	10 bbl	CW100
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Lead	139 LiteCrete D961 / D124 / D154	297 cuft
Slurry 1	+ 0.03 gps D47 antifoam	
TOC@Surface	+ 0.5% D112 fluid loss	

# Cementing Program

+ 0.11% D65 TIC

Tail		143	50/50 Class "G"/Poz	206	cuft
Slurry 2			+ 5% D20 gel (extender)	+ 5	#/sk D24 gilsonite
	1822 ft fill		+ 0.1% D46 antifoam	+ 0.15%	D65 TIC
			+ 1/4 #/sk. Cellophane Flake	+ 0.1%	D800 retarder
			+ 0.25% D167 Fluid Loss		
				0.1026	cuft/ft OH
Slurry Properties:	Density	Yield	Water	10	% excess
	(lb/gal)	(ft <sup>3</sup> /sk)	(gal/sk)	0.1169	cuft/ft csg ann
Slurry 1	9.5	2.14	6.38		
Slurry 2	13	1.44	6.5	Top of Mancos	
				4905	

Casing Equipment:

4-1/2", 8R, ST&C

1 Float Shoe (autofill with minimal LCM in mud)  
 1 Float Collar (autofill with minimal LCM in mud)  
 1 Stop Ring  
 39 Centralizers (every third joint)

1 Top Rubber Plug  
 1 Thread Lock Compound

Note:

1. The job should be pumped at 2-3 bpm max rate. Do not exceed 3 bpm on displacement
2. Wash pump and lines before displacement. Slow to 1 bpm for the last 30 bbl of displacement.