## **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Budget Bur	eau 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		oir. 99 JUL 22	51 Lease Designation and Serial N SF B. If Indian, Allottee or Tribe Nam 10: 24 7. If Unit or CA, Agreement Desi	- 078513 **	
1. Type of Well  Oil  Well  Gas Well  Other  2. Name of Operator		Attention:	-	8. Well Name and No.  ARNAL	JD A 1
AMOCO PRODUCTION COM	PANY	Mary Corley		9. API Well No.	
3. Address and Telephone No.			.,	30-	-045-28182
P.O. BOX 3092 HOUSTON, TX 77253 281-366-4491			10. Field and Pool, or Exploratory	10. Field and Pool, or Exploratory Area	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description	on)			BASIN FF	RUITLAND COAL
1850' FNL 1090' F	EL Sec. 17	T 32N R 9W	UNIT H	11. County or Parish, State SAN JUA	N NEW MEXICO
12. CHECK APPROPRIA	TE BOX(s) TO IND	ICATE NATURE	OF NOTICE . RI	EPORT, OR OTHER	R DATA
TYPE OF SUBMISSION	(0)		TYPE OF ACTION		
Notice of Intent  Subsequent Report  Final Abandonment Notice		Abandonment Recompletion Plugging Back Cesing Repair Altering Casing Other WELL REPAIR	(Note: Re	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water sport results of multiple completion on Well	Completion or Recompletion Report and Log form
13. Describe Proposed or Completed Operations (Clearly state all pmarkers and zones pertinent to this work.)*  Amoco Production Company	ny request premission t	o repair the subject	well as per the atta	ached procedure.	and measured and true vertical depths for all
Should you have any techn Mary Corley @ 281-366-44		ontact Mike Kutas @	) 281-366-5812. F	or administrative cond	erns please contact
					IVED 8 1999
	4				N. DIV.
14. I hereby certify that the foregoid of true and correct Signed	ley	Title	Sr. Busines		07-21-1999
(This space for Federal or State office use)  Approved by  Approved by	/ Spencer	Title	Team Lond, Pannious	i käsn <b>agsmant</b> Da	JUL 2 6 399

Arnaud A 1

Version:

arna1lin.doc

Date: **Budget:**  July 21, 1999 Well Repair

Work Type:

C.O. and run liner

## **Objectives:**

- Clean out fill; Underream, cavitate, and stabilize open hole section
- Run and perf liner; Re-run TBG and pump
- Return well to production

Pertinent Information:

Location:

1850'FNLx1090'FEL; Sect 17H-T32N-R9W

Horizon:

FT

County:

San Juan

API #:

30-045-28182

State:

**New Mexico** 

Engr:

**Kutas** 

Lease: Well Flac: Fed: SF-078513 704943

Phone:

H--(281)693-3700

W-(281)366-5812 P--(888)907-0916

**Economic Information:** 

APC WI:

25%

Prod. Before Repair:

25 MCFD

**Estimated Cost:** 

\$150,000

Anticipated Prod.:

**700 MCFD** 

Payout:

5 Months

Max Cost -12 Mo. P.O.

PV15:

Max Cost PV15:

Note:

Economics will be run on all projects that have a payout exceeding ONE year.

Formation Tops: (Estimated formation tops)

Nacimento:

Oio Alamo:

Cliff House:

Kirtland Shale:

Point Lookout:

Mancos Shale:

Mesaverde:

Fruitland: Pictured Cliffs: 3468'-TD

CSG

Gallup: Graneros:

Dakota: Morrison:

**Bradenhead Test Information:** 

BH

**Test Date:** 

8/26/96 Tubing:

Casing:

1411

psi

BH: 5 psi

psi

1287

INT CSG

Time 5 min 10 min

15 min

Comments:

BH has no pressure or flow

Arnaud A 1
Orig. Comp. 2/92
TD=PBTD = 3727'
Page 2 of 2

Current wellbore info: 7" CSA 3415', O.H. @ 3415-3727', 2 3/8" TSA 3465', Fill at 3518' by TBG tag

Current flow info: 20 MCFD, FTP=313 psi, FCP=308 psi, LP=305 psi;

Recent servicing attempts to restore production in April and July have failed. Fill is currently restricting flow from the basal coal seam in the well. Plans are to clean out fill, underream the open hole from 6 1/4" to 9 1/2", cavitate for 24 hours to clean up and stabilize hole, run and perf liner, and place well back on compression and pump to restore production.

- 1. MIRUSU. Pull and lay down rods and pump-haul RxP back to yard; RDMOSU.
- 2. MIRURT--AWS Rig #184. ND tree, rig up BOP's w/cavitation capability. Test BOE. TOH and lay down rods, pump, and 2.375" tubing
- 3. Pick up 4.750" drill collars and 3.500" drill pipe with 6.250" bit and clean out fill from 3,518' to total depth (3,727') using air and foam. Underream open hole to 9 ½"-11". Cavitate O.H. section for 24 hrs. Stabilize hole as quickly as possible to allow running liner (after reaching TD, trip out to casing shoe and wait for 4-6 hours and check to determine amount of fill and how difficult it is to clean up.
- 4. Run a blank 5.500" flush joint liner (Hydril 511) from TD back to approx. 3,350'. Install a tri-cone bit on bottom with a float immediately above bit and a TIW JGS 5 ½"x 7" liner hanger. Strip in hole and drill to bottom with power swivel if necessary. Hang liner, lay down drill pipe.
- 5. RU HES, Run GR-CCL and tie into open hole mudlog to identify correct coal seam depths; TIH and Perforate (w/3 1/8" DP) as follows:

COAL SEAMS		PERFORATIONS			
Ignacio	3,469 to 3,474'	3,469 to 3,474'	4 jspf	20 holes	
Cottonwood 1	3,483 to 3,495'	3,483 to 3,516'	4 jspf	132 holes	
Cottonwood 2	3,497 to 3,516'	3,646 to 3,651'	4 jspf	20 holes	
Cahn 1	3,648 to 3,650'	3,721 to 3,726'	4 jspf	24 holes	
Cahn 2	3,721 to 3,726'		- 1		

6. Pick up and run 2 3/8" as follows:

- 1) Mule shoe
- 2) One Jt 2 3/8" TBG
- 3) 2 3/8 std. pump SN with lock collar and retr. plug in place

Total

196 Holes

Land bottom of TBG at approximately 3710-15'. Pull retrievable plug; RDMORT

7. MIRUSU. PU and run rods and 1 1/4" SJ pump with Hivac assembly. Pressure test pump. RDMOSU and turn well over to production.

Dependent on speed of hole stabilization, I estimate this procedure to require approximately 6-7 days and to cost approximately \$150,000.

Cost estimate: Rig \$ 58,000 Pits \$ 5.000 W.L. \$ 3,500 \$ 8,500 Hanger Haul/Trk \$ 2,500 Bits \$ 3,500 UR \$ 10,000 Air \$ 15,000 Labor \$ 2,500 Liner \$ 5,000 Rentals \$ 7,500 Perfs \$ 7,500 Misc-20% \$ 21,500 Total \$150,000

## Amoco Production Company



