June 1990) DEPARTMEN BUREAU OF	TED STATES  IT OF THE INTERIOR  LAND MANAGEMENT	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No. NM-012648
Do not use this form for proposals to di Use "APPLICATION FO	AND REPORTS ON WELLS rill or to deepen or reentry to a different reservoir. R PERMIT—" for such proposals	6. If Indian, Allottee or Tribe Name  7. If Unit or CA, Agreement Designation
1. Type of Well	T IN TRIPLICATE	8. Well Name and No.
2. Name of Operator Amoco Production Company At	tn: Ed Hadlock	Sullivan Gas Com E #1  9. AFI Well No.  30-045-28641
3. Address and Telephone No. P.O. Box 800, Denver, CO 8020 4. Location of Well (Footage, Sec., T., R., M., or Survey)		10. Field and Pool, or Exploratory Area Basin Fruitland Coal Gas
600' FSL, 1540' FWL, SE/SW Uni Sec. 22-T32N-R10 W		11. County or Parish, State San Juan, NM
12. CHECK APPROPRIATE BOX	((s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment  Recompletion  Plugging Back  Casing Repair  Altering Casing  XX Other APD Modifications	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.)
give subsurface locations and measured and true ve	e all pertinent details, and give pertinent dates, including estimated date of start entire depths for all markers and zones pertinent to this work.)*  subject well's APD has been modified:	
to TD. Casing point to be det	termined after review of open hole logs bottom casing string. (See attached	. A formation

If there are any questions, please contact Ed Hadlock at (303) 830-4982.

DECEIVED  OCT1 6 1992  OIL COLL. DIV.	HOVED  OCT 15 1992  RFA MANAGER	RECEIVED BLM 92 OCT 14 AMII: 24 019 FARMINGTON, N.M.
14. I hereby certify that the foregoing is true and correct	Tide Administrative Analyst	Date 10/13/92
(This space for Federal or State office use)		Date
Approved by Conditions of approval, if any:	Tide	. Date

## AMOCO PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

File:D:\SULL46.WK3 Date: 11/27/91

Revised: 10/04/92

Lease: SULLIVAN G. C. 'E' County: San Juan, New Mexico Well No. 1

Field: Blanco Fruitland

Bottom Hole Location: 890' FSL x 1650' FWL Sec 22-32N-10W

Surface Hole Location: 600' FSL x 1540' FWL Sec 22-32N-10W

Revision for SFC CSG:11/27/91

BH Target: 400' x 400' Target centered at 990' FSL x 1650' FWL TVD @ 2209'

OBJECTIVE: Develop Fruitland Coal Reserves.

NAC.						
	THOD OF DRILLING		APPROXIMATE DEPT	THS OF GEOLO	GICAL MARKER	
TYPE OF TOOLS	DEPTH OF D	RILLING	Actual GL: 5983' Estimate KB: 5995'			
Rotary	0 – TD		Marker	Depth TVD	Elevation	
	G PROGRAM		Ojo Alamo	1050'	4960'	
Туре	Depth interval		Fruitland	2259'	3736'	
			Lemon	-	_	
FDC/GR/CAL*	707' to TD**		Ignacio #	_	_	
MICROLOG	707' to TD**		Cottonwood #		_	
Mudlogger	2000' to TD		Cahn #	_	_	
			Pictured Cliffs	2709'	3286'	
REMARKS:			TOTAL DEPTH:	2707'*	3086'	
Run FDC at slow sp	peed, high sample rate thru		# Probable completion		5555	
000' of hole. Bulk	density presentation as per	standard	* Possible pay.			
coal log format. Cu	stomer edit 9-track LIS tap	e to W. Pelzmann				
n Denver ASAP.			DRILL CUTTING S	SAMPLES	DRILLING	3 TIME
NOTE: *Pull caliper\GR back to surface. Send logs to Sandy Braun ASAP to pick ICP. Run Microlog in hole first.		logs to	FREQUENCY	DEPTH	FREQUENCY	DEPTH
		n hole first.	10' 2	000' – TD	Geolograph	0 – TD
	والمستحرف والمستحرب المستحرف والمستحرف والمستح					
*Logging interval	aeterminea by minimum ch	arge.	Remarks:			
	determined by minimum ch			red Cliffs will not b	e penetrated if the	well is
	determined by minimum ch		REMARKS: * The Pictur	red Cliffs will not b	e penetrated if the well is not a succe	well is
	determined by minimum ch		REMARKS: * The Pictur completed successfully hole completion, the we	open hole. If the all will be deepend	well is not a succe d to 2909'. Mudlo	ssful open
Remarks:			REMARKS: * The Pictur completed successfully hole completion, the we	open hole. If the all will be deepend	well is not a succe d to 2909'. Mudlo	ssful open
**Logging interval of Remarks:			REMARKS: * The Pictur completed successfully hole completion, the we modify TD based on loc	open hole. If the ell will be deepene cation of basal cos	well is not a succe d to 2909'. Mudio al seam.	ssful open gger to
Remarks:			REMARKS: * The Pictul completed successfully hole completion, the we modify TD based on loc This well is to be dire	open hole. If the ell will be deepene cation of basal cos	well is not a succe d to 2909'. Mudio al seam.	ssful open gger to
Remarks:			REMARKS: * The Pictur completed successfully hole completion, the we modify TD based on loc This well is to be dire /gal Vis, sec/qt	open hole. If the ell will be deepene cation of basal cos ectionally drilled	well is not a succe d to 2909'. Mudlo al seam. to intercept the W/L, cc's/30 mir	ssful open gger to <u>BH target.</u> Notes
Remarks: MUD PROGRAM: Approx Interval	Type Mud	Weight, #/	REMARKS: * The Pictur completed successfully hole completion, the we modify TD based on loc This well is to be dire /gal Vis, sec/qt	open hole. If the ell will be deepene cation of basal cos ectionally drilled	well is not a succe d to 2909'. Mudlo al seam. to intercept the W/L, cc's/30 mir aintain hole condit	ssful open gger to BH target. Notes
Remarks:  MUD PROGRAM: Approx Interval  0' - 300'	Type Mud SPUD	Weight, #/	REMARKS: * The Pictur completed successfully hole completion, the we modify TD based on loc This well is to be dire /gal Vis, sec/qt Sufficient to	open hole. If the ell will be deepene cation of basal cos ectionally drilled	well is not a succe d to 2909'. Mudlo al seam. to intercept the W/L, cc's/30 mir	ssful open gger to <u>BH target.</u> Notes

REMARKS: In the event the well does not yield commercial volumes of gas from the open hole completion, the water filled hole will be mudded up and weighted up (9-11 #/gal) with LSND mud for hole stability and well control. The well will then be deepened approximately 200' into the Pictured Cliffs to provide necessary footage for a cased and cemented completion technique to allow a fracture stimulation.

- 1. Mud up 100' above 800' Kick off point.
- 2. Bring up mud weight to 10.3 ppg prior to drilling the Fruitland.

Casing String	Estimated Depth	Casing Size	Hole Size	Landing Point, Cement, Etc
Surface	300'	9-5/8"	12-1/4"	1
Intermediate	2209'*	7"	8-3/4"	2
Liner	TD	N/A	8-3/4"	3
		4-1/2"	6-1/4" (If required)	•

- 1. Surface casing to be set at 300' to accomodate adjacent water well, circulate cmt to surface.
- 2. \*ICP in top of coal, casing pt. to be determined after review of openhole logs. A formation packer shoe will be run on btm of csg string. Circulate cement to surface.
- 3. Open hole. A contingency 4-1/2" Liner will be run and cemented if the well is deepened into the Pictured Cliffs for a fracture stimulation. Use 6-1/4" bit to deepen well into Pictured Cliffs if required.

WELLHEAD: 3,000 PSI flanged equipment

## **GENERAL REMARKS:**

Planned open hole completion. A contingency completion will require as many as two fracture stimulations.

This well to be maintained in confidential status. Permitting Group is to provide statement in permit to regulatory agencies that indicates the Pictured Cliffs will be penetrated approximately 200' in the event the planned open hole completion in the coal seams does not yield a commercial volume of gas. The contingency plan to drill into the Pictured Cliffs will allow adequate rat hole for a cemented liner across the coal seams. The cemented Liner will provide isolation for a necessary fracture stimulation to initiate a commercial volume of gas.

Estimated KOP 800' Kick 290' North, 110' East, 310.16' departure, N 20.77 E

Form 46 Reviewed by:	Logging program reviewed by:	
PREPARED BY:	APPRIOUED://	APPROVED:
W. Pelzmann/J. Davidson/F. Seidel/S. Braun	H.K. Vantalio 10 1	
Form 46 7-84bw	For roduction Dept 10/13/92	For Exploration Dept