

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.

5. Lease Designation and Serial No.

NM-013686

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Pritchard A #11

9. API Well No.

3004528357

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal Gas

11. County or Parish, State

SAN JUAN NEW MEXICO

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator Attention:  
AMOCO PRODUCTION COMPANY Pat Archuleta

3. Address and Telephone No.  
P.O. BOX 800 DENVER, COLORADO 80201 303-830-5217

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1285' FSL 950' FWL Sec. <sup>m</sup>1 T 30N R 9W

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"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Repair
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<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 request permission to clean out, stabilize, run and perf liner per the attached procedures.

If you have any technical quetions contact Mike Kutas at (303) 830-5159.

RECEIVED  
JAN 22 1998  
OIL CON. DIV.  
DIST. 3

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

Signed Pat Archuleta Title Staff Assistant Date 01-13-1998

(This space for Federal or State office use)

Approved by /s/ Duane W. Spencer Title \_\_\_\_\_ Date JAN 20 1998  
Conditions of approval, if any:

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.

\* See Instructions on Reverse Side

NMOC

# SJOET Well Work Procedure

## Pritchard A 11

Version: #1  
Date: January 13, 1998  
Budget: Well Repair  
Work Type: C/O, stabilize hole, run and perf liner

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### Objectives:

1. Clean out fill and stabilize hole
  2. Run and perf liner
  3. Return well to production
- 

### Pertinent Information:

Location:	1285'FSLx950'FWL; Sect 1M-T30N-R09W	Horizon:	FT
County:	San Juan	API #:	30-045-28357
State:	New Mexico	Engr:	Kutas
Lease:	BLM: NM-013686	Phone:	H--(303)840-3700
Well Flac:	703059		W-(303)830-5159
			P--(303)553-6334

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### Economic Information:

APC WI:	50%	Prod. Before Repair:	680 MCFD
Estimated Cost:	\$75,000	Anticipated Prod.:	1500MCFD
Payout:	< 4 Months	Prod. Before Repair:	
Max Cost -12 Mo. P.O.	\$290M	Anticipated Prod.:	
PV15:			
Max Cost PV15:			

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

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### Formation Tops: (Estimated formation tops)

Nacimiento:		Mesaverde:	
Ojo Alamo:		Point Lookout:	
Kirtland Shale:		Mancos Shale:	
Fruitland:	2329'	Gallup:	
Pictured Cliffs:	2643'	Graneros:	
Cliff House:		Dakota:	
		TD:	2651'

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### Bradenhead Test Information:

Test Date: 6/96    Tubing: 135    Casing: 162    BH: 0 psi

Time	BH	CSG	INT	CSG
5 min				
10 min				
15 min				

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Comments:

Current wellbore info: 7" CSA 2421', OH at 2421-2651', 2 3/8" TSA 2540', Fill at 2570'KB (2/96 tbg tag)  
 Current flow info: 680 MCFD, FTP=54 psi, FCP=117 psi, LP=49 psi; Producing tubing; casing logs well

General observations: 1. Well has never produced at cavitation rates (2200 MCFD); best sust'd prod=800-850 mcfd  
 2. Well located adjacent to Pritchard lateral compressor and has lowest HC line pressure  
 3. Best coal in well (2630-50) is covered with fill

Short term plans: 1. Clean out, 24 hr cavitation, line and perf well; well underreamed to 9 1/2" in '94

Long term plans: 1. Place on artificial lift (if needed)

1. MIRURT; equipped with air package/mist pump
2. ND tree, rig up BOP's; complete with venturics on blooie lines w/man. valves. Test BOE. Set plug in SN in 2 3/8" TBG (Std SN sa approx. 2540'). TOH w/2 3/8" tubing
3. Set wireline EZSV in 7" at 2300'. Load and pressure test csg. NU and test BOE.
4. Pick up drill collars, and 6.250" bit, blow hole dry, drill up EZSV, clean out fill from 2,570' to total depth (2651') using air and foam. Cavitate well for 24 hours to clean up open hole section. C/O and 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.
5. Run a blank 5.500" flush joint liner (Hydril 511) from TD back to approx. 2,300'. Install a tricone bit on bottom with a float immediately above bit and a Baker Model SLR-P Liner Hanger Packer. Strip in hole and drill to bottom with power swivel if necessary. Hang liner, lay down drill pipe
6. RU HES, run GR-CCL to identify correct coal seam depths; TIH and perforate liner as follows:

COAL ZONES		PERFORATIONS		
Ignacio	2,471 to 2,474'	2,471 to 2,474'	4 jspf	12 holes
	2,490 to 2,496'	2,490 to 2,496'	4 jspf	24 holes
Cottonwood	2,554 to 2,563'	2,554 to 2,563'	4 jspf	36 holes
	2,590 to 2,601'	2,590 to 2,601'	4 jspf	44 holes
Cahn	2,630 to 2,650'	2,630 to 2,650'	4 jspf	80 holes
		<b>Total</b>		<b>196 holes</b>

5. TOH and lay down drill pipe and bit; RIH w/2 3/8" TBG as follows:

- 1) mule shoe
- 2) 1 jt 2 3/8" tbg
- 3) STD SN (1.780" ID) with retrievable plug in place
- 4) remainder 2 3/8" TBG (All TBG: 6.4# J55 FBN)

Land bottom of TBG at approximately 2630-35'. Pull retrievable plug. RDMODU. Turn well over to production.

Note: bring well on slowly, well may need swabbing in order to RTP.

Dependent on speed of hole stabilization, I estimate this procedure to require approximately 5 days and to cost approximately \$75,000 (see attached AFE form).

***If problems are encountered, please contact:***

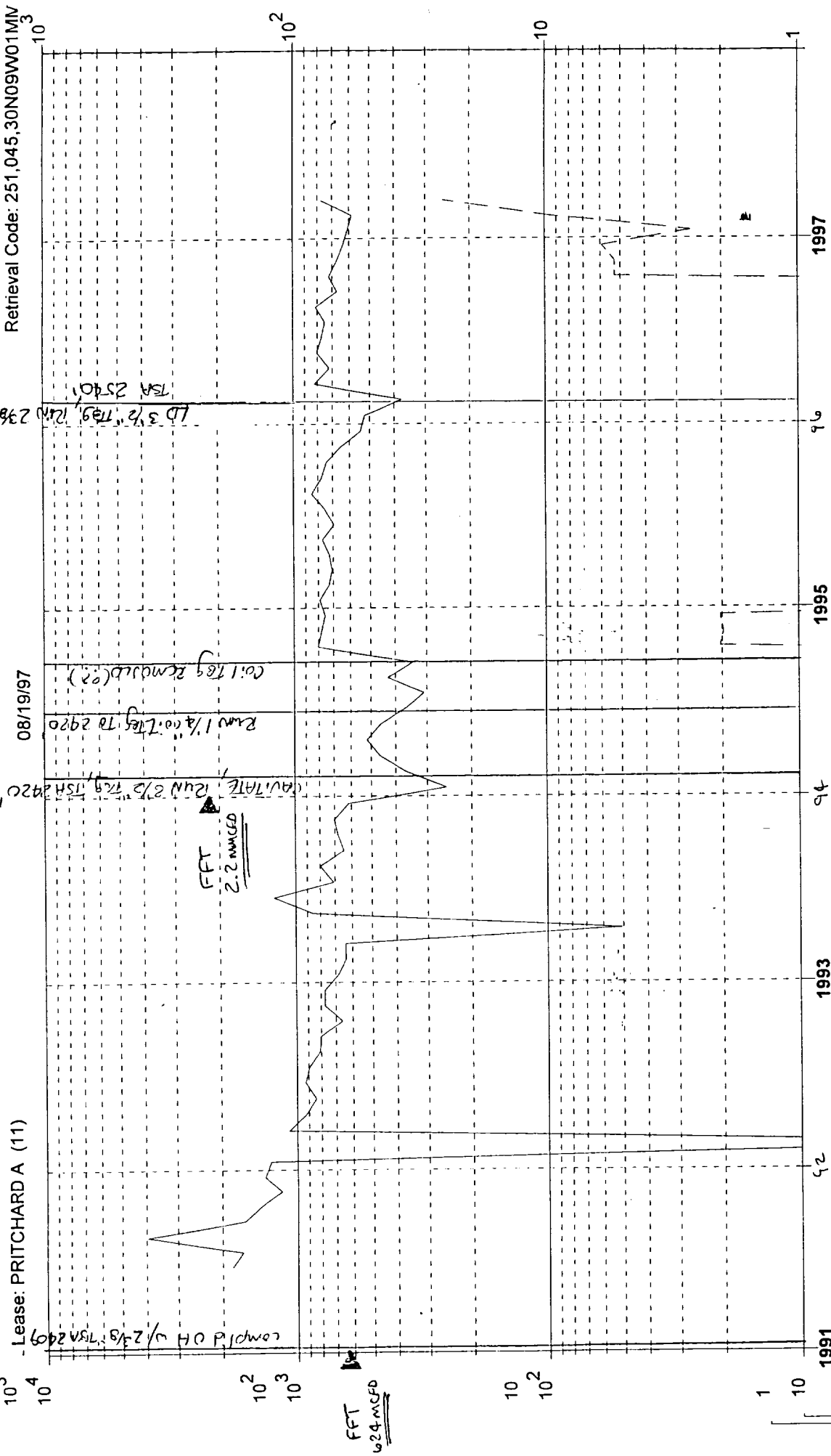
*Miké Kutas*

**(W) (303) 830-5159**

**(H) (303)840-3700**

**(P) (303)553-6334**

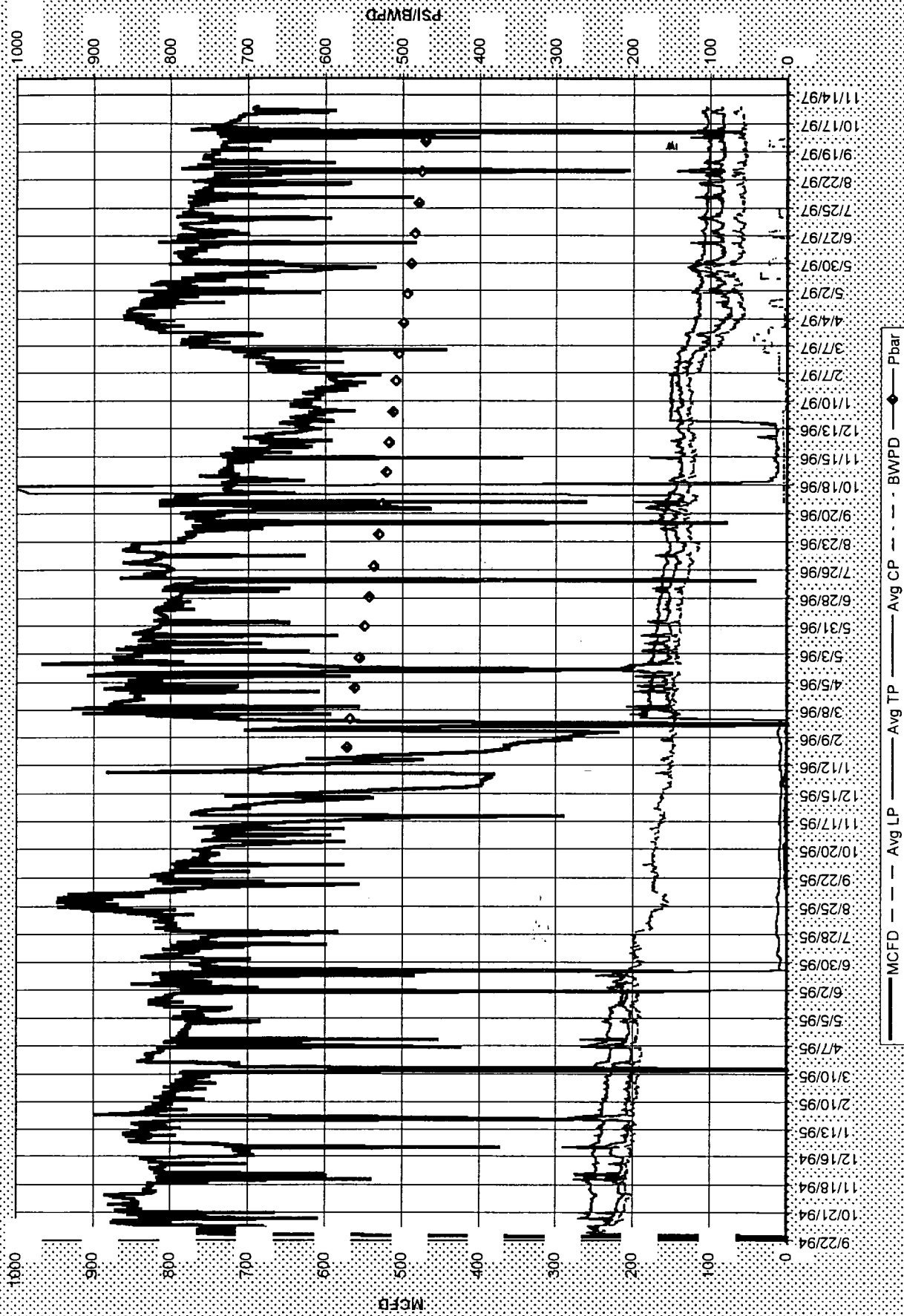
# Dwights



Retrieval Code: 251,045,30N09W01MM

County: SAN JUAN, NM	F.P. Date: 06/91
Field: BASIN (FRUITLAND COAL) FT	Oil Cum: 0 bbl
Reservoir: FRUITLAND COAL	Gas Cum: 1694 mmcf
Operator: AMOCO PRODUCTION CO	Location: 1M 30N 9W

Pritchard A 11



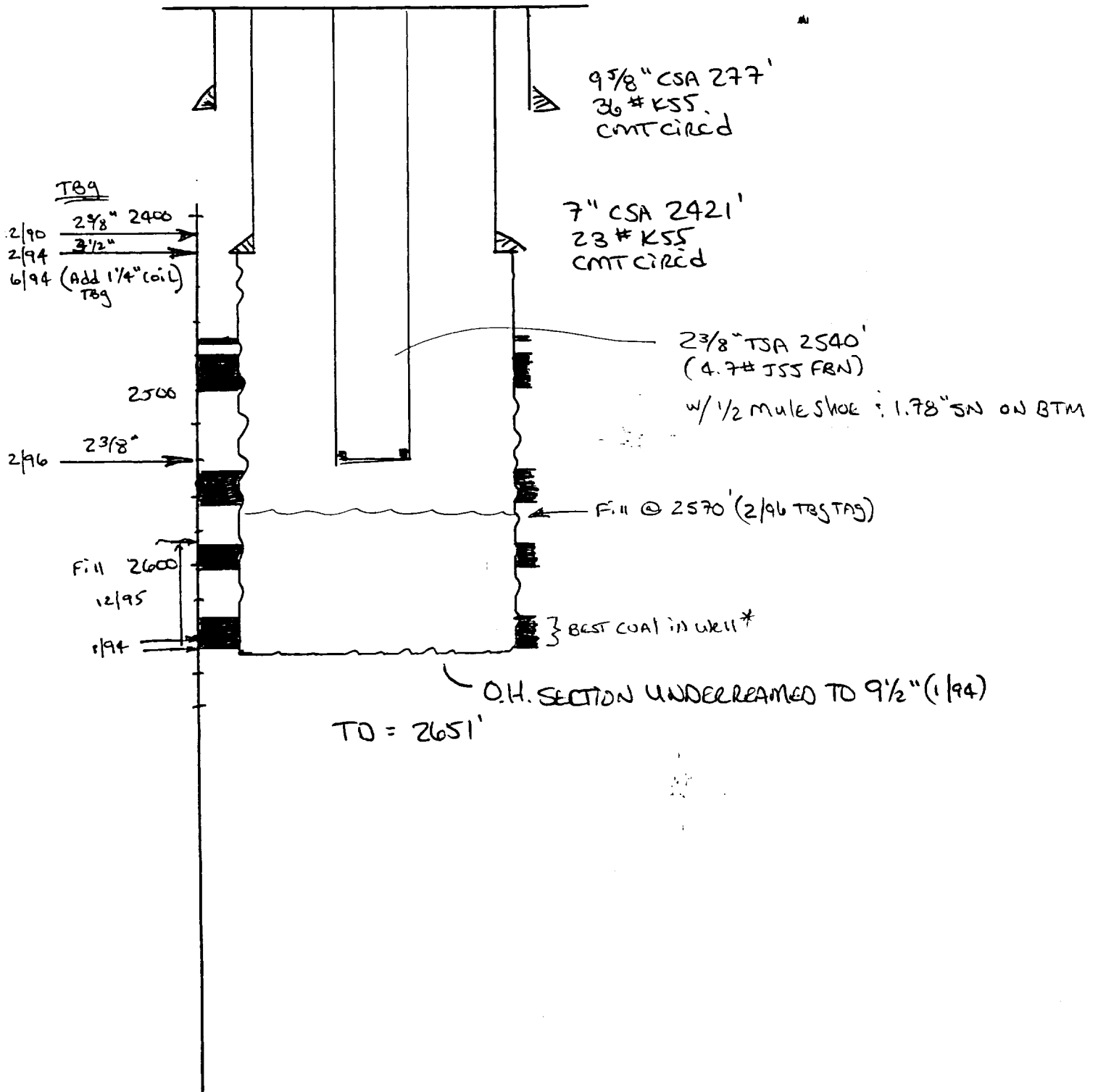
ENGINEERING CHART

Appn \_\_\_\_\_

SUBJECT Pritchard A 11

Date 10/6/97

By GMC



SUBJECT PITCHARD A 11

Appn \_\_\_\_\_

Date 10-3-97

By G.M.K

SPUD: 12/2/90 RREL: 12/5/90  
 9 5/8" CSA 277', 36# K55, CMT CIRCD  
 7" CSA 2421', 23# K55, CMT CIRCD

12/15/90

- MINUSU, TEST BOE.

- PU DC, DP: BHA, TAG CMT @ 2335'

- D.O. TO TD @ 2651', FOUND COAL @

FLOW TEST: 50 → 24#, 725 → 348 MCFD  
 SI 4 hrs = 790 ps.

ZONE	DEPTH	FLARE	μ
IGNACIO	2471-74'	30'	2500 μ
	2474-98'	"	2800 μ
COTTONWOOD	2547-65'	20'	2500 μ
	2588-602'	20-40'	2850 μ
CAHN	2630-70'	20-30'	2850 μ

- TAG: 4/0 15' Fill, CST #1 x 3, 1500-1600 psi, SMALL COAL RTNS,  
 TAG: 4/0 Bridge @ 2636', Flow TEST: 4 hrs, 3/4", 20# 290 MCFD  
 TAG: 4/0 3' Fill, CST #2 x 8, 1800 psi; TAG: 4/0 65' Fill, R:R w/  
 FAIR-MED COAL RTNS

- Flow TEST: 8 hrs, 3/4", 18 psi, 261 MCFD, DRY; CST #3 x 10, 1800 psi  
 FINE COAL RTNS; TAG: 4/0 56' Fill, R:R

- Flow TEST 7 hrs, 609 MCFD, 3/4", DRY; TAG: 4/0 4' Fill, CST #4  
 x 7, 1980 psi - FINE COAL RTNS

- TAG 63' Fill, C/O: TEMP STUCK PIPE @ 2632', CAHN TIGHT?  
 STICKY, FLOW TEST: 40 psi, 580 MCFD

- CONT FLOW TEST: 4 hrs, 43 psi, 624 MCFD; TAG: 4/0 53' Fill, LDC  
 PU: LAND 2 3/8" TBG A 2409' w/ mule shoe + Exp check on BTM,  
 1 JT TBG, 1.81" FNIPPLE (4.7# J55, FBN)

- RREL 12/13/90

- Flow TEST: 1/6/91: T/C = 400/540 psi, 489 MCFD 1 BWPD

1/14/91: T/C = 370/500 psi, 1105 MCFD 7 BWPD

1/25/94

- MINUSU, TEST BOE

- TOH x LD 2 3/8" TBG, SICP=400 psi; SET CIAP @ 2330', TEST BOP's  
 PU BIT x DP x DC's

- D.O. CIAP, TAG up @ 2535', <sup>116'</sup> C/O TO TD; R:R - HVY COAL RTNS

- STAB. HOLE, UNDERREAM FROM 6 1/4" TO 9 1/2" FROM 2425-2651'

- TOH, LD UR, TAG: 4/0 3' Fill; FLOW TEST: 3/4", 132 psi, 1.9 mmCFD  
 SIP = 325# in 2 1/2 hrs; CST x 1, 350 psi

- CST x 7, 295-310 psi; FLOW TEST: 3/4", 150 psi, 2.2 mmCFD, CST x 2, 300 psi

- CST x 3, 450 psi, Lt coal; w/RT returns; FLOW TEST: 3/4", 143 psi, 2.07 mmCFD  
 TAG: 4/0 3' Fill; FLOW TEST: 3/4", 150 psi, 2.2 mmCFD, CST x 2, 300 psi, GAS RT





UNIT NO. 2  
 DEPTH FROM 2423' TO 2651'  
 DATE FROM 12-16-90 TO 12-17-90  
 ENGINEERS JIMMIE A. BALES  
LORNA S. GLENN

CO — CIRCULATE OUT DB — DIAMOND BIT  
 N9 — NEW B'T DST — DRILL STEM TEST  
 DEV — DEVIATION NR — NO RETURNS  
 TG — TRIP GAS NS — NO SHOW  
 DTG — DOWN TIME GAS POROSITY, STAIN, B CUT  
 CG — CONNECTION GAS TRACE  
 DCB — DIAMOND CORE BIT FAIR  
 — GOOD

LOCATION:  
 950' FWL, 1285' FSL  
 SEC. 11 TWP. 30N RGE. 9W

**LEGEND**

	SHALE		BENTONITE
	SILTSTONE		CHERT
	SANDSTONE		CONGLOMERATE
	LIMESTONE		COAL
	DOLOMITE		SALT
	ANHYDRITE		

**GAS FROM MUD**

TOTAL GAS DETECTOR.....

CHROMATOGRAPH ANALYSIS

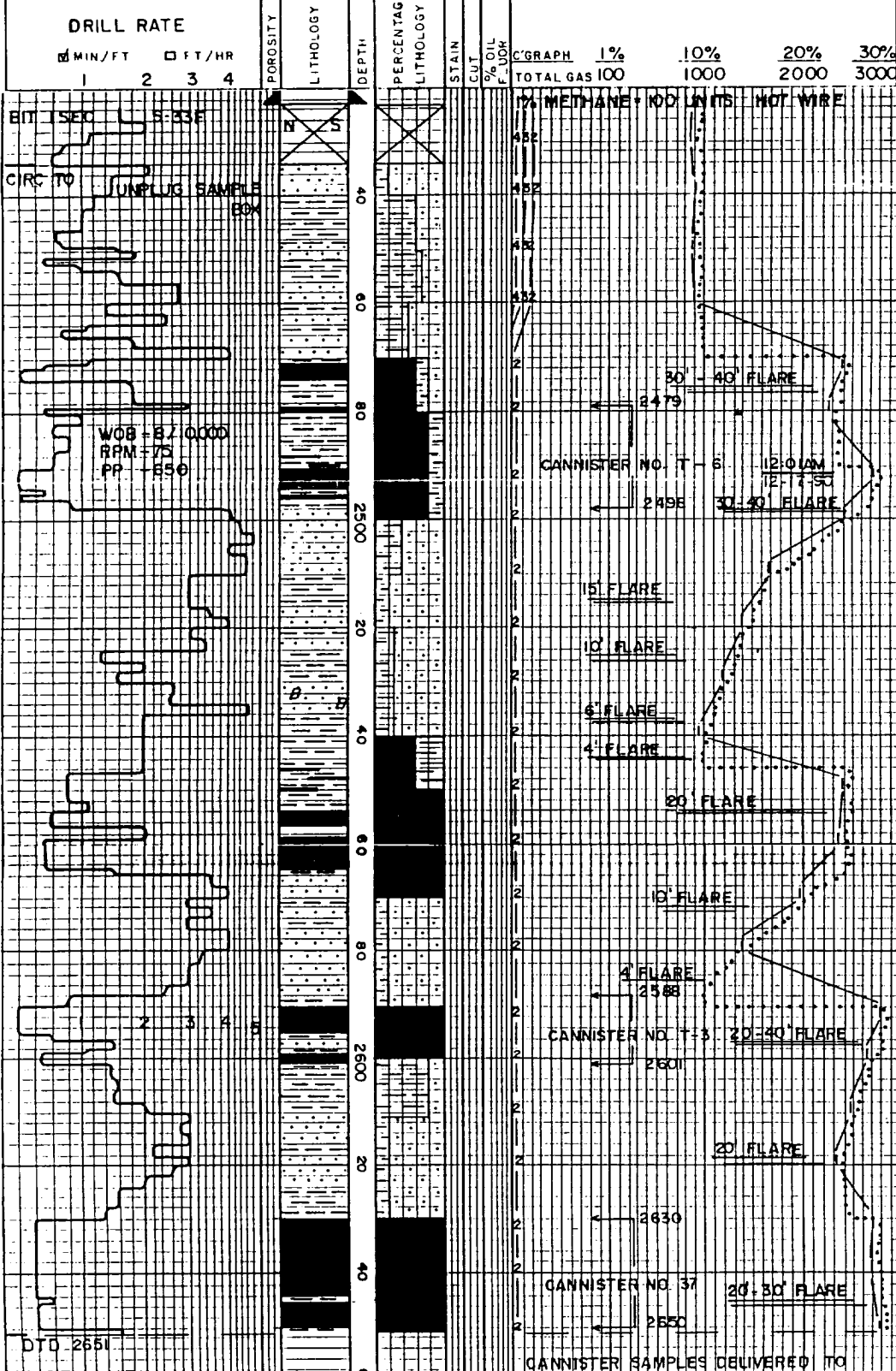
METHANE — 1	PENTANES — 5
ETHANE — 2	HELIUM — 6
PROPANE — 3	
BUTANES — 4	

RESULTS IN MOLE PERCENT GAS/AIR

**CASING RECORD**

SIZE	FROM	TO
7"	-0-	2423

ELEVATION  
 GL 5866  
 DF \_\_\_\_\_  
 KB 5882



**REMARKS**

WELL TECH RIG 398  
 ON LOCATION 12-16-90

SH - DK BN GY, DK GY, SLI FIS, CARB, SM M GY, MIC MICA

SS - M GY, VF - FG, SB ANG, SB RND, UNCONS

COAL - BLK, SB BLKY TO PLTY, SEMI VIT TO VIT, MOD - SLI RTHY, FR CLEATING, BLDG GAS, SM BN BLK, RTHY W/VIT LENS

COAL - BLK, BLKY, VIT - SEMI VIT, SLI RTHY, SM CONCH FRAC, FAIR CLEATING

SS - LT GY, GY BN, VF - FG, SB ANG - SB RND, MOSTLY UNCONS

SH - DK GY - BLK, BN BLK FIS - SB FIS, V/CARB ABNDT LT GY WXY BENT

COAL - 60% BN BLK, PLTY DULL, V/RTHY, & 40% BLK, PLTY, SEMI VIT - DULL, RTHY, POOR CLEATING, PR BLDG GAS

SS - M - LT GY BN, VF - L VFG, FR, SB ANG, V/ SLI S & P, V/SLI CALC

COAL - BLK, SB BLKY, VIT - SEMI VIT, SOME CONCH FRAC, SLI - MOD RTHY, WELL CLEATED

SH - M - DK GY, SB BLKY, MIC MICA IP, SM SB FIS, V/CARB

COAL - BLK, SEMI-VIT TO VIT, SB BLKY, MOSTLY CLEAN, SOME SLI RTHY, WELL CLEATED, GOOD BLDG GAS

BEST COAL IN WELL \*

CANNISTER SAMPLES DELIVERED TO