(June 1990)

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

RECEIVED BLM

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

98 MAR 23 PM 2:15

070 FARMINGTON, NM

5. Lease Designation and Serial No.: SF-078385

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

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

8. Well Name and No.: Florance K 3

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

9. API Well No.: 3004527013

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1788' FSL 790' FWL Sec. 25 T 30N R 8W UNIT L

10. Field and Pool, or Exploratory Area: Basin Fruitland Coal

11. County or Parish, State: SAN JUAN NEW MEXICO

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Repair	☐ 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 requests permission to repair this well per the attached procedures.

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

RECEIVED
MAR 27 1998
OIL CON. DIV.
DIST. 3

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

Signed Pat Archuleta Title Staff Assistant Date 03-20-1998

(This space for Federal or State office use)

Approved by WAYNE TOWNSEND Title Pet. Eng. Date 3-25-98

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, ficticious, or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instructions on Reverse Side

NMOCD

Florance K 3

Version: #1
Date: March 18, 1998
Budget: Well Repair
Work Type: **Change wellhead, C/O, underream, stabilize hole, run and perf liner**

Objectives:

1. Change wellhead, clean out fill, underream, and stabilize hole
2. Run and perf liner
3. Return well to production

Pertinent Information:

Location:	1788'FSLx790'FWL; Sect 25L-T30N-R08W	Horizon:	FT
County:	San Juan	API #:	30-045-27013
State:	New Mexico	Engr:	Kutas
Lease:	BLM: SF-07385	Phone:	H--(303)840-3700
Well Flac:	703048-01		W-(303)830-5159
			P--(303)553-6334

Economic Information:

APC WI:	50%	Prod. Before Repair:	2050 MCFD
Estimated Cost:	$120,000	Anticipated Prod.:	3000 MCFD
Payout:	5 Months		
Max Cost -12 Mo. P.O.	$335M		
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:
Ojo Alamo:
Kirtland Shale:
Fruitland: 2830-3050'

Bradenhead Test Information:

Test Date: 5/96 **Tubing:** 137 **Casing:** 212 **BH:** 0 psi

Time	BH	CSG	INT	CSG
5 min				
10 min				
15 min				

Comments: No flow

Current wellbore info: 7" CSA 2817', OH at 2817-3050', 2 3/8" TSA 2897', Fill at 2925' (2/96 W.L. tag)
Current flow info: 2050 MCFD, 14-15 BWPD, FTP=n/a psi, FCP=33 psi, LP=137 psi; Producing tubing and casing on compression.

General observations:
1. Well has never produced at cavitstion rates (3625 MCFD); best sust'd prod=1900 mcfd
2. Best coals in well (@2938-50 and 2972-88') are covered with fill
3. Tubing head has 2" casing valves (w/approx. 1.5" IDs)

Short term plans:
1. Change wellhead, clean out, underream, 24 hr cavitation, line and perf well

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

1. Set plug in HES X nipple (1.875") sa 2864'. MIRURT; equipped with air package/mist pump
2. ND tree, rig up BOP's; complete with venturies on blooie lines w/man. valves. Test BOE. TOH w/2 3/8" tubing--consider laying tbg down (as it is not FBN) if visual inspection for corrosion warrants it.
3. Set wireline CIBP in 7" at 2700'. Load csg w/water and pressure test t/500 psi for 30 mins. ND BOPE. Change out wellhead (use tubing head equipped with 3 1/8" casing outlets and for hanging 2 7/8" tubing); NU and test BOE.
4. Pick up drill collars, and 6.250" bit, unload water and drill out CIBP, clean out fill from 2,925' to total depth (3050') using air and foam. Record bridges, tight hole, and fill amounts in O.H. section. Underream hole at 2818-3025' from 9.5" to 11" (Note: 6 1/4" hole from 3025-50'). Cavitate well for 12-24 hours to clean up open hole section. C/O and stibilize 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) with no rotation or circulation if possible. TOH w/drill string and lay down drill collars.
5. Run a blank 5.50" flush joint liner (Hydril 511) from TD back to approx. 2,750' or with as little overlap as possible. Install a tricone bit on bottom with a float immediately above bit and a Baker Model SLP-R Liner Hanger Packer. Strip in hole and drill to bottom with power swivel if necessary. Hang liner, lay down drill pipe and setting tool.
6. RU HES, run GR-CCL to identify correct coal seam depths; TIH and perforate liner as follows:

COAL ZONES		PERFORATIONS		
Ignacio	2,858 to 2,866'	2,858 to 2,866'	4 jspf	32 holes
	2,900 to 2,920'	2,900 to 2,920'	4 jspf	80 holes
Cottonwood	2,938 to 2,950'	2,938 to 2,950'	4 jspf	48 holes
Cahn	2,972 to 2,988'	2,972 to 2,988'	4 jspf	64 holes
		Total		**224 holes**

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: 4.6# J55 FBN)

Land bottom of TBG at approximately 2965-70'--space out with subs or cut mule shoe joint to get tbg landed at this depth.
6. RDMORT. Pull tbg plug. Sample and ensure well contains less than 0.5% air. **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 $120,000 (see attached AFE form).

If problems are encountered, please contact:

Mike Kutas

(W) (303)830-5159
(H) (303)840-3700
(P) (303)553-6334

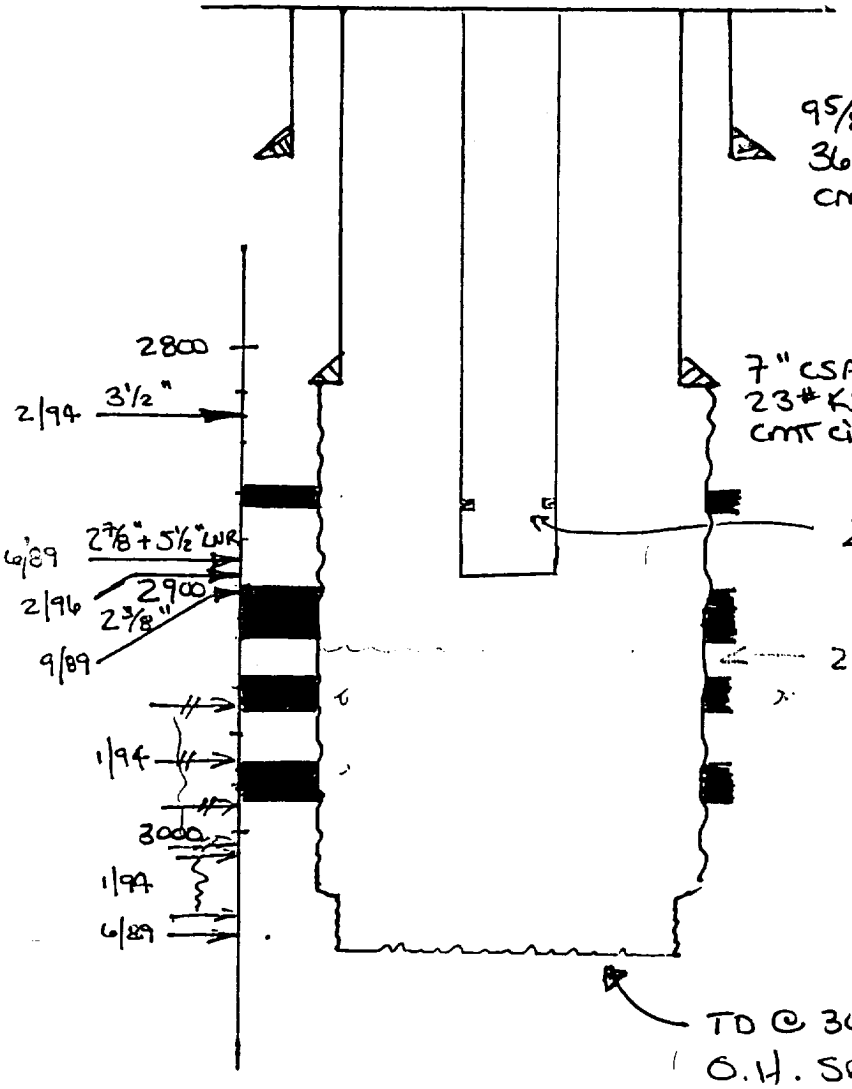
ENGINEERING CHART

SUBJECT Florance K 3

Appn

Date 8-13-97

By GMK



Form 371 1-86

ENGINEERING CHART

File

Appn

SUBJECT FLORANCE K 3

Date 8-6-97

By GMK

SPUD: 5/21/89 — 9 5/8" CSA 280', 36 #____, CMT circd, pumped 7
RREL: 5/24/89 — 7" CSA 2817', 23# K55, CMT circd

	depth	show
IGNACIO A	2858-66'	5320 u
" B	2900-20'	4930 u
COTTONWOOD	2938-50'	10,140 u
CAHN A	2972-88'	5,550 u
B	NOT FOUND	

- 6/10/89 - MI RU SU, RU BOE, PU BIT, DC's, DP. TAG CMT @ 2720'
- DRILL OUT TO TD @ 3050';
- R; R; FLOW TEST: 3/4" ch 41 psi, 53 BWPD, 586 MCFD CIRC; FLOW TESTS, RATES ↓
- SI 5 3/4 hrs, P = 1070 psi, TAG @ 5' FILL, CIRC, FLOW TEST 3/4" 27 psi, 392 MCFD - CASING APPEARS TO BE FILLING WITH WAT
- TAG @ 2' FILL, FLOW TEST 3/4", 46 psi - i, f. 64 psi. w/ 48 609 MCFD
- CIRC - ON/OFF good COAL RTRNS, FLOW TEST: 3/4", 30 - 62 psi, 0-4E 435 - 593 MCFD
- BEGIN SURGING WELL, CIRC HOLE, FLW TEST: 3/4", 6 hrs, 90 psi. 1305 MCFD W/ HVY MIST
- TAG @ 5' FILL, SURGE WELL - HVY COAL & MIST RTRN, TAG 0' FIL FLW TEST: 3/4", 6 hrs, 85 psi, 1233 MCFD - 1950 MCFD, 50-51
- SURGE WELL, 800 psi, TAG @ 2' FILL, PUT THRU SEP FOR 9 751 MCFD, 55 BW, 3/4" ch, 385* FCP
- @ 31 3/4 hrs, 678 MCFD, 3 BWP/H, CPF = 375#
- TAG @ 4' FILL; SICP = 1300 psi
- SNUB OUT DP, PREP TO SNUB 5 1/2" LINER (23 ppf P110)
- LAND LINER W/ SHOE @ 3037', TOP @ 2733', TOH & FOU LOWER 1/2 OF SETTING TOOL LEFT ON TOP OF HANGER
- WASH OVER & MILL TO DRESS OFF TOP OF FISH; TOH, RUN OVERSH AND RECOVER FISH
- PU TBG x MILL, MILL AL. PLUGS STARTING @ 2822' - WELL BEGAN F IMMEDIATELY LG VOL'S OF WATER & GAS (50' FLARE), MILL PLUGS TO 3033', FLOW WELL, RETAG @ 3033', TEST: 3/4" ch 112 psi FCP, 1072 MCFD; 52 BWPD
- LD MILL, RUN 2 7/8" TBG W/ 1/2 MULE SHOE, 1 jt, BAKER F. TBG SA 2890'
- RREL: 6/22/89 PERFS IN CSG @ 2822-3035'

Form 371 1-86

ENGINEERING CHART

Appn _____

SUBJECT _____

Date _____

_____

By _____

9/17/89 - MIRUSU, SET TBG PLUG, PULL 2 7/8" TBG, RUN 2 3/8" TBG TAG FILL @ 3083'. 2 3/8" TBG: EXP CHECK, 1 JT, 1.81" SN RETR ~~EXP~~. PLUG IN SN., PUMP OUT EXP PLUG TSA 2905'

1/11/94 - MIRUSU, SET PLUG IN TBG, PULL 2 3/8" TBG
- PU. BIT, C/O 40' FILL, TOH, LD 2 3/8" TBG, P.U. MILL & D.P.
- MILL TOP OF LINER FROM 2931-37', LD MILL, PU FISHING TOOLS RETR LINER
- SET BP @ 2700', TEST BOE, D.O. BP, C.O. HOLE - HAD BRIDGE @ 2918', REC LG AMTS COAL, R. R; CIRC
- R. R, C/O 10' FILL, UNDERREAM FROM 2818-2950'
- FINISH UR TO 3025', FLOW TEST: 3/4" ch, 4 HRS, 50-105 725-1522 MCFD, 2 HRS - COAL & WTR TO SURF, SIP = 580 5 HRS; CST x 9, 500 psi, REC HVY COAL & WTR RTRNS
- CST x 1, PLUGGED BIT, TRIP, FLOW TEST: 3/4", 2 HR, 35-105 CST x 6, 520 psi, LITTLE COAL + WTR
- TAG BRIDGE @ 2948' & 70', C/O TO TD, FLOW TEST: 3/4", 2 35-140 psi, 2080 MCFD; CST x 8, 510-20 psi, GOOD GAS W/ LITE COAL + WTR

CST#	Q (MM)	
0	0.993	- CST x 4, 520 psi, Lt COAL + WTR RETURNS; TAG 45' FILL C/O 1 FLW TEST: 2 HRS, 40-172 psi, 2494 MCFD; CST x 7, 520 ps
1	1.6	Lt COAL + WTR RTRNS
2	1.9	- CST x 8, 520 psi; FLOW TEST: 60-165#, High 240# @ 3480MC
3	2	TAG @ 2990', C/O TO TD; FLW TEST: 1 HR, 180#
4	2.49	- TAG @ 2985', C/O, R. R, FLOW TEST, 2 HR, 40-200 psi
5	2.6	~~CST~~ #8, 450-470 psi, FINE COAL & GAS RTRNS
6	2.6	- CST x 6, 490 psi, Lt COAL + WTR, TIH x HIT BRIDGE @ 299C R. R, CIRC, FLOW TEST: 3/4", 1 HR, 50-220 psi, 3190 MCFD,
7	2.9	- CST x ~~6~~, 450-490 psi, TAG & C/O BRIDGE @ 2995', FLOW TEST 3/4", 40-230 psi, 3335 MCFD, 3 HRS - DRY; CST #10 x 6, 4
		- CST CONT'd x 6, 490 psi, C/O BRIDGE @ 3010', FLOW TEST: 2 2 HR, 230 psi, 3335 MCFD - DRY; CST #11 x 8, 450 psi, Lt C
		- CST CONT'd x 4, 450 psi, Lt COAL RTRNS, C/O BRIDGE @ 30 FLW TEST: 3/4", 4 HRS, 50-~~3500 MCFD~~ 242 psi, 3509 MCFD

Form 371 1-86

ENGINEERING CHART

Appn _____

SUBJECT _____ Date _____

Lt COAL By _____

-CST # 12 x 9, 470-885 psi, TAG : C/O 30' Fill, R:R, CIRC, FLOW TEST 3/4", 3 hrs, 50 - 245 psi, 3552 MCFD

-CST # 13 x 15, 440-85 psi, Lt COAL + WTR ; TAG : C/O Fill @ 3020' FLOW TEST : 3/4", 3 hrs, 60 - 248 psi, 3596 MCFD

-CST # 14 x 12, 430-440 psi, Lt MIST RETNS, TAG : C/O 3' Fill FLOW TEST : 3/4", 3 hrs, 60 - 250 psi, 3625 MCFD - DRY

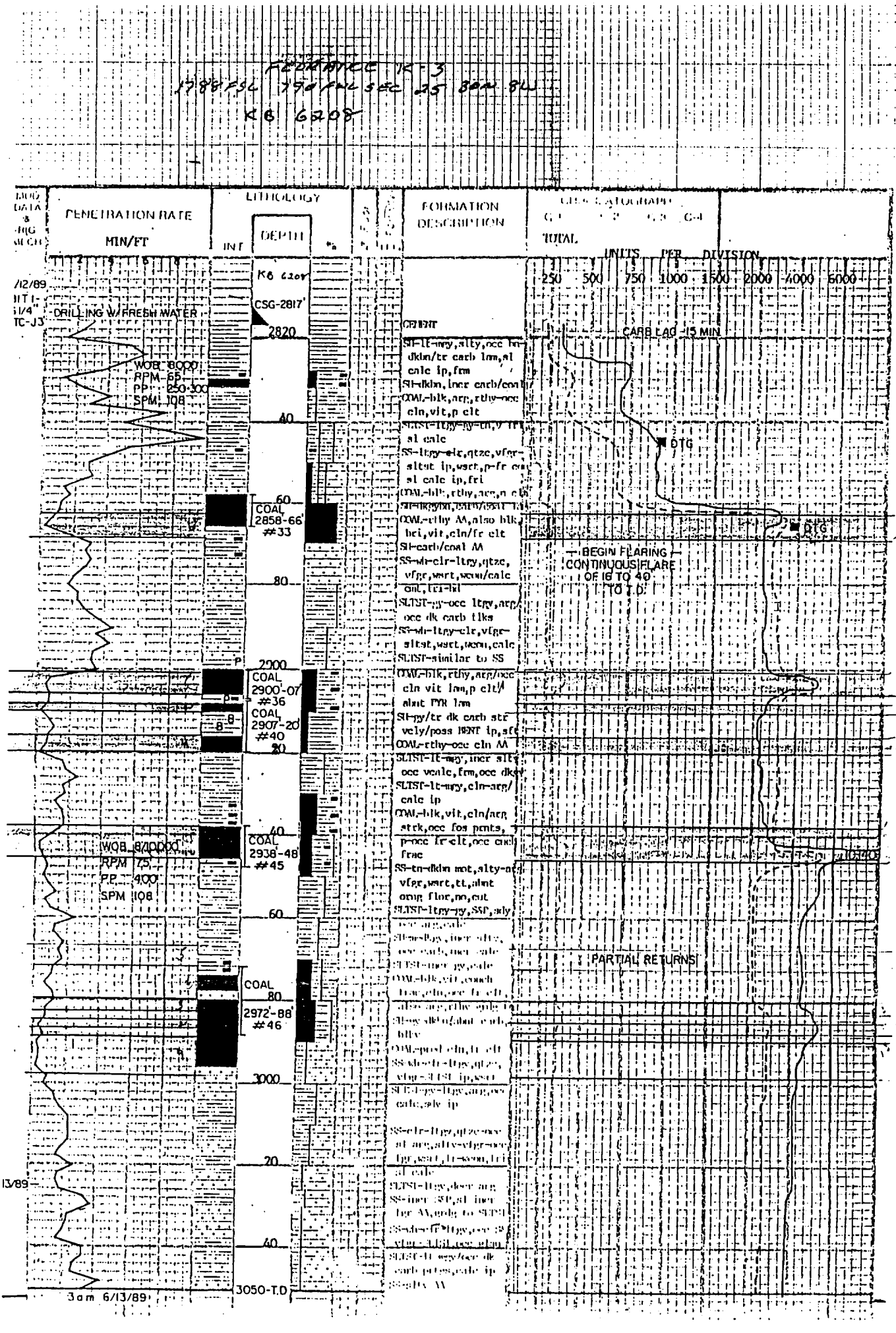
- LD DP, P.U. & RUN 3½" TBG (9.3# J55 FBN) LAND @ 2830' NO DETAILS : Coupling on BTM, 1 jt, 3.5" FN Nipple

- RREL 2/2/94

2/16/96 - MI RU SU ; TOH x LD 3½" TBG ; PU : RUN 2⅜" TBG NO FILL TO 2925', LAND TBG @ 2897' w/ ½ muleshoe ON BTM, 1 TBG, 1.875" PROF Nipple @ 2864'

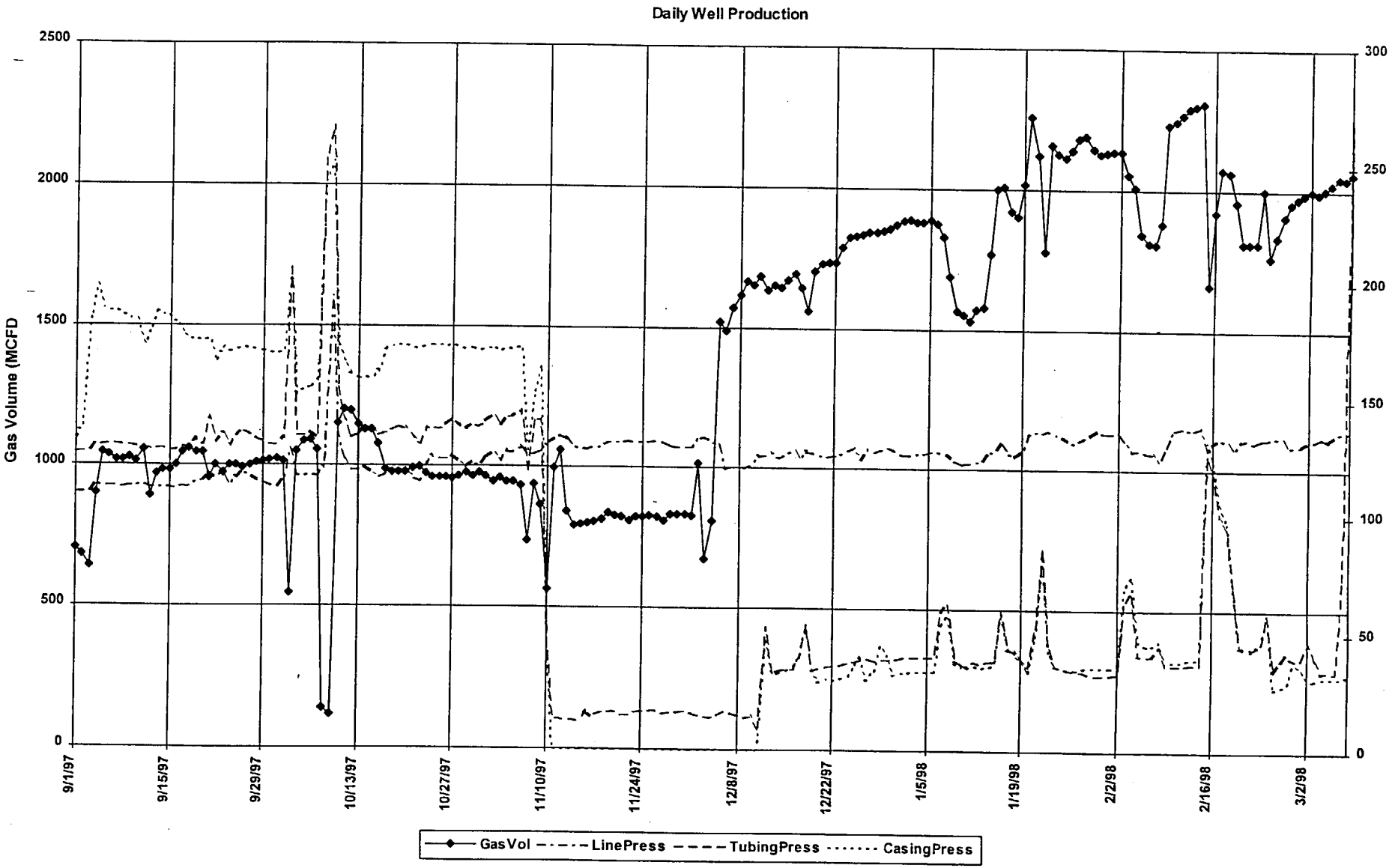
LEDGE OR FILL w/ SINKER BARS *

Form 371 1-86

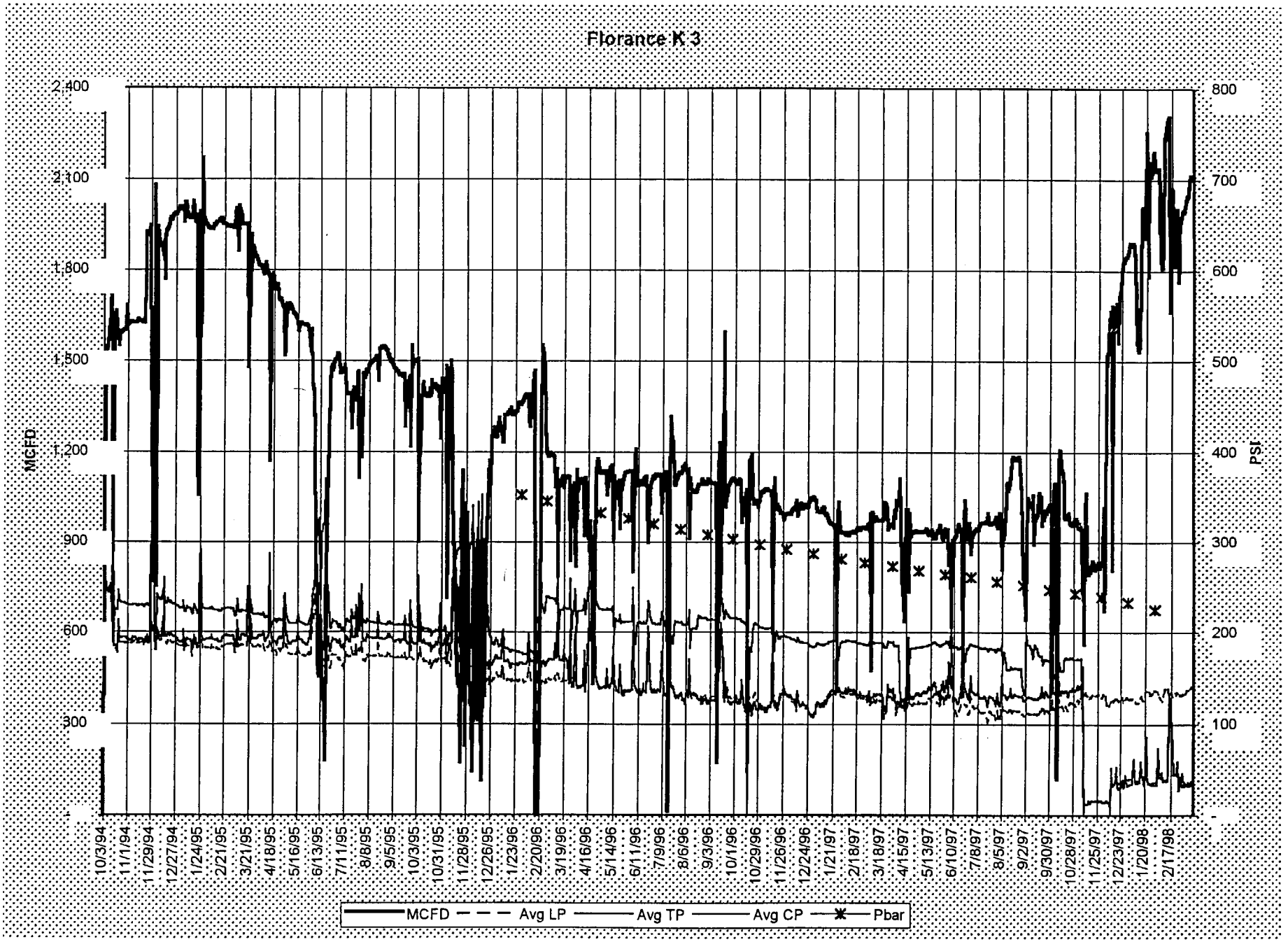

PENETRATION RATE
MIN/FT
LITHOLOGY
DEPTH
FORMATION DESCRIPTION
GAS CHROMATOGRAPH
TOTAL
UNITS PER DIVISION
250 500 750 1000 1500 2000 4000 6000
DRILLING W/ FRESH WATER
CSG-2817'
2820
WOB 8000
RPM 65
PP 250-300
SPM 108
40
60
COAL
2858-66'
#33
80
2900
COAL
2900-07'
#36
COAL
2907-20'
#40
40
COAL
2938-48'
#45
WOB 8/10000
RPM 75
PP 400
SPM 108
60
COAL
80
2972'-88'
#46
3000
20
40
3050-T.D
3am 6/13/89
CARB LAG -15 MIN
BTG
BTG
BEGIN FLARING
CONTINUOUS FLARE
OF 10 TO 40
TO T.D
PARTIAL RETURNS

NEAR TERM

Wellname: **FLORANCE K 003-FT** Flacwell: **70304801** API: **300452701300** Amoco - OIDB/Synergy Data



3T YEAR LOOK



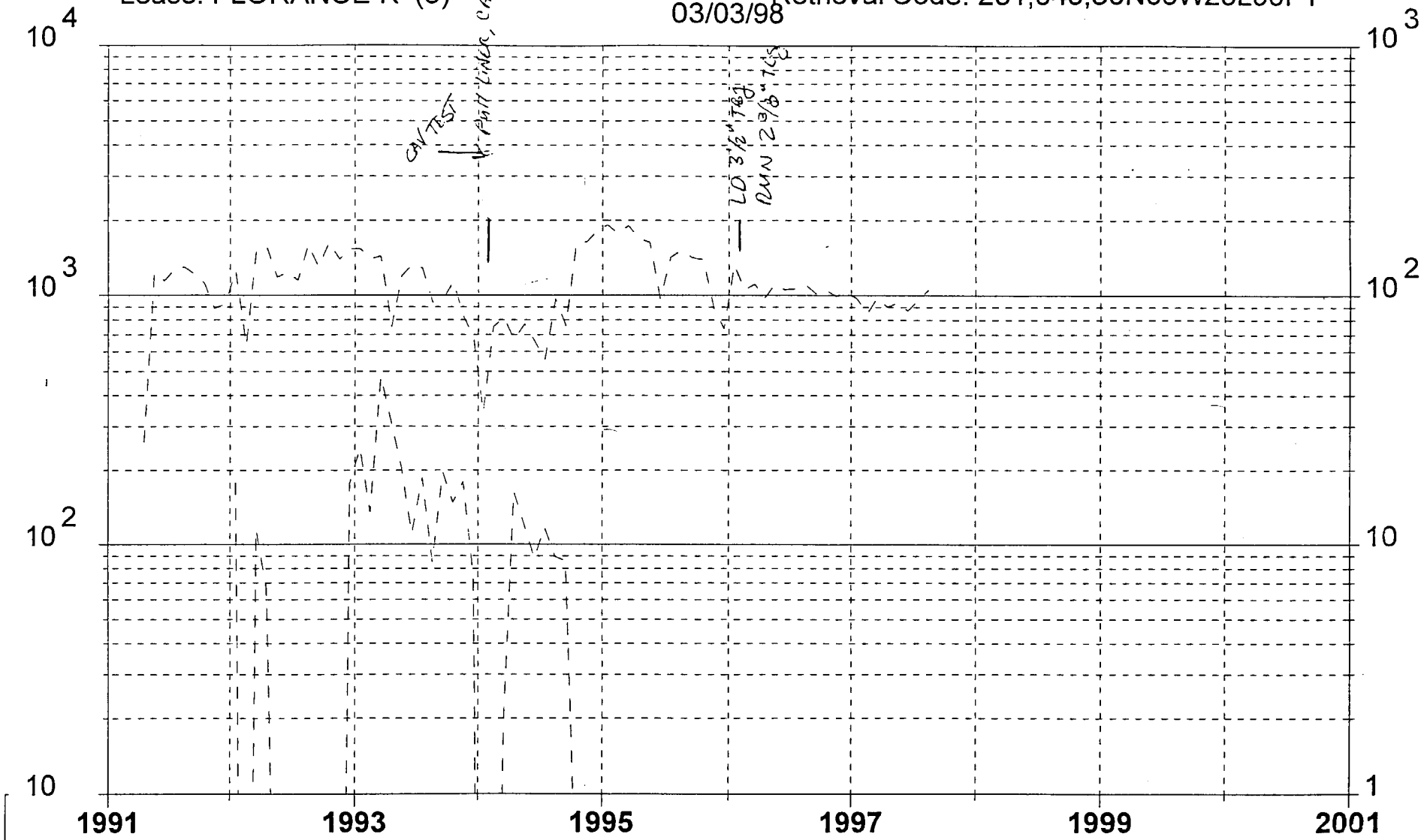
2:48 PM 3/12/98

Historic

Dwights

Lease: FLORANCE K (3) Retrieval Code: 251,045,30N08W25L00FT

03/03/98



Gas (mcf/day)

Water (bbl/day)

County: SAN JUAN, NM	F.P. Date: 04/91
Field: BASIN (FRUITLAND COA	Oil Cum: 0 bbl
Reservoir: FRUITLAND COAL	Gas Cum: 2658 mmcf
Operator: AMOCO PRODUCTIO	Location: 25L 30N 8W