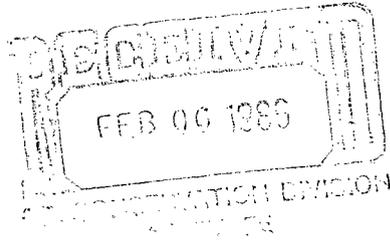




**Sun Production
Operations Division**
Southwestern District



**Sun Exploration and
Production Company**
No 24 Smith Road
ClayDesta Plaza
PO Box 1861
Midland TX 79702 9970
915 688 0300

January 29, 1986

Mr. David Catanach
Energy and Minerals Dept.
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Re: Application of Sun Exploration &
Production Company for approval
of downhole commingling of
production in the Elliott B-12
Well No. 2 (Unit D, Sec. 12,
T-22S, R-37E), Drinkard and Wantz
Granite Wash Pools.

Mr. Catanach:

Sun requests administrative approval for an exception to Rule 303-A to permit downhole commingling of production in the subject well from the Drinkard and Wantz Granite Wash Pools.

This well is currently dual completed pumping from the Wantz Granite Wash Formation and flowing from the Drinkard formation. The Wantz Granite Wash is classified as an oil zone, while the Drinkard is classified as a gas zone. Ownership of the two zones is common. Note that Sun's Walter Lynch #1 (Sec. 1, T-22S, R-37E) and Annie Christmas #1 (Sec. 1, T-22S, R-37E) are already downhole commingled in the Drinkard and Wantz Granite Wash Pools.

The additional information concerning this application, as outlined in Rule 303-C, is attached for your consideration.

Thank you,


Susan Wikstrom
Production Engineer

cc: Tom Fox
Kim Bowen
Bill Hayden
DeeAnn Kemp
Well File

- A. OPERATOR:
Sun Exploration and Production
P. O. Box 1861
Midland, Texas 79702-1861
- B. LEASE
Elliott B-12 #2
Unit D, 567' FNL & 467' FWL
Sec. 12, T-22S, R-37E
Lea County, New Mexico
- C. Well is dual completed in the Drinkard and Wantz-Granite Wash zones per NMOCC Order No. MC-2232.
- D. The C-116 for both zones is attached.
- E. Production decline curves for both the Drinkard and Wantz-Granite Wash zones are attached.
- F. BOTTOM HOLE PRESSURE DATA:
Drinkard: 72 hr. SIBHP: 597 psi (1/16/86)
Granite Wash: Rod pump, est'd SIBHP 1000 psi
- G. FLUID CHARACTERISTICS:
There is no evidence of fluid incompatibility. Sun's Walter Lynch #1 and Annie Christmas #1 are already downhole commingled in the Drinkard and Wantz-Granite Wash pools.
- H. VALUE OF COMMINGLED FLUIDS:
The value of either crude will not be affected by downhole commingling this well because Drinkard and Granite Wash production is already surface commingled per NMOCC Order No. PC-523.
- I. ALLOCATION FORMULAS:

$$X = \frac{Y}{Z} (100)$$

Where X = percent allocation of commingled production to desired zone.

Y = latest daily rate of desired zone, BOPD or MCFD.

Z = total combined Drinkard and Wantz-Granite Wash daily rate, BOPD or MCFG.

$$\text{Drinkard Oil} \quad X = \frac{1}{(1 + 11)} (100) = 8.33\%$$

$$\text{Wantz-Granite Wash Oil} \quad X = \frac{11}{(1 + 11)} (100) = 91.67\%$$

$$\text{Drinkard Gas} \quad X = \frac{369}{(369 + 81)} (100) = 82.0\%$$

$$\text{Wantz-Granite Wash Gas} \quad X = \frac{81}{(369 + 81)} (100) = 18.0\%$$

J. ALL OFFSET OPERATORS HAVE BEEN NOTIFIED BY A COPY OF THIS APPLICATION:

Anadarko Production Company
Box 2497
900 Gibraltar Savings Center
Midland, TX 79702

Exxon Company U.S.A.
Box 1600
615 W. Missouri
Midland, TX 79702

Marathon Oil Company
Box 552
125 W. Missouri
Midland, TX 79702

Sohio Petroleum Company
10 Desta Dr.
Ste. 600 W.
Midland, TX 79705

GAS-OIL RATIO TESTS

Operator		Pool		County									
Sun Exploration and Production Co.		Wantz Granite Wash		Lea									
Address		TYPE OF TEST - (X)		Scheduled <input type="checkbox"/> Comp. Int. <input type="checkbox"/> Special <input checked="" type="checkbox"/>									
P.O. Box 1861, Midland, Texas 79702													
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	T.B.G. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST PERIODS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.
		U	S	T						R	WATER BBL'S.	GRAV. OIL	
Elliott B-12	2	D	12	22	37	12-13-85	P		24	5	11	81	7364/1

No well will be assigned an allowable greater than the amount of oil produced on the official test.
 During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.
 Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
 Report casing pressure in lieu of tubing pressure for any well producing through casing.
 Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 303 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

DuAnn Kemp
 (Signature)
 Associate Accountant
 (Title)

GAS-OIL RATIO TESTS

Operator		County												
Sun Exploration and Production Co.		Lea												
Address		Well												
P.O. Box 1861, Midland, Texas 79702		Drinkard												
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	SHOKE SIZE	TEG. PRESS	DAILY ALLOW. ABLE	LENGTH OF TEST	Completion			Special	
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.
Elliott B-12	2	D	12	22	37	32/64	50		24	3		1	369	369,000/1

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

DuAnn Kemp
(Signature)
Associate Accountant

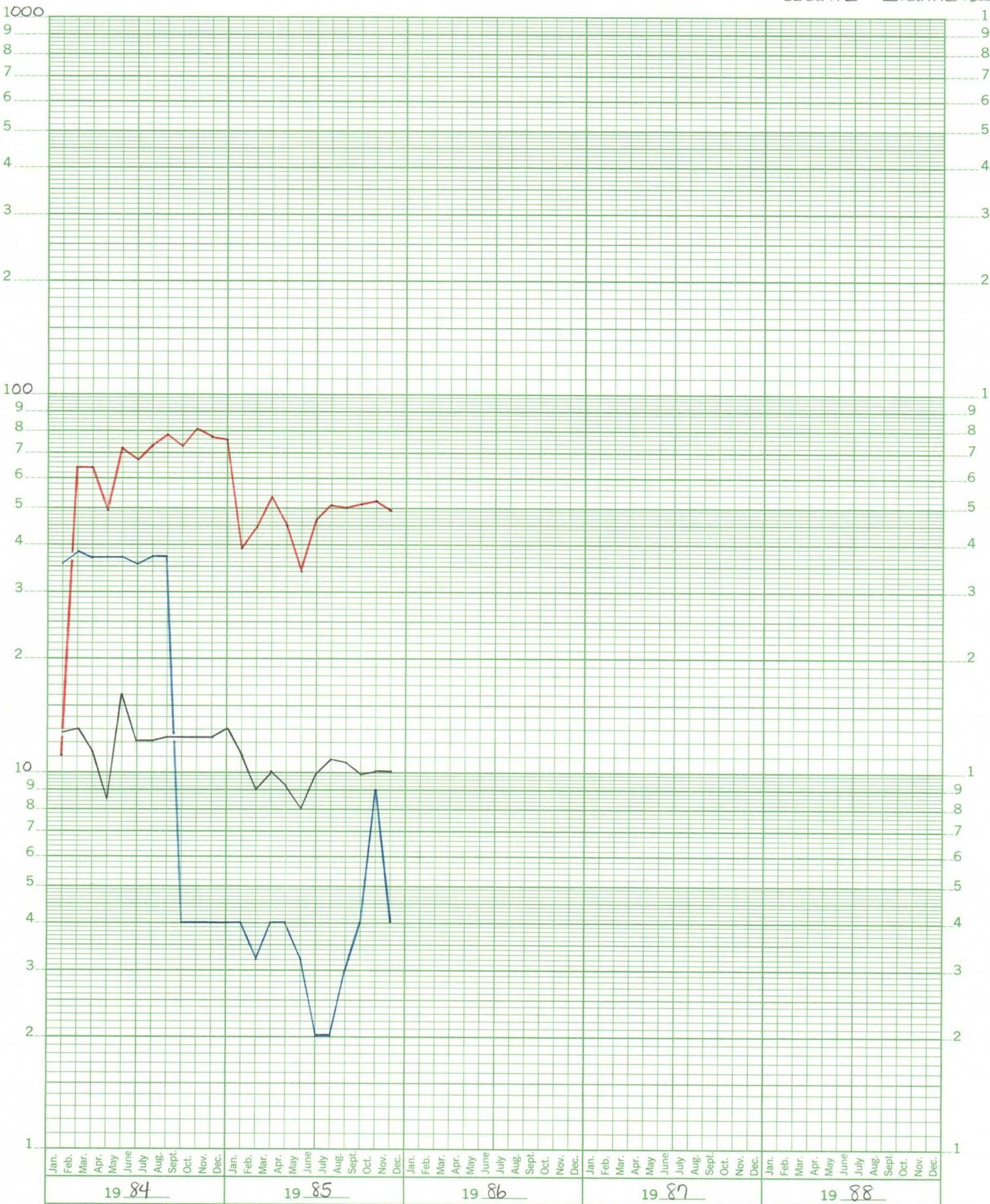
1-31-86
(Date)

No well will be assigned an allowable greater than the amount of oil produced on the official test.
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.
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Elliott B-12 #2
Wantz - Granite Wash

46 6690

5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

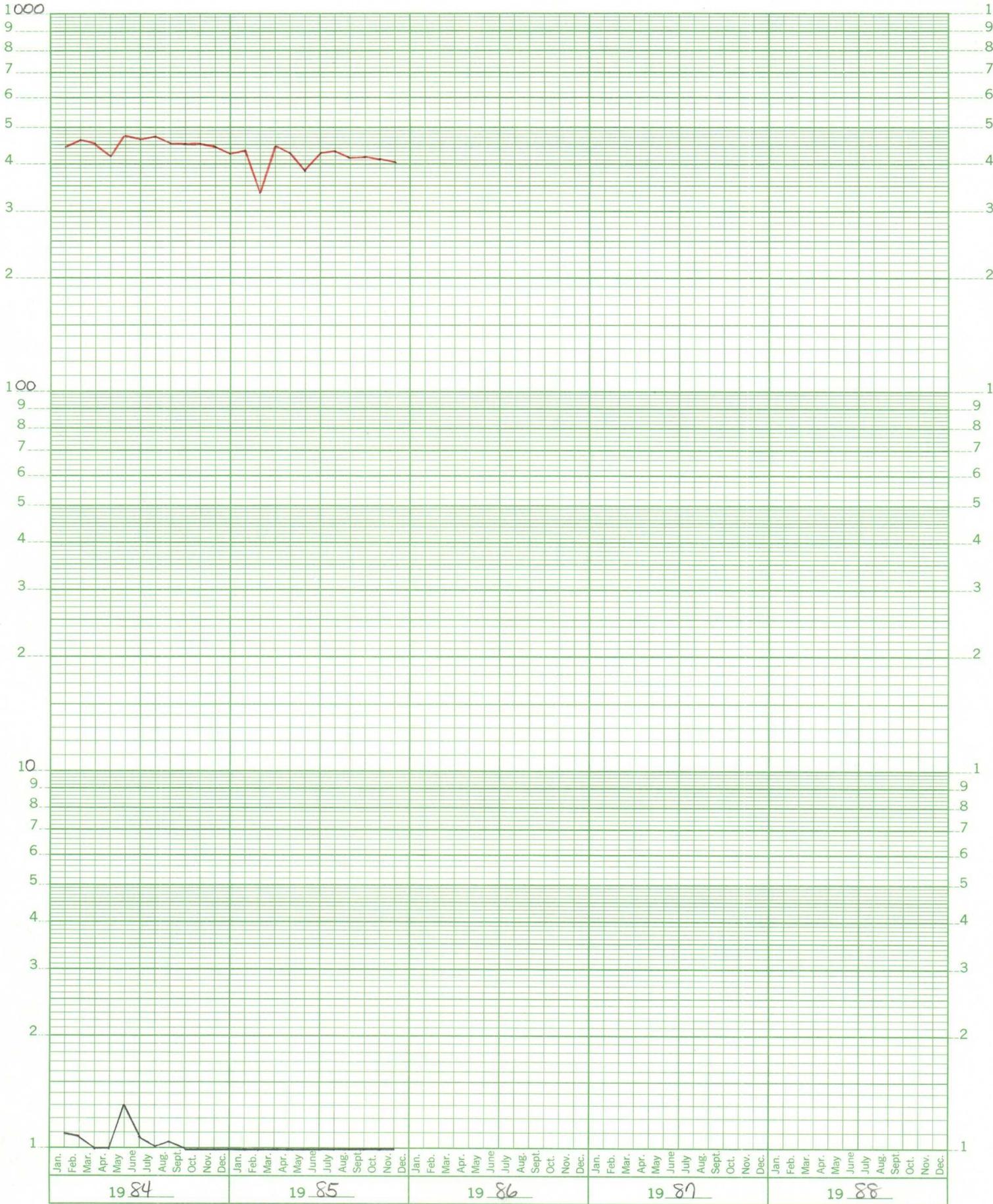


BOPD _____ BWPD _____ MCFPD _____

Elliott B-12 #2
Drinkard-Drinkard

46 6690

5 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



BOPD _____ MCFPD _____

WELL COMPLETION SKETCHES SUN-5036-4-A

WELL ELLIOTT B-12 #2 FIELD DRINKARD DATE JAN. 1986

PRESENT COMPLETION SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

DATA ON THIS COMPLETION

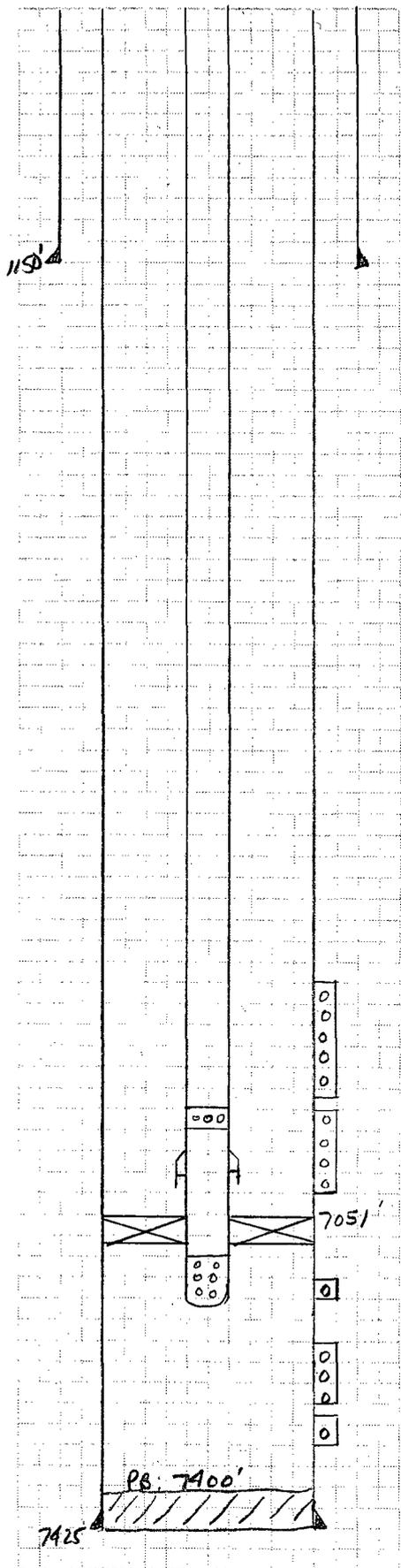
6P: 3350'

9 5/8" 36# CSG @ 1150'
CMTD w/ 550 SX, CIRC'D.

TDC @ 2140' (by survey)

7" 23" 26# CSG @ 7425'
CMTD w/ 1250 SX.
TDC @ 2140'

PBTD: 7400'
TD: 7425'



2 3/8" J-55 TBG (229 fts)

OTIS 'XA' SLIDING SLEEVE @ 7016'

1 JT 2 3/8 TBG

OTIS OSTSD 'N' PROFILE @ 7050'

OTIS 7" PERMALACH PER @ TDSI

2 3/8" PERF PUP JT. BULL PLUGGED

LOWER GRANITE WASH ON
RODPUMP w/ 76 RODSTRING
+ 1 1/2" RODPUMP SEATED IN
'N' PROFILE

DRINKARD:

6221-6739 (60 holes)

6746-7001 (29 holes)

SELECT FIRE

GRANITE WASH: 7223-55
(1 ISPF, 33 holes)

7326-71 + 7379-7388'
(1 ISPF, 56 holes)

WELL COMPLETION SKETCHES SUN-5036-4-A

WELL Elliott B-12 #2 FIELD DRINKARD DATE JAN. 1986

PRESENT COMPLETION SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

DATA ON THIS COMPLETION

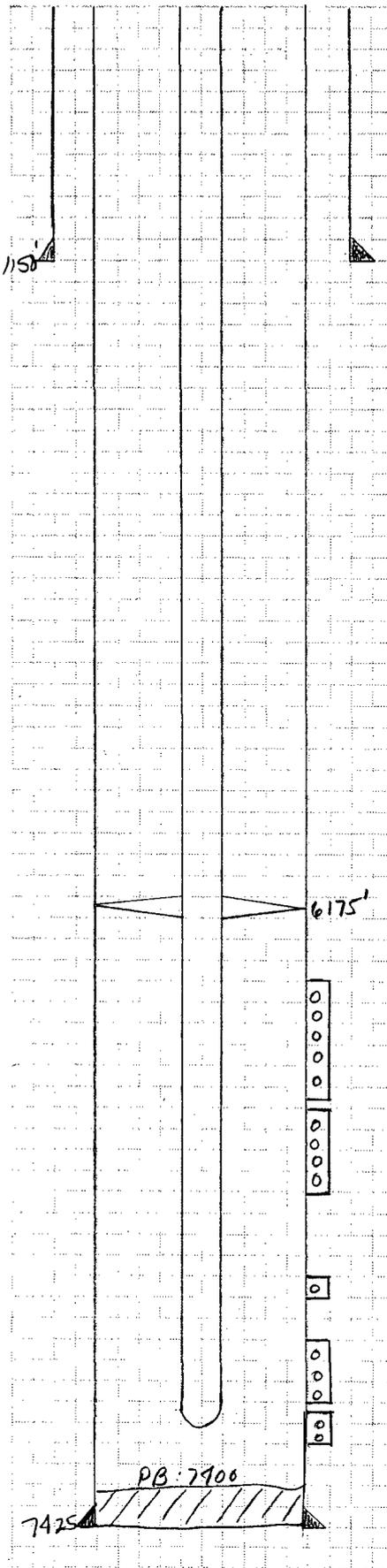
GR: 3350'

9 5/8" 36# CSG @ 1150'
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TOC @ 2140' (by survey)

7" 23*26# CSG @ 7425'
CMTD w/ 1250 SX
TOC @ 2140'

PBTD: 7400'
TD: 7425'



2 3/8" J55 TBG TO 7375'
TAC @ 6175'
76 RODSTRING
1 1/2" RODPUMP

DRINKARD

6221-6739 (60 holes)
6746-7001 (29 holes)
SELECT FIRE

GRANITE WASH: 7223-55
(1 JSPP, 33 holes)
7326-71 + 7379-7388'
(1 JSPP, 56 holes)