

Mobil Oil Corporation

1
SEP 16 1969

P.O. BOX 633
MIDLAND, TEXAS 79701

October 10, 1969

325

- New Mexico Oil Conservation Commission (3)
P. O. Box 2088
Santa Fe, New Mexico 87501

Att: Mr. A. L. Porter, Jr.

APPLICATION FOR ADMINISTRATIVE
APPROVAL FOR CONVERSION OF MOBIL
OIL CORPORATION'S DENTON NORTH
WOLFCAMP UNIT WELLS NO. 6-27,
7-10, 10-2, 12-2 AND 18-1 TO
WATER INJECTION
DENTON WOLFCAMP POOL
LEA COUNTY, NEW MEXICO

Dear Mr. Porter:

Mobil Oil Corporation respectfully requests administrative approval for conversion of the subject wells to water injection under the provisions of Rule 701.E.5 of the Commission's Rules and Regulations. In support of this request, attached is:

1. A plat showing all wells within a two mile radius of the proposed injection wells. These wells produce from the Wolfcamp and Devonian formations.
2. A plat showing the proposed injection wells and all Wolfcamp wells within a two mile radius.
3. A tabulation of the proposed injection wells.
4. Logs of the proposed injection wells.
5. Diagrammatic sketches of the proposed injection wells.
6. Production history curves of the proposed injection wells and of two producing wells, Nos. 14-2 and 12-5, which offset the two proposed injection wells which have not experienced response.
7. Copies of Commission Form C-116 showing production test of the affected wells.

Mobil

New Mexico Oil
Conservation Commission

-2-

October 10, 1969

Produced Devonian and Wolfcamp salt water will be injected into the Wolfcamp formation in the proposed injection wells at an approximate depth of 9300'. Planned injection rates are 600 BPD per well. Injection will be through cement lined tubing and beneath a packer.

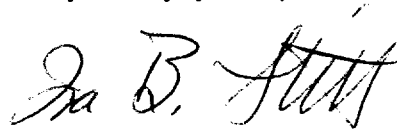
Water for injection will be obtained from Atlantic Richfield Company's Denton Salt Water Disposal System. Average current rates for the existing injection wells are 542 BPD per well. After conversion of the proposed wells the total planned injection rate for the unit will be 10,200 BPD. The volume of water available from Atlantic's system is estimated to be 25,000 BPD.

It should be noted that two of the proposed injection wells, Nos. 6-27 and 12-2 have experienced response indicated by an increase in oil and water production. One well, No. 7-10, has experienced response as indicated by an increase in water production. Well No. 7-10 is currently temporarily abandoned. Well Nos. 10-2 and 18-1 have not experienced any response. They are offset, however, by producing wells which have experienced response as indicated by increased production. These two producing wells are Nos. 12-5 and 14-2.

Conversion of the proposed wells is considered necessary to complement the existing injection well pattern and provide for a more thorough sweep. The waterflood project, including the existing twelve injection wells, was authorized in Order No. R-3001.

All offset operators are being notified of this application by copy of this letter. If any additional information is required please advise.

Very truly yours,



~~for:~~ Ira B. Stitt
Division Operations Engineer

CRKreuz/bje
Attachments

cc: Offset Operators (see attached list)
(w/tabulation & plat)

MOBIL OIL CORPORATION'S
DENTON NORTH WOLFCAMP UNIT
DENTON WOLFCAMP POOL
LEA COUNTY, NEW MEXICO

OFFSET OPERATORS
ADDRESS LIST

Atlantic Richfield Company, Box 1610, Midland, Texas 79701

Gulf Oil Corporation, Box 1150, Midland, Texas 79701

Phillips Petroleum Corporation, Room B-2, Phillips Building, Odessa, Texas 79760

Redfern Development Corporation, Box 1747, Midland, Texas 79701

Ryder Scott Management Co., 922-8th St., Wichita Falls, Texas 76301

Shell Oil Company, Box 1509, Midland, Texas 79701

Skelly Oil Company, Box 993, Midland, Texas 79701

PROPOSED INJECTION WELL CONVERSIONS
 MOBIL OIL CORPORATION'S
 DENTON NORTH WOLFCAMP UNIT
 DENTON WOLFCAMP POOL
 LEA COUNTY, NEW MEXICO

<u>Proposed Conversions</u>		<u>Location</u>			
<u>Tract No.</u>	<u>Well No.</u>	<u>Unit</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>
6	27	G	35	14-S	37-E
7	10	E	36	14-S	37-E
10	2	J	25	14-S	37-E
12	2	M	25	14-S	37-E
18	1	N	23	14-S	37-E

CRKreuz/bje
 10/10/69

NEW MEXICO OIL CONSERVATION COMMISSION
GAS - OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County		Lea									
Mobil Oil Corporation		Denton Wolfcamp													
Address		Box 633, Midland, Texas 79701		TYPE OF TEST - (X)		Completion ☐ Special ☒									
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BBL.	
		U	S	T						R	WATER BBL.S.	GRAV. OIL	OIL BBL.S.		GAS M.C.F.
Denton North Wolfcamp Unit Tract	6 27	G	35	14	37	5-68	P	-	-	24	3	43	9	2.0	222
	6 29	A	35	14	37	5-68	P	-	-	24	3	44	13	3.0	230
	7 10	E	36	14	37	2-68	P	-	-	24	30	41	10	65.0	6,500
	12 2	M	25	14	37	11-68	P	-	-	24	3	44	6	TSTM	-
	12 5	K	25	14	37	7-68	P	-	-	24	1	44	2	17.0	8,500
	14 2	C	26	14	37	11-68	P	-	-	24	2	41	3	3.0	1,000

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 Commission.

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 Commission in accordance with Rule 301 and appropriate pool rules.

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

[Signature]

(Signature)
Authorized Agent

(Title)

10-13-69

(Date)

NEW MEXICO OIL CO
GAS - OIL

C-116
Revised 1-1-65

Operator		Pool		County		Lea								
Mobil Oil Corporation		Denton Wolfcamp												
Address		Box 633, Midland, Texas 79701		T		JF								
				TEST - (X)		Completion ☐ Special ☒								
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	T.B.G. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL	
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.
Denton North Wolfcamp Unit Tract	6 27	G	35	14	37	7-69	P		24	8	43	20	4.0	200
	6 29	A	35	14	37	7-69	P		24	1	44	38	8.0	210
	7 10	E	36	14	37	7-68	P		24	65	41	20	65.0	3,250
	12 2	M	25	14	37	7-69	P		24	1	44	31	5.0	161
	12 5	K	25	14	37	6-69	P		24	2	44	9	TSTM	-
	14 2	C	26	14	37	9-69	P		24	6	41	9	13.5	1,500

No well will be assigned an allowable greater than the amount of oil produced on the official test.

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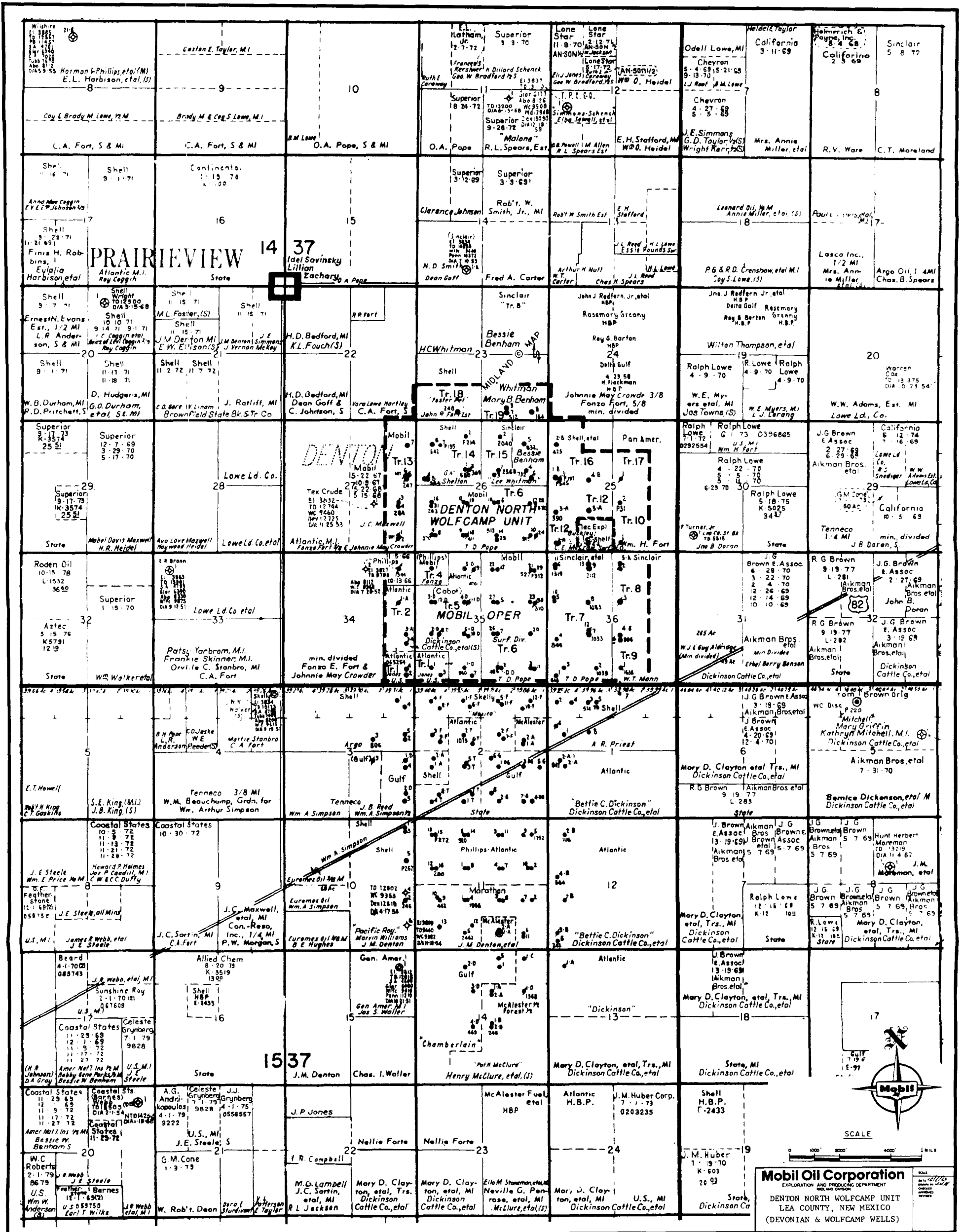

(Signature)

Authorized Agent

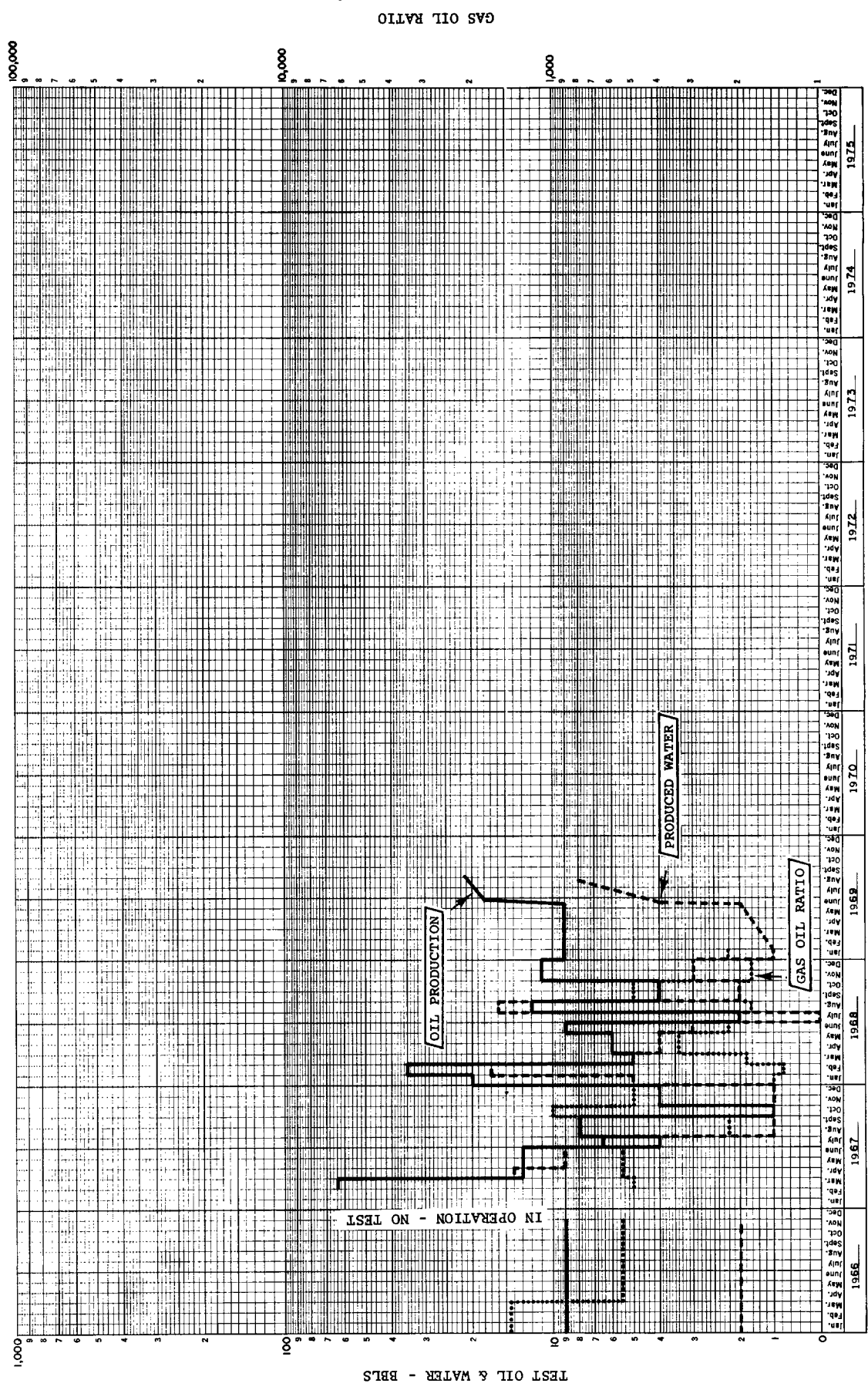
(Title)

10-13-69

(Date)



Mobil Oil Corporation
EXPLORATION AND PRODUCING DEPARTMENT
DENTON NORTH WOLFCAMP UNIT
LEA COUNTY, NEW MEXICO
(DEVONIAN & WOLFCAMP WELLS)

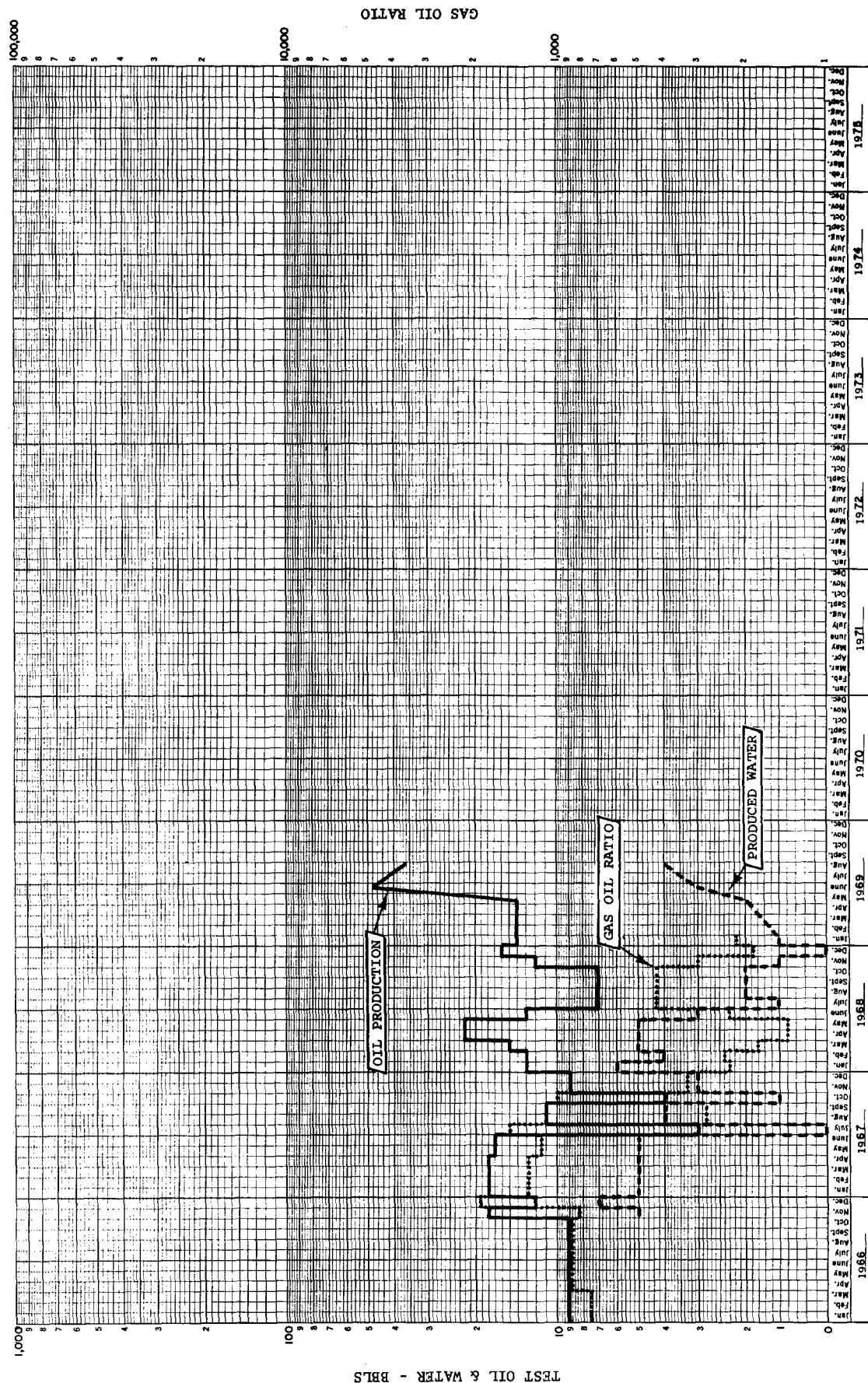


TIME - YEARS

Mobil Oil Corporation
EXPLORATION AND PRODUCING DEPARTMENT
MIDLAND DIVISION

DENTON N. WOLF CAMP UNIT
WELL # 6-27
LEA COUNTY, NEW MEXICO

SCALE
DATE 10-10-79
BY J. M. L.
CHECKED J. P. C.
APPROVED
REVISED



DATE 10-10-69
ORDERED BY J.W.V.
CHECKED LAC
APPROVED
REVIEWED

Mobil Oil Corporation

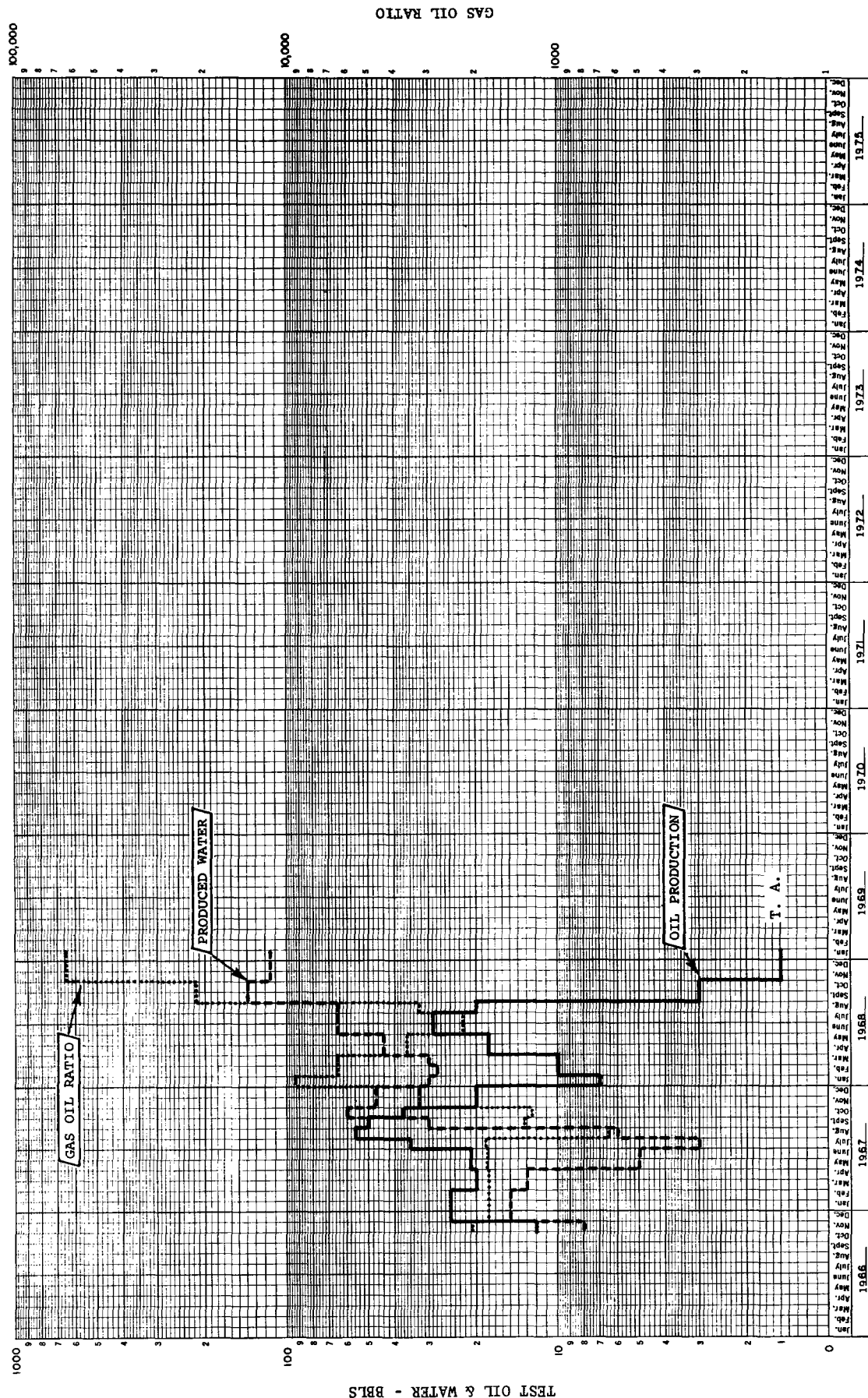
EXPLORATION AND PRODUCING DEPARTMENT

AND PRODUCING
MAJL AND DIVISION

DENTON N. WOLFCAMP UNIT

IN N. WOLF CAMP
WELL # 6-29

WELL # 0-23
LEA COUNTY, NEW MEXICO



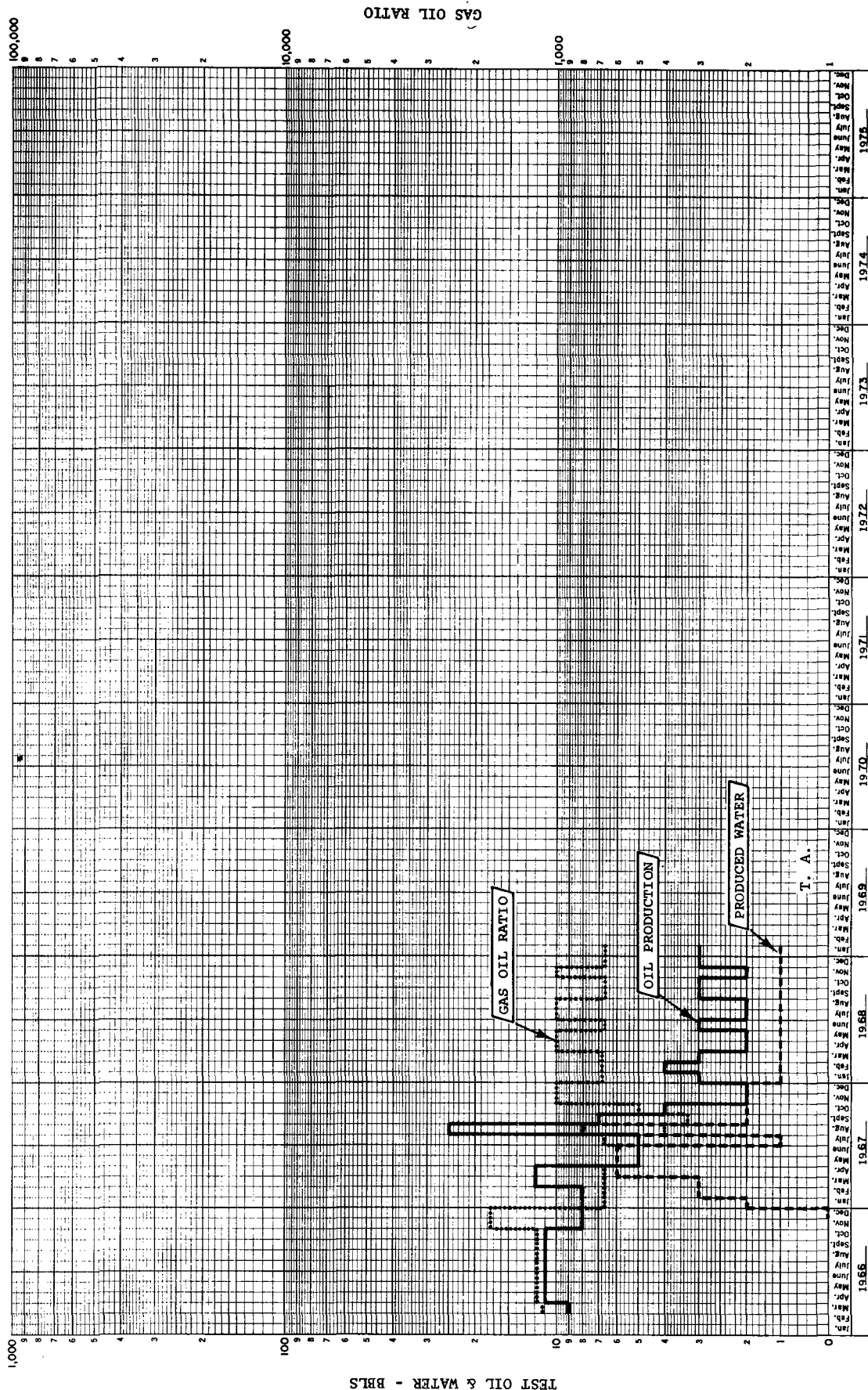
TIME - YEARS

Mobil Oil Corporation

EXPLORATION AND PRODUCING DEPARTMENT
INDIAN DIVISION

DENTON N. WOLF CAMP UNIT
WELL # 7-10
LEA COUNTY, NEW MEXICO

SCALE
DATE 10-10-69
BY J. J. J.
CHECKED J. J. J.
APPROVED J. J. J.



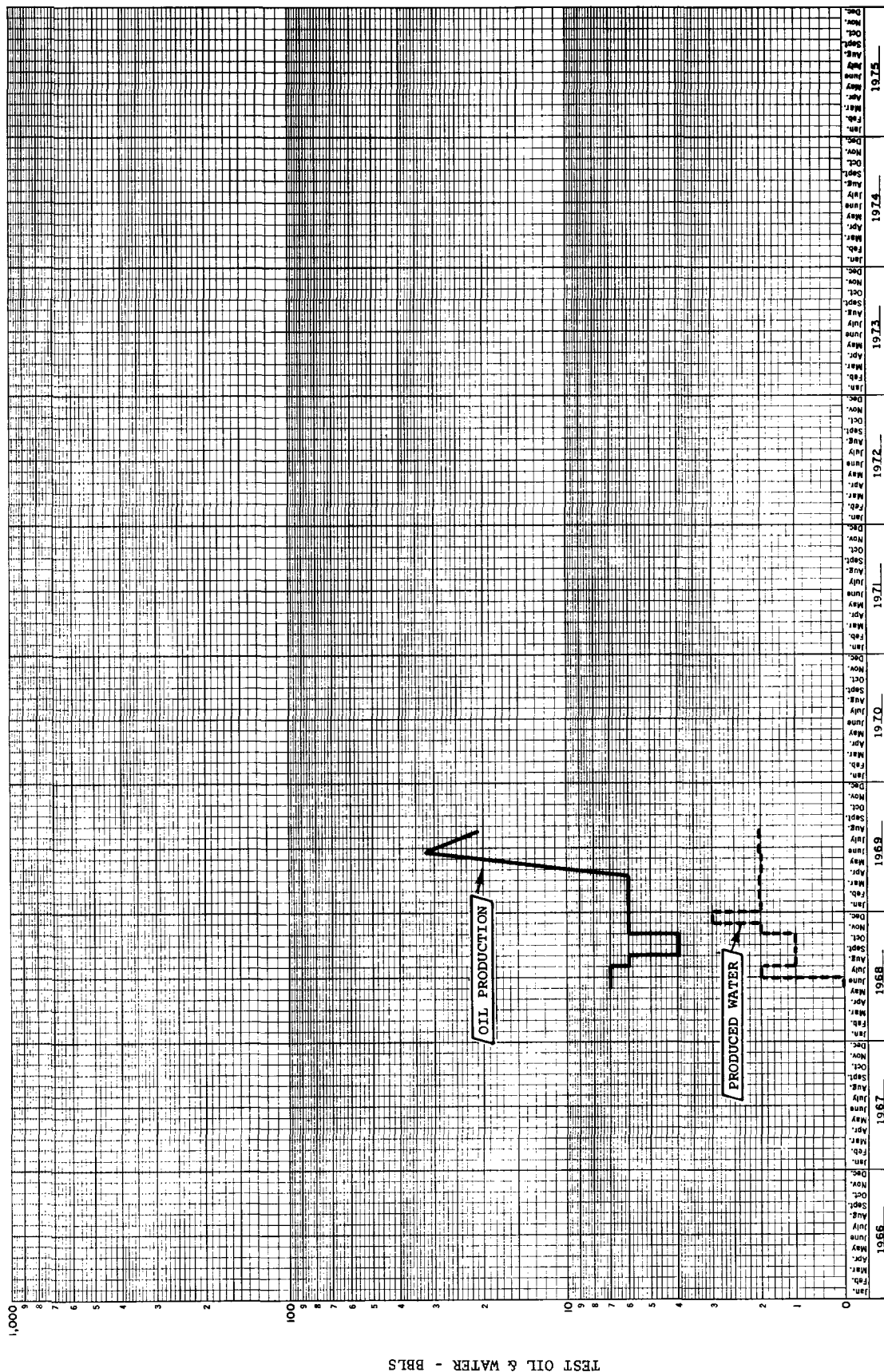
TIME - YEARS

Mobil Oil Corporation

EXPLORATION AND PRODUCING DEPARTMENT
MIDLAND DIVISION

DENTON N. WOLF CAMP UNIT
WELL # 10-2
LEA COUNTY, NEW MEXICO

SCALE
DATE 10-10-75
CHECKED BY JAC
APPROVED
REVISED



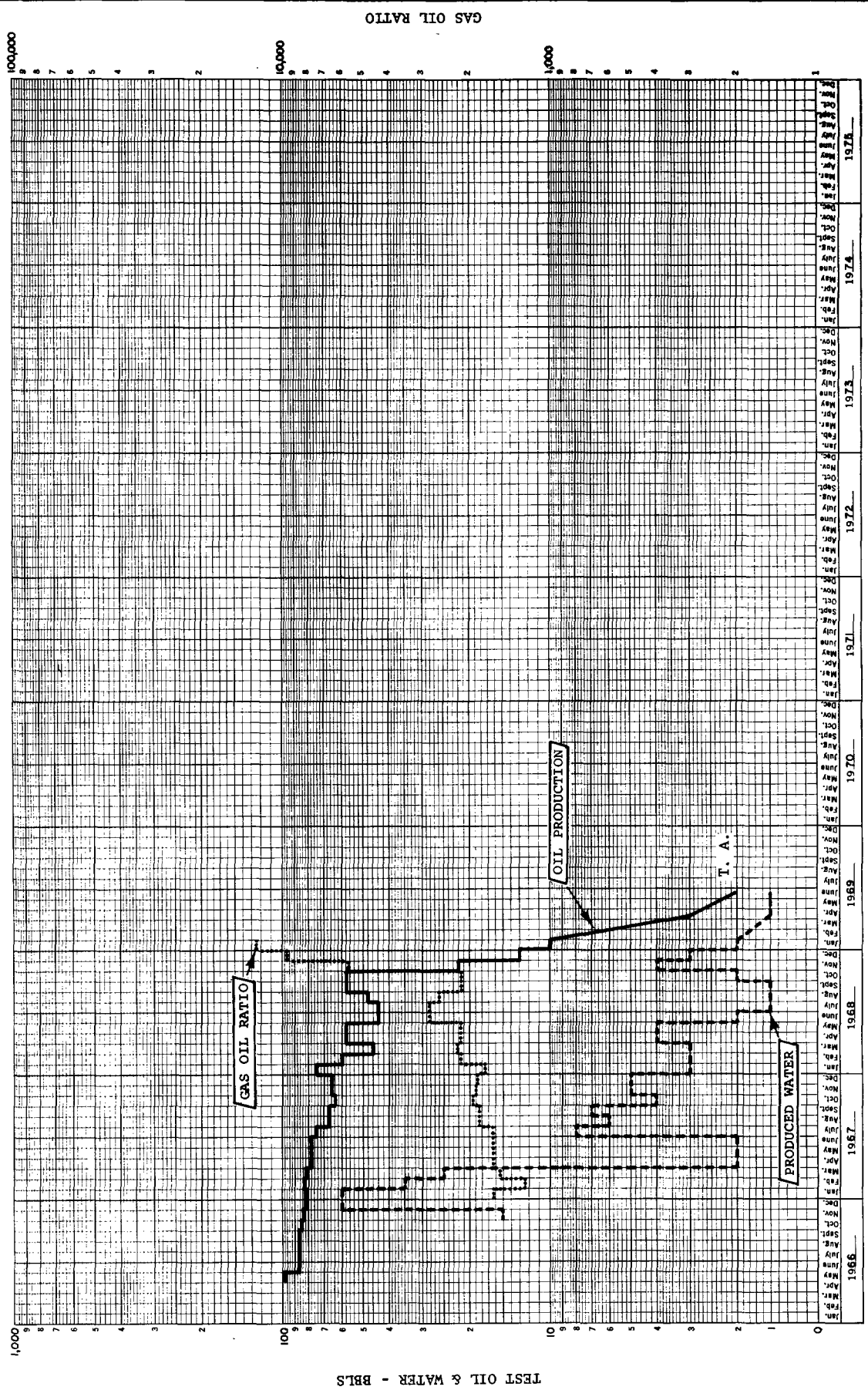
TIME - YEARS

Mobil Oil Corporation

EXPLORATION AND PRODUCING DEPARTMENT
MOBIL DIVISION

DENTON N. WOLF CAMP UNIT
WELL # 12-2
LEA COUNTY, NEW MEXICO

SCALE
DATE 10-10-68
BY J. W. J.
CHECKED J. W. J.
APPROVED J. W. J.
REVISED



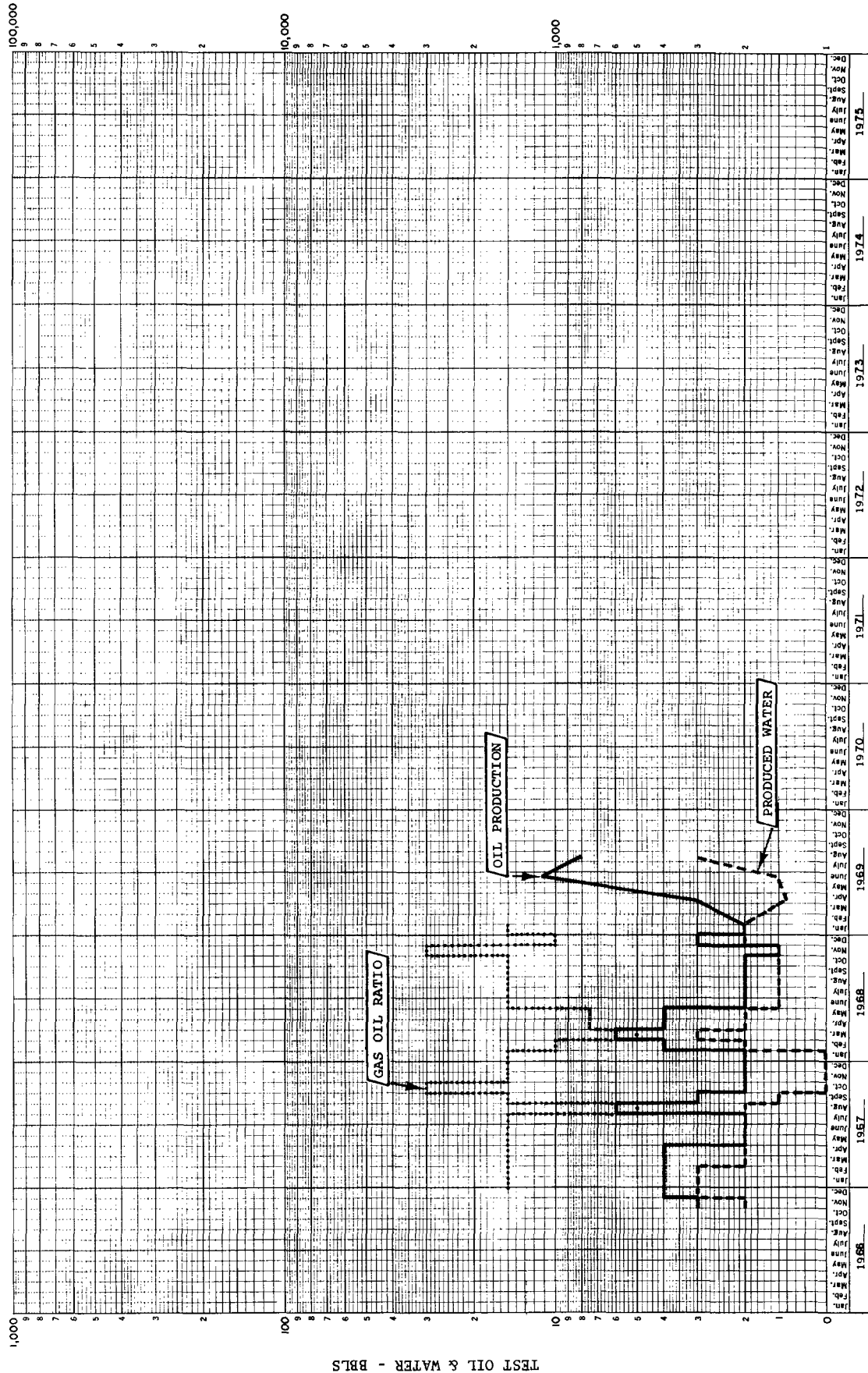
TIME - YEARS

Mobil Oil Corporation

EXPLORATION AND PRODUCING DEPARTMENT
MIDLAND DIVISION

DENTON N. WOLF CAMP UNIT
WELL # 18-1
LEA COUNTY, NEW MEXICO

SCALE
DATE 10-10-79
DRAFTER J. M. L.
CHECKED L. R. C.
APPROVED
REVISED



Mobil Oil Corporation
 EXPLORATION AND PRODUCING DEPARTMENT
 MIDLAND DIVISION
 DENTON N. WOLF CAMP UNIT
 WELL # 14-2
 LEA COUNTY, NEW MEXICO

SCALE
 DATE 10-10-75
 DRAWN BY J.M.J.
 CHECKED LAC
 REVIEWED



TIME - YEARS

Mobil Oil Corporation

EXPLORATION AND PRODUCING DEPARTMENT

MIDLAND DIVISION

DENTON N. WOLFCAMP UNIT

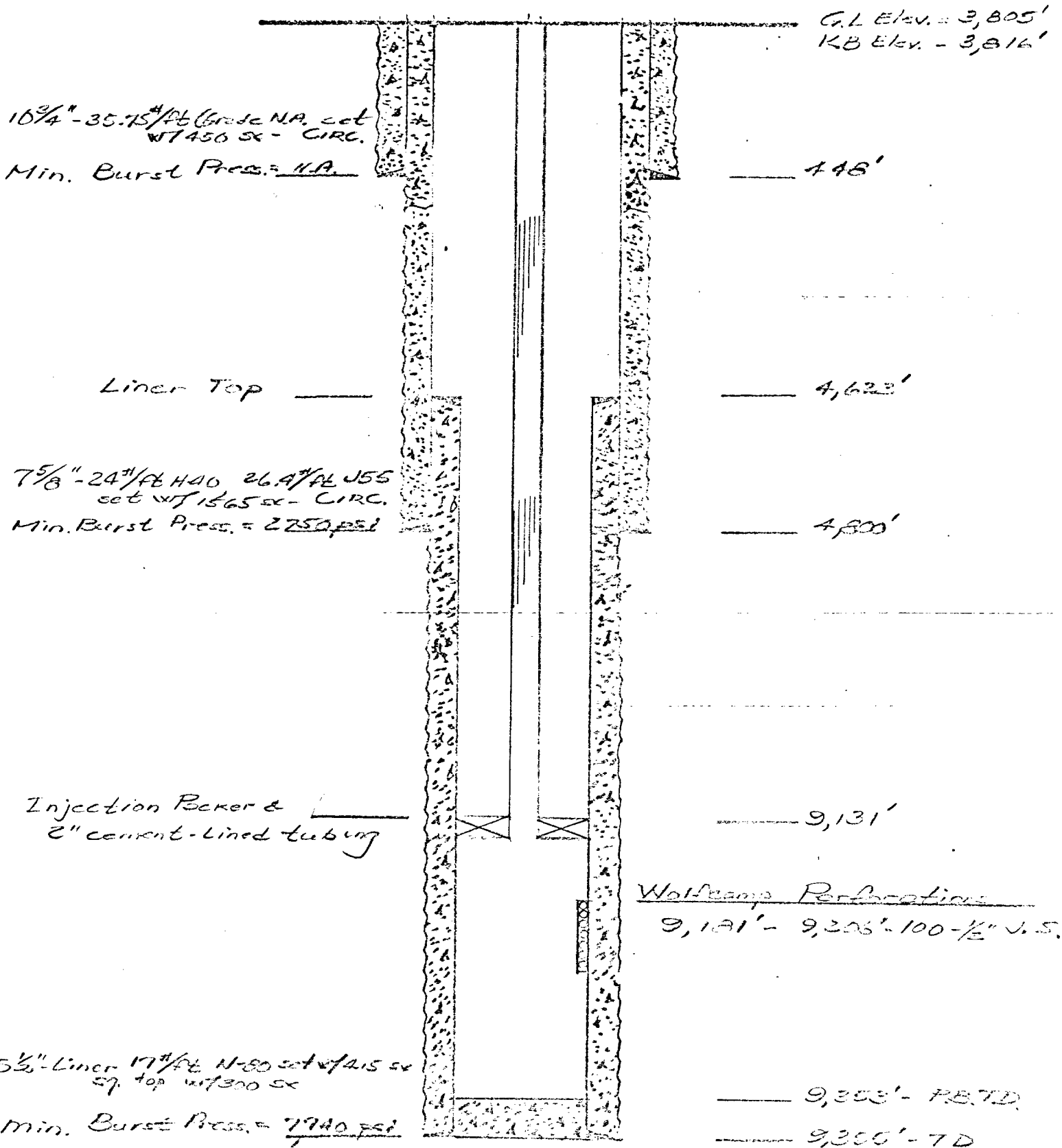
WELL # 12-5

LEA COUNTY, NEW MEXICO

SCALE
DATE 10-10-69
DRAWN BY J.W.L.
CHECKED LAC
APPROVED
REVISED

Diagrammatic Well Sketch
Denton North Wolfcamp Unit Well No. 6-27
Denton (Wolfcamp) Field
Lea County, New Mexico

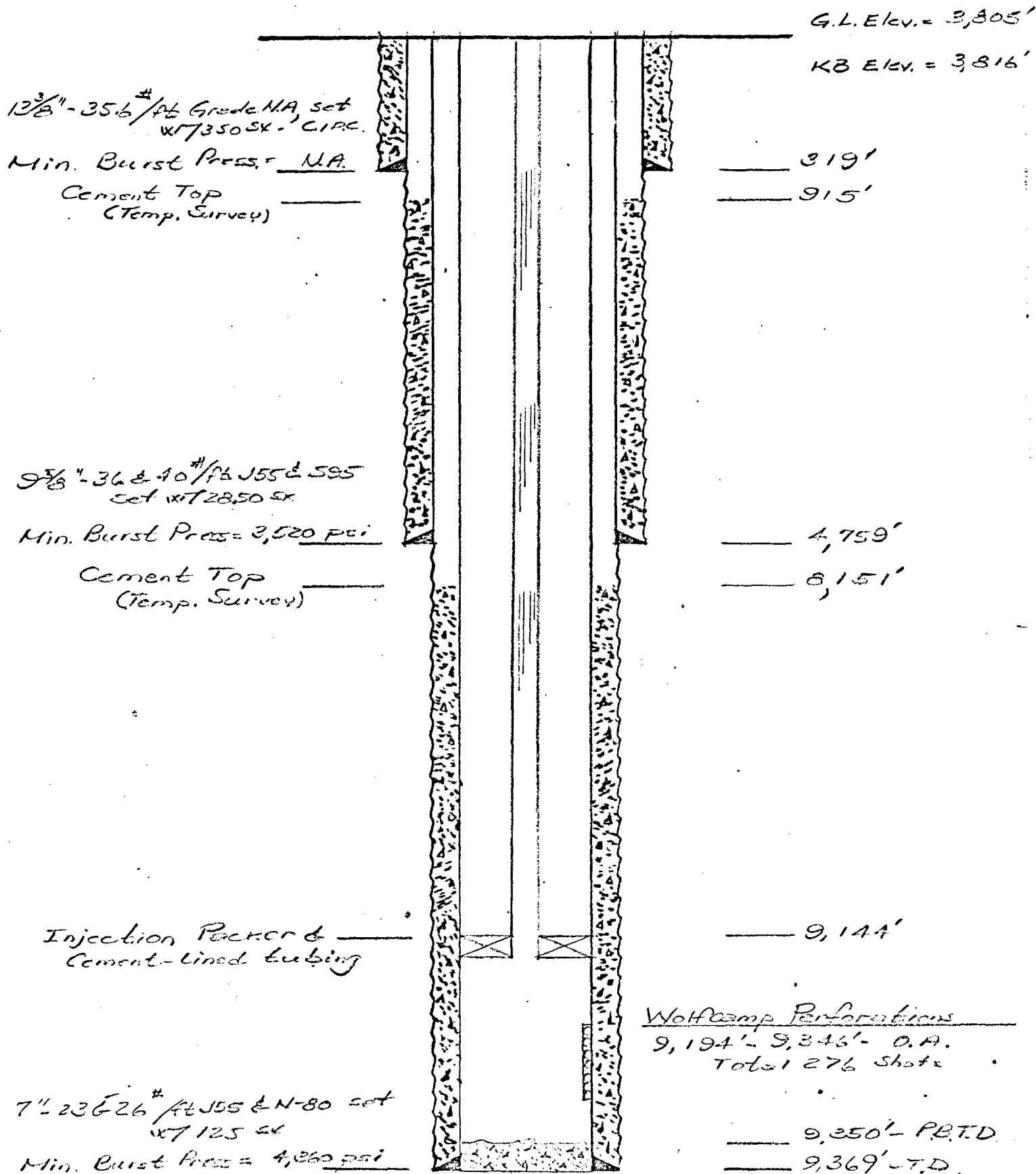
W.I.U.



10-9-69
 (C.I.)

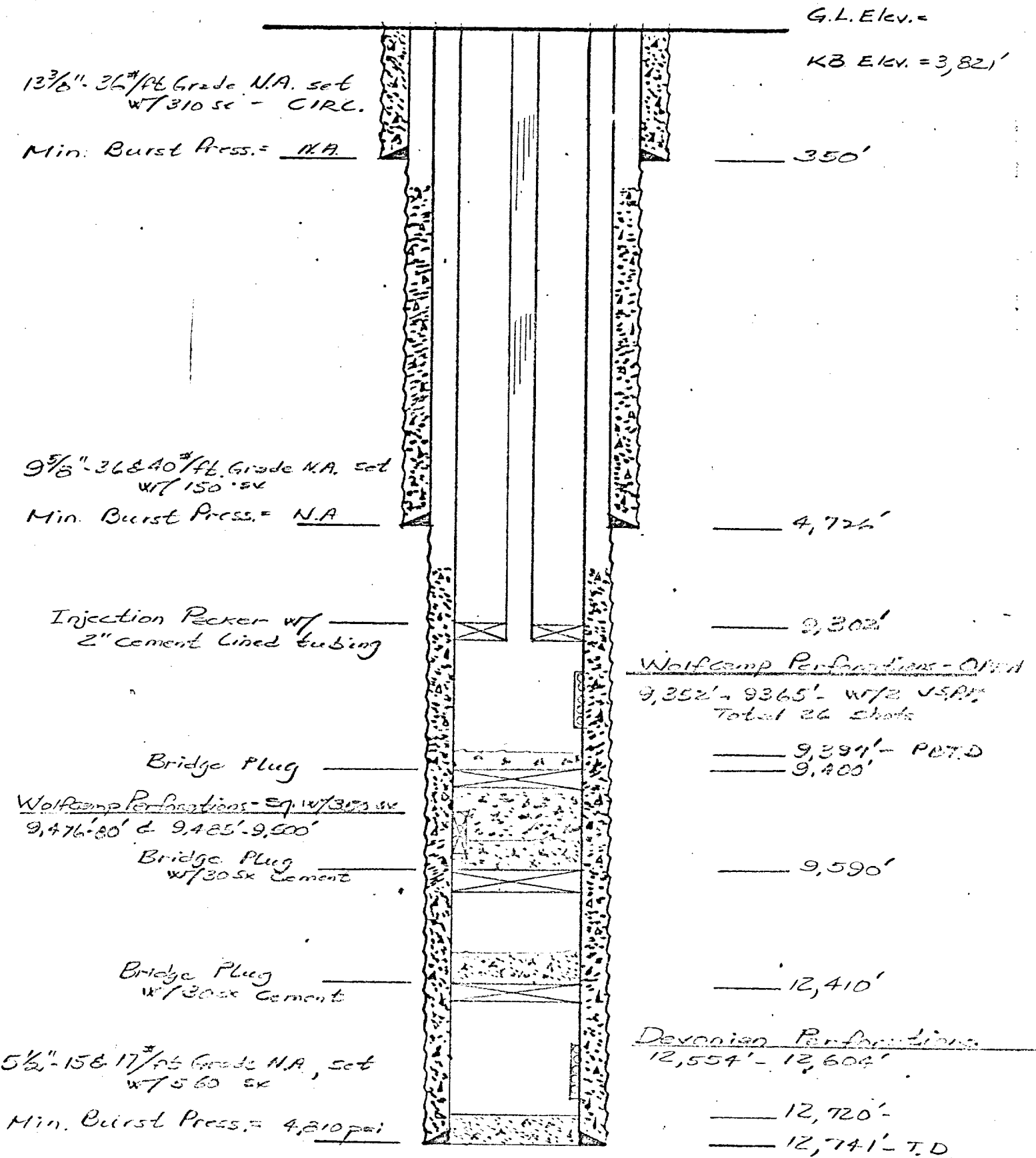
Denton North Wolfcamp Unit Well No. 7-10
 Denton (Wolfcamp) Field
 Lea County, New Mexico

W.I.W.



10-9-69
 W.M.

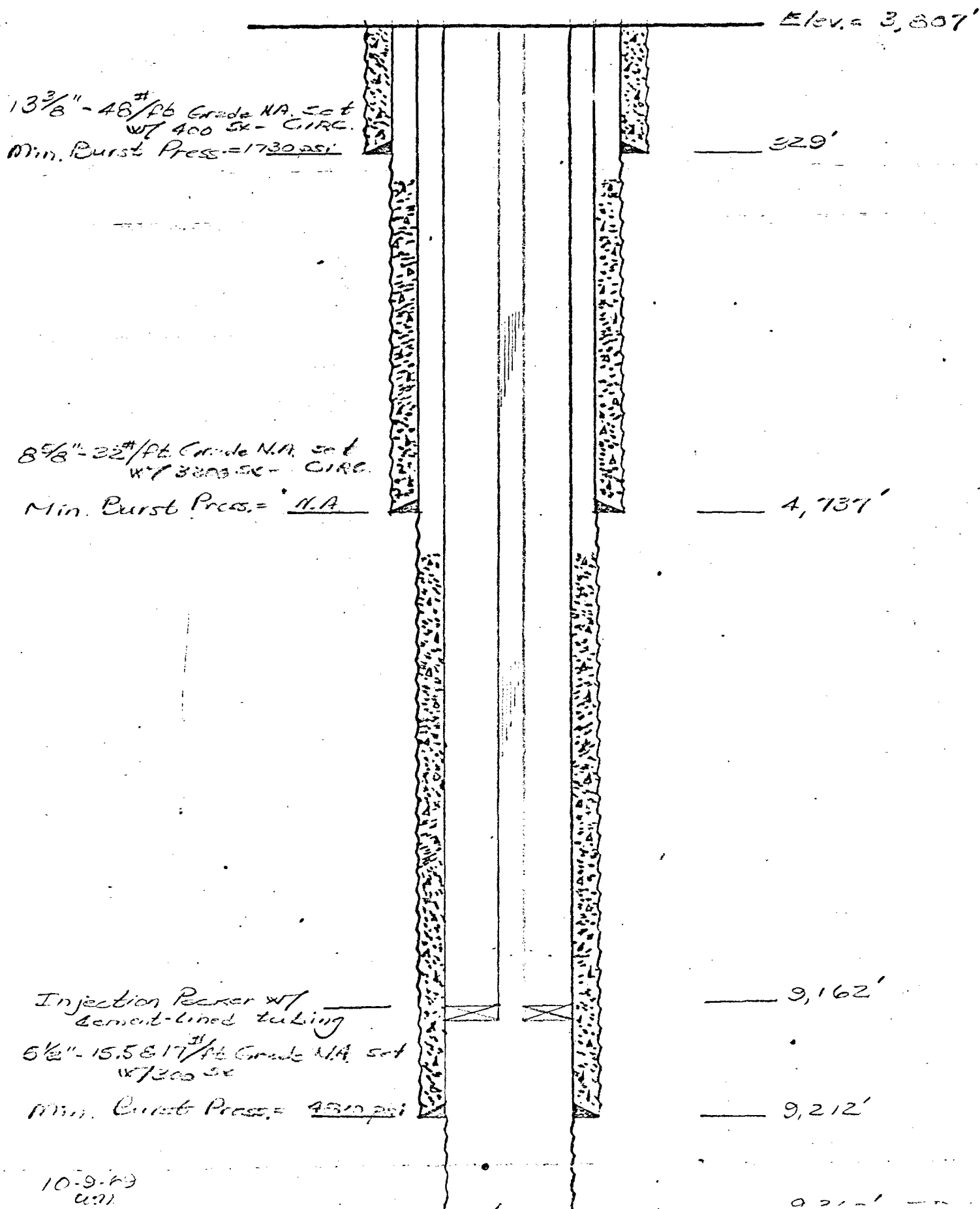
Denton North Wolfcamp Unit Well No. 10-Z W.I.W.
Denton (Wolfcamp) Field
Lea County, New Mexico



10-9-69
 W.I.

PROPOSED WELL SKETCH
Denton North, Wolfcamp Unit Well No. 12-Z
Denton (Wolfcamp) Field
Lee County, New Mexico

W.I.W.



Diagrammatic Well Sketch
Denton North Wolfcamp Unit Well No. 13-1 - W.I.W.
Denton (Wolfcamp) Field
Lea County, New Mexico

