

OK to issue
 talked to WBM
 on 1/15 & showed
 him Curve I drew - I don't agree
 with Rieder - will be
 until wells allowable
 of it appears it should not exceed 1 1/2
 million CF/D for some time
 million over 3 1/2 million CF/D
 no problem

OIL CONSERVATION COMMISSION
 BOX 2045
 HOBBES, NEW MEXICO

DATE January 27, 1956

MR. W. B. MACEY
 OIL CONSERVATION COMMISSION
 BOX 871
 SANTA FE, NEW MEXICO

RE: PROPOSED NSP 234
 PROPOSED NSL _____

due 2/18/56

Dear Mr. Macey:

I have examined the application dated 1/17
 for the Humble New Mexico State M #4-C 19-22-37
 Operator Lease and Well No. S-T-R

and my recommendations are as follows:

This is OK, however, the well should make a lot of oil - C. M. Rieder

I recommend that the well be classified as an Arrow gas pool well, and
 as a gas well, however, I want to point out that the Humble M #5 and 6, Amerada
 PA #2, which are offset wells, are completed in the same zone. The January al-
 lowables are 11, 15 and 33 BOPD, all with relatively low GORs.

It is possible that the producing GOR will be less than 100,000-1, de-
 pending on the manner in which the well is produced. It is also probable that
 the well will often produce more than the oil allowable, this depending on the
 manner in which the transporter takes the gas.

A zone behind the casing ^{is} seems to be well-developed and should be productive
 of dry gas with no fluids. This zone could be developed and the well made a dual
 completion. If the application is denied, or the acreage reduced on the bases of
 the #5 and 6 wells, it is possible that the operator might examine this possibility.
 I can see no objection to the possible dedication of the SE/4 of Sec. 18 and N/2
 of Sec. 19 to the #4 well, although #6 is located in a more favorable position. It
 would be of considerably more benefit, economically, not only to the operator but
 to the royalty owner. This is not considering the value of the gas in the lower
 zones for pressure maintenance and as a ~~gas~~ lifting medium.

If this application is approved, it is suggested that the order state—
 that should the incidental oil exceed the normal unit allowable, the production
 be curtailed. -----R. F. Montgomery

OIL CONSERVATION COMMISSION
C. M. Rieder
 C. M. Rieder
 Engineer

copy - occ - Hall 1/18/56
HUMBLE OIL & REFINING COMPANY

NSP-234

HUMBLE OIL & REFINING COMPANY
MIDLAND, TEXAS

Jan 2/18/56

January 17, 1956

J. W. HOUSE

Re: Reclassification of Humble's New Mexico State "M" Well No. 4, Sec. 19, T-22-S, R-37-E, Lea County, New Mexico

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

NSP ONLY
314 Acres
W.H.M.

Gentlemen:

As a result of a study performed in conjunction with reconditioning our New Mexico State "M" Well No. 4, located 660 feet from the North line and 1980 feet from the West line of Section 19, T-22-S, R-37-E, Lea County, New Mexico, it is apparent that this well should be classified from an oil well in the Arrowhead Pool to a gas well in the Arrow Pool.

The Arrow Pool as designated by Order R-520 includes the N/2 of Section 19, T-22-S, R-37-E, and designates the vertical limits of the Arrow Pool to include the Yates, Seven Rivers and all of the Queen formation. New Mexico State M-4 produces from the Queen formation from open hole interval 3578 feet to 3714 feet.

Queen

On an 8 hour test taken on January 13, 1956, through a 30/64-inch choke the well produced with a gas-oil ratio of 116,486 - 1. The Arrow Pool rules as set forth in Order R-520 state that a gas well will be any well having a gas-oil ratio in excess of 100,000 cubic feet per barrel.

In connection with our request that the well be reclassified as an Arrow Pool gas well we have attached a gas unit plat dedicating the N/2 of Section 19, T-22-S, R-37-E. We also support our application with the following statements:

1. Name of well and location - New Mexico State "M" Well No. 4, located 660 feet from the North line and 1980 feet from the West line of Section 19, T-22-S, R-37-E, Lea County, New Mexico.
2. New Mexico State "M" No. 4 was completed in the Arrow Pool prior to the effective date of Order R-520.
3. The acreage to be dedicated is ³¹⁴ 320 acres described as the N/2 of Section 19, T-22-S, R-37-E, Lea County, New Mexico.
4. The non-standard gas proration unit consists of contiguous quarter-quarter sections.
5. The non-standard gas proration unit lies wholly within a single governmental section.

6. The entire non-standard gas proration unit may reasonably be presumed to be productive of gas.
7. All operators owning interest within 1500 feet of the well have been notified by registered mail.
8. We have attached a table containing various test data and curves.

We request reclassification of the well and the assignment of the ³¹⁴~~20~~ acre non-standard gas proration unit under the rules and regulations for the Arrow Pool as set forth in Order R-520. If you are unable to grant our request by an administrative approval, then we request that you set this up for the first hearing date, either an examiner or regular hearing.

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

Yours very truly,

HUMBLE OIL & REFINING COMPANY

J. W. HOUSE,
Division Superintendent

By: H. L. Hensley
H. L. Hensley,
Asst. Div. Superintendent

Sworn to and subscribed before me this the 17th day of January, 1956.

Shirley J. Elmer SHIRLEY J. ELMER
Notary Public in and for
Midland County, Texas

AJT/se
Attachment

HUMBLE OIL & REFINING COMPANY

MIDLAND, TEXAS

January 17, 1956

J. W. HOUSE

The Ohio Oil Company
Box 552
Midland, Texas
Attention: D. K. Spellman

OK

Amarado Petroleum Corporation
Box 2040
Tulsa, Oklahoma
Attention: R. S. Christie

Gulf Oil Corporation
Box 2167
Hobbs, New Mexico

Continental Oil Company
Box 427
Hobbs, New Mexico

Stolly Oil Company
Box 38
Hobbs, New Mexico

Western Natural Gas Company
8th Floor, Midland Tower Bldg.
Midland, Texas

OK

Gentlemen:

Please find attached a copy of our application to the New Mexico Oil Conservation Commission for a reclassification of our New Mexico State "M" Well No. 4, located 660 feet from the North line and 1980 feet from the West line of Section 19, T-22-S, R-37-E, Lea County, New Mexico, from an oil well in the Arrowhead Pool to a gas well in the Arrow Pool and the assignment of a 320 acre non-standard gas proration unit.

We have attached four (4) copies of a waiver which we would appreciate your signing. Please retain a copy for your files and return the other three to this office.

Thanking you in advance for your consideration of this matter.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

J. W. HOUSE,
Division Superintendent

By: *J. P. Kennedy*
Asst. Div. Superintendent

AJT/ce
Attachment

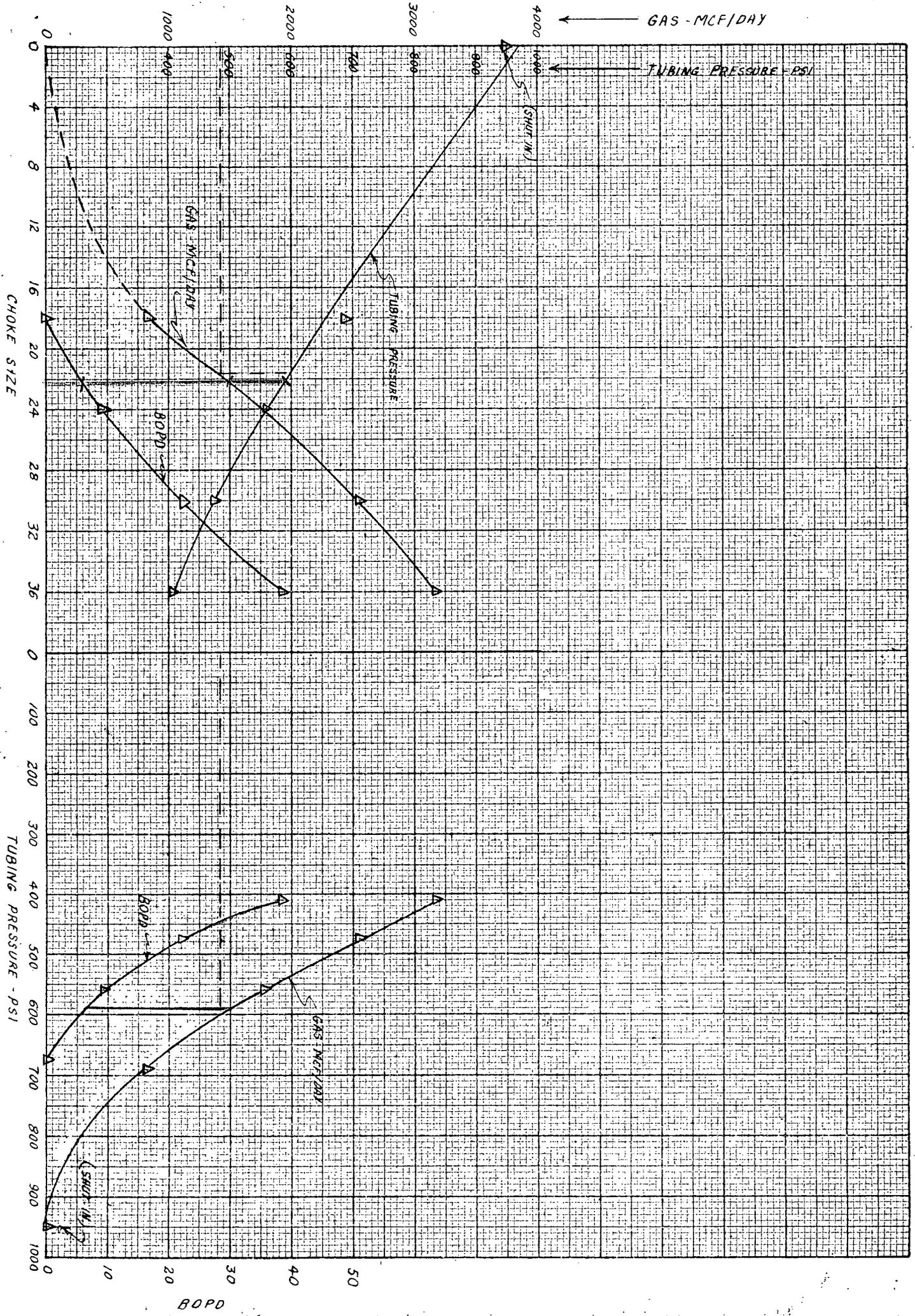
N. M. STATE M. No. 4

<u>Date</u>	<u>(a)</u>		<u>Leng. Test</u>	<u>Oil Prod.</u>	<u>(b)</u>		
	<u>Choke Size</u>	<u>Tbg. Press.</u>			<u>Rate BOPD</u>	<u>Gas MCF/Day</u>	<u>Gas-Oil Ratio</u>
Jan. 11	24/64	-	-	-	-	-	-
	24/64	575	7.08	-	-	1565	-
Jan. 12	28/64	-	-	-	-	-	-
	28/64	535	16.92	-	-	3002	-
Jan. 13	36/64	-	-	-	-	-	-
	36/64	-	2.42	2.07	20.5	-	-
	36/64	-	1.33	0.69	12.5	-	-
	36/64	440	2.33	3.85	39.7	-	-
	36/64	440	1.17	1.38	28.3	-	-
	36/64	440	1.00	1.96	47.0	-	-
	36/64	440	0.50	0.47	22.6	-	-
	36/64	410	<u>15.75</u>	<u>28.86</u>	<u>44.0</u>	-	-
			24.50	39.28	38.5	3175	82,467 ✓
Jan. 13	30/64	-	-	-	-	-	-
	30/64	475	6.83	6.20	21.8	-	-
	30/64	475	<u>1.00</u>	<u>1.04</u>	<u>25.0</u>	-	-
			7.83	7.24	22.2	2586	116,486 ✓
Jan. 14	24/64	-	-	-	-	-	-
	24/64	605	0.92	0.23	6.0	-	-
	24/64	590	15.00	5.25	8.4	-	-
	24/64	560	<u>0.58</u>	<u>0.82</u>	<u>33.9</u>	-	-
			16.50	6.30	9.1	1787	196,373 ✓
Jan. 15	18/64	-	-	-	-	-	-
	18/64	690	6.67	-	-	-	-
	18/64	700	<u>16.92</u>	-	-	-	-
			23.59			828	

(a) Adjustable choke.

(b) No water or BS produced, all pipe line oil.

TEST DATA
 NEW MEXICO STATE M-4

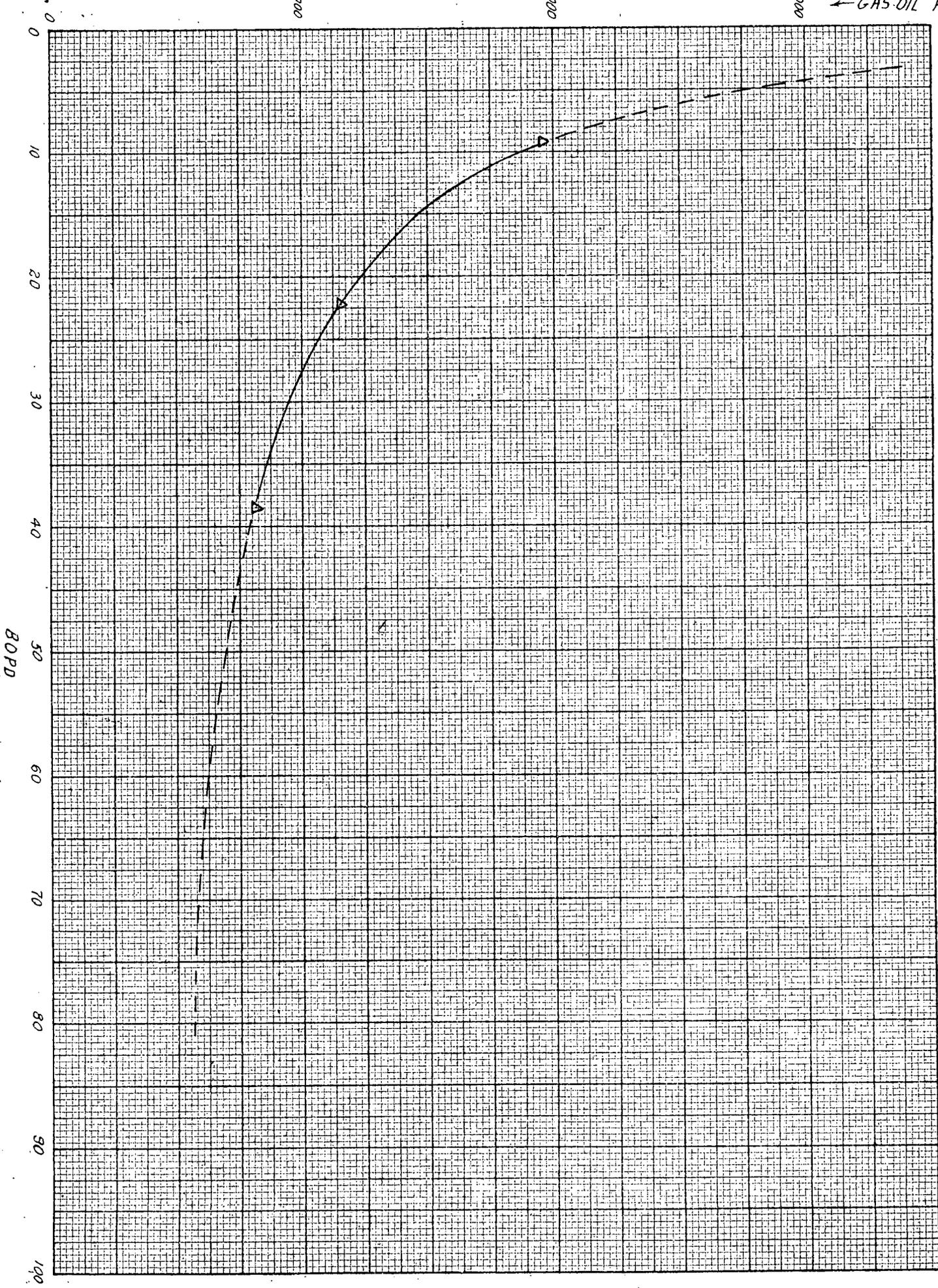


← GAS-OIL RATIO

300,000

200,000

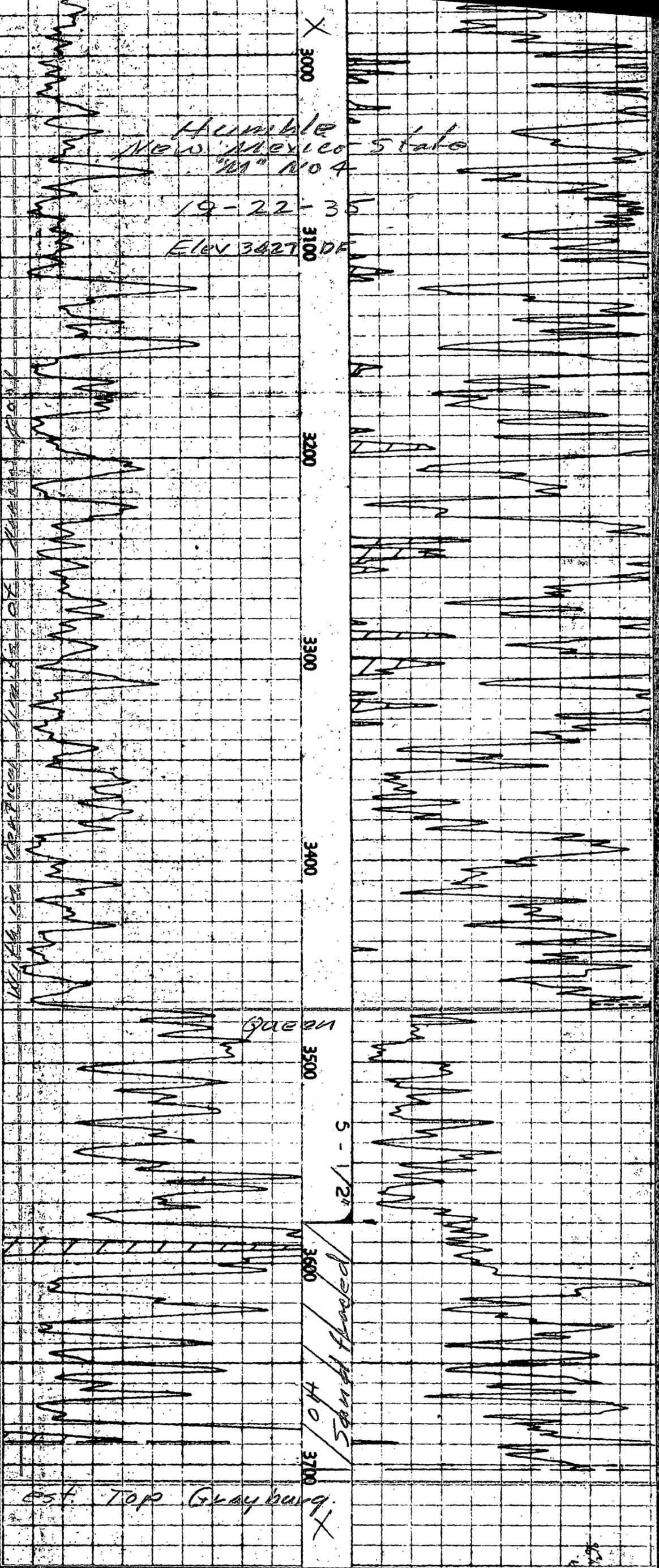
100,000



KEUFEL & SERRI CO., N. Y. NO. 389-11
10 x 10 to the 6 inch. 5th time corrected.
Engineering 7 X 10 in.
MADE IN U.S.A.

TEST DATA
NEW MEXICO STATE M-4

BOPD



Humble
New Mexico State
"M" No 4

19-22-35

Elev 3427

mean

5 - 12"

500 ft
#0

Est. Top Grayburg

HUMBLE OIL & REFINING COMPANY
MIDLAND, TEXAS

RECEIVED FEB 15 1956
February 9, 1956
11:59

NSP-234

Jan 21/18/56

J. W. HOUSE

New Mexico Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Gentlemen:

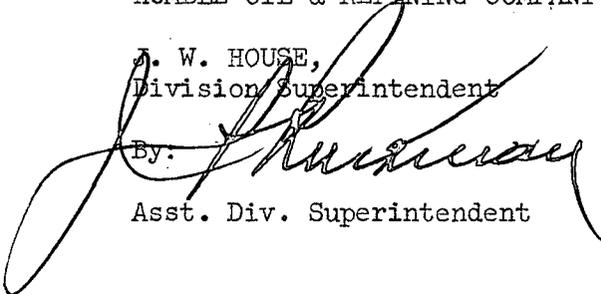
On January 17, 1956, we filed an application with your office requesting re-classification of New Mexico State "M" Well No. 4, 660 feet from the North line and 1980 feet from the West line of Section 19, T-22-S, R-37-E, Lea County, New Mexico, from an oil well in the Arrowhead Pool to a gas well in the Arrow Pool. All the offset operators were notified and to date we have received correspondence from Amerada Petroleum Corporation, The Ohio Oil Company and Western Natural Gas Company. No correspondence has been received from Gulf Oil Corporation, Skelly Oil Company or Continental Oil Company.

So that you might have a complete file, we are furnishing you copies of correspondence received to date.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

J. W. HOUSE,
Division Superintendent

By: 
Asst. Div. Superintendent

AJT/se
Attachment

FEB 2 - 1956

Place Midland Texas
Date 2-1-56

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

The undersigned, being an authorized representative of the offset operator, has been duly informed by Humble Oil & Refining Company of their application for a reclassification of their New Mexico State "M" Well No. 4, located 660 feet from the North line and 1980 feet from the West line of Section 19, T-22-S, R-37-E, Lea County, New Mexico, from an Arrowhead Pool oil well to an Arrow Pool gas well and the assignment of a 320 acre non-standard gas proration unit, the 320 acre non-standard gas proration unit described as the N/2 of Section 19, T-22-S, R-37-E, Lea County, New Mexico, hereby waives all objections to the reclassification of said well and the assignment of the proposed 320 acre unit.

The Ohio Oil Co
Name of Company

Geo D Mills
Representative of Company

Place Houston, Texas

Date January 28, 1956

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

The undersigned, being an authorized representative of the offset operator, has been duly informed by Humble Oil & Refining Company of their application for a reclassification of their New Mexico State "M" Well No. 4, located 660 feet from the North line and 1980 feet from the West line of Section 19, T-22-S, R-37-E, Lea County, New Mexico, from an Arrowhead Pool oil well to an Arrow Pool gas well and the assignment of a 320 acre non-standard gas proration unit, the 320 acre non-standard gas proration unit described as the N/2 of Section 19, T-22-S, R-37-E, Lea County, New Mexico, hereby waives all objections to the reclassification of said well and the assignment of the proposed 320 acre unit.

Western Natural Gas Company

Name of Company

Paul C. Wright

Representative of Company

GENERAL OFFICES
120 BROADWAY NEW YORK

AMERADA PETROLEUM CORPORATION

BEA CON B L L I N G

1 2 0 B R O A D W A Y

N E W Y O R K

T E L E P H O N E

January 30, 1956

Humble Oil & Refining Company
Humble Building
Midland, Texas

Attention: Mr. H. L. Hensley

Gentlemen:

We have your request for waiver on your New Mexico State "M" Well No. 4, located in Section 19, T-22-S, R-37-E, Lea County, New Mexico.

Please be advised we are withholding the requested waiver pending the outcome of Case 1019 set for hearing February 15, 1956, wherein the Oil Conservation Commission intends to abolish the Arrow Gas Pool.

Yours very truly,

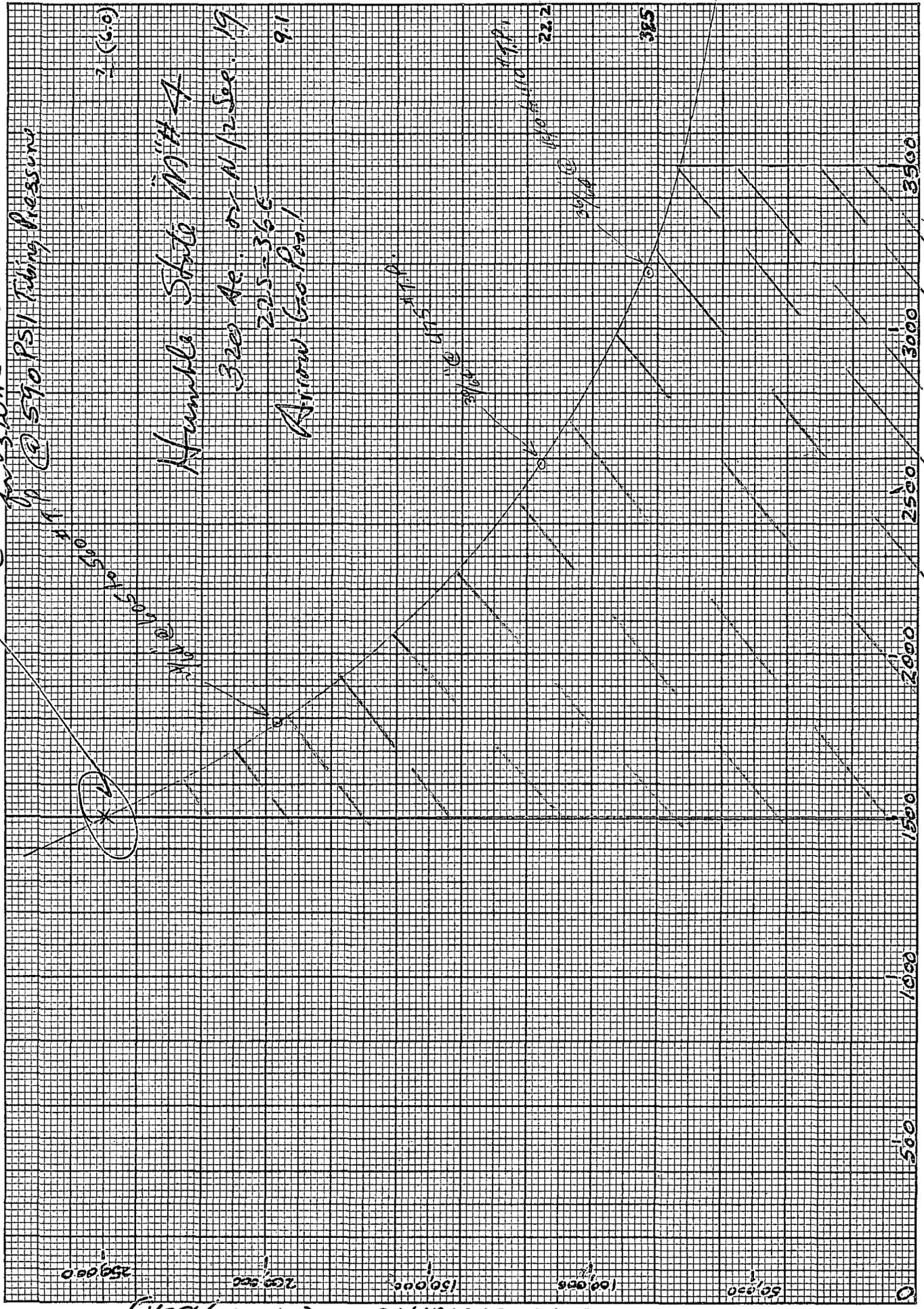
R. S. Christie

R. S. Christie

RSC:nt

GOR of 250,000/1
 @ Rate of 1500 MCF/day
 @ 320 Ac Unit

540 PSI Tubing Pressure



GAS-OIL RATIO (cu ft./bbl.)

GAS PRODUCTION (MCF/DAY)

Humble State MHA
 320 Ac. or N/12 Sec. 19
 22.5-36.5
 Arrow Geo. Pool
 91

DIL PRODUCTION (861./bar)

2 (60)

22.2

325

0 500 1000 1500 2000 2500 3000 3500

250,000

200,000

150,000

100,000

50,000

0