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521

Application, Transcript,
5 mill Exhibits, Etc.

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO.

BEFORE THE OIL CONSERVATION COMMISSION May 23, 1951

CASE No. 245

MR. SPURRIER: Let the record show, no one appeared to testify. The Commission has written testimony on pools not taken up at the first hearing on April 24th. Therefore, the case was closed and taken under advisement.

STATE OF NEW MEXICO COUNTY OF BERNALILLO

I HEREBY CERTIFY that the foregoing and attached transcript of proceedings before the Oil Conservation Commission in Case No. 245, taken on May 23, 1951 at Santa Fe, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, this 20 day of June, 1951.

6.6. Helson

My Commission Expires: August 4, 1952

# Charlotte Yates - Seven Rivers Gas Pool

The pool consists of one completed gas well, Wilson Oil Company No. 2 Charlotte-State, in Unit C of Section 32, Township 20 South, Range 36 East, Lea County, New Mexico. The gas from this well is being produced from the Yates - Seven Rivers formation at a depth of 3850 - 60'. The geological information establishes a definite gas structure, separated from the Wilson Oil Pool by a number of dry holes.

The gas produced from Wilson Oil Company No. 2 Charlotte-State is being used as fuel on pumping engines and heater-treaters on company oil producing leases in the Wilson Pool. The present rate of production is from 3 to 4 MCF per month.

The discovery well was completed on January 8, 1951 at a total depth of 3860. 7 casing was set at 3788. The initial rate of production was 2-1/2 MOF of gas per day. However, the gas volume, before killing the well to run casing was 18-1/2 MOF of gas per day.

It is recommended that the South 1/2 of Section 29 and all of Section 32, Township 20 South, Range 36 East, be designated as "Charlotte Yates-Seven Rivers Gas Pool.

Case 245 Shell Ef#1,

DELINEATION STUDY OF THE BYERS GAS POOL

### BYERS GAS POOL

In the Hobbs Field Area there are three wells producing dry gas from the Byers Gas Pool. A total of four wells have produced gas from this horizon but at present only three wells are producing with the fourth shut in due to its very low capacity. An attached tabulation shows the well locations and producing interval.

The Byers Sand is a member of the Queen formation, Whitehorse group of the Permian system. The Byers Sand (sometimes known as the Big Gas Sand) occurs at an approximate depth of 3650 feet and averages about 70 feet in thickness. Other producing horizons in the same area are the Bowers Sand of the Seven Rivers formation which is approximately 500 feet above the top of the Byers, and the Hobbs pay zones (San Andres) which underlie the Byers some 300 feet. The 500 feet separating the Bowers oil reservoir from the Byers Gas reservoir consist predominately of anhydrite. The 300 feet separating the Byers Gas reservoir from the Hobbs oil pay consist of dolomite and sandy dolomitic limestones of Grayburg age - the upper portions of which are impermeable.

The Byers Sand is prevalent over the entire Hobbs structure and during the development of the Hobbs pool it presented blow-out hazards due to its high pressure. Gulf W. Grimes No. 4, Unit C. Section 32-T18S-R38E, the first commercial gas well in the Byers Gas Pool, was plugged back from the Hobbs pay and recompleted as a Byers gas well in the early part of 1941. It had an initial potential of 23.8 million cubic feet of sweet gas per day and a shut in surface pressure of 1700 psi.

The gas produced from this horizon has a negligible hydrogen sulphide content and is considered sweet whereas the gas occuring in the Hobbs pay has a 1.3 per cent H<sub>2</sub>S content. At present the Byers gas production is not accompanied by any liquids but during the early life of the reservoir distillate was produced in small amounts.

The cumulative gas production as of March 1, 1951 was 6,557,730,000 cubic feet and the average daily production was 698 MCF during the last 14 months. A portion of the gas from the field is being sold to the Hobbs Gas System with the remainder being utilized for gas lifting wells in the Hobbs Pool and for domestic lease fuel. No gas is being wasted; the gas employed in gas lifting is later recovered in the Phillips Hobbs Gasoline Plant gas gathering system.

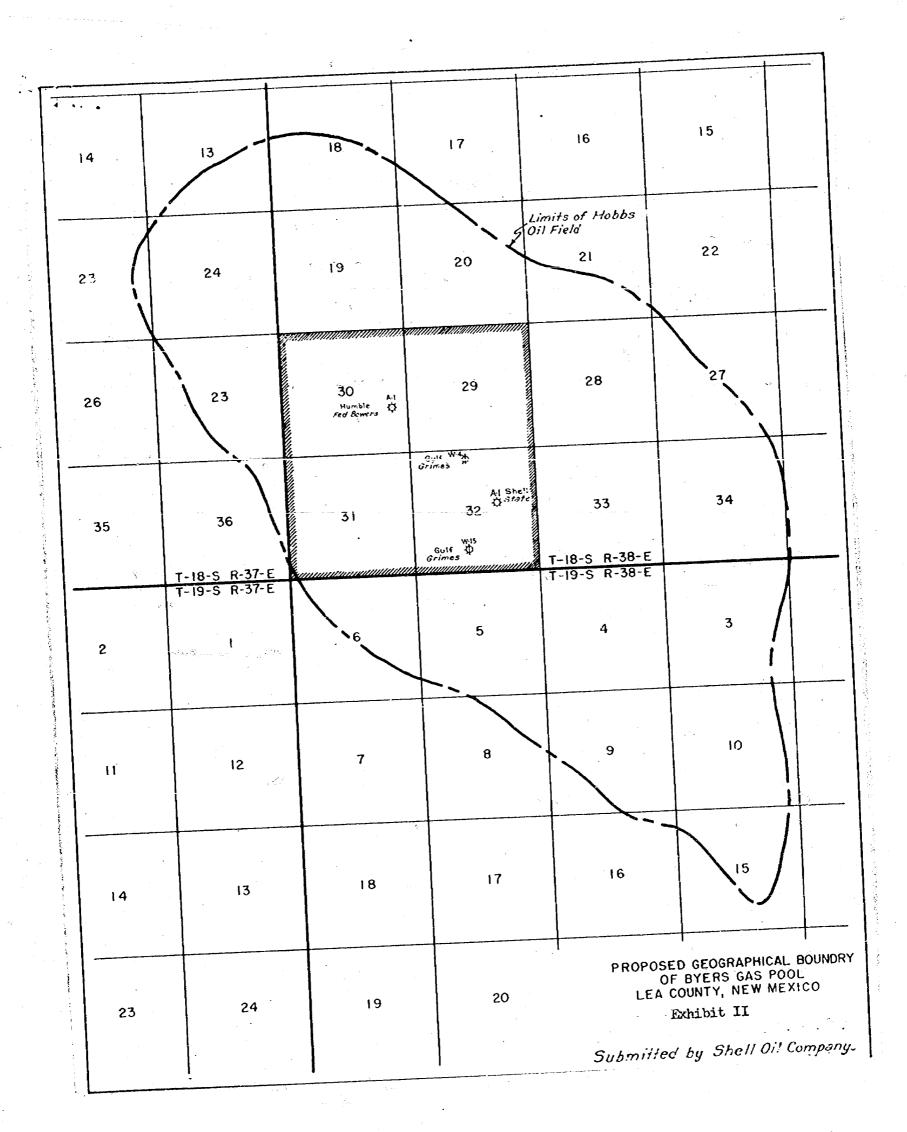
On the basis of the Byers Sand's stratigraphic position, the fact that its gas composition is different from the Hobbs Pay gas, and the absence of associated liquid hydrocarbons, it is proposed that the Byers Sand under the following acreage be defined and designated as a gas pool:

T. 18S, R. 38E Sections 29, 30, 31 and 32 Between the depths of 3500' and 3800' The proposed gas pool is shown on the attached plat.

# TABULATION SHOWING LOCATION AND PRODUCING INTERVAL

# OF BYERS GAS POOL WELLS

•.	OR - LEASE	WELL NO.	UNIT	S - T - R	TOTAL DEPTH	PRODUCING INTERVAL	REMARKS
Gulf	- W. Grimes	4	C	32-18-38	38821	3604-3681	First Byers Gas Pool Well Originally P.B. from Hobbs P.
Gulf	- W. Grimes	15	N	32-18-38	41051	3650-37301	Dual completion with Hobban
Humòle	- Fed. Bowers A	1	I	30-18-38	39001	3715-37261	Byers not producing at present.
Shell	- State A	1	Ğ	32-18-38	3750	3621-36851	Single Completion. Single completion.



Shell Lahou

## BYLES GAS FOOL

In the Hobbs Pield Area there are three wells producing dry gas from the Byers Gas Fool. A total of four wells have produced gas from this horizon but at present only three wells are producing with the fourth shut in due to its very low depacity. An attached tabulation shows the well locations and producing interval.

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The gas produced from this horizon has a negligible hydrogen sulphide content and is considered sweet whereas the gas occurring in the Hobbs pay has a 1.3 per cent H23 content. At present the Byers gas production is not accompanied by any liquids but during the early life of the reservoir distillate was produced in small amounts.

The cumulative gas production as of March 1, 1951 was 6,557,730,000 cubic feet and the average daily production was 698 MCF during the last 14 months. A portion of the gas from the field is being sold to the Hobbs Gas System with the remainder being utilized for gas lifting wells in the Hobbs feel and for domestic lesse fuel. No gas is being wasted; the gas employed in gas lifting is later recovered in the Phillips Hobbs Gasoline Plant gas gathering system.

On the basis of the Syers Sand's stratigraphic position, the fact that its gas composition is different from the Hobbs Pay gas, and the absence of associated liquid hydrocarbons, it is proposed that the Syers Sand under the following acreage to defined and designated as a gas pool:

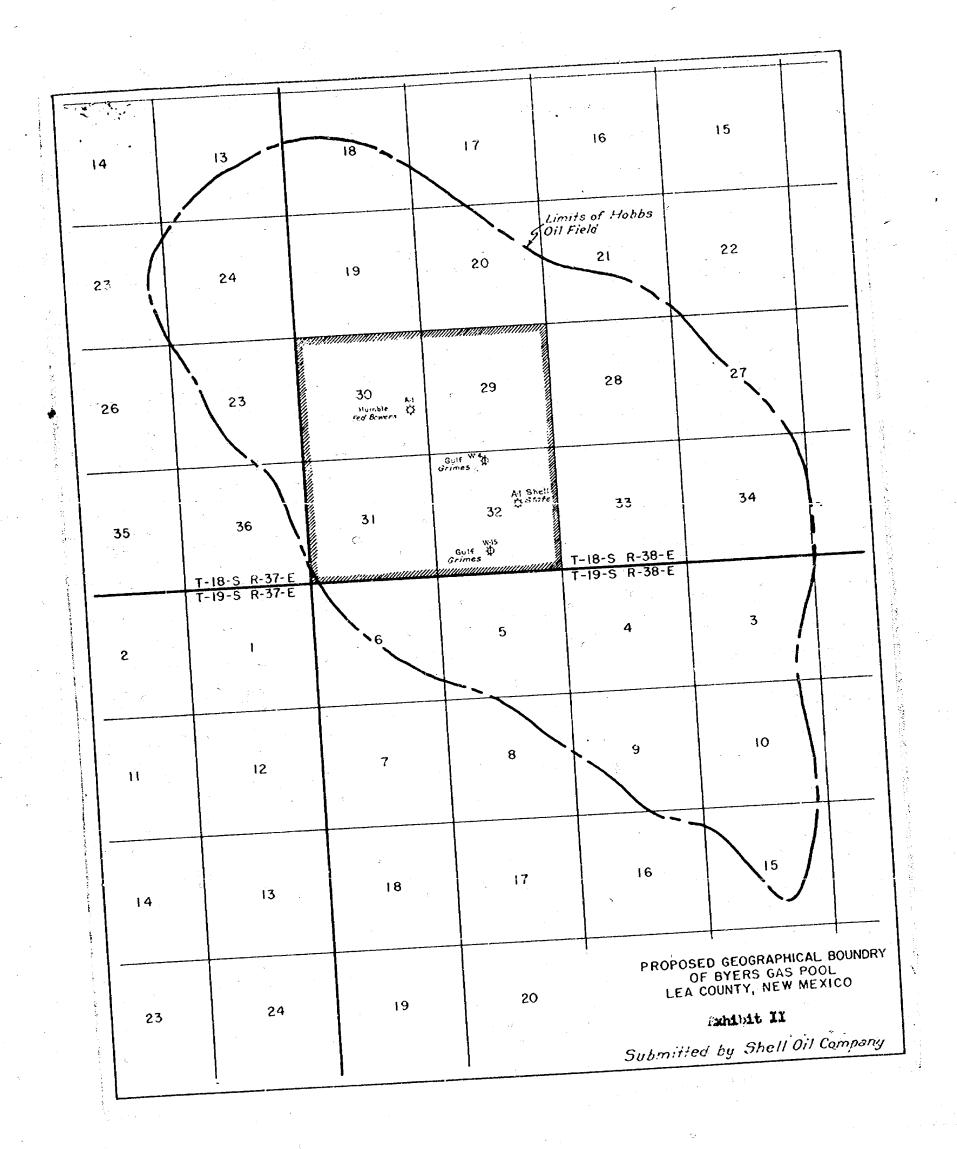
T. 183, R. 388

Sections 29, 30, 31 and 32

The proposed gas pool is shown on the attached plat.

# 31. 22 - 32 - 1-32 - 1-32 B

en an en	a	4	<u> </u>	-1-4	TVIAL HITTE		3.34.42
orn,	- W. Orlmas	4	C	32-18-38	38881	3604-3662	First Syers the Fool will Originally F.S. Iron Bobbs Fey and later dusted with Sovers Fey.
11eo	Grins	15	<b>3</b>	na sa sa Samponesa	Alagt	3652-37301	Nate not bregades of bearing.
	. Jed. Bondra		1	30-16-38	39001	3725-37261	Single Completion.
Similar 1	- 100. senors	1	ā	32-18-38	37501	3621-36891	single eculetion.



# BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

March 20, 1951

# Case 245:

This case, which involves the designation of the gas pools in Lea, Eddy, and Chaves Counties, was originally scheduled for the December hearing. At that time sufficient information was not available to enable the Commission to promulgate an order, and the case was therefore continued to the regular March hearing (March 20, 1951.).

CHAIRMAN SHEPARD: The next case is 245, will you read it, Mr. Graham please.

(Mr. Graham reads the notice of publication.)

MR. DAILEY: My name is Homer Dailey. We, at the December hearing in this case when it came up before, we asked for a continuance until this hearing. In the meantime, we found there was a little bit more work than what we bargained for, and would like to ask for another 30 days to get the rest of the data.

At the present time, we have made a series of some 12 or 14 cross sections and written data. The data is fairly well practically completed. However, it will take 30 days to get

these sections photostated or reproduced and put up in a presentable manner.

CHAIRMAN SHEPARD: If there is no objection this case will be continued until the next regular hearing, April 24, 1951.

The next case is No. 260, and is in a separate transcript.

STATE OF NEW MEXICO )
COUNTY OF BERNALILLO)

I hereby certify that the foregoing transcript of Case No. 245 before the Oil Conservation Commission on March 20, 1951, in the Council Chambers, City Hall, Santa Fe, New Mexico, is a true record of the same to the best of my knowledge, skill and ability.

Dated at Albuquerque, New Mexico, March 27, 1951.

6.6. Julison E. E. GREESON.

My commission expires August 4, 1952.

Carlibito Core 245 Co-Continental Houterd mp Sc. new mes Cont. on Top of yates (april 24) Crossections (?) C-W Continatal 2 Doo Pool designation map 8 Bulk gates structure map AV Blineby Pool Humble Monument makel amerad Heylotomas Dulf Tollo Poel 45 Tubb Cross Vectors 45 4 Tabulation tubbs 45 6 V+ 7 antalla Pool 45 46 8 V Justes Pool 46 47 7 / amada Peal over not offered Miscelloneves Buffalo + ? Kewone S Eddy Co-Robballe Wilsod Yates Byers So Omoi Shell

# WILSON YATES GAS POOL

Jan . 4

This pool consists of two wells, Wilson Oil Company State No. 31 in Unit J, Section 24, Township 21 South, Range 34 East, and Wilson Oil Company State No. 20 in Unit B, Section 23, Township 21 South, Range 34 East, Lea County, New Mexico.

The gas is being produced from the Yates sand section. None of this gas is being sold comercially, but has been used for fuel for lease purposes. At the present time, the wells are shut in.

Wilson Oil Company, State No. 20:

Well was completed February 2, 1947. It was drilled to total depth 3865' and was plugged back to 3680' with perforation from 3522'- 45' and 3572'- 95! 7" casing was set at 3716'. Initial potential flow 880 MCF per day.

Wilson Oil Company, State No. 31:

Well was completed February 16, 1949. It was drilled to 3803' and plugged back to 3660'. Interval perforated from 3527 + 35', 3545 - 57', and 3610 - 25'. 7" casing set at 3674'. Initial potential flow 200 MCF per day.

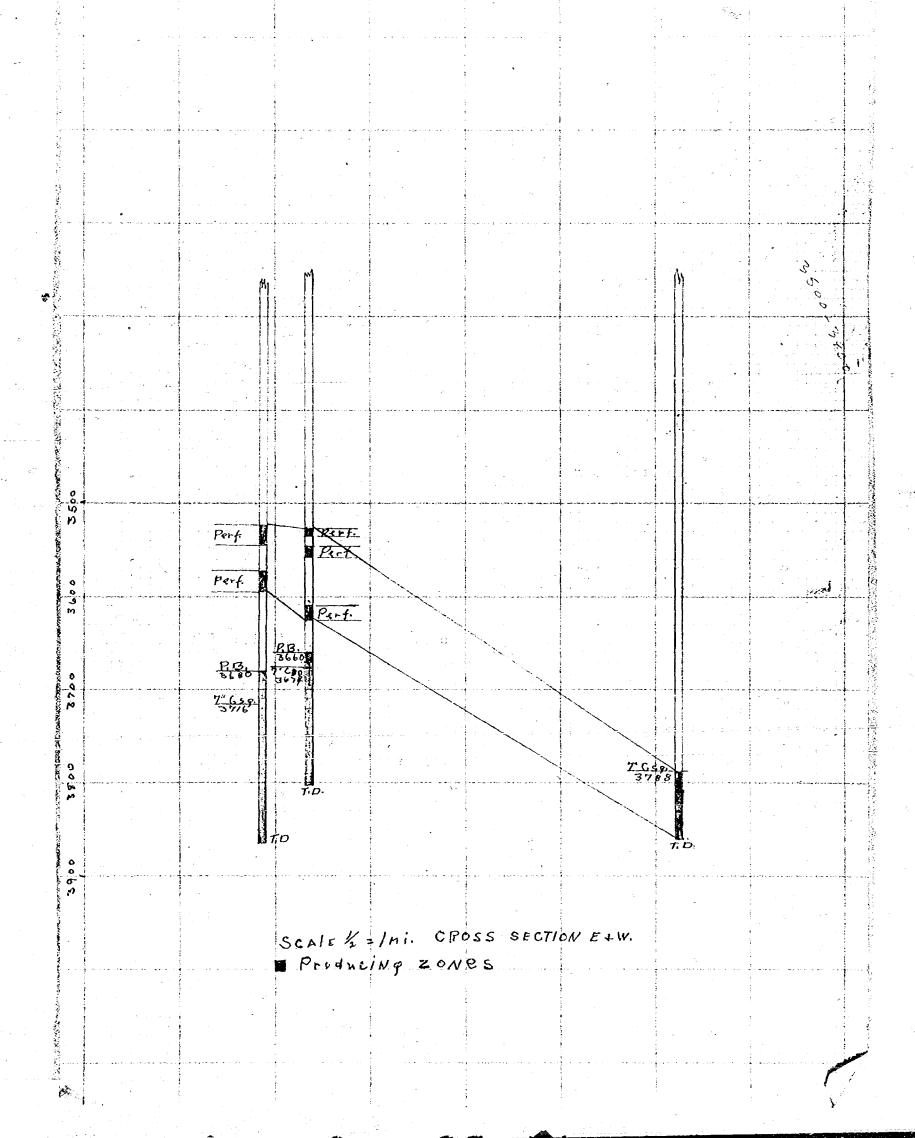
It is recommended that the East 1/2 of Section 23 and all of Section 24 be set out as the Wilson Yates Gas Pool.

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## Charlotte Yates - Seven Rivers Gas Pool

The pool consists of one completed gas well, Wilson Oil Company No. 2 Charlotte-State, in Unit C of Section 32, Township 20 South, Range 36 East, Lea County, New Mexico. The gas from this well is being produced from the Yates - Seven Rivers formation at a depth of 3850 - 60%. The geological information establishes a definite gas structure, separated from the Wilson Oil Pool by a number of dry holes.

The gas produced from Wilson Oil Company No. 2 Charlotte-State is being used as fuel on pumping engines and heater-treaters on company oil producing leases in the Wilson Pool. The present rate of production is from 3 to 4 MCF per month.

The discovery well was completed on January 8, 1951 at a total depth of 3860'. 7" casing was set at 3788'. The initial rate of production was 2-1/2 MCF 15 of gas per day. However, the gas volume, before killing the well to run casing was 18-1/2 MCF of gas per day.

It is recommended that the South 1/2 of Section 29 and all of Section 32, Township 20 South, Range 36 East, be designated as "Charlotte Yates-Seven Rivers Gas Pool.

# WILSON YATES GAS POOL

This pool consists of two wells, Wilson Oil Company State No. 31 in Unit J, Section 24, Township 21 South, Range 34 East, and Wilson Oil Company State No. 20 in Unit B, Section 23, Township 21 South, Range 34 East, Lea County, New Mexico.

The gas is being produced from the Yates sand section. None of this gas is being sold comercially, but has been used for fuel for lease purposes. At the present time, the wells are shut in.

Wilson Oil Company, State No. 20:

Well was completed February 2, 1947. It was drilled to total depth 3865' and was plugged back to 3680' with perforation from 3522'- 45' and 3572'- 95', 7" casing was set at 3716'. Initial potential flow 880 MCF per day.

23

Wilson Oil Company, State No. 31:

Well was completed February 16, 1949. It was drilled to 3803 and plugged back to 3660. Interval perforated from 3527 - 35, 3545 - 57, and 3610 - 25%. 7 casing set at 3674. Initial potential flow 200 MCF per day.

It is recommended that the East 1/2 of Section 23 and all of Section 24 be set out as the Wilson Yates Gas Pool.

Ext 1 case 245 america

# MONUMENT-MCKEE GAS PCOL

In the Monument field there is one well producing gas from the McKee sand in the Simpson formation. Three other wells drilled through the McKee sand have indicated on drill stem tests that they will produce gas from that zone. Three wells found only water in the McKee.

The attached cross-section shows the sample logs and drill stem test results for all wells drilled through the McKee sand in the Monument field. The attached map shows the location of the wells.

The McKee sand is considered as the zone starting at 9846! (-6256!) in Amerada Petroleum Corporation's State F Well No. 5 and extending to the top of the Ellenberger formation at 10,010! (-6520!). The water level is at approximately 6330! subsea.

Amerada State F Well No. 5 was completed November 4, 1948 as a high gasoil ratio oil well. This was the discovery well for the Monument-McKee Pool. The thin oil column was soon depleted and the well was reclassified as a gas well March 1, 1950. The well currently produces condensate with a gravity of of degrees A.P.I.. No other well has indicated any oil column.

The boundaries originally set out by the Oil Conservation Commission for the Monument-McKee Pool, should cover any possible gas productive acreage from that zone. Those boundaries are:

T. 19S, R.36E Section 36
T. 19S, R.37E Section 31
T. 20S, R.36E Section 1
T. 20S, R.37E Section 6

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO.

MAY 21 1951

(I)

# Murrille Cy #1 Case 245

There are 12 oil wells in the Blinebry Field and 11 gas - distillate wells are completed to produce from the Blinebry pay. Data available for these wells are listed in the accompanying tables. The oil wells are all marginal with allowables in March 1951 ranging from 5 to 28 bbl/day and averaging 11 bbl/day. As shown on the accompanying map, the oil wells are in three areas over an interval of about 8 miles. Fractically all these oil wells were originally drilled with some other pay such as Drinkard as an objective and were only completed in the Blinebry after failure to produce in other pays. The average cumulative production of the oil wells to January 1, 1951 is approximately 15,000 bbl/well. It should be noted that on the map only wells with production tests or drill stem tests of a Blinebry pay are shown although there are a number of other wells in the area producing from the Paddock, Drinkard and other pays. It will be noted from the map that the Blinebry has been found productive of gas over an area about 9 miles long with a maximum width of about 2 miles. Data available are insufficient to indicate whether gas production will be continuous over the entire length of the area involved. Initial tests of Blinebry gas wells show production of distillate varying in gravity from 50 to 64 degrees A.P.I. at gas-distillate ratios varying from 40,000 to 100,000 cubic feet per barrel.

If oil is found in a reservoir with a gas cap and the pressure in the gas cap is lowered faster than that in the oil pay, oil will migrate to the gas cap. The efficiency of oil recovery for the reservoir as a whole will be reduced since only a small percentage of the oil migrating to the gas cap will be produced. Pressure data for the Blinebry pay show that the pressures of the oil wells have dropped much faster than those of the gas wells, indicating that little if any oil migration to a gas cap has occurred or will occur. Pressures reported for oil wells include the following:

Company	Well	Date	Pressure @ 2200 SS
Olsen	Danglade 1	11-49	1635
Penrose	Hinton 3	7-50	839
Penrose	Hinton 4	7-50	1525
Rowan	Elliott B-13-1	6-50	903
Sinclair	Hill 1	11-48	1018
Texas	Lockhart 2	11-50	812

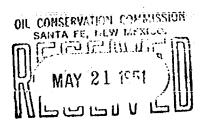
Back pressure tests indicate the gas wells had pressures of about 2300 pounds at the middle of 1950.

Cross-sections AA' and BB' were prepared primarily to determine whether oil and gas production were from the same zone. Section AA' shows oil production in Gulf-Pike 1 just above the top of the Blinebry while oil production in Sinclair-Hill 1 is from a point about 65 feet below the top of the Blinebry. These wells are about 7 miles apart. In the central area where most of the oil wells are located, Rowan-Elliott B-13-1. Section BB', is shown by drill stem tests to have its best oil pay 65 feet below the top of the Blinebry. Data on Section AA' for such gas-distillate wells as Gulf-Vivian 5, Humble-Penrose 1, and Sinclair-Sarkeys 1 indicate that gas production is from just below the top of the Blinebry.

It is believed that these data indicate that it is unlikely that the Blinebry gas-distillate pay is a gas cap of the oil pay or pays. The gas-distillate pay occurs about 65 feet higher in the section than the oil pay and has a bottom hole pressure from 800 to 1500 pounds higher. In the event that it should be the gas cap of the oil pay, it is believed that negligible loss of ultimate oil produc-

tion would occur as a result of prorating and producing the gas pay as a separate gas

A proposed areal boundary for the Blinebry gas-distillate pay is shown on the attached map. The area included inside this boundary is largely undeveloped. It area inclosed in it. The area included is as follows: South half of Section 10, South half of Section 11, Sec. 14, 15, 22, 23, 26, 27, 34, 35 and 36, Township 21 22 South, Range 37 East; Sec. 1, 2, 3, 4, 10, 11, 12, 13, 14, 23, 24, and 25, Township 31, Township 22 South, Range 38 East.



# BLINEBRY AREA OIL WELLS

Sinclair Texas	Rowan	Penrose	DeKalb Gulf	COMPANY
Hill 1 Lockhart 2	McCallister 1 Rodgers 2 Elliott B-13-1	Delower 1 Danglade 1 Beloher 1 Hinton 3	Elliott 1 Pike 1	Lease & Well No.
P 26–21–37 D 18–22–38	T 12-22-37 D 7-22-38 H 12-22-37 E 13-22-37	L 13-22-37 D 13-22-37 D 13-22-37	B 6-23-38	Location
8-4-48 12-10-45	7-21-46 12-31-46 1-23-49 8-6-47	3-11-49	11-2-46* 3-15-46*	Date Comp.
3386 3354	3344 3357 3354 3354	3333	3352	Elev.
~3 CF	2-25-55 K	ス (ス (ス 〜 ************************************	272	100
	5665 5685 5337	6500 6374	0169 7189	Oil String O.D. Depth
7642 5660-5720 7597 5560-5610	6500 5545-75 5630-70 7742 5705 6286 5560-92, 5615-3	6643 5410-5595 6555 *** 7386 ***	5570-5725 5570-5610	Total Perf. Depth Interval
10,000	2,000 8,750 2,000	9,000	000,000	Acid -Callons
427	521 501 99 99	388		01.15 10.15
625	1,761	1,500	300 28,000	Initial Prod. Oil/Day G.O.R.
77	4425	, <del>,</del> 600	\ww <sub>.</sub>	
562 3,974	16,400		15,585	11-50 Prod. 011/Day G.O.R.

<sup>\*</sup> Workover

\*\* 5-inch liner 4982-6330

\*\*\* 5530-65, 5585-5625, 5665-5686

\*\*\*\* Perforated interval in Blinebry not obtained

# BLINEBRY AREA GAS WELLS

Phillips Sinclair Texas	Olsen	Gulf Humble	Company
Sims 1 Sarkeys 1 Blinebry 1	Boyd 2 Drinkard 1 Sims 1	Vivian 5 Penrose 1	Lease & Well No.
I 24-22-37 J 23-21-37 O 19-22-38	H 23-22-37 C 25-22-37 F 25-22-37	D 30-22-38 B 13-22-37 N 24-22-37	Location
11-8-45 4-13-49 7-1-45	1-6-48 6-20-48 12-23-48	8-20-48 10-5-45	Date Comp.
3333 3407 3369	& & & & & & & & & & & & & & & & & & &	3336 9456 9456	Elev.
7 57 57 NJ-NJ-	く く く く く く く く く く く く く く く く く く く	アンドウ	Cas
7005 6000 5673	5390 5410 5278	6325 6588 6955	Casing Size Depth
7377 6711 7517	5532 5532	6475 6592 7447	Total Depth
5459-84 5620-60 *		5415-85 5500-60 5419-5509	Perf. Interval
1250 2000 11 <b>,</b> 750	8000	36000 0000	Acid -Gals.
3844 7254 11,700	6160 6160	2400	MCF Dist.
135	775	24	Dist
8-9-50 8-10-50 **	7-31-50 8-8-50 8-7-50	7-10-50 8-14-50 7-26-50	Date
1835	1740 1740	1800 1750	S.I.
5,250 5,250	6,800	33,700 4,000 7:650	Potential MCF

<sup>5580-95, 5595-5625</sup> Not Available

(W)

### HEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

CASE 521: (Consolidated with Case 245) These two cases concerning the denomination of gas pools in SE New Mexico and proration of natural gas in the area have been under study by an industry advisory committee.

# TRANSCRIPT OF HEARING

August 20, 1953

HEFORE: Honorable Ed. L. Machen, Governor Honorable E. S. Walker, Land Commissioner Honorable R. R. Spurrier, Director, OCC

STATE OF NEW MEXICO )

COUNTY OF LOS ALAMOS)

I hereby certify that the within transcript of preceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill and ability.

TRANSCRIBED at Los Alamos, New Mexico this 26th day of August, 1953.

Audrey M. Henrickson

My commission expires September 22, 1955.

# NEW MEXICO OIL CONSERVATION COMMISSION

Regular Hearing
9:00 a.m., August 20, 1953

MR. HILL: A. L. Hill of the El Paso Natural Gas Company and I have acted as chairman of the committee appointed by the Commission in Case 521 to develop recommendations concerning gas preration in the southeastern part of the State. The recommendations of the committee were formerly presented to the Commission at last month's hearing and a meeting of the committee was held in this room yesterday afternoon for the purpose of fully discussing with all interested parties the recommendations of the committee.

We were somewhat surprised that there were not more participants in the discussion but very well pleased at the same time.

Before the Commission entertains any full discussion of these recommendations, if it please the Commission, certain of the pipeline companies interested in operating in the area would like to present certain testimony of the general nature, in order to enlighten all those concerned that may not have the full pt ture of the oberations of the gas pipeline companies in the area. It would give them some further idea of the problems and the magnitude of the operations of the pipeline companies in the southeastern part of New Mexice as well as the entire Permiss Basin.

So if it please the Commission, we will proceed in that manner.

MR. HOWELL: My name is Ben Howell, representing the El Paso Natural Gas Company. If the Commission has no objection, I would like to call as witnesses Mr. Baulch and Mr. Steen.

# J. W. BAULCH, JR.

having been first duly sworm, testified as follows:

# DIRECT EXAMINATION

## BY MR. HOWELL:

- Q. What is your name, please?
- A. J. W. Baulch, Jr.
- Q. What position do you hold with El Paso Natural Gas

# Company?

A. I'm the supervisor in the gas dispatching for El Pase

# Natural.

- Q. Where are you stationed?
- A. At Jal, New Mexico.
- Q. About how long has you held that position?
- A. I've held this one position for approximately 7 years.
- Q. What are the duties of your position to determine the amount that will be taken from the gas poels in the southeastern portion of New Mexico and determine the demand upon those gas pools?
  - A. That's right.
  - Q. Insofar as El Paso Natural Gas Company is concerned?
  - A. That is correct.
- Q. I hand you am exhibit which we have marked as El Pase
  Natural Gas Company Exhibit No. 1 and ask you to state to the Commission

what that exhibit shows.

- A. Now the colored lines that you see here that represents the boundaries of the pools that are designated by the Commission. In addition to that, we have other pools like the Jalce, the Justice and the Blineberry pool, there are recommended changes in the boundaries of these various pools by recommendations made by the advisory committee to the Commission in Case 521.
- Q. If I understand you then, this exhibit 1 is a plat which shows all of the gas pools in southwastern New Mexice that are presently designated by the Commission. That is shown in solid limes and then in broken lines, such new pools and such additions to the pools as are contained in the recommendations of this committee which have been filled with the Commission.
  - A. That is right.
- Q. That is correst. Now, let's pass to the separate pools. We have here in the northern or south part of exhibit 1, a pool. What is that pool?
  - A. That is the Byers-Queen pool.
- Q. What are the characteristics of that pool as to the depth, the quality of gus the character of gas produced from the pool and the connection by which gas is taken from that pool?
- A. Well, as far as the characteristics of the well is concerned,

  I don't feel qualified to gaster. There are two wells in this pool operating that are used for gas lift purposes and there are three/companies involved.

- Q. Now, I might ask you what you used as a basis for the data that you put on this plat as to the well connections in this pool?
  - A. That was taken from the Engineer's Committee Report.
  - Q. As of what date is this number of wells shown?
  - A. December 31st, 1952.
- Q. All right. Them as of that time in this Byers-Queen pool there were three wells that had connections with three companies that were using the gas for gas lift.
  - A. That is true.
  - Q. Now, let us pass to the next pool. What is it?
  - A. That is the Monument-McKee Pool.
- Q. All right. What can you tell us about the depth and the character of gas produced from that poel?
- A. Well, I don't feel qualified to answer that because El Paso doesn't have any wells in that pool.
  - Q. Now, what connections are there in that pool?
  - A. We have one well being used for gas lift purposes.
- Q. All right. Let's pass next to the next pool here. What pool is that?
  - A. That is the Eumont pool.
  - Q. Now what - about what depth is the Eumont pool?
- A. I'm not too familiar with the geology, but I believe it is around 3200 to 3400 feet.
  - Q. And from what formation?

- A. From the Yates and Queen formations. It is designated as top of the yates to point 200 feet below top of Queen.
- Q. That is the designation presently made by the Commission?
  - A. That is right.
- Q. Now, then, what is the character of the gas whether it is sweet or sour in the Eumont pool?
- A. Well, the biggest portion of gas for El Paso that is taken from that pool is sour gas.
- Q. Now what well connections are there in the Eumont pool? What gas is being taken?
- A. Well, for gas lift purposes, there are nimeteen wells being used for gas lift purposes and there are seven companies involved. Phillips Petroleum Company is taking gas from nime wells; Warren Petroleum company is taking gas from seven wells; Southern Union Gas Company is taking gas from seventeen wells; and El Pase Natural Gas Company is taking gas from ten wells.
  - Q. That is, as of the date of December 31, 1952?
  - A. That's right.
- Q. Now let us pass to the next pool here. Which is the next pool?
  - A. We come down there to the Blimebry pool.
  - Q. What formation is that producing from?
  - A. That is what is called the Blinebry formation.
  - Q. At approximately what depth?
  - A. Approximately 5800 feet.

- Q. Now, is that gas seet or sour?
- A. It is mainly sweet gas.
- Q. And what wells are connected in that pool?
- A. In the Blinebry, the El Paso Natural Gas Company is taking gas from fourteen wells in the Blinebry pool.
  - Q. Is there any other company taking gas from that pool?
  - A. No. Not as of December, 1952.
  - Q. Now what other pool is there in that locality?
  - A. We have the Tubb poel.
  - Q. And in what formation is it producing?
- A. From the top of the Tubb to a point 225 feet below the top of the Tubb.
  - Q. At approximately what depth?
  - A. At approximately 6100 to 6200 feet.
- Q. Now as to the gas from the Tubb's pool, is that sweet or sour?
  - A. It is mainly sweet gas.
  - Q. And what connections are there into the Tubb's pool?
- A. Well, for gas lift purposes there are five wells with two companies involved, and El Pase Natural Gas Company is connected to eight wells and that was the disposition in the Tubb's Pool as of December 31, 1952.
  - Q. Now is there another pool in that general area?
  - A. The Arrow Pool.
  - Q. And what is the formation from which that is producing?
- A. Top of the Yates to a point 200 feet below top of the Queen.

- Q. Now any other poel - -
- A. We have three wells being used in the Arrow Pool for gas lift purposes and two companies are involved.
- Q. And as of December 31, 1952, those were the only wells connected in that pool?
  - A. Yes.
  - Q. Now are there any other pools in that area?
  - A. Well, you go on down to the Jalco and the Amanda poel.
  - Q. How many well connections are there in the Amanda pool?
  - A. There is one well being used for gas lift purposes.
  - Q. Do you know the characteristics of that pool?
  - A. No, sir. I don't.
- Q. Now, let's pass ever to the pool to the west there. I believe the Langmat is the next one.
  - A. Yes.
  - Q. From what formation is this well producing?
  - A. To Yates to a point 100 feet above base of the S.R.
- Q. And what character of gas is it producing is it sweet or sour?
- A. A part of the pool is producing sweet gas and in the southern part of the pool, there is sour gas. There is sweet and sour.
  - Q. And about what - -
  - A. There is mainly sweet gas in the whole pool.
  - Q. And about what depth is this well producing?
  - A. That ranges from about 3000 feet to 3200 feet.

- Q. Now what well connections are there in that pool?
- A. For gas lift purposes, there are six wells in the area and four companies involved. Southern Union Gas Company is connected to six wells and El Paso Natural Gas Company is connected to 155 wells.
- Q. Now, with reference to the Jalco pool, what fermation, depth and character of gas is found in that pool?
- A. That is from the top of the Yates to a point 100 feet above the base of the S.R. The gas in the Jalco pool is mainly sour gas and it is producing from a depth of approximately 3000 feet to 3100 or 3200 feet.
  - Q. Now what connections are there in that pool?
- A. For gas lift purposes there are ten wells being used with four companies involved. United Production Company is connected to six wells; Phillips Petroleum Company is connected to three wells; and El Paso Natural Gas Company is connected to 82 wells.
- Q. Are there any other pools that are now designated or projected?
- A. There is the Justis pool which is producing from 200 feet below the Gloristta Datum.
  - Q. At approximately what depth is this?
  - A. I believe that's around 5400 to 5600 feet.
  - Q. And what is the character of gas? Is it sweet or sour?
  - A. The area is mostly sour gas.
- Q. And what connections were there on December 31, 1952 as to that pool?

- A. El Paso Natural Gas Company is connected to four wells.
- Q. Is there s difference between these various pools, as to the extent of the depletion that is taking place in each pool?
- A. Definitely so. Take the Languat pool and the Jalce pool

   the southern portion of the pools are at a low level and your

  depletion has - is beginning to show in these two pools, reasonably fast.
- Q. Does the El Paso Natural Gas Company have a service project located in one of those pools?
  - A. In the southern half of the Jalco Poel.
  - Q. Is that known as the Rhodes area?
  - A. That is the Rhodes Unit area.
- Q. And that is used for area for surface gas from time to time and withdrawn at other times?
  - A. Yes.
- Q. Now, Mr. Baulch, in connection with the operations of El Pase Natural Gas Company, I hand you a graph which is marked El Pase Natural Gas Company's Exhibit No. 2. Will you tell us what that graph or chart represents?
- A. This chart represents the gas purchased by El Pase Natural Gas from the Permiss Basin Area.

The black lines show the total gas purchased by months by El Pase. The top of the red represents the total amount of dry gas produced from the Lea County area and the top of the blue represents the total gas produced from what we consider marginal wells throughout the area.

(Pause. Exhibit No. 2 was attached to bulletin board)

- Q. Mr. Baulch, do you have exhibit 3 that reflects the total figures?
  - A. Yes, I am placing it on the board.
- Q. Now, as I understand the graph which has been presented for the year 1952 shows the purchases by El Paso Natural Gas Company in the Permian Basin area? Is that correct?
  - A. Correct.
- Q. Now the black as shown on the chart represents the residue gas which is purchased. Is that correct?
  - A. That is correct.
- Q. Now what proportion of that residue comes from Lea County - produced from Lea County?
- A. Well, during the month of January, 1952, the total amount of gas was a little bit less than 31 billion.

VOICE: I didn't get that.

- A. For January, 1952, the total amount of gas, both residue and dry gas - -
  - Q. Just a minute, do you mean produced or purchased?
- A. Purchased. Was a little below 31 billion cubic feet of gas. Now there was 42 billion, approximately, of residue gas produced ah, purshased and out of that 42 billion residue gas, there was about 48.45 per cent of that was residue gas found in New Mexico.
  - Q. Now what was the - -
  - A. I beg your pardon. That percentage was 36.42.

- Q. Now does that table, marked Exhibit 3, does that represent the percentages month by month of the residue gas which was purchased in Lea County?
  - A. That's right.
- Q. Now what does it vary what do those purchases vary from the top percentage to the bottom percentage without taking up so much time in going into each one of them?
- A. In New Mexico, residue gas varies from approximately 31 per cent to 39 per cent, or 392 per cent, of the total gas purchased.
- Q. Now, Mr. Baulch, the red as shown on the graph represents the purchases of dry gas from the pools in Lea County, is that correct?
  - A. That is correct.
- Q. Now, there's considerable fluctuation as shown on that chart as to quantities purchased. For example, the month of May, the purchases of dry gas have increased while purchases of residue have gone down. Can you give the reason for that?
- A. Yes. In May, 1952 that's when the oil strike occurred and as a result we had to take more dry gas.
- Q. Now, in general, your purchases of dry gas fluctuate from month to month with respect to the quantities of residue which may be available either from Lea County er from the Permian Basin?
  - A. That is correct.
- Q. And I notice at the bottom of the graph there, that the total production - that the total purchases have increased. Is

that due to new facilities being installed and new plants being put on the system?

- A. That's true. Also during the winter months our purchases increase.
- Q. Your market conditions then determine what your purchases will have to be?
  - A. That is correct.
  - Q. And the market fluctuates with market conditions?
  - A. That is correct.
- Q. Well, Mr. Baulch, I will hand you a graph marked El Pase Natural Gas Company's Exhibit 4. Does this graph represent the purchases made day by day for different months during the year 1952?
  - A. That is correct.
- Q. The months shown on there are February, July, October and December. Is that right?
  - A. That is correct.
- Q. Now, I notice that there is quite a dip there in July. Can you account for that?
- 9 A. Well, the big dip that you see is the decrease in pipe line purchases ever the week-end of July 4th, 1952. That is due to industrial plants shutting down.
- Q. So that these dips occur when the plants shut down for long week-ends and then immediately your demand changes?
  - A. That is correct.
  - Q. And as shown by month to month, you have a week-end dip

# almo st every week-end?

- A. That is correct. On week-ends, the big industrial plants as well as the California companies shut back during these days of the month.
- Q. So that you have a constantly fluctuating market demand for the gas that is being delivered in New Mexico, Arizona and California?
  - A. That is correct.
- Q. And one of your sources of supply, the residue gas, is subsequently cut back?
  - A. That is correct.
- Q. Now at the end of each month, I notice that the curve of your dry gas purchases goes up to a high point. Can you account for that?
- A. Yes, that is caused by the sources of our residue gas being very low during that period, caused by production in other words, the operators get production from other wells and consequently, we have less residue gas available.
- Q. That is, the operators of oil wells that produce their allowables before the end of the month and so the oil wells being operated to capacity at the end of the month mean that you have an additional demand on dry gas wells?
  - A. That is correct.
- Q. Now, Mr. Baulch, you are familiar with the rules that we have here, that have been submitted by the advisory board - one minute, before that - we would like to offer these exhibits 1 through

4 inclusive in evidence.

MR. SPURRIER: Is there objection? Without objection, they will be admitted.

- Q. What, from your experience in knowing when to take dry gas - - from your experience, what do you think approximately the rules should be and should apply?
- A. The proration of gas initially should be done on a pool basis, without any specific rules being adopted.
- Q. You think there should be a hearing as to whether or not proration is needed on any pool before rules should be adopted for that pool.
  - A. I do yes.
- Q. And you think that the rules should be required for that pool - the general rules - which might be necessary because of the peculiar characteristics of anyone pool or the working donditions of that pool?
  - A. That is correct.

MR. HOWELL: I think that's all for Mr. Baulch. Now, we have one other witness, do you want to hear him now?

MR. SPURRIER: I think we will recess until 1:30 this afternoon before hearing any additional testimony.

(RECESS UNTIL 1:30 P.M.)

Mr. SMITH: I should like at this time to ask the Commission if they will permit the record to show that the several exhibits offered in the Fowler Field case - which were marked for identification but were not offered - shall be considered in evidence.

MR. SPURRIER: Without objection, they will be admitted.
Mr. Howell?

MR. HOWELL: Is the Commission prepared to ask Mr. Baulch some questions or to have our other witness put on? I suggest that we put Mr. Steen on and then have both witnesses available for questioning and I think it would probably save time rather than having them questioned separately. If that's agreeable, we'll have Mr. Steen take the stand.

MR. SPURRIER: That is agreeable with the Commission.

# H. F. STEEN.

having been first duly sworn, testified as follows:

#### DIRECT EXAMINATION

#### BY MR. HOWELL:

- Q. What is your name?
- A. H. F. Steen.
- Q. What is your position with El Pase Natural Gas Company?
- A. General superintendent.
- Q. How long have you been employed in this capacity?
- A. Some twenty-three years.
- Q. Are you familiar with the over-all problems of purchases of dry gas in the Lea County area?
  - A. I believe I am.
- Q. Would you explain to the commission the various sources of gas in that area. I believe you have a map there you can use in answering the question and you can point out the various sources of supply.

A. That is right, Mr. Howell, we do have a map on the wall. I hope all of those present will be able to see the map because it's on such a small scale. However, in part, it sets out the facilities of the El Paso Natural Gas Company in the Permian Area.

You will note that the map has red and green dots designating by the red dot, the plants owned by the El Paso Natural Gas Company.

- Q. Now, let me interrupt just a minute there. The plants owned by El Paso Natural Gas Company take what character of gas?
- A. The plants owned by the El Paso Natural Gas Company take all the gas that is passed through the El Paso Natural Gas Company's line.

The necessity of these plants is due partly to the fact that part of the Permian Basin is sweet and part of the gas is sour. Being se co-mingled, it would take duplicate systems in the field to bring the gas in from long distances if it were kept separated. We have found it more economical to build a plant and co-mingle the gas and let all the gas go through the purification dehydration and compressor plant.

Again on the map there, the green dots represent the spots where we are buying gas from other companies. That is gas that would enter our transmission line and is pipeline gas. When I say pipeline gas, I mean gas that has been purified, the sulpur acid removed and dehydrated and ready for transmission into our main line system. Those plants are owned by numerous companies who operate residue plants, having gas available at the tail gate of such plants for sale to the pipeline industry. The ones up above there belong to Stanolind and

some below that belong to Gulf and one or two that belong to Skelly.

There are numerous plants that belong to Phillips and other producers in the area where we buy gas at the tail gate of their gasoline plants.

Now, in the area where the red dots are shown, our plants are not the only existing plants there. As the general rule, a gasoline plant is existing there, although not in all cases, in New Mexice proper in the vicinity of Jal and Eunice, we have the only plant which is our Jal 1, 2, 3 and 4. Now, that's in the vicinity of Mamument and Phillips oil center plant - Phillips, Warren and various other producers have plants besides our plant. In the sketch you see there alone, we have over 200,000 horse power or horse power approaching 200,000 of our own horse power that we have placed there so that residue gas could be properly marketed. We have about 1000 miles of pipeline and gathering lines ranging from about 30 inch down to 8 inch in diameter. Also a gathering system of smaller lines probably reaching close to a 1000 miles as well.

Besides our held plant where our 200,000 horse power is installed, the other companies have numerous amounts of horse power which I am not entirely familiar with and the pressures in the gasoline plants are anywhere from vacuum to 8 or 10 pounds suction and discharge some 45,000 and in some cases up to 200,000. It is our practice to buy the gas at those pressures and compress it on up and in most cases, rum it through our own purification and dehydration plant, compress it on up, in some instances, to 850,000 for mainline transmission use.

About 80 per cent of the entire output of gas from the Permian

Basin area through our company is at this time residue gas and when I

residue gas I mean gas that has come from oil wells, has been processed through a gasoline plant and then picked up by our company and treated or purified to remove the acid substances, dehydrated and placed into our compressors and then into our high-pressure system.

Where you have 80 per cent of your volume of gas coming from sources as uncertain as residue plants, your production will necessitate having stand-by capacity to take the place of that gas, or in the event of failure of pressure or the fluctuation of oil marketing conditions that cause shut-dewn days, in Texas particularly, and we find, I might add here that we find from the Texas Railraod Commission cuts or adds from twenty days for each day cut, we have a fluctuation of a full 20 or 30 million in our residue take. For each day added to eil production, we have the same fluctuation upward, between 25 or 20 or 30 million feet of gas per day. So that you can see that the oil residue gas in the area, both in New Mexico and Texas, it is necessable sary to have consider/t volume of standardised gas. It is our estimate that for every four million of residue gas that is marketed, you should have at least one million standby of high pressure dry gas.

Now, not only does the orders of the Commission effect the some 37 or 38 plants shown on the plat in front of you there, with that many plants mechanically operating and with purification and treating facilities which are subject to corresion and sometimes repairs, you can see that hardly a day passes that one or two plants, either our own er some of the others, they must be repaired and therefore, they must be shut down ranging anywhere from two days to two months. In the case of fire or explosion or a failure of some type in the equipment,

it could incapacitate a plant for a much longer period of time.

Therefore, where you are getting a flow of gas approximating say

50 million a day, you must process that flow of gas through another facility.

Now, our company is unique to some extent in two counts. The first being that all the gas - - the majority of the gas that we process itself through our pipeline facilities is our gas. It must be treated and purified se that it can be sold as gas that will pass the state qualifications for the product. The other is that we, I guess, market more residue gas than any other company.

Most of the time gas companies have high pressure gas wells connected to their high pressure systems. About all that is necessary for the high pressure gas is that it is turned on, run through a dehydration plant and them it is ready for sale in the high pressure ever areas or market areas where/it might be transferred to. I think we are far ahead of any other other company in these two factors. Now, whether that is a good deal or not, I cannot say at this time. It is however, a lot of trouble. It takes about 1000 mem to operate this system that you have been following there, with headquarters of another plant being located in Jal, which is the headquarters of our southern states.

The part that I am talking about or trying to get over to the Commission here is that a great deal of flexibility is required in operating a system of this type. And in that flexibility, you must have high pressure gas wells on call at all times to take care of

any fluctuation in your residue, which is the gas that comes from the oil wells.

We started out a number of years age at Jal, as most pipeline companies would, without any - - with some 7 or 8 high pressure gas wells that were all that existed in the area at the time. We took gas from those wells for a number of years - this high pressure gas and all that was required was treatment. I believe that the first state or the first place where conservation of preventing of waste by the burning of residue gas was in New Mexico. That was started up at our low pressure plant which we designate as our No. 2 plant. where as you know, a gasoline plant was built and gas from the oil wells was taken from the tail gate of the gasoline plant, treated, processed, compressed and put into mainline systems. The next place we went, I believe was the Phillips plant and made a deal with Phillips to start buying residue gas from that plant, and compressing it, treating it and putting it into the line. Consequently, we have tried to keep abreast of the flaring of gas in New Mexico which has been our policy. I believe the record will show that very little gas is being burned from gasoline plants throughout the State of New Mexico. That, I presume, is the reason that regulations have not been imposed sooner or that they have not been imposed at all to any great extent, in New Mexico, because there is no waste occurring.

Now, I mention these things to give you some idea of the equipment, the man power and the flexibility that is required to assure markets for our residue gas and to conserve it from waste because if it isn't marketed -- several years ago, it was vented to the air. Most

of the Commissions are becoming more strict with respect to this, and more so daily, in allowing any gas to be flared to the air and wasted forever for the country as a whole.

Mr. Howell, I believe that's all I have to say about the matter. I was just trying to bring them up to date a little on what the procedure has been and our policy with respect to residue gas as well as the need of flexibility that you must have for stand-by capacity for this type of system.

Now, we have built in, as we could, in our/reservoir a storage project which will help us take care of demands of excess residue gas areas, when we do not have demand for it in the pipeline so that we can store it for short periods of time to help give us some flexibility for that isn't all that is required in marketing this large volume of residue gas.

- Q. Mr. Steen, are you purchasing from Lea County approximately the same amount of residue gas as dry gas?
- A. Mr. Howell, I believe the figures will show that that is approximately - the statement is approximately correct. Although it ism't on a straight line basis. In the summer time, the high pressure wells are cut back to the extent that we can cut them back. All high pressure wells that we are tied into in order to meet our contract with the producers are guaranteed an allowable that we have to look after to hold our contract in good standing with the producers. But in the summer time, we shut the high pressure wells back because if you don't have something that you can cut back, you certainly have to flare residue gas either in New Mexico, Texas or other places. So, our practice

has been to cut the high pressure wells back in the summer time, go ahead and take all the flared gas that we have facilities to take, then in the winter time when the seasonal demand on the system causes peak takes and peak days, we use the ligh pressure wells as a means of keeping our system loaded.

- Q. Now there is a matter which we tend to overlook. What is the fundamental difference between the problems of marketing oil and marketing gas?
- A. Well, my conception of that Mr. Howell, would be that the oil can be carried in buckets or in a truck or it can be stored in tanks on top of the ground in various places, but that is impossible with gas. You must have a pipeline running through the gas field and the line must have a market at the place the line extends to to be sold because there is no way unless some other ground storage is devised and that requires a formation of some kind to be stored in, there is no way to store the gas at the sales point like there is the oil.
- Q. So that for each separate gas pool, the market is determined by the lines that are built into that pool?
  - A. That is correct.
- Q. And the only way that that gas can be marketed from any one pool is through the pipeline which go in there, whether they go to interstate pipelines or local pipelines or cargon black or gas lift. The gas moves out of the pool and must be marketed.
  - A. That is correct.

- Q. Now, let us look over the proposed rules for the Lea County area. What is your opinion with reference to the time and manner in which the Commission should approach imposition of rules for the proration of gas in Lea County?
- A. I have looked over the rules several times and wish to say that I'm not entirely familiar with them. There are some things about them that I do not understand, completely. But it is my opinion that in prorating gas in Lea County it should be done where it is just being done for the first time it should be done on a pool basis and not an over-all proposition with one order because if that happens I think it is going to cause a glorified amount of confusion such as the Commission hasn't run into before if the order is passed that all paols on a general order will be prorated.

Now it may be that these pools are partially depleted in different percentages. Many of them have different flowing pressures. Many of them have dual completed wells in them. Many of them have not only dual completed oil wells but dual completed gas wells. You have gas wells in some of those pools that are producing from two varieties or two formations down below the ground. All of that is going to raise the question - - all of that is going to cause a great deal of confusion, not only that but the pools that have been named here and some of them covering the extent of territory they cover, it seems to me that there is some question that must be straightened out between the oil producers and the Commission as to whether all of these wells in the gas pools - - the pools that are designated as gas

pools, are gas wells or whether part of them are oil wells.

Now, I admit that maybe I haven't understood the rules well enough. Maybe that isn't a good thought or a good idea to bring up at this time, but it seems to me that any well, or tract of land in a gas pool could be designated a gas well and conversely there would be certain wells that are at this time classified as oil wells that, if classified as gas wells, would loose a part of the oil allowable they have at this time as well as loose the gas that was going into a low-pressure system.

Perhaps, low pressure wells will not be considered. However, there are a number of high-pressure wells, that is oil wells - that is, they are dually completed wells and the reason I think that it should be considered on a pool basis aside from the things that I have already said, is that there may be found in certain pools there that they do not need proration at this time. There may be one purchaser there who is taking from all the wells in that particular pool and there are no correlative rights that are being - one person to the other - is not getting hurt on the pool with respect to correlative rights being taken. In the came instance, if we try to do this on an ever-all basis, with the different pressures - the different flowing pressures that the wells have - the different deliverability that the wells will put out, it is going to cause a great deal of confusion in trying to make all the pools fit one set of rules. It seems to me that it would be much simpler to take one pool for propetion first, as the Commission saw it, and have evidenced furnished showing the type well

or all the type wells that existed there and then make a set of rules to conform to the type of wells that you have in the pool, rather than rules for the over-all area in New Mexico.

- Q. I understand that it is your opinion that the best approach is to have a hearing as to a particular pool to determine whether or not proration is necessary, to determine the boundaries of the pool to see if they are proper and to discuss any particular problems that exist in the pool prior to imposing proration rules on that pool.
- A. It seems to me that that in the only feasible way to do it.
- Q. Now, there is another factor that hasn't been mentioned here that is that it is anticipated that the Permian Basin pipeline will be taking gas from this area. Is there any advantage in your opinion in waiting until the Permian Company is actually in there and taking gas and seeing what the problems are before giving rules to the pool district?
- A. Well, I think that when Permian comes in it will change the situation to a considerable degree. Of course, that's up to the Commission as to whether it wishes to put the proration into effect before the Permian gets in. I don't know.

MR. HOWELL: I think that's the evidence that I had desired to bring out.

MR. SPURRIER: Are there any questions of either of these witnesses? If there are no questions, the witnesses may be excused.

MR. SPURRIER: Mr. Davis?

MR. DAVIS: I have one witness.

# A. M. WEIDERKEHR.

having been first duly sworn, testified as follows:

# DIRECT EXAMINATION

#### BY MR. DAVIS:

- Q. What is your name?
- A. A. M. Weiderkehr.
- Q. What position do you hold with Southern Union Gas Company?
- A. Engineer.
- Q. Would you brisfly state your background?
- A. I started with Southern Union Gas Company about six years ago. Before that, I spent 5 years with Magnolia and two and one half of that was in the field in general engineering and the last two and one half, I worked in their Dallas office as a reservoir engineer and working on proration in fields in Texas.
- Q. Mr. Weiderkehr, you are familiar with the operations of Southern Union Gas Company, particularly in the Lea County area, New Mexico?
  - A. I am.
- Q. Would you tell us briefly what fields we have under the pipeline system and what disposition is being made of that gas?
- A. We take gas at this particular time actually from three fields. The Eumont field primarily, and then we are also taking gas from the Langmat field and we have recently added one Blinebry well

to our system. The gas from all of this area is used in our southeast distributing system.

- Q. The gas is used for what purpose?
- A. For conduction throughout the general area.
- Q. For domestic?
- A. For domestic, commercial, etc.
- Q. Now, you have heard the testimony of Mr. Baulch and Mr. Steen of El Pase concerning the character of the gas to be found in the Eumont and Langmat pools. Have you not?
  - A. I have.
  - Q. Do you agree with their conclusions?
  - A. Yes, I do.
- Q. Generally, their testimony insefar as our operations in this area conforms with our operations?
- A. Right. Our gas coming from the Eumont pool is sour and the gas that we are taking from the Langmat pool is sweet.
- Q. What action do we take on the gas coming from the Eumont pool to get it ready for our market?
- A. We have to process this gas in order to make it available for the pipeline.
- Q. In other words, until that operation is completed, the gas is not of any benefit to us whatspever?
  - A. It cannot be used until it has been processed.
- Q. In connection with that type of operations, our plant is designed to carry and take care of a certain amount of gas which is

comparable to our market requirements?

- A. That is right.
- Q. With respect to both the sour and sweet gas?
- A. That is correct. We need both the sour and the sweet gas. Our plant has capacity to handle 300, million cubic feet per month, and the remaining gas will be taken from the sweet gas wells. It has been our policy in the several months, we have gotten our plant running pretty well the year round on sour gas and increase our gas intake from the sweet gas wells during the winter months since we have more sour gas wells, it gives them their fair share and we continue to produce them at a higher rate the year round that is, a higher average rate than we do the other wells that are producing sweet gas and we kick up the sweet gas wells appreciably during the winter months.
- Q. Now, Mr. Weiderkehr, you were present at the meeting yesterday? You were a member of the advisory committee and also the rules committee that prepared a draft of provation rules for the Commission?
  - A. Yes.
- Q. During some of those meetings, did you observe that the rules that we submitted here that there was controversy as to several of the provisions?
- A. That is correct. There were very few of the companies that agreed on all of these. Some folks said will de do about this, and the answer usually was we'll take care of that when the problem arises. The rules were drafted very broadly and if they have bugs in them, they'll be worked out.

- Q. In other words, it is your opinion that a general procedure should be followed and if and when the Commission finds that the proration of natural gas in any part of the area is manecessary
- A. I think the Commission will have to make rules for individual fields taking into the consideration of these rules the factors which will vary throughout the field, such as sweet and sour deliverability gas, all those things will have to be taken into consideration in any of your pools.
- Q. None of that information was taken into consideration by the committee that was involved in setting up these rules which were adopted by the majority vote of the committee?
- A. That was not the case. The rules were general and did not take into consideration any specific pools.

MR. DAVIS: No further questions.

MR. SPURRIER: Does anyone have a question of this witness? If not, the witness may be excused.

MR. STAHL: My name is Stahl of the Permian Basin Pipeline Company and we have one witness.

# REX D. FOWLER,

having been first duly sworn, testified as follows:

# DIRECT EXAMINATION

# BY: MR. STAHL

- Q. Will you state your name, please?
- A. Rex D. Fowler.

- Q. What position do you hold with the Permian Basin Pipe... line Company?
  - A. Manager.
  - Q. Do you also hold the same position a natural gas company?
  - A. That is correct.
  - Q. In general, what do your duties consist of, Mr. Fowler?
- A. They generally cover the allocation and proration of gas and various sources of supply.
  - Q. For both Permian and Northern?
  - A. Yes.
- Q. Will you explain to the Commission the present status of the Permian Basin Pipeline Company?
- A. Yes. We think it will go into operation December 1 of this year. That system is located in the southeast part of the -- of Lea County, New Mexico, where dry gas will be purchased and in the Frayberry area of Texas.
- Q. You said that the system was planned to go into operation December 1st, do you mean that the company anticipates running gas about December 1st?
  - A. That is correct.
- Q. Mr. Fowler, was Permian represented on the committee which was delegated to draft the proposed rules?
  - A. Yes, they were.
  - Q. Are you familiar with those rules?
  - A. Yes. I have read the rules.
  - Q. With your conversations with persons from Permian who

attended those meetings and from your reading of the rules, is it your understanding that those rules provide for proration on a pool by pool basis?

- A. Yes. That is my understanding.
- Q. Do you have any other general comments with respect to those rules, Mr. Fowler?
- A. I'd like to make just one general comment. I am not completely familiar with the pools in the southeastern section of Lea county; however, it has been my experience that the characteristics of various gas pools are not generally the same. For that reason, I believe hearings will be held on each pools se that special rules can be considered.
  - Q. Were you present when Mr. Steen of El Paso testified?
  - A. I was.
  - Q. Did you hear his testimony?
  - A. I did.
- Q. In your opinion, do you think that the Permian Basin Pipeline Company will be faced with the same type of problems that Mr. Steen outlined in his testimony?
  - A. Yes, I do.
- Q. Did you hear Mr. Steen testify that a great amount of flexibility is desirable in the gas producing areas?
- A. Yes, I did. I think Mr. Steen covered the problem very well.
  - Q. Does this generally conform to the view of the Permian

# Basin Pipeline Company?

- A. That is right.
- Q. Is the Northern Gas Company presently operating where gas is prorated?
- A. Yes. We are operating in the Texas panhandle and gas is prorated there.
- Q. I understand from earlier testimony that you have had experience in working under proration in various areas?
  - A. That is right.
- Q. Based on that experience in your work, do you have an opinion as to whether proration should be established at this time?
- A. Yes. As previously stated Permian Basin Pipeline Company expects to put its system in operation in a little over three months now about December 1. There will be a substantial new market for gas in the Lea County area.
- Q. Do you have any figure in mind as to about what percentage Permian will take of the gas produced in that area?
- A. Roughly, I think it will be about 35 per cent. Now, it seems to me that as soon as that system is in operation, quite a large number of additional wells will have a market for gas, and much more information will be available at that time on which to base a study as to whether or not proration would be advisable and what rules should apply in each pool.
- Q. If I understand your testimony then, your position is that Permian Basim Pipeline Company feels that proration is not desirable at this time is that right?

- A. We would like to see it deferred until our Company is in operation. Thinking that the additional information available at that time will help the Commission in establishing proration on a suitable basis.
- Q. Mr. Fowler, are you generally familiar with the sources of supply that Permian anticipates getting their gas from?
  - A. Yes.
- Q. Is it not a fact that Permian does not have a great deal of information at this time with regard to wells that it will be connected to?
- A. That is true. In fact, many of the wells aren't yet drilled. They are to be drilled between now and the and of the
- year. Other wells are to be reworked and recompleted.
- Q. Then from your experience, wouldn't it be very difficult thing to attempt to set up proration at this time when a very small amount of knowledge and factual data is available?
  - A. I believe it would.
- Q. Do you have any further statement that you would care to make?
  - A. I believe not.
  - MR. STAHL: That's all.
  - MR. SPURRIER: Is there a question of this witness?
- MR. TREMBIE: George E. Tremble, Samaden Oil Corporation.

  Mr. Fowler, did I understand you to say that your system is proposed

  for 200 million cubic feet of gas per day?

- A. That is right. At the first of the year.
- Q. What I would like to ask you, the gas coming from the State of Texas, how much of that will be residue - how much of that do you anticipate to be residue and how much will be high pressure gas?
  - A. Out of the State of Texas?
  - Q. Yes.
  - A. I think about 100 to 125 will be residue gas.
  - Q. That's out of the State of Texas?
  - A. That would be from the Sprayberry area, yes.
- Q. How much from the gaz wells in Pecos County are they high pressure gas wells?
- A. Yes. I think that will probably go into operation early in next year. Probably start out around 2500 per day.
  - MR. STAHL: Thank you.
- MR. SPURRER: Anyone else? If not, the witness may be excused.

  Is there anyone else to be heard in this case?

MR. CAMPHELL: If the Commission please, I'm Jack M. Campbell, Roswell, New Mexice and I'd like to make a statement, in behalf of the Texas-Pacific Coal & Oil Company.

It appears to Texas-Pacific Coal & Oil Company that there is some difference of opinion as to the effect of the proposed general rules should the Commission see fit to put them into effect.

The rules do not seem to us to be clear inasmuch as they seem on the surface to contemplate pool hearings in all cases, which we

believe is the proper method to initiate gas provation and if they mean any more than that - if they do mean an attempt to provation in a four county area - er any area larger than a common source of supply, we have serious doubts as to their legality under New Mexico statute.

We have no objection to gas proration provided it is needed and provided it is done in compliance with the statutes. In fact, the statutes require that the Commission make a determination if gas proration is needed and these proposed rules likewise contain such a provision.

Furthermore, the statutes require that the Commission in designating a gas pool limit the pool both horizontally and vertically as a separate or common source of supply. As we understand it, this hearing involves both cases 245 and the case involving the proposed gas provation in a four-county area. We feel that the determination and definition of the gas pools being the very predicate upon which gas prevation, if it is initiated, must be based is extremely important, in setting up any gas provation system.

For example, it is our understanding that in Case 245 the Commission has already or by the proposed changes which have recently been offered in connection with this proposal by the committee, has combined the Tates formation, which both historically and geologically have been accepted as a separate source of supply in the Permian Basin from the Seven Rivers formation and in some cases, has combined it with a portion of the Queen, and combined all of these into one common source of gas supply.

To do so, we feel ignores the method and manner in which hundreds of wells have been drilled in those areas and results in considerable complications both by way of proper and legal orders of the Commission and protection of contractual rights of people in those areas, who have drilled oil wells and who have been producing them as oil wells under the Commission's approval for some period of time.

Furthermore, many gas sales contracts have been entered into in these areas with the Commission's knowledge which limit the subject matter of the contract of gas produced from the Yates formation as sweet gas on one hand, and sour gas on the Seven Rivers formation on the other hand.

We feel that the legality of the designation of gas pools in this manner is a very serious question for the Commission and in establishing gas proration if it is determined to be necessary. We would like to request the Commission, and I believe these proposed rules contemplated, if they do not spell it out clearly, that there shall be a separate pool hearing in each and every case. And that in those pool hearings, case 245 might be left open for the purpose of determining in each pool from preper geological testimony by interested parties whether a gas pool designated both horizontally and vertically is actually a single source of supply or whether in fact there are several sources of supply involved.

Second, that the hearing determine separate sources of supply which should be designated as gas pools. Third, whether gas proration

is needed in each of these separate sources of supply and fourth, if they are needed, what special field rules should be adopted to protect the wells already completed and to protect contractual rights which have been acquired on the basis of designation of pools in another manner in the absence of gas provation.

If these proposed general rules contemplate that they shall simply be stand-by rules and that there shall be no gas proration in any pool in New Mexico in the absence of a pool hearing, we have no particular objection to them. On the other hand, if, as some people seem to feel, they contemplate gas proration on a four-county basis without a determination in each common source of supply before any gas proration is put into effect, we have serious doubts as to their widdem or legality.

We want to particularly request that Case 245 be retained open in any event for modification in the event there is a pool hearing and its determination is contrary to the existing designation of gas pools as made by the Commission at that time.

MR. SPURRER: Is there anyone else to be heard? Mr. Hinkle?

MR. HINKIE: I am Clarence Hinkle, Hervey, Dow & Hinkle,

Roswell representing the Humble Oil and Refining Company.

We have listened with a great deal of interest to the testimony that has been put up here by the El Paso Natural Gas and other pipeline companies. We assume that the object of their testimony is to impress the Commission that there is no hurry in putting prevation into effect. We have felt all along that the wisdom of the Commission in appointing the advisory committee to recommend some rules was an

indication of the feeling of the Commission that there was a necessity for gas proration in these four counties.

We have participated in the hearings that have been held with respect to drafting these rules. And I think I can state generally, that we are in accord with the rules that have been proposed. We are not wholeheartedly in accord with Rule 4 which is the rule which is sometimes — which has come under some discussion here as to its proper interpretation — whether it is necessary for the Commission to make a separate determination in each pool or field to determine if proration is needed and the adoption of special field rules.

However, we are willing to go along on that and on the proposiof
tion that/the pipeline companies as proposed here that there be a
hearing on each separate pool, but we would like to urge the Commission
te put these rules after they have been adopted, into effect at the
earliest possible time. We think that the Commission should go ahead
and call, as soon as practicable, hearings for the purposes of determining whether prevation is warranted in the pool and for the adoption
of any special rules as may be necessary preparatory to putting proration into effect. Then they can go ahead and call for provation and
put it into effect at the earliest possible time.

Now, I assume that there will be some periods of time when each one of these rules, as proposed, will be discussed. Am I right on that?

MR. SPURRIER: We hoped we wouldn't have to, Mr. Hinkle. But if you care to discuss them, you go ahead.

MR. HINKIE: I have only one suggestion. It is not a proposed

change in those rules but it is a suggested clarification. And that's in connection with Rule 6 which provides for gas allocation. Now, in order to understand the substitution which I would like to suggest to the Commission when they consider the adoption of these rules, I last would like to read that/sentence which is in "C", roman numeral VI.

It reads "More than one prevation unit of fractional parts thereof may be adjoined to a gas well and the allowable assigned said well may be increased proportionally provided that:" and them it discusses the conditions upon which these allowables may be increased. "First, no more than 640 acres shall be assigned to any one well; second, all acreage in said lease may reasonably be presumed to be productive of gas; three, a multiple unit, so formed, shall not have over-all length or width exceeding 5,280 feet;" now, fourth, this is the one which I felt was ambiguous and should be changed. Four reads this way in the proposed rule. "The well, to which such additional units are assigned, shall be located not closer to any boundary of such pool units" that - - I think that's a typographical error, I distance suppose it should be "than" "the/represented by 25% of the length of the longer of the two boundaries in such pool units, which are adjacent to said first mentioned boundaries."

Now, I don't believe that that makes sense in that you have not made reference to any such boundary at all. And we have tried a number of times to figure out practically and while we know what the intent was and have no quarrel with the intent - we think that the intent was "no well, where there are multiple pool units, should be located less than 660 feet from the longest boundary nor more than

1320 feet from the shortest boundary."

Now, in order to clarify that statement and accomplish the same thing, we would like to suggest that the following be substituted for sub-section 4. "Where not more than two proration units are assigned to a well, the well shall not be located closer than 660 feet to the longest boundary of the pool unit nor less than 1320 feet from the shortest boundary of the pool unit, where three or more units are pooled, the wells shall not be located closer than 320 feet to the outer boundary of the pool unit."

We believe that in this manner, it is clear and accomplished the same thing that is proposed in these rules. I would like to pass this along to the Commission for what it's worth.

VOICE: You made reference to 320, you meant 1320 feet, didn't you?

MR. HINKIE: 1320 - that's right.

MR. SPURRIER: Anyone else?

MR. DIPPIE: My name is Harry Dipple and I'm with the Continental Oil Company.

The continental realizing or acting on the assumption, I should say, that the Commission in appointing this committee felt that the time for gas proration has arrived, feels that it should say that it favors generally the rules that have been proposed by the committee.

Continental was represented on the committee and took part in the discussions. But, of course, we have some reservations in our mind with respect to the provisions of certain portions of these rules.

I might say at the out-set that it is our opinion that they should have general application to the four-county area and that exceptions thereto should be granted when the conditions exist that require granting of such exceptions, and after proper notice and hearing, rather than trying to have all of the exceptions fit into the rules.

There is a provision in section (b) of Rule 4 for just that sort of thing, I believe. And apparently, some members of the committee have in mind that that sort of hearing would be in order and probably necessary on certain occasions. Since it was indicated a moment age that the Commission will hear comments with respect to the individual rules as proposed, we have made, I think it is correct to say, some careful studies of these rules that are proposed and we have some matters that we would like to call to the Commission's attention and we have some recommendations to make.

Rule 1 attempts to define a gas well. We think that the rule is so worded as to perhaps be confusing and in one sense of the word, it's rather duplications. It says: "A gas well shall mean a well producing gas or natural gas from a common source of gas supply from the gas pools determined by the Commission" and if you'll refer to the definitions in the existing rules, you will, I think, find that a common source of gas supply is the same thing as a gas pool. So in view of that definition, we would like to recommend the following definition of a gas well. "A gas well shall mean a well producing gas from a common source of supply which has been designated by the Commission to be a gas pool."

Now, since Rule 1 has to de with definitions, we would suggest

that the heading of the rule be changed merely to the word "Definitions" and that the work of the gas well be eliminated and that a definition be added under there - let the gas well definition be sub-section (a) or sub-section (1) whatever you may chose.

Under Rule 4, sub-section (c), there is an attempt made to define a gas purchaser system. Now Rule 4 is headed "GAS PRORATION" and we do not feel that that is a proper place for a definition. We, therefore, would suggest that a gas purchaser should be defined in Rule 1 where definitions will properly find their place, since we already attempted to define one term as to what a gas well is.

We would recommend that the following definition of a gas purchaser should be included in rule 1. "Gas purchaser shall mean any taker of gas either at the well head or at any point on the lead where connection is made for gas transportation or utilization."

We feel that perhaps a casual comparison of the proposed definition and the one that we are recommending with the one that is appearing in sub-section (c) of Rule 4 will suggest that the one that is included in the proposed rules as sub-section (c) of Rule 4 does not adequately define a gas purchaser, because some gas purchasers take at points other than well heads. Some of them take it at the separator or either at the lease line.

Now, this next recommendation has to do with Rule 2. We feel that under paragraph (a) of Rule 2 in lines 2 and 3, the word sections should be changed "section" and then sub-divisions (a), (b) and (c) should be eliminated. In other words, we feel that sub-section (a) of Rule 2 should read that "the secretary of the Commission shall have

authority to grant an exception to the requirements of state-wide rules 104, section (d) without notice and hearing when application has been filed in due form." Then put a period and eliminate the word "and".

The reason for this recommendation is that the provisions of the sections that we have proposed to eliminate do not apply to these gas rules but appear to us to apply to oil rules.

Our next recommendation has to do with sub-paragraph 2(a) in line 2 of - - let me see - in sub-paragraph 2(a) of sub-section (a) of Rule 2 reads: "The ownership of all oil and gas leases within a radius of 660 feet of the proposed locations" - - we recommend that it be changed from 660 to 1320 feet. This distance that we recommend, the 1320, corresponds to gas spacing whereas the 660 figure which apparently was copied with this wording from state-wide rule 104(f)applies to oil proration units specifically.

Now, our next recommendation has to do with Rule 3, and we recommend that the entire paragraph be eliminated and that there be substituted for it the following: "No well producing from any pool allocated under these rules shall be allowed to produce a greater daily amount of liquid hydrocarbons than the top unit oil allowable determined by state-wide rule 505, unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste or protect correlative rights."

We feel that the provision that we recommend the deletion of is not only not necessary but that it is contrary to what we think is the intent of the Commission in regulating gas pools. We believe that rules governing gas pools should regulate gas by setting gas allowables, not oil allowables.

We will next come to Rule 4. To be perfectly frank about it, we feel that Rule 4 should be eliminated in its entirety unless it is desired to keep sub-division (b) in the rules and if that sub-section (b) is thought to be desirable, we would suggest that it be added on at the end of the rule rather than at this point.

Now, the reason for our recommending or suggesting that Rule 4 should be -- that is sub-section (a) of Rule 4 should be deleted is that it appears to be as has been evidenced here today, some conflict of opinion on the part of those who worked on the rules at the request of the Commission, as to the interpretation of that rule. The provisions of sub-section (a) are really made unnecessary by provisions of some of the other rules, that are proposed -- as for example, sub-section (a) of Rule 6. And by eliminating sub-section (a) of Rule 4, we feel that the rules would actually not suffer but would be benefited by the deletion. Now, our reason for suggesting the deletion of sub-section (c) of Rule 4 has already been gone into in that we recommend that asgas purchaser be defined as we recommended and be placed in Rule 1, under definitions.

Now, we next come to Rule 6. In paragraph B, line 8, that sentence which I have reference to now reads "The Commission shall include in the proration schedule the gas wells in the pool delivering to a gas transportation facility, and shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation

facility which is reasonably capable of handling the type of gas produced by such well." We recommend the deletion of that sentence and the substitution for it of this sentence: "The Commission shall include in such proration schedule, all wells completed in and capable of producing from any pool allocated under these rules."

We feel that the wording that is in the rule and proposed by the committee would enable an operator in utilizing all of his gas production on his own lease to have his wells left off the schedule. We feel that placing a well on the proration schedule is no insurance that the well will be connected because that is a matter of contract between the producer and the purchaser.

Now, we recommend also the deletion of the next sentence of sub-section (b) of paragraph 6 which reads "The total allowable to be allocated to the pool shall be determined by the Commission in the following manner: The total allowable for a month shall be equal to the total market demand for that month plus the amount of any overproduction, or less the amount of any underproduction during the second preceding month." We recommend the substitution of the following: "Such schedule shall set forth each well's current gas allowable, which shall be its fair and equitable share of the pool allowable, as determined under the provisions of Rule VIC below; the amount of overproduction or underproduction accrued during the second preceding month; and the net allowable which shall be the current allowable plus said underproduction or less said overproduction from the second preceding month."

The wording, as recommended by the committee, we feel, is

calculated to adjust nominations by actual production emperience. The effect, however, would appear to us to be confusing. For instance, if production or takes during a given month greatly exceeded the allowable, due to an unexpected surge of demand, that excess would be added to the allowable of the second succeeding month. The effect is to multiply the difficulties wrought by the vagaries of weather and market demand. Actually, these unknown factors should be handled by adjusting nominations, as that is the purpose of the supplemental mominations.

Now, we have one recommendation for a change which perhaps is minor and is more a grammatical matter than one which would seriously affect the rules. I have reference to section (c), of Rule 6 the last line on the page. That is, the third line. The word "amount" - it reads" the allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage" and so on. We feel that the word "amount" should be changed to read "proportion" because that would make the intent clearer.

New in line 5 of sub-section(c) of Rule 6 which is line 2 on page 3 of the mimeographed copies of the proposed rules which I have - after the word "shall"-provided that for this purpose standard units shall be as defined in Rule 5 above - - we recommend that the words "as defined in Rule 5 above" be deleted and that we substitute the following: "construed to contain 160 acres, notwithstanding variations therefrom within the limitations of rule 5 above."

Now, our first thought was perhaps that the Committee misunderstood the intent of the former wording, and that it was changed for brevity. The purpose of this language is to relieve the Commission of having to deal with small variations (up to 2 acres) from the standard units for allowable purposes. Units with 158 or 162 acres would be given credit for 160 acres and be treated exactly like a tract that contained precisely 160 acres.

Now, Mr. Hinkle called attention to typographical error in numbered paragraph 4 of sub-section (c) of Rule 6 in the second line where he suggested the word "that" should be changed to "than". Unless the Commission adopts the substituted language that Mr. Hinkle proposed and we have no objection to the Commission's adopting the language that he recommended.

If, however, Humble's recommendation is not adopted, we would further recommend that numbered paragraph 4 should end after the word "pooled" and the word "and" at the end of it should be eliminated.

Now, under Rule 8, numbered paragraph 2 of sub-section (a), it now reads: "the locations of all wells on the lease and the immediately surrounding leases producing from the saver reservoir, and". We recommend the elimination or deletion of the words "and the immediately surrounding leases". We also recommend the deletion of numbered paragraph 3 of sub-section (a) of Rule 8, which reads: "the lease ownership of said leases". Now the reason for that recommendation is that the person who will be required to make the affidevit on form C-104 could hardly be expected to have personal knowledge of the location of wells

on the immediately surrounding leases and of the lease ownership of surrounding leases to such an extent that he would be willing to swear to it.

The next recommendation has to do with Rule 9. In the second line of Rule 9, there appears the word "submitted". We recommend that we substitute for the word "submitted" the following words "reported on a form designated by the Commission." The first part of that paragraph should then read: "The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be reported on a form designated by the Commission."

The word "submitted" we think is ambiguous and does not indicate the intent of the rule. The substituted wording, we feel, gives the proper directions and indicates exactly how the gas production is to be reported.

Now, we would like to make this further suggestion. While it really doesn't directly apply to the rules as proposed by the Commission — the committee, but we feel perhaps that this is an opportunity to call it to the attention of the Commission and we should like to do so. That the definition numbered 51 in the state—wide rules be changed — I don't have my copy of state—wide rules — be changed in line 4 to — change the word "seventh" to read "sixth". The definition would then read as follows: Proration period shall mean for oil the proration month and for gas six consecutive calendar months which shall begin at 7:00 a.m. on the first day of a calendar month and end at 7:00 a.m. on the first day

#### sixth succeeding month."

The present wording would imply a seven month proration period, whereas the wording just prededing it in the same definition definitely states that the period should be six months. We think that for consistency and clarity, the change should be made.

MR. DIPPIE: I believe that's all I have.

MR. SPURRIER: Anyone else? Mr. Nestor?

MR. NESTOR: E. W. Nestor representing Shell 011 Company.

Shell Oil Company is in general accord with the gas rules as proposed except for one feature. We wish to direct attention to Rule 5, Proration Unit, in connection with Rule 6, Gas Allocation.

Rule 5 establishes a standard gas proration unit of 158 to 162 contiguous surface acres. Provision is also made for special pool rules under which proration units are of a different size and may be established.

Section (c) of Rule 6 provides however, that more than one standard proration unit may be assigned to a gas well provided that not more than 640 acres are so assigned and provided that the other requirements are met.

As written, the rule would apparently leave to the discretion of the operator whether such additional acreage should be assigned to a well. Also as written, there is no requirement that the wells to which additional acreage is assigned should be shown to be capable of draining such additional acreage. We feel that this rule could result in grave inequity. An operator with a single 160 acre tract could be off-set or surrounded by one or more single ownership units

of 640 acres, such operator would have a single unit allowable. The off-set operators, on the other hand, could each assign four standard units to their wells and could each obtain a proportionately increased allowable and could do this even without a showing that their wells were draining the acreage assigned such wells.

It is our thought that in the absence of field rules establishing larger units, it would be better to say that the standard 160 acre units for allowable purposes unless after a hearing, the Commission permitted the assignment of additional acreage and allowable because of circumstances existing in that particular case.

We realize that there may be conditions under which such additional acreage could be assigned to other wells but feel that it should be permitted only after hearing and not solely at the discretion of an operator.

MR. SPURRIER: Animone else?

MR. DIPPLE: If the Commission, please, it has been called to my attention that I apparently recommended the deletion of the word "and" at the wrong point in sub-division (a) of Rule 2.

I was told that I recommended the elimination of the word "and" at the end of that first paragraph there under sub-division (a) just before the numbered paragraph 1. I did not so intend and the word "and" that I intended to recommend elimination of appears just before "d" in parenthesis in the third line of the first paragraph under sub-division (a). In other words, I intended to recommend the changing of the word "sections" in line 2 to read "section" and eliminate (a),

(b), (b) and so that it would read: "to the requirements of State-wide Rule 104, Section (d). . . "

MR. SPURRIER: We will take a five minute recess.

(FIVE MINUTE RECESS)

MR. SPURRIER: Is there anyone else to be heard?

MR. CHRISTIE: R. S. Christie of the Amerada Petroleum Company. We are in favor of gas proration in the state of New Mexico and urge the adoption of the proposed rules as soon as possible.

The only rule that we are not particularly in favor of would be Rule 3 - that's oil production from a defined gas pool. We don't believe that that's necessary and we suggest that that be deleted.

MR. SPURRIER: Mr. Smith?

MR. SMITH: Stanolind Oil and Gas Company would like to make the following statement. We concur in Mr. Campbell's statement that the statutes do not authorize the prorationing of gas on anything but a pool-wide basis and we doubt seriously the legality of any such order that might affect prorationing throughout an entire area.

I should like to suggest, however, that the committee report be adopted by the Commission for use as stand-by rules and that individual applications for prorationing in a particular pool would result in those rules being brought forward, at which time the individual operating problem or marketing problems in that particular pool would be subject to review to determine what variations or deviations should be made in the suggested prorationing rules.

MR. SPURRIER: Anyone else? Mr. Foster?

JUDGE FOSTER: Phillips Petroleum Company is, of course, in favor of gas proration and we feel that the time has really come for that to be put into effect, in these pools.

As far as these rules are concerned, I don't suppose that any committee or even the Commission could ever write a set of rules that would suit everybody. Now, there are some things in here that don't suit Bhillips Petroleum Company. But we are willing to go along of them as they are written. We sat in as a member of that committee and we voted against some of these rules and we were out-voted on them. We are willing to accept them as they are written in order to get proration started.

Now, I know they're not perfect and I know that you'll want to change them in a good many respects as you go along. I think you are going to find that this is going to be sort of a long, tedious process in getting the gas prorated in this state. I'd say that it would take you five to ten years to get this thing to running smoothly. That's been our experience other places and I think we will have the same experience here.

I think you should adopt separate pool rules and - - or adopt rules separately for each pool and it would be my suggestion that when you decide that proration is necessary in any particular pool, that you start off with these rules for that pool and then as the problems develop, you can have your hearings and determine what particular changes should be made in these rules as applied to any particular

pool. You are just going to have to do it by a trial and error method and that's the way all the other rules that I know anything about have finally been rewolved. Just try this one out. There will be matters of interpretation. People won't agree on what a particular sentence means or what it's application is and the Commission will have to make those interpretations.

These represent - - these rules that have been presented here to the Commission represent a good many hours of hard work. I think the committee got down and really worked and took everything in a pretty good spirit. As I say, there are lots of them that aren't satisfied with everything in here, but you attempt to get everybody satisfied before you put a set of rules into effect, you'll never get prorationing to working in this state.

MR. SPURRIER: Anyone else?

MR. COOPER: J. D. Cooper with Skelly. At last month's meeting, Skelly brought up two or three changes which we thought would be desirable in this group of rules. One of which was just brought out by Mr. Christie of Amerada, regarding Rule 3.

The other brought up by Humble on sub-paragraph 4, section 3(c) of Rule 4 - ah, 6 - the rewording there but there is one furthere that has not been discussed in Rule 9.

Skelly would like to provide that the gas used on the lease for any purpose other than gas lift or drilling fuel would not be charged against the well's allowable. Now, that can be done by inserting a clause at the beginning of the last sentence of Rule 9

Case 245



# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

P. O. Box 997 Roswell, New Mexico

December 19, 1950

Mr. R. R. Spurrier Secretary-Director New Mexico Oil Conservation Commission Box 871 Santa Fe, New Mexico

Dear Mr. Spurrier:

Reference is made to Case 245 in the matter of the motion by the Oil Conservation Oil Commission to designate, name, define and extend or delete the gas pools in Lea, Eddy and Chaves Counties, New Mexico. By a notice to all gas producers dated December 1, 1950, you advised that Case 245 will involve the naming of gas pools in Tps. 24, 25 and 26 S., Rs. 36, 37 and 38 E., N.M.P.M., Lea County, New Mexico.

I am aware of the efforts being made by operators of federal oil and gas leases within the above-described area in Lea County, New Mexico to formulate opinions with respect to the location and extent of gas pools in that area, and that the information compiled to date is insufficient for the formulation of definite opinions or recommendations to the Commission for the naming and defining of gas pools. In view of the federal interest involved, this office desires to review the findings of the operators prior to their final recommendations to the Commission. This action has not yet been taken.

Accordingly, it is respectfully requested that the hearing on Case 245 be continued to a later date so that the recommendations of federal lease operators may be properly and completely considered prior to final action of the Oil Conservation Commission.

Very truly yours,

Foster Morrell

Oil and Gas Supervisor Southwestern Region

#### NEW MEXICO OIL CONSERVATION COMMISSION

P. O. Box 871 Santa Fe, New Mexico

December 1, 1950

TO ALL GAS PRODUCERS:

Res Townships 24, 25, 26 South Ranges 36, 37, 38 East, N.M.P.M., Lea County, New Mexico

### Gentlemen:

Case 245, recently advertised to be heard on December 22, 1950, will involve the naming of gas pools in the above designated townships.

Interested operators are requested to be present at the hearing on Docember 22, to make recommendations to the Commission so that the Commission may determine the vertical and horizontal extent of the gas pools in the area.

If insufficient information is available on December 22, the hearing will be continued to a later date so that this material may be properly and completely

Very truly yours,

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

R. R. Spurrier

Secretary Director

RRS: bw

Case 245

# DIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

June 15, 1951

Mr. H. F. Forbes, Area Petroleum Engineer of Production Continental Oil Company 1710 Fair Building Fort Worth 2, Texas

Dear Henry:

I appreciate the exhibit that you forwarded for class 245 das Pool Delineation.

Phanks very much for your thoughtfulness.

Very truly yours,

R. R. SPURRIER, Secretary-Director

RRS/ir



# CONTINENTAL OIL COMPANY

1710 Fair Building Fort Worth 2, Texas May 29, 1951

Mr. R. R. Spurrier New Mexico Oil Conservation Commission Santa Fe, New Mexico

Dear Mr. Spurrier:

We understand that you have misplaced one of the exhibits Continental Oil Company presented in connection with Case 245, Gas Pool Delineation, and we are, therefore, attaching a replacement.

Yours very truly,

N. M. Porbes

H. F. FORBES Area Petroleum Engineer of Production Fort Worth Area

HFF-LP Encl

# OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

June 8, 1951

Mr. Raymond Lamb Wilson Oil Company Carper Building Artesia, New Mexico

Dear Raymond:

I have a note on my desk asking that I supply you with the requirements for using gas from a gas well, known as the Charlotte No. 6.

Details in regard to the disposition of this gas are quite meager and I would therefore like to have you give me in writing, where you propose to dispose of this gas and for what purpose. It would be well that we have on our records the pay zone and its relation to the oil pay sone on the Wilson pool, and any other details that you feel are pertinent to the question.

I am sure something reasonable can be worked out after we have received the above requested information.

Regards to you and your family.

Yours very truly,

ELVIS A. UTZ, Gas Engineer

EAU/ir



# SHELL OIL COMPANY

THIS LETTER IS FROM OUR

Box 1457 Hoobs, New Mexico

June 1, 1951

June 1, 1

Graham Subject: Case No. 245

Aleador of Subject: Case No. 245

New Mexico Oil Conservation Commission Santa Fe, New Mexico

Gentlemen:

In re Case No. 245 which involves designation of gas pools in Lea, Eddy, and Chaves Counties, the Shell Oil Company is now prepared to present data concerning the Byers Gas Pool producing from about 3650 to 3725 feet in the Queen Formation and located in Sections 29, 30, 31, and 32, T-18-S, R-18-E, Loa County, New Mexico.

Would you please provide for receiving these data on the next docket of hearings which you or epare.

Yours very truly,

C. R. Bickel Division Manager

OR CONSERVATION COMMISSION SANTA FE, NEW MEXICO.

FORM 829 2-49

## STANOLIND OIL AND GAS COMPANY

FAIR BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD DIVISION PRODUCTION SUPERINTENDENT

May 21, 1951

File:

IHB-5425-174

Subject: Designation of Lea County Gas Pools

Case 2 45

Mr. R. R. Spurrier Secretary - Director Oil Conservation Commission of New Mexico Santa Fe, New Mexico

Dear Sir:

This is to advise that we are preparing data for a hearing to designate as a gas pool the reservoir being produced from our State "E"-17 Well, located in Section 1, T-17-S, R-36-E. This well is currently furnishing gas for gas lift purposes for wells in the Lovington Pool.

It is not desired that a hearing be set at this time, in this regard, since it can not be determined exactly when our study will be completed.

The above is furnished for your information in order that you may be advised of our plans in this matter.

C. J. Belford

LHB: hh



#### SOUTHERN UNION GAS GOMPANY BURT BUILDING DALIAS 1, TEXAS

May 9, 1951

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

#### Gentlemen:

We have been asked by Mr. Glenn Staley, Director, New Mexico Oil and Gas Engineering Committee, Hobbs, New Mexico, to give you our recommendations for designation of gas fields and their boundaries, in the Red Lake Area, Eddy County, New Mexico.

There are two producing gas pools in this area, to my knowledge, each now being operated by Southern Union Gas Company, as storage reservoirs.

Our recommendation for names and areas to be included in the boundaries of these two fields is as follows:

Vandagriff Field

Township 17 South, Range 28 East, N.M.P.M. Section 5,

SEt, and St of NEt, and Et of SWt, and SEt of NWt. Section

SEt, and NWt, and NWt of SWt. Section 8, Nt of NEt.

4, SWt, and NWt, and NWt of SWt.

The producing sand in this field is found at approximately 1350° to 1370°.

Township 17 South, Range 28 East, N.M.P.M., Section 3, Swit, and Will of SEt. Section 4, SEt. Section 9, NEt, and NEt of SEt. Section 10, NW1, and Will of NEt, and Net of SWit. Keyos Field

The producing sand in this field is found at approximately 1390i to 1417'.

Yours very truly, 5. H. Newman

E. H. Newman Engineer

EHN: ig Mexico Oil & Gas Engineering Committee Drawer Eye, Hobbs, New Mexico

### DIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

May 7, 1951

Mr. N. A. Schellhardt El Peso Natural Cas Co. 1901 National Standard Bldg. HOUSTON 2 - TEXAS

Door Hr. Schollhardts

I have at hand your letter of May I inquiring about the Hamble and Amorada exhibits on the Elimetry and Manuscript gas peols presented in reference to Gase 245. These exhibits were taken to Allangarque by the reporter, and we have written r. Greecem to have these photostated for you in Albaquerque and hilled and mailed to you directly from these, as I believe it would save considerable time. Apparently Mr. Greecem has not had this done yet, and I will therefore check with him when I am in Albaquerque today, in an effort to get these to you as soon as possible. It is my understanding that when you have these, this will be all that you desire in the way of exhibits in this case.

Year truly yours,

Blvis A. Uts

# El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Texas

ADDRESS REPLY TO.
1901 NATIONAL STANDARD BLDG.
HOUSTON 2, TEXAS

May 1, 1951

Mr. R. R. Spurrier Director, Oil Conservation Commission Box 871 Santa Fe, New Mexico

Dear Mr. Spurrier:

18

In compliance with a request made to Mr. Utz several days ago, we received copies of several of the exhibits presented during the hearing held by the Commission on April 24 in Santa Fe on Case 245.

The material was mailed to us by Read and Company of Santa Fe with invoice No. 01368 dated 4/25/51.

The exhibits that we wished to obtain included all of those presented during the recent hearing on Case 245 except those presented by Continental representatives. The copies received included, I believe, all of the exhibits desired except those presented by the Humble and the Amerada representatives, respectively, on the Blinebry and Monument-McKee gas pools.

I shall mail a copy of this letter to Read and Company in order that the company will be informed regarding the material previously omitted, when authorized by your office to forward the remainder of the desired exhibits to us.

I wish to express our appreciation for your cooperation and for the assistance of Mr. Utz in obtaining the material requested.

Very truly yours,

M. A. Schellhardt

MAS:h

cc: Read and Company 123 East Water Street Santa Fe, New Mexico

OIL CONSERVATION COUNT SCION
SOUTH FOR COUNTY TO THE MELLING THE M

(Hossel)

April 30, 1951

Stanolind Oil and Gas Company Engineering Department Box F Hobbs, New Mexico

#### Gentlemen:

Pollowing the Oil Conservation Commission's request to designate gas pools, the following committee is appointed to recommend to the Oil Conservation Commission peel boundaries and producing horizons in the Levington Poel area:

Standlind Gil & Gas Company - Chairman Magnelia Petroleum Company

When this data has been compiled, please send a copy of the report to the New Mexico Oil Conservation Commission, Box 871, Santa Fe, and a copy to this office.

Yours very truly,

Olem Staley - Director

CEN/THE

es: Magnolia Petroleum Company



Shell Oil Company Engineering Department New 1457 Hebbe, New Mexico

#### Contlemen:

At the present time there are a number of wells producing Dry Ges in the Hebbs area.

Pollering the Oil Conservation Consission's request to designate one peals, the following consistee is appointed to recommend to the Oil Conservation Consission poel boundaries and producing horizons in the Robbs area:

Shell Oil Company - Chairman Gulf Oil Corporation Suble Oil and Refining Company Standard Oil Company of Temas The Temas Company

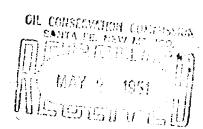
When this data has been compiled, please send a copy of the report to the New Montes Oil Conservation Commission, Box 871, Centa Pe, and a copy to this office.

Yours very truly,

Olem Staley - Director

CR/m

Humble Oil & Refining Company Standard Oil Company of Tenne The Tenne Company



#### April 30, 1951

Mr. H. B. Lamb Mileon Oil Company Bex 1436 Artesia, New Mexico

Door Raymond:

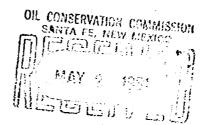
Fellowing the Cil Conservation Commission's request to designate gas peols, your company is appointed as a committee to recommend to the Cil Conservation Commission pool boundaries and producing burisons in the Milson area.

When this data has been compiled, please send a copy of the report to the New Mexico Oil Conservation Commission, Box 871, Santa Fe, and a copy to this office.

Yours very truly,

Olem Staley

CH/mm



April 30, 1951

Southern Union Gas Company 1104 Burt Building Dallas, Texas

### Contlemen:

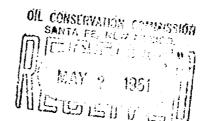
Pollowing the Oil Conservation Commission Request to designate gas pools, your company is appointed as a committee of one to recommend to the Oil Conservation Commission pool boundaries and producing horizons in the Red Lake area.

Meen this data has been compiled, please send a copy of the report to the New Mexico Oil Conservation Commission, Box 871, Senta Fe, New Mexico and a copy to this office.

Yours very truly,

Glam Staley

CEI/see



Baffale Oil Company Engineering Department 203 Carper Bailding Artesia, New Mexico

#### Gentlemen:

Pollowing the Oil Compensation Commission's request to designate gas pools, the following committee is appointed to recommend to the Oil Compensation Commission pool boundaries and producing horizons in the Majamar Pool area:

Buffale Oil Company - Chairman Kommon Oil Company

When this data has been compiled, please send a copy of the report to the New Mexico Gil Conservation Commission in Santa Pe, and a copy to this office.

Yours very truly,

Olem Staley - Director

CH/DE

ec: Kennee Off Company



#### DOCKET OIL CONSERVATION COMMISSION

Resume of applications to be heard April 24, 1951 at 10:00 a.m. in Santa Fe, New Mexico, in the Council Chamber of the City Hall

#### Allowable

- Case 265 This case is an application by Byrd-Frost, Inc. for exception to the spacing rules for a well to be located 567' from the S/L and 1527' from the W/L 24-28N-8W, San Juan County, for topographic conditions.
- Case 266 This case involves the nomenclature of now existing or new pools for McAlester Fuel Company, Simpson A-1-B, 26-15S-37E; Weier Drilling Company, Foster 6-G and Foster 5-H, 17-17S-31E; Texas Co., "AN" No. 1, SE SW 22-14S-33E; Allan Hargrave, Bradley No. 1, NWNW 24-24S-26E; and Paul C. Teas, Dinnin #1, 24-20S-33E.
- Case 267 This case has been called upon the Commission's motion to show cause why wells located in the NW SW 23-25S-8E, drilled by Frank and Elmer Bechtel, should not be declarred abandoned and ordered plugged.
  - Case 202 This case was continued to April 24 and involves the allowable of the Brunson pool, which has been reduced to 90 barrels per day per well for a period of six months and then extended to April 24 for additional studies.
  - Case 231 This case has been continued twice and involves Rule 404, which in turn, is concerned with natural gas utilization, especially as it is applied to gas lift in Lea County.
  - Case 247 This case involves the Gallegos Canyon Unit Agreement which has been continued twice to allow the operators to secure necessary signatures.
- Case 249 The application of Amerada Petroleum Corp. for a temporary order establishing proration units and uniform spacing of wells for the Bagley-Siluro-Devonian pool, comprising SE/4 sec. 34, S/2 sec. 35, SW/4 sec. 36, T.11 S, R. 33 E; and W/2 sec. 1, all sec. 2, E/2 sec. 3, E/2 sec. 10, all sec. 11, W/2 sec. 12, T.12 S, R.33 E continued to April 24.
- Case 245 A case which has been continued twice for lack of information to designate the gas pools of Lea, Eddy, and Chaves Counties.
- Case 251 The application of Amerada Petroleum Corp. for the pooling of separately owned royalty or mineral interest in the E/2 NE/4 sec. 3, T.12 S, 33 E, within a proposed proration unit in the Bagley-Siluro-Devonian pool, Lea County, New Mexico.

Case 268 - Boyd-Plemons unorthodox location Continents 51 83 27-17-29 OIL CONSERVATION COMMISSION

Case 271 - H J Cox plugging well in 11-19N-21E, Mora County

Case 245

Artesia, New Mexico
April 13, 1951

Mr. R. R. Spurrier Director Oil Conservation Commission Box 871 Santa Fe, New Mexico

Dear Sir:

1 (1)

As you know various operators in Lea County are preparing information on the gas pools and it is understood that these reports will be furnished the Conservation Commission for consideration at the hearing to be held April 24, 1951. Mr. Glenn Staley has suggested that the Kewanee Oil Company and Buffalo Oil Company cooperate in preparing a report ( iich would furnish data on the gas pool which is referred to in the attached report as the Maljamar Queen Gas Pool. You will find attached hereto this report and we trust that this information will furnish all the data required for the naming of gas pools and defining boundaries.

Respectfully yours,

KEWANEE OIL COMPANY

By Ramorice

BUFFALO OIL COMPANY

18 Galph L. May

#### MALJAMAR QUEEN GAS POOL

This pool consists of two wells, the Kewanee State 0 #4, located in the center of SE1NW1 of Sec. 16, T-17-S, R-32-E; and Buffalo Baish B #1, located in the center of NE1NW1 of Sec. 22, T-17-S, R-32-E. The gas is being produced from the Red Sand zone which is found in the top 20' of the Queen formation. The gas is a dry, low B.T.U. content of approximately 500-600 B.T.U. None of this gas is sold commercially, being used only for fuel for lease purposes. There are no other gas wells completed in the immediate area. Following are pertinent data on each well.

#### KEWANEE OIL CO. - STATE O #4:

This was completed Dec. 12, 1941. It was drilled to a total Depth of 3760 and plugged back to 3160. The interval from 3140-60 was shot with 60 qts. of nitroglycerine. 7" 0.D. casing was set at 3493 with 100 sacks of cement. The initial production was 30,000 MCF per day. The present casing pressure is approximately 430 psi.

#### BUFFALO OIL CO. - BAISH B #1:

The well was completed Dec. 11, 1938. It was drilled to a total depth of 41371, but was found dry in the Maljamar pay. It was subsequently plugged back to 31301. 7" O.D. casing was cemented at 36001 with 425 sacks. The pipe was shot with nitroglycerine from 3100-301, using 120 qts. Initially, the well produced at the rate of 1-1/2 to 2 million cubic feet per day. Presently, the flowing casing pressure is 430 psi. and it is estimated the well will not produce more than 400 MCF per day.

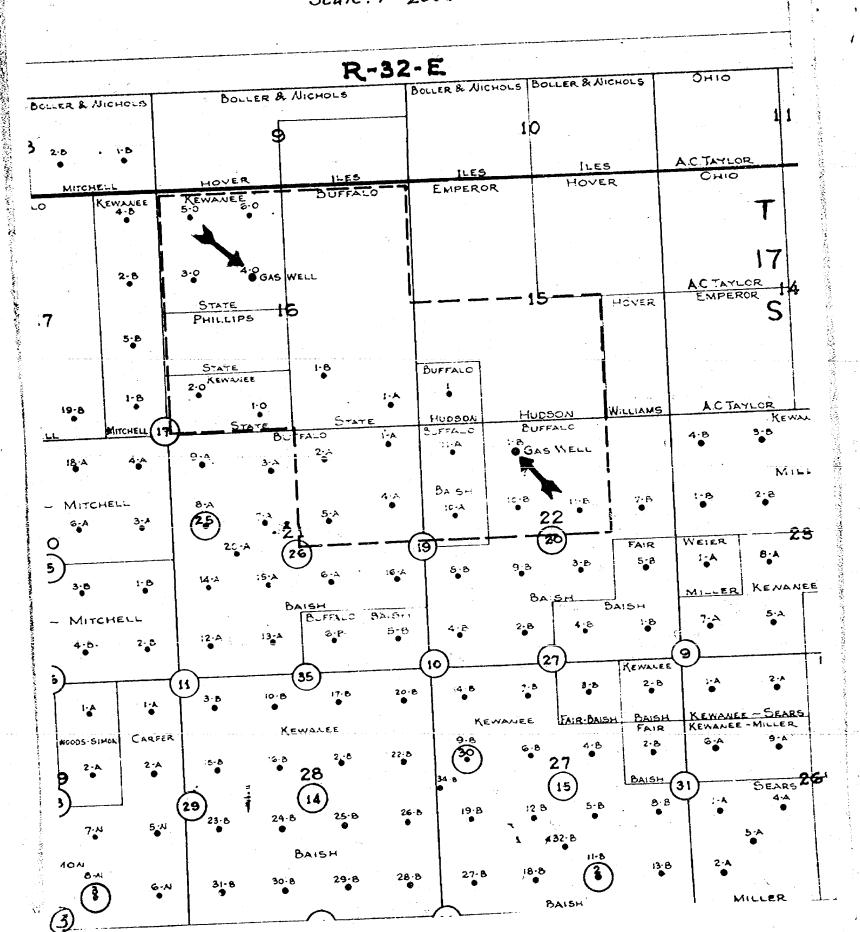
#### PRODUCTION AREA

121

Attached is a map of a part of the Maljamar Field, showing the estimated productive area of this gas pool. This area comprises all of Sec. 16, the  $SW_2$  and  $W_2$  of  $SE_2$  of Sec. 15, the  $NE_2$  of Sec. 21, the  $NW_2$  and  $W_2$  of the  $NE_2$  of Sec. 22, T-17-S, R-32-E.

In view of the presently small productivity, and the low B.T.U. content, it is believed that little or no further exploitation of this reservoir is anticipated.

## MALJAMAR-QUEEN GAS POOL Lea Co., N. Mex. Scale: 1"= 2000'



Caso

April 25, 1951

Mr. R. R. Grasson Dam 1302 Albaysonyus, Nov Memiso

Door Goos

Mr. M. A. Shellhardt of RI Page Natural Gas Go, is in meet of copies of statements of Humble and Galf regarding Gase 245 as discussed in restorday's hearing. I balieve that he meets those at case, and rather than wit for the tennescript to be completed, he ages that year copy he photostated and that he he supplied with the magnitive. If you can do this at case, and have invedes pant to Mr. Shellhardt (address below) we will be most grateful.

Yory bruly years,

Elvis A. Vts

EAU : mr

ec: Mr. M. A. Stellhardt Elifere Esteral Cas Co. 1000 Matteral Standard Elde Indirent Brian

The



MAR 8 195

## CONTINENTAL OIL COMPANY

Hobbs, New Mexico March 5, 1951

New Mexico Cil Conservation Commission - 20 Act 30 Box 1545
Hobbs, New Mexico

Gentlemen:

This letter concerns the hearing scheduled for the 20th day of March 1951, regarding the fixing of pool boundaries and the establishment of governing rules and regulations for the dry gas productive pools of New Mexico.

Continental Oil Company, at the December 22, 1950, hearing represented to the Commission that it was conducting an extensive study of the shallow dry gas productive areas of Lea County and requested that the hearing regarding this matter be postponed for 90 days to allow time for completion of the study and preparation of evidence and recommendations for presentation to the Commission.

This request was granted and the hearing date was set for March 20, 1951.

It has now become apparent that, due to unforseen difficulties, Continental Oil Company will not have its evidence and recommendations in presentable form by the March 20th hearing and it is therefore respectfully requested that the hearing be postponed until the April 24th hearing.

N.M. Cil Conservation Commission Page 2

Representatives of Continental Oil Company will be present at the March 20th hearing, and if the Commission so desires, will be pleased to make a progress report at that time.

E. L. SHAFER
Supt., New Mexico District
West Texas-New Mexico Division
Production Department

#### ELS-MPN

Secretary and

CC: Glenn Staley M.M. Oil & Gas Engineering Committee Hobbs, N.M.

from brokes Continent to many
orders Continental Oil Company
Hobbs, New Mex

Hobbs, New Mexico March 5, 1951

New Mexico Oil Conservation Commission Box 1545 Hobbs, New Mexico

Gentlemen:

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N.M. Oil Conservation Commission Page 2

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R. L. SHAFER
Supt., New Mexico District
West Texas-New Mexico Division
Production Department

#### els-ww

CC: Glenn Staley N.M. Oil & Gas Engineering Committee Hobbs, N.M.

January 25, 1951

Case 2 45

Mr. Glenn Staley
New Mexico Oil & Gas Engineering Committee
Hobbs, New Mexico

Dear Glenn:

Under separate cover you will receive a map and tabulation of proposed gas pools in southeastern New Mexico.

The Commission respectfully requests the assistance of the Engineering Committee in the preparation of material for the determining of the gas reservoir areas for presentation at the hearings scheduled March 20, 1951.

Very truly yours,

RRS:bpw

Secretary - Director

# NEW MEXICO OIL CONSERVATION COMMISSION

GOVERNOR THOMAS J. MABRY
CHAIRMAN
LAND COMMISSIONER GUY SHEPARD
MEMBAR
STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR



29 11

P. O. BOX 871 SANTA FE, NEW MEXICO

January 8, 1951

The following material prepared by Mr. R. S. Dewey for Case 245 has been forwarded to Glenn Staley:

- Outline map of gas producing areas, T.17 S T.26 S,
   R.35 E R.38 E showing dry gas productive wells in
   Lea County, together with index to producing formations.
- 2. List of gas wells, location, reservoir and operators in the following pools:

Hobbs
Hobbs
Hobbs
Bowers
Monument Eunice
So Eunice, Langlie
Mattix, Penrose-Skelly
Arrowhead, Cooper-Jal
Monuent, Eunice
Monument

Monument-McKee
Drinkard
Drinkard, Paddock
Blinebry, Skelly-Penrose
Langlie-Mattix
Justis
Rhodes, Eaves
Not on Map:
Wilson
Lovington
Maljamar
Vacuum
Hightower PermoPennsylvanian

Hedrand

New Mexico
OIL CONSERVATION COMMISSION

205 CARPER BUILDING
Artesia, New Mexico
Apr. 6, 1953

OIL CONSERVATION COMMISSION
SANTA FE. NEW MEXICO.

APR 8 1953

Mr. W. B. Macey, Oil Conservation Commission, Box 871, Santa Fe, New Mexico

RE: Page 9 of Order No. R-264
Denomination of the Eumont
Gas Pool

Dear Bill:

GOVERNOR EDWIN L. MECHEM
CHAIRMAN
LAND COMMISSIONER E.S.WALKER
MEMBER
STATE GEOLOGIST R.R.SPURRIER
SECRETARY AND DIRECTOR

Our order recieved in this office reads as follows: Township 19S., Range 38E., SE/4 Sec. 13, etc.

In plotting my pool map, I could not make this fit. I called Stanley J. Stanley and their order reads 19S., 36E which fits in OK. I checked with Ralph Gray and their order is the same as ours.

Perhaps this has already been called to your attention, but is not, I thought you would probably want to send out a correction.

Very truly yours,

I. A. HANSON

LAH/lp

1

#### CORRECTION

#### Reference Case 472:

Through typographical error, the copies of the order issued in case 472 (Richardson and Bass - James Ranch Unit Agreement) were sent out showing the wrong order number.

The original signed order in Case 472 properly indicated that Order R-279 was issued to cover. However, the mimeographed version as distributed showed Order R-297. We ask that you please change your order numbers to reflect this correction.

Order R-297, issued in its proper succession to cover Case 308, is currently being distributed.

Reference Sase 245:

Please refer to Order R-264 issued in this case which delineated gas pools of southeastern New Mexico.

On Page 9 of the distributed order, Paragraph III (1), in designating the Eumont Gas Pool, reads:

Township 19 South, Range 38 East, NMPM

when it should read:

Township 19 South, Range 36 East, NMPM

We ask that you please change your reference copies to show this correction.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

4-13-1953; Santa Fe, New Mexico

### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 245 ORDER No. R-264

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER DESIGNATING, NAMING, DEFINING AND EXTENDING THE GAS POOLS OF LEA, EDDY, AND CHAVES COUNTIES, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 10 o'clock a.m. on December 22, 1950, March 20, 1951, April 24, 1951, May 23, 1951, and July 24, 1951, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on the 17 day of February, 1953, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received at said hearings, and being fully advised in the premises,

#### FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That under the authority of Rule 601 of Order No. 850, effective January 1, 1950, the Commission instituted proceedings upon its own motion to name, classify and define the limits of all known and producing gas pools in the Counties of Lea, Eddy and Chaves, New Mexico.
- (3) That during the years 1950 and 1951, the Commission did cause exhaustive studies to be made of all then known southeastern New Mexico gas reserves, and at the several hearings in this cause took voluminous testimony of production engineers, geologists and other experts to the end that the producing gas pools in the area aforesaid should be named, defined and properly classified as such in the interests of conservation, prevention of waste, and the protection of correlative rights.
- (4) That the following definitions and classifications of gas pools in Eddy, Lea and Chaves Counties, New Mexico will result in a more efficient administration of the conservation laws of the State of New Mexico.
- (a) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Jalco Gas Pool, with the following description:

Township 21 South, Range 35 East, NMPM E/2 Sec. 12; E/2 Sec. 13; E/2 Sec. 24.

Township 21 South, Range 36 East, NMPM W/2 Sec. 7; W/2 Sec. 18; W/2 and SE/4 Sec. 19; SW/4 Sec. 20; All Secs. 29 thru 32 incl.

Township 22 South, Range 36 East, NMPM All Secs. 5 thru 8 incl.; All Sec. 17; N/2 and SE/4 Sec. 18; NE/4 Sec. 19; All Sec. 20; NW/4 Sec. 28; All Sec. 29 and 32; SW/4 Sec. 33.

Township 23 South, Range 36 East, NMPM
All Sec. 4; N/2 and SE/4 Sec. 5; E/2 Sec. 8;
All Sec. 9; All Sec. 16; NE/4 Sec. 17; All Sec.
21; W/2 Sec. 27; E/2 Sec. 28; E/2 Sec. 33;
W/2 and SE/4 Sec. 34.

Township 24 South, Range 36 East, NMPM All Sec. 3; E/2 Sec. 4; NE/4 Sec. 9; N/2 and SE/4 Sec. 10; W/2 Sec. 11; All Sec. 14; E/2 Sec. 15; All Secs. 22 and 23; S/2 Sec. 25; All Sec. 26; E/2 Sec. 27; E/2 Sec. 34; All Secs. 35 and 36.

Township 24 South, Range 37 East, NMPM S/2 Sec. 31.

Township 25 South, Range 36 East, NMPM All Sec. 1; N/2 Sec. 2; All Secs. 12, 13, 24 and 25; NE/4 Sec. 36.

Township 25 South, Range 37 East, NMPM All Secs. 6 and 7; SW/4 Sec. 8; S/2 and NW/4 Sec. 16; All Secs. 17 thru 21 incl.; All Secs. 28 thru 33 incl.; W/2 Sec. 34.

Township 26 South, Range 37 East, NMPM W/2 Sec. 3; All Secs. 4 thru 9 Incl.; W/2 Sec. 10; All Secs. 18 and 19; W/2 Sec. 29; E/2 and NW/4 Sec. 30; NE/4 Sec. 31; NW/4 Sec. 32.

(b) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Langmat Gas Pool, with the following description:

Township 21 South, Range 36 East, NMPM W/2 Sec. 28; All Secs. 33 and 34.

Township 22 South, Range 36 East, NMPM All Secs. 3, 4, 9 and 10; SW/4 Sec. 11; W/2 Sec. 14; All Secs. 15 and 16; All Secs. 21, 22 and 23; All Secs. 25, 26, 27; S/2 and NE/4 Sec. 28; N/2 and SE/4 Sec. 33; All Secs. 34, 35 and 36.

#### Case No. 245 - Order No. R-264

Township 22 South, Range 37 East, NMPM SW/4 Sec. 31

Township 23 South, Range 36 East, NMPM All Secs. 1, 2 and 3; All Secs. 10 thru 15 incl.; All Secs. 22 thru 26 incl; E/2 Sec. 27; NE/4 Sec. 34; All Secs. 35 and 36.

Township 23 South, Range 37 East, NMPM All Secs. 6, 7, 18 and 19; W/2 Sec. 29; All Secs. 30 and 31; W/2 Sec. 32.

Township 24 South, Range 36 East, NMPM All Secs. 1 and 2; E/2 Sec. 11; All Secs. 12, 13, 24; N/2 Sec.25.

Township 24 South, Range 37 East, NMPM All Secs. 5 thru 8 incl.; W/2 Sec. 9; W/2 Sec. 16; All Sec. 17 thru 21 incl.; All Secs. 28, 29 and 30; N/2 Sec. 31; All Secs. 32 and 33; SW/4 Sec. 34.

Township 25 South, Range 37 East, NMPM W/2 Sec. 3; All Secs. 4 and 5; N/2 and SE/4 Sec. 8; All Sec. 9; W/2 and SE/4 Sec. 10; All Sec. 15; NE/4 Sec. 16; All Sec. 22; N/2 Sec. 27.

(c) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Eumon's Gas Pool, with the following description:

Township 19 South, Range 36 East, NMPM SE/4 Sec. 13; S/2 Sec. 23; S/2 and NE/4 Sec. 24; All Secs. 25 and 26; E/2 Sec. 27; E/2 Sec. 34; All Secs. 35 and 36.

Township 19 South, Range 37 East, NMPM SE/4 Sec. 7; SW/4 Sec. 8; All Secs. 17 thru 20 incl.; W/2 Sec. 21; W/2 Sec. 27; All Secs. 28 thru 34 incl.

Township 20 South, Range 36 East, NMPM All Secs. 1 and 2; E/2 Sec. 3; E/2 Sec. 10; All Secs. 11 thru 14; incl.; NE/4 Sec. 15; N/2 and SE/4 Sec. 23; All Sec. 24 and 25; E/2 Sec. 26; E/2 Sec. 35; All Sec. 36.

Township 20 South, Range 37 East, NMPM All Secs. 3 thru 9; incl.; W/2 Sec. 10; W/2 Sec. 15; All Secs. 16 thru 20 incl.; W/2 and NE/4 Sec. 21; NW/4 Sec. 22; W/2 Sec. 29; All Secs. 30, 31 and 32; W/2 Sec. 33.

Township 21 South, Range 35 East, NMPM SE/4 and Lots 1, 2, 7, 8, 9, 10, 15 and 16 of Sec. 1.

Township 21 South, Range 36 East, NMPM SW/4 Sec. 1; S/2 and Lots 11, 12, 13 and 14 of Sec. 2; S/2 and Lots 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15 and 16 of Sec. 3; All Sec. 4, 5 and 6; E/2 Sec. 7; All Secs. 8 thru 11; incl.; W/2 Sec. 12; NW/4 Sec. 13; N/2 and SW/4 Sec. 14; All Secs. 15, 16 and 17; E/2 Sec. 18; NE/4 Sec. 19; N/2 and SE/4 Sec. 20; All Sec. 21; W/2 and NE/4 Sec. 22; E/2 Sec. 28.

(d) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Arrow Gas Pool, with the following description:

Township 21 South, Range 36 East, NMPM SE/4 Sec. 24; All Sec. 25; S/2 and NE/4 Sec. 35; All Sec. 36.

Township 22 South, Range 36 East, NMPM All Secs. 1 and 2; NE/4 Sec. 11; All Sec. 12; N/2 and SE/4 Sec. 13.

Township 22 South, Range 37 East, NMPM W/2 Sec. 7; All Sec. 18; N/2 Sec. 19.

(e) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Tubb Gas Pool, with the following description:

Township 21 South, Range 37 East, NMPM SW/4 and Lots 3, 4, 5, 6, 11, 12, 13 and 14 of Sec. 2; All of Sec. 3; SE/4 and Lots 1, 2, 7, 8, 9, 10, 15, and 16 of Sec. 4; E/2 Sec. 8; All Secs. 9 and 10; W/2 Sec. 11; W/2 Sec. 14; All Secs. 15, 16 and 17; E/2 Sec. 19; All Secs. 20 thru 23; incl.; W/2 Sec. 25; All Secs. 26 thru 29, incl.; E/2 Sec. 30; E/2 Sec. 31; All Sec. 32 thru 36 incl.

Township 22 South, Range 37 East, NMPM All Secs. 1 thru 5; incl.; E/2 Sec. 6; All Secs. 8 thru 16; incl.; E/2 Sec. 21; All Secs. 22, 23 and 24.

Township 22 South, Range 38 East, NMPM W/2 Sec. 6; W/2 Sec. 7; W/2 Sec. 18; W/2 Sec. 19.

(f) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Blinebry Gas Pool, with the following description:

Township 21 South, Range 37 East, NMPM S/2 Sec. 10; S/2 Sec. 11; All Secs. 14, 15, 22, 23, 26, 27, 34, 35 and 36.

Township 22 South, Range 37 East, NMPM All Secs. 1, 2, 3, 4, 10, 11, 12, 13, 14, 23, 24, and 25.

Township 22 South, Range 38 East, NMPM W/2 Sec. 6; W/2 Sec. 7; W/2 Sec. 18; All Secs. 19, 30 and 31.

(g) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Amanda Gas Pool, with the following description:

Township 22 South, Range 37 East, NMPM All Sec. 25.

(h) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Monument-McKee Gas Pool, with the following description:

Township 19 South, Range 36 East, NMPM All of Sec. 36.

Township 19 South, Range 37 East, NMPM All of Sec. 31.

Township 20 South, Range 36 East, NMPM All of Sec. 1.

Township 20 South, Range 37 East, NMPM All of Sec. 6.

(i) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Byers-Queen Gas Pool, with the following description:

Township 18 South, Range 38 East, NMPM All of Secs. 29, 30, 31, and 32.

(j) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Maljamar-Queen Gas Pool, with the following description:

Township 17 South, Range 32 East, NMPM SW/4 and W/2 SE/4 Sec. 15; All of Sec. 16; NE/4 Sec. 21; NW/4 and W/2 NE/4 Sec. 22.

(k) That a new pool should be created, classified as a gas pool, with its boundaries defined, and named the Vandagriff-Keyes Gas Pool, with the following description:

Township 17 South, Range 28 East, NMPM S/2 Sec. 3; S/2 and NW/4 Sec. 4; All of Sec. 5; NE/4 Sec. 8; All of Sec. 9 and 10.

#### IT IS THEREFORE ORDERED:

That the application of the Oil Conservation Commission, be and the same hereby is approved, as follows:

I. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Jalco Gas Pool and described as follows:

Township 21 South, Range 35 East, NMPM E/2 Sec. 12; E/2 Sec. 13; E/2 Sec. 24.

Townskip 21 South, Range 36 East, NMPM W/2 Sec. 7; W/2 Sec. 18; W/2 and SE/4 Sec. 19; SW/4 Sec. 20; All Secs. 29 thru 32 incl.

Township 22 South, Range 36 East, NMPM All Secs. 5 thru 8 incl.; All Sec. 17; N/2 and SE/4 Sec. 18; NE/4 Sec. 19; All Sec. 20; NW/4 Sec. 28; All Sec. 29 and 32; SW/4 Sec. 33

Township 23 South, Range 36 East, NMPM
All Sec. 4; N/2 and SE/4 Sec. 5; E/2 Sec. 8;
All Sec. 9; All Sec. 16; NE/4 Sec. 17; All Sec.
21; W/2 Sec. 27; E/2 Sec. 28; E/2 Sec. 33;
W/2 and SE/4 Sec. 34.

Township 24 South, Range 36 East, NMPM
All Sec. 3; E/2 Sec. 4; NE/4 Sec. 9; N/2 and
SE/4 Sec. 10; W/2 Sec. 11; All Sec. 14; E/2
Sec. 15; All Secs. 22 and 23; S/2 Sec. 25;
All Sec. 26; E/2 Sec. 27; E/2 Sec. 34; All
Secs. 35 and 36.

Township 24 South, Range 37 East, NMPM 5/2 Sec. 31.

Township 25 South, Range 36 East, NMPM All Sec. 1; N/2 Sec. 2; All Secs. 12, 13, 24 and 25; NE/4 Sec. 36.

Township 25 South, Range 37 East, NMPM All Secs. 6 and 7; SW/4 Sec. 8; S/2 and NW/4 Sec. 16; All Secs. 17 thru 21 incl.; All Secs. 28 thru 33 incl.; W/2 Sec. 34.

Township 26 South, Range 37 East, NMPM W/2 Sec. 3; All Secs. 4 thru 9 incl.; W/2 Sec. 10; All Secs. 18 and 19; W/2 Sec. 29; E/2 and NW/4 Sec. 30; NE/4 Sec. 31; NW/4 Sec. 32.

(2) That the producing formation in the Jalco Gas Pool shall extend from the top of the Yates formation to a point 100 feet above the base of the Seven Rivers formation.

#### Case No. 245 - Order No. R 264

II. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Langmat Gas Pool and described as follows:

Township 21 South, Range 36 East, NMPM W/2 Sec. 28; All Secs. 33 and 34.

Township 22 South, Range 36 East, NMPM All Secs. 3, 4, 9 and 10; SW/4 Sec. 11; W/2 Sec. 14; All Secs. 15 and 16; All Secs. 21, 22 and 23; All Secs. 25, 26, 27; S/2 and NE/4 Sec. 28; N/2 and SE/4 Sec. 33; All Secs. 34, 35 and 36.

Township 22 South, Range 37 East, NMPM SW/4 Sec. 31.

Township 23 South, Range 36 East, NMPM
All Secs. 1, 2 and 3; All Secs. 10 thru 15 incl.;
All Secs. 22 thru 26 incl.; E/2 Sec. 27; NE/4
Sec. 34; All Secs. 35 and 36.

Township 23 South, Range 37 East, NMPM All Secs. 6, 7, 18 and 19; W/2 Sec. 29; All Secs. 30 and 31; W/2 Sec. 32.

Township 24 South, Range 36 East, NMPM All Secs. 1 and 2; E/2 Sec. 11; All Secs. 12, 13, 24; N/2 Sec. 25.

Township 24 South, Range 37 East, NMPM All Secs. 5 thru 8 incl.; W/2 Sec. 9; W/2 Sec. 16; All Secs. 17 thru 21 incl.; All Secs. 28, 29 and 30; N/2 Sec. 31; All Secs. 32 and 33; SW/4 Sec. 34.

Township 25 South, Range 37 East, NMPM W/2 Sec. 3; All Secs. 4 and 5; N/2 and SE/4 Sec. 8; All Sec. 9; W/2 and SE/4 Sec. 10; All Sec. 15; NE/4 Sec. 16; All Sec. 22; N/2 Sec. 27.

- (2) That the producing formation in the Langmat Gas Pool shall extend from the top of the Yates formation to a point 100 feet above the base of the Seven Rivers formation.
- III (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Eumont Gas Pool and described as follows:

Township 19 South, Range 38 East, NMPM SE/4 Sec. 13; S/2 Sec. 23; S/2 and NE/4 Sec. 24; All Secs. 25 and 26; E/2 Sec. 27; E/2 Sec. 34; All Secs. 35 and 36.

Township 19 South, Range 37 East, NMPM SE/4 Sec. 7; SW/4 Sec. 8; All Secs. 17 thru 20 incl.; W/2 Sec. 21; W/2 Sec. 27; All Secs. 28 thru 34 incl.

Township 20 South, Range 36 East, NMPM All Secs. 1 and 2; E/2 Sec. 3; E/2 Sec. 10; All Secs. 11 thru 14 incl.; NE/4 Sec. 15; N/2 and SE/4 Sec. 23; All Sec. 24 and 25; E/2 Sec. 26; E/2 Sec. 35; All Sec. 36.

Township 20 South, Range 37 East, NMPM All Secs. 3 thru 9 incl.; W/2 Sec. 10; W/2 Sec. 15; All Secs. 16 thru 20 incl.; W/2 and NE/4 Sec. 21; NW/4 Sec. 22; W/2 Sec. 29; All Secs. 30, 31 and 32; W/2 Sec. 33.

Township 21 South, Range 35 East, NMPM SE/4 and Lots 1, 2, 7, 8, 9, 10, 15 and 16 of Sec. 1.

Township 21 South, Range 36 East, NMPM SW/4 Sec. 1; S/2 and Lots 11, 12, 13 and 14 of Sec. 2; S/2 and Lots 3, 4, 5,6,9,10,11,12, 13,14,15 and 16 of Sec. 3; All Sec. 4, 5 and 6; E/2 Sec. 7; All Secs. 8 thru 11; incl. W/2 Sec. 12; NW/4 Sec. 13; N/2 and SW/4 Sec. 14; All Secs. 15, 16 and 17; E/2 Sec. 18; NE/4 Sec. 19; N/2 and SE/4 Sec. 20; All Sec. 21; W/2 and NE/4 Sec. 22; E/2 Sec. 28.

- (2) That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to a point 200 feet below the top of the Queen formation thereby including all of the Seven Rivers formation.
- IV. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Arrow Gas Pool and described as follows:

Township 21 South, Range 36 East, NMPM SE/4 Sec. 24; All Sec. 25; S/2 and NE/4 Sec. 35; All Sec. 36.

Township 22 South, Range 36 East, NMPM All Secs. 1 and 2; NE/4 Sec. 11; All Sec. 12; N/2 and SE/4 Sec. 13.

Township 22 South, Range 37 East, NMPM W/2 Sec. 7; All Sec. 18; N/2 Sec. 19.

(2) That the producing formation in the Arrow Gas Pool shall extend from the top of the Yates formation to a point 200 feet below the top of the Queen formation, thereby including all of the Seven Rivers formation.

V. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Tubb Gas Pool and described as follows:

Township 21 South, Range 37 East, NMPM SW/4 and Lots 3, 4, 5, 6, 11, 12, 13 and 14 of Sec. 2; All of Sec. 3; SE/4 and Lots 1, 2, 7, 8, 9, 10, 15 and 16 of Sec. 4; E/2 Sec. 8; All Secs. 9 and 10; W/2 Sec. 11; W/2 Sec. 14; All Secs. 15, 16 and 17; E/2 Sec. 19; All Secs. 20 thru 23; incl.; W/2 Sec. 25; All Secs. 26 thru 29 incl.; E/2 Sec. 30; E/2 Sec. 31; AllSec. 32 thru 36 incl.

Township 22 South, Range 37 East, NMPM All Secs. 1 thru 5 incl.; E/2 Sec. 6; All Secs. 8 thru 16 incl.; E/2 Sec. 21; All Secs. 22, 23 and 24.

Township 22 South, Range 38 East, NMPM W/2 Sec. 6; W/2 Sec. 7; W/2 Sec. 18; W/2 Sec. 19.

- (2) That the producing formation in the Tubb Gas Pool shall extend from the top of the Tubb sand to a point 225 feet below the top of the Tubb sand.
- VI. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Blinebry Gas Pool and described as follows:

Township 21 South, Range 37 East, NMPM 5/2 Sec. 10; S/2 Sec. 11; All Secs. 14, 15, 22, 23, 26, 27, 34, 35 and 36.

Township 22 South, Range 37 East, NMPM All Secs. 1, 2, 3, 4, 10, 11, 12, 13, 14, 23, 24 and 25.

Township 22 South, Range 38 East, NMPM W/2 Sec. 6; W/2 Sec. 7; W/2 Sec. 18; All Secs. 19, 30 and 31.

- (2) That the producing formation in the Blinebry gas pool shall be all of the Blinebry formation.
- VII. (I) That a new pool be, and the same hereby is created, designated for gas production, denominated the Amanda Gas Pool and described as follows:

Township 22 South, Range 37 East, NMPM All Sec. 25.

(2) That the producing formation in the Amanda Gas Pool shall be known as the Amanda zone of lower Permian encountered at an approximate depth of 7050 feet.

#### Case No. 245 - Order No. R 264

VIII. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Monument-McKee Gas Pool and described as follows:

Township 19 South, Range 36 East, NMPM All of Sec. 36

Township 19 South, Range 37 East, NMPM All of Sec. 31

Township 20 South, Range 36 East, NMPM All of Sec. 1

Township 20 South, Range 3.7 East, NMPM All of Sec. 6

- (2) That the producing formation in the Monument-McKee Gas Pool shall be the McKee sand of the Simpson formation
- IX. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Byers-Queen Gas Pool and described as follows:

Township 18 South, Range 38 East, NMPM All of Secs. 29, 30, 31 and 32.

- (2) That the producing formation in the Byers-Queen Gas Pool shall be the Queen formation.
- X. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Maljamar-Queen Gas Pool and described as follows:

Township 17 South, Range 32 East, NMPM SW/4 and W/2 SE/4 Sec. 15; All of Sec. 16; NE/4 Sec. 21; NW/4 and W/2 NE/4 Sec. 22.

- (2) That the producing formation in the Maljamar-Queen Gas' Pool shall be the Queen formation.
- XI. (1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Vandagriff-Keyes Gas Pool and described as follows:

Township 17 South, Range 28 East, NMPM S/2 Sec. 3; S/2 and NW/4 Sec. 4; All of Sec. 5; NE/4 Sec. 8; All of Sec. 9 and 10.

(2) That the producing formation in the Vandagriff-Keyes Gas Pool shall be the Queen formation encountered at an approximate depth of 1400 feet.

#### IT IS FURTHER ORDERED:

#### Case No. 245-Order No. R 264

That due to the extensive development program being carried on by the oil and gas operators in the southeastern New Mexico, and the possible enlargement of existing pools or discovery of new pools, the Commission orders that further testimony in the matter be received at the regular monthly hearing of the Commission on April 16, 1953.

, STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

R. R. SPURRIER, Secretary

SEAL

# BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

March 20, 1951

#### Case 245:

This case, which involves the designation of the gas pools in Lea, Eddy, and Chaves Counties, was originally scheduled for the December hearing. At that time sufficient information was not available to enable the Commission to promulgate an order, and the case was therefore continued to the regular March hearing (March 20, 1951.).

CHAIRMAN SHEPARD: The next case is 245, will you read it, Mr. Graham please.

(Mr. Graham reads the notice of publication.)

MR. DAILEY: My name is Homer Dailey. We, at the December hearing in this case when it came up before, we asked for a continuance until this hearing. In the meantime, we found there was a little bit more work than what we bargained for, and would like to ask for another 30 days to get the rest of the data.

At the present time, we have made a series of some 12 or 14 cross sections and written data. The data is fairly well practically completed. However, it will take 30 days to get

these sections photostated or reproduced and put up in a presentable manner.

CHAIRMAN SHEPARD: If there is no objection this case will be continued until the next regular hearing, April 24, 1951.

The next case is No. 260, and is in a separate transcript.

STATE OF NEW MEXICO )
COUNTY OF BERNALILLO)

I hereby certify that the foregoing transcript of Case No. 245 before the Oil Conservation Commission on March 20, 1951, in the Council Chambers, City Hall, Santa Fe, New Mexico, is a true record of the same to the best of my knowledge, skill and ability.

Dated at Albuquerque, New Mexico, March 27, 1951.

E. E. PREESON.

My commission expires August 4, 1952.

### OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION SANTA FL. NEW A LARGO

JUN 2 2 1953

CASE 521: (Consolidated with Case 245)

These two cases concerning the denomination of gas pools in southeastern New Mexico and the proration of natural gas in the area have been under study of an industry advisory committee, and have been continued awaiting completion of reports.

TRANSCRIPT OF HEARING

June 16, 1953 Date

BEFORE: Konorable Ed. L. Med

Konorable Ed. L. Mechem, Governor Honorable E. S. Walker, Land Commissioner Honorable R. R. Spurrier, Director, OCC

STATE OF NEW MEXICO )

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COUNTY OF BERNALILLO)

I HEREBY CERTIFY That the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill, and ability.

DONE at Albuquerque, N. M., this 20th day of June

My Comm. Ex.: August 4, 1956

E. E. Greeson Notary - Reporter COM. SPURRIER: We will move on to Case 521, which is consolidated with Case 245.

(Mr. Graham reads the advertisement.)

MR. MACEY: I have a letter from Mr. A. L. Hill, Chairman of the Advisory Committee on gas proration, dated June 12, 1953, addressed to the New Mexico Oil Conservation Commission, Re: Advisory Committee to the Oil Conservation Commission on Case 521, concerning gas proration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. It reads,

#### "Gentlemen:

"The subcommittee on general rules met on June 2, 1953, at Hobbs, New Mexico, at which time final rules were proposed for presentation to the Advisory Committee. As you were advised in our report at the last regular hearing of the Commission, the subcommittee investigating the need for revision of present gas pool designations has completed its work. The final report of both subcommittees will be considered by the Advisory Committee at a meeting to be called in the near future.

"It is believed that the final report of the Advisory Committee can be submitted to the Oil Conservation Commission at their regular meeting in July.

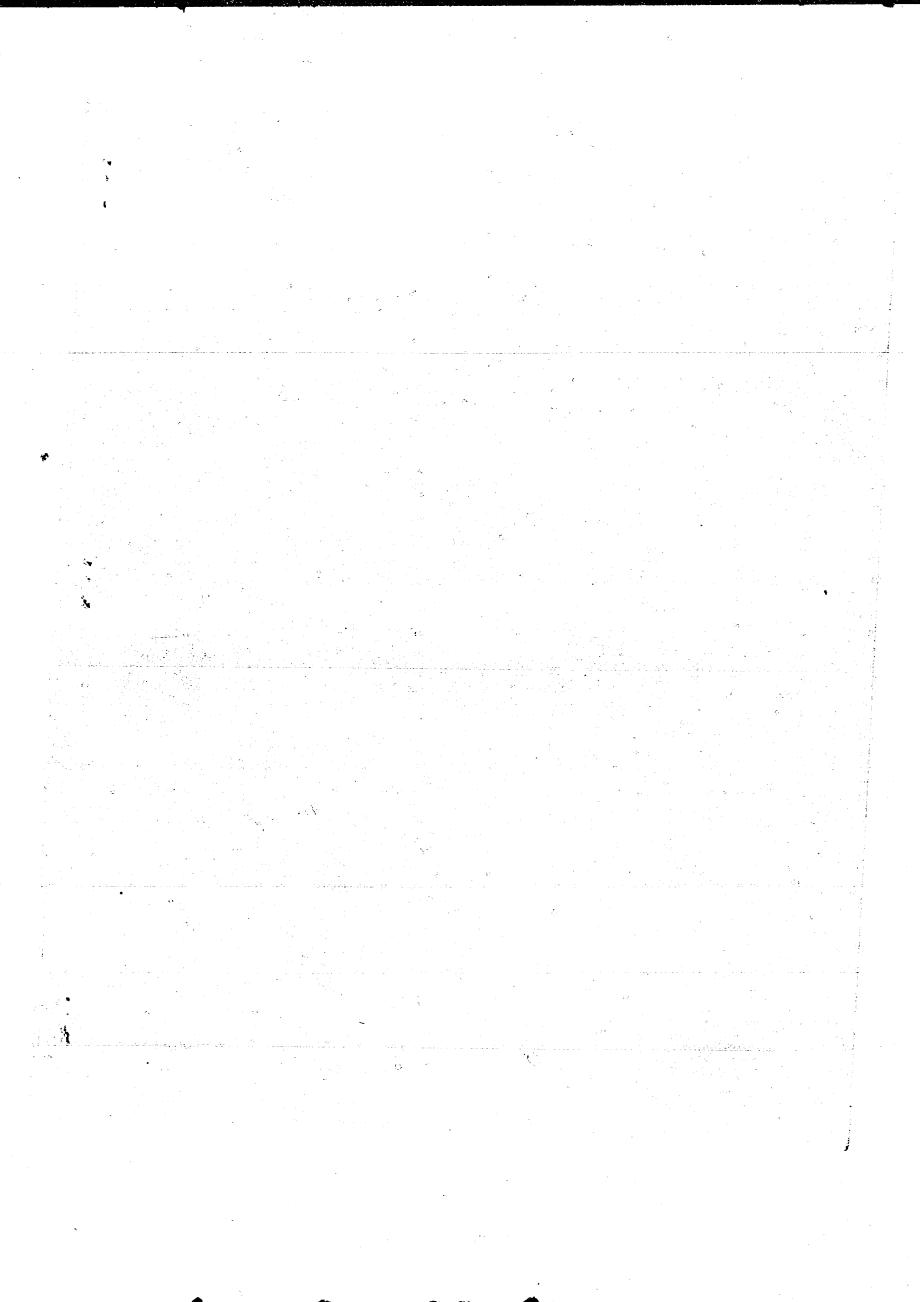
"Respectfully submitted, /s/ A. L. Hill A. L. Hill El Paso Natural Gas Company Advisory Committee"

COM. SPURRIER: Are there any other comments in this case?

MR. GRAHAM: Shall we consider that as a motion for continuance?

COM. SPURRIER: I think so. The Commission will expect to get the Committee's final report in July and wind up this case.

The next case on the docket is Case 532.



# OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION SANTA FE. NEW MEXICO. JUN 1 3 150 15 15 N

CASE 245 CASE 521: (Consolidated) These two cases concerning the denomination of gas pools in southeastern New Mexico and the proration of natural gas in the area were consolidated for hearing purposes on April 16, then continued to May 19 in order that reports might be completed by the advisory committee which was appointed to make recommendations to the Commission.

## TRANSCRIPT OF HEARING

May 19, 1953 Date

Honorable Ed. L. Mechem, Governor Honorable E. S. Walker, Land Commissioner Honorable R. R. Spurrier, Director, OCC BEFORE:

STATE OF NEW MEXICO )

COUNTY OF BERNALILLO)

I HEREBY CERTIFY That the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill, and ability.

DONE at Albuquerque, N. M., this 29th day of May

My Comm. Ex.: August 4, 1956

E. Greeson Notary - Reporter

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COMMISSIONER SPURRIER: The next case on the docket is Case 245, which is tied in very closely with Case 521, and therefore we will take the two together.

(Mr. Graham reads the call of the cases.)

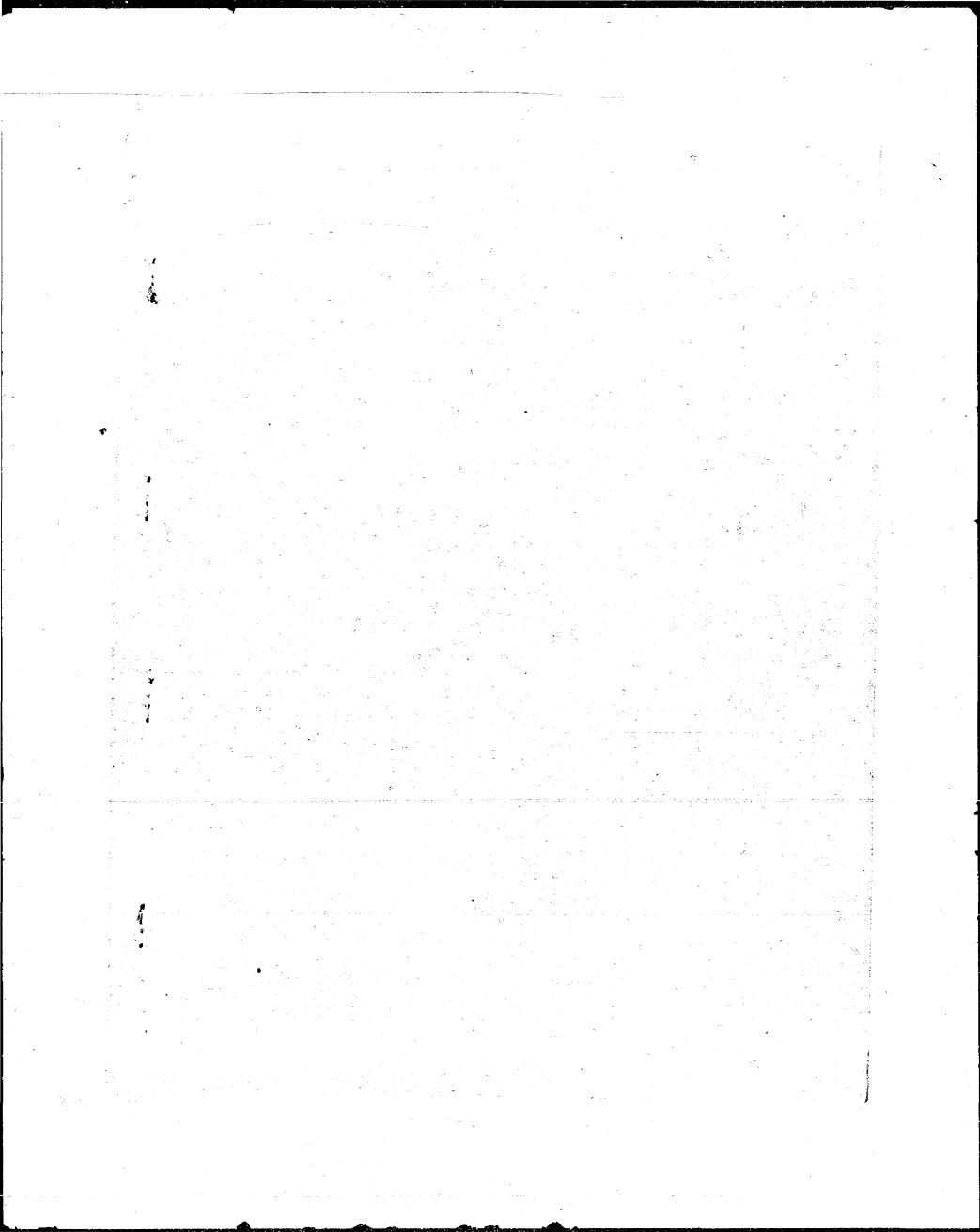
MR. MACEY: We have a letter from Mr. A. L.
Hill, El Paso Natural Gas Company, in regard to this
case. It is addressed to Oil Conservation Commission,
Santa Fe, in regard to the advisory committee in regard
to the Oil Conservation Commission on Case 521 concerning gas proration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

(Reads the letter.)

COMMISSIONER SPURRIER: Is there anyone else to be heard in this case?

(Off the record)

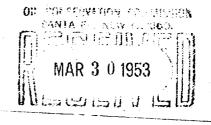
COMMISSIONER SPURRIER: Without objection,
Mr. Hill's motion to continue to the regular June hearing
will be approved.



BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

Santa Fe, New Mexico March 17, 1953

TRANSCRIPT OF HEARING CASE NO. 521



ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12. CROMWELL BLDG
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICS

# BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

Santa Fe, New Mexico March 17, 1953

Case

No. 521

In the Matter of:

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Application of the Oil Conservation Commission )
upon its own motion for an order establishing means and methods for the proration of natural gas in Lea, Eddy, Chaves and Roosevelt Counties.

TRANSCRIPT OF HEARING

(Notice of Publication read by Mr. Graham.)

MR. SPURRIER: On this case the Commission believes that it recognizes a need for proration and ratable take of gas in Lea County, and, for that matter, in the State of New Mexico. However, this particular case applies only to Lea, Eddy, Chaves and Roosevelt County. We anticipate a lot of hard work and a lot of difficulty in getting this set up properly. We want to be fair to everyone and, as I have said before, we intend to referee this thing. We do not have all the personnel that we need to go into the matter completely and set it up.

We would like to appoint an advisory committee to report to us on how this might be set up and we want that Committee to report at the next hearing, which will be April the 16th. Before I leave that part of it I might say that we have tried to put companies who have considerable production, or have a special interest, or the purchasing companies of natural gas. Perhaps you had better make notes on this. I will confirm this with a

ADA DEARNLEY & ASSOCIATES

COURT REPORTERS

ROOM 105-106, EL CORTEZ BLDG.
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

letter, but we head the list with El Paso Natural Gas.

LEED.

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I think whoever the member might be designated from that company might be the chairman. However, that is something for the Committee to determine. The second dompany is Southern Union, the third is Continental Oil Company, the fourth is Gulf, the fifth is Humble, the sixth is Shell, the seventh is Texas and Pacific Coal and Oil Company, eight is Phillips Petroleum Company nine is Samedan, and I think that if Mr. Staley, Staley's office can and will, we would like you to serve as the secretary, Mr. Staley.

MR. STALEY: I will be glad to assist in every way possible.

MR. SPURRIER: We presume that some of you have some comments to make in this case. Before we take those comments we would like to impress on you that we are not starting this to continue it and continue it indefinitely. We will expect a report from this Committee at the April hearing and we expect by the May hearing to be able to set it up. I am sure that many of you have been thinking about it for a long time. I don't believe that two months is too short a time to get this thing set up. anyone who has a comment in the case?

MR. HOUSE: You want to give Mr. Staley the responsibility of securing the names of the people to serve on the Committee and also announce the place and date of the first meeting.

MR. SPURRIER: Did everyone hear that? He would like to know the names, and I think I will let Commissioner Staley be a clearing house for that, the names of the men that the various companies want to serve on this Committee. I think you all

understand that the meeting will have to be called as soon as possible.

MR. STALEY: If it meets with your approval, I will be glad to pole the members of the Commission and determine for the Committee the persons to serve.

MR. SPURRIER: They didn't hear that, Glen.

MR. STALEY: I say, if it meets with the approval of those present, our office will be glad to pole the companies that you have appointed on this Committee and to determine the members that are to serve, and we will set a date for a preliminary meeting, one that will meet with the approval of the Committee.

MR. KELLY: It was my understanding that this Committee is a Committee working for the Oil Conservation Commission, appointed by them and working under their jurisdiction.

MR. SPURRIER: Yes. Anyone else?

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MR. FOSTER: I would like to suggest that the chairman there name the time of the preliminary meeting now. I think that would save a lot of time. I will designate our man this afternoon.

MR. SPURRIER: It may be that the El Paso Natural Gas is not ready to designate a man. If they are he will be at least temporary chairman, and perhaps you could announce a meeting date.

MR. COLEMAN: Coleman, with El Paso Natural Gas Company. We are not ready, at this time, to appoint a chairman. I would like to check to see who is coming. We can either set the date, or Mr. Staley.

MR. SPURRIER: Any other comments in this case? If not

Case 521 will be continued at the April 16th hearing and we will go on to the next case.

STATE OF NEW MEXICO ) : SS COUNTY OF BERNALILLO

I, ADA DEARNLEY, hereby certify that the above and foregoing transcript of proceedings in Case No. 521, taken before the Oil Conservation Commission on March 17th, 1953, at Santa Fe, New Mexico, is a true and correct record.

Dated in Albuquerque, New Mexico, this 25th day of March, 1953.

Ada Dearnley
Notary Public

My Commission Expires: June 19, 1955

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BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

TRANSCRIPT OF HEARING December 22, 1950.

E. E. GREESON
COURT REPORTER
UNITED STATES COURT HOUSE
TELEPHONE 2.0672
ALBUQUERQUE, NEW MEXICO

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#### BEFORE THE

#### OIL CONSERVATION COMMISSION

#### STATE OF NEW MEXICO

#### PROCEEDINGS

The following matter came on for consideration before a hearing of the Oil Conservation Commission of the State of New MExico, pursuant to legal notice, at Santa Fe, New Mexico, on December 22, 1950 at 10:00 a.m.

#### NOTICE OF PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation

Commission hereby gives notice pursuant to law and the Rules
and Regulations of said Commission promulgated thereunder,
of the following public hearing to be held December 22, 1950,
beginning at 10:00 o'clock A.M. on that day in the City of

Santa Fe, New Mexico, in the Capitol (HAll of Representatives).

#### STATE OF NEW MEXICO TO:

All named parties in the following cases and notice to the public:

#### Case 243:

In the matter of the Oil Conservation Commission upon its own motion to any and all gas producing persons to show cause why Commission Orders No. 33 and No. 398 should not be rescinded (Monument and HObbs pools provation orders).

### Case 244:

In the matter of the Cil Conservation Commission upon its own motion to designate, name, define and extend the following pools, some as recommended by the Northwestern New MExico Nomenclature Committee on October 26, 1950. Extend Blanco (Nesaverde) Gas Pool to include:

# Township 30 North, Range 9 West:

All Section 23 All Section 14 Section 15 Section Section All Section Wi Section

## Township 31 North, Range 9 West:

SW1 Section 33 St Section 32

Extend Fulcher Basin-Kutz Canyon (Pictured Cliffs) Gas Pool, to be known hereafter as Fulcher-Kutz (Pictured Cliffs) Gas Pool, to include:

# Township 27 North, Range 9 West:

All Section 8 All Section 17 St Section 18

# Township 28 North, Range 10 West:

SWł Section 25 SEł Section 26

Extend West Kutz Canyon (Pictured Cliffs) Gas Pool to

#### include:

### Township 27 North, Range 12 West:

Eg Section 14 NEg Section 23 Ng Section 24

Designate South Kutz Canyon (Pictured Cliffs) Gas

### Township 27 North, Range 11 West:

El Section 22
All Section 23
All Section 26
El Section 27

Designate South La Plata (MEsaverde) Gas Pool to include:

### Township 30 North, Range 12 West:

NE Section 4 NE Section 5

## Township 31 North, Range 12 West:

 $E_2^1$  Section 32 All Section 33

Extend La Plata (Mesaverde) Gas Pool to include:

## Township 32 North, Range 12 Mest:

All Section 14 All Section 15 Et Section 22 All Section 23

Designate Stoney Butte (Dakota) Oil Pool to include:

## Township 21 North, Range 13 West:

W/2 Section 6 W/2 Section 7 Township 22 North, Range 13 West:

W/2 Section 31

Township 21 North, Range 14 West:

E/2 Section 1 E/2 Section 12

Township 22 North, Range 14 West:

E/2 Section 36

#### Case 245:

In the matter of the motion by the Oil Conservation Commission to designate, name, define and extend or delete the gas pools of Lea, Eddy and Chavez Counties, New Mexico. Case 246:

In the matter of the regular and allowable hearings to be held during 1951 upon the Cil Conservation Commission's own motion, dates to be as follows:

January 16, 1951
February 15, 1951
March 15, 1951
April 17, 1951
May 15, 1951
June 14, 1951
July 17, 1951
August 16, 1951
September 18, 1951
October 16, 1951
November 15, 1951
December 18, 1951

GIVEN under the seal of the Oil Conservation Commission of NEw Mexico, at Santa Fe, New Mexico, on November 22, 1950.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

/s R. R. Spurrier R. R. SPURRIER, Secretary.

SEAL

#### NEW MEXICO

### OIL CONSERVATION COMMISSION

P. O. Box 871 Santa Fe, New Mexico

December 1, 1950

TO ALL GAS PRODUCERS:

Re: Townships 24, 25 26 South Ranges 36, 37, 38 East, N.M.P.M., Lea County, New Mexico

Gentlemen:

Case 245 recently advertised to be heard on December 22, 1950, will involve the naming of gas pools in the above designated townships.

Interested operators are requested to be present at the hearing on December 22, to make recommendations to the Commission so that the Commission may determine the vertical and horizontal extent of the gas pools in the area.

If insufficient information is available on December 22, the hearing will be continued to a later date so that this material may be properly and completely compiled.

Very truly yours,

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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R. R. Spurrier
R. R. SPURRIER
Secretary-Director.

RRS:bw

BEFORE: Honorable Guy Shepard, Chairman Honorable R. R. Spurrier, Secretary. REGISTER:

Quilman B. Davis Southern Union Gas Company Dallas, Texas

Van Thompson Southern Union Gas Company

E. E. Kinney New Mexico Bureau of Mines Artesia, New Mexico

A. R. Ballou Sun Oil Company Dallas, Texas

W. B. Macey American Republics Corporation Artesia, New Mexico

Warren L. Taylor
El Paso Natural Gas company

W. T. Hollis
El Paso Natural Gas Company Farmington, New Mexico

F. C. Barnes New Mexico Oil Conservation Commission Santa Fe, New Mexico

O. P. Nicola Phillips Petroleum Company Bartlesville, Okalhoma

M. L. Patterson
Phillips Petroleum Company
Odessa, Texas.

E. L. Shafer Continental Oil Company Hobbs, New Mexico

R. S. Christie Amerada Petroleum Corporation Fort Worth, Texas

L. O. Storm Shell Oil Company Hobbs, New Mexico

ELvis A. Utz New Mexico Oil Conservation Commission Santa Fe, New Mexico

H. L. Hensley Humbbe Oil and Refining Company Midland, Texas

R. S. Denny Humble 011 and Refining Company Midland, Texas

Homer Dailey Continental Oil Company Midland, Texas

Lucas H. Bond, Jr. Stanolind Oil and Gas Company Fort Worth, Texas

J. A. Seth Stanolind Oil and Gas Company Santa Fe, New Mexico

R. G. Schuehle Texas Pacific Coal and Oil Midland, Texas

GlennStaley New Mexico Gil and Gas Engineering Commission Hobbs, New Mexico

G. H. Gray Sinclair Oil and Gas Company Midland, Texas C. D. Borland Gulf 011 Corporation Hobbs, New Mexico

D. E. Elliott Wooster, Ohio

New Mexico Oil Conservation Commission Carlsbad, New Mexico

New Mexico Oil Conservation Commission Santa Fe, New Mexico

The meeting will come to order, gentlemen. MR. SPURRIER: Commissioner Shepard will be here in a few moments. In the meantime, we will proceed with the first case, which will be the allowable hearing.

MR. McCORMICK: I would like to have Mr. Utz and Mr. Kinney sworn.

(Witnesses sworm.)

(Chairman Shepardnow present.)

ELVIS A. UTZ,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. MCCORMICK:

- Q State your name and official position.
- A Elvis A. Utz, engineer of the Oil Conservation Commission.
- Q Have you made a study of the market demand for oil for the State of New Mexico for the month of January 1951?

- A Yes, I have.
- Q Do you have an estimate of market demand furnished by the United States Bureau of Mines?
- A Yes, sir, I do have.
- Q What was that?
- A 138,000 barrels per day.
- Q How does that compare with the last previous estimate?
- A The last month, it was 142,000 barrels.
- Q Have you received and compiled the nominations of purchasers for the month of January?
- A Yes, I have.
- Q What is the total.
- A The total nominations are 132,627.
- Q How does that compare with the last previous month?
- A that is 8.8 per cent above the nominations last month, December,
- Q Do you have an opinion as to what the reasonable market demand for oll will be for the entire state in January?
- A In my opinion the reasonable market demand will be 141,972 barrels per day, for the southeast. 800 for the northwest, or 142,772 barrels per day for the state.
- Q I will ask you if/your opinion the market demand you have estimated for southeastern New Mexico can be met by the allocated pools in southeastern New Mexico?
- A Yes, I believe it can.

- Q Is the potential producing capacity of all pools in southeastern New Mexico greater than the estimate you have given?
- A I believe so, yes, sir.
- Q In order to prevent waste, is it necessary for the pools of Lea, Eddy and Chavez county to be limited in their production?
- A Yes, I believe it is.
- Q In your opinion can those pools produce the amount you have estimated without permitting waste?
- A From the information we have available, to study, they can, yes.
- Q What do you recommend then as the total daily allowable for the allocated pools of Eddy, Lea and Chave county?
- A 141,972 barrels per day.
- Q And in your opinion how should this production be distributed?
- A It should be distributed in accordance with the present rules and regulations of the Oil Conservation Commission.
- Q What do you recommend for the daily normal unit allowance?
- A 48 barrels normal daily unit allowable should give us the beforehand quoted figure.
- Q That is the same recommendation you made at the last hearing, isn't it?
- A That is correct.

- Q Is there any essential difference in market demand situation now than a month ago?
- A Possibly a little more demand now than there was a month ago. However, it was only apparent in the nominations. It wasn't apparent in any other manner I know of.

MR: McCORMICK: Does anyone have any questions of Mr. Utz?

(Witness dismissed.)

## ED E. KINNEY,

having been first duly sworn, tostified as follows:

#### DIRECT EXAMINATION

#### BY MR. McCORMICK:

- Q State your official position, Mr. Kinney.
- A Petroleum engineer, New Mexico Bureau of Mines.
- Q Have you made a study of the market demand situation for New Mexico for the month of January, 1951?
- A I have.
- Q Just tell the commission in your own words what the picture is on storage and market demand.
- A For the past 30 days oil has been going out of storage in southeastern New Mexico. The demand is very firm. Infact,
- a little in excess of supply. And for that reason I see no reason to go below last months' proration of 48 barrels.
- Q And you join in the recommendation of Mr. Utz then, for
- a 48 barrel normal unit allowable?

- A Yes, sir.
- Q You think it is a reasonable figure?
- A Yes, sir.
- Q Do you have anything else to tell the Commission?
- A No, sir.

MR. McCORMICK: Any questions of Mr. Kinney? Does anyone else have anything to say about the state-wide allow-able?

(Witness dismissed.)

CHAIRMAN SHEPARD: The next case, No. 243. Will you read, Mr. Graham, please?

(Reads the notice of publication in Case No. 243.)

MR. STORM: My name is L. O. Storm with the Shell
Oil Company. I would like to recommend that the Commission
poll the operators present and determine what their attitude
in the case is.

MR. CHRISTIE: Mr. Chairman, since this is a motion of the Commission, I wonder if they would care to give their attitude on the matter. It was called on your motion.

MR. McCORMICK: If the Commission please, Mr. Porter in charge of the proration office at Hobbs, has made a compilation of the effect of threeinding these two orders, No. 33 and No. 398, and has prepared a compilation showing how the different producers would be affected. This has been furnished, I believe, to all the operators. I will

ask the operators present if any of them have not had the chart prepared by Mr. Porter. Would you like to examine this, Mr. Ballou?

MR. BALLOU: I would like to have a copy of it. I don't know whether we will have any objection to it.

(Off the record.)

MR. McCORMICK: Will you please mark these as Exhibits 1 and 2 in this case?

(Marked Exhibits 1 and 2, Case No. 243.)

MR. McCORNICK: (Continuing) If the Commission please, I would like to offer in evidence Exhibit 1 which is a compilation of the effect of trascinding the order relating to the Monument Pool, and also Exhibit 2 which is a compilation of the effect of trascinding the present order in the Hobbs Pool. These are available for anyone who would like to inspect them.

I might further state to the Commission and for the benefit of the operators that it has been suggested by numerous operators: that these two orders be rescinded for the reason that they are somewhat troublesome to abide by and are exceptions to the regular state wide allowable set up. The feeling of many operators and probably the Commission too, is that these two orders have served their it purpose and that/would be in the interest of this Commission if they were rescinded, and the Hobbs and Monument Pools

placed back on the regular state-wide formula. If any operators have any comments, why, this is the time to let them get into the record.

MR. NICOLA: Speaking only for the Monument Pool, in which the Phillips Petroleum Company is an operator, we would like to strongly urge that the Commission rescind this allowable order. We think it would be very helpful in the matter of saving abr producing unnecessary expense in the field, and also in cutting down on the manpower necessary to make the various tests.

CHAIRMAN SHEPARD: Well, I will call on each company present as we come to them. Mr. Christie, what have you on this?

MR. CHRISTIE: We have no objection to rescinding the order on either pool. On the other hand, we have no objection to retaining them. In otherwords, we are neutral. We have lived under the formula for the last few years and I don't think withhes resulted in any physical waste or anything. We are in favor of letting the decision rest with the Commission.

CHAIRMAN SHEPARD: Continental, what have you to

A VOICE: Continental Oil Company has operated in both the Hobbs and Monument Pools. We have no objection to the rescission of both orders.

CHAIRMAN SHEPARD: Humble.

MR. DEWEY: Humble Oil and Refining Company is in favor of rescinding both orders.

CHAIRMAN SHEPARD: Shell. MR. STORM: Shell Oil Company is an operator in each of the two pools and favors rescinding both orders.

CHAIRMAN SHEPARD: El Paso Natural Gas.

MR. TAYLOR: El Paso Natural Gas is only an operator of one well in the Monument Pool. It is a gas well and is shut in at the present time.

CHAIRMAN SHEPARD: Stanolind Oil and Gas.

MR. BOND: Stanolind Oil and Gas Company recommends that the orders he rescinded for both Hobbs and Monument. CHAIRMAN SHEPARD: Sinclair.

MR. GRAY: Sinclair Oil and Gas Company has no objection to rescinding the order in behalf of Monument Pool. We feel like other wells in the Hobbs - Sinclair has some secepted wells in there - I believe some seven. The 40 acre units are regular units. The exhibits I believe Mr. McCormick introduced show the reflected change in allowable, recognizes these particular wells as 40 acre units for allowable purposes at least. And that there is no objection to rescinding the orders. We feel like these wells should retain their status as under the original Hobbs order.

CHAIRMAN SHEPARD: Gulf Oll Company.

MR. BORLAND: Gulf has no objection to rescinding the orders in both the Hobbs and Monument Pools.

CHAIRMAN: SHEPARD: Texas Pacific.

MR. SCHUEHLE: Texas Pacific operates only in the Hobbs Pool and has no objections to the rescinding of the order.

CHAIRMAN SHEPARD: Sun Oil Company.

MR. BALLOU: Sun Oil Company operates in both pools and has no objection to rescinding the orders.

CHAIRMAN SHEPARD: Southern Union.

MR. DAVIS: Southern Union does not have any oil production in either pool and has no objection.

CHAIRMAN SHEPARD: American Republics.

MR. MACEY: American Republics operates only in the Monument pool and we have no objections to rescinding the order.

CHAIRMAN: SHEPARD: Mr. Staley, do you have any comments?

MR. STALEY: I haven't.

CHAIRMAN SHEPARD: Anyone else have anything to say?

Does anyone want to say anything about this? Anyone want to say something about what somebody else has said?

(Laughter.)

If not, we will take up Case No. 245.

(Mr. Graham reads the notice of publication in Case No.

245.)

MR. SHAFER: Continental Oil Company respectfully requests that the Commission continue Case 245 until the March 15th hearing.

In support of that, I would like to say that Continental Oil Company is one of the largest operators and producers of dry gas in the southern part of Les County. And it has been conducting a detailed study of the shallow gas structures of that portion of the County for the past two months.

Our study is not as yet complete. And with the permission of the Commission, I would like to have Mr. Homer Dailey, our division engineer from Midland who is directly connected with this study, fill in some of the details of this job so that you will know how far the study has progressed at the present time, and approximately how much work we have left to do.

CHAIRMAN SHEPARD: Swear him, George, please.

(Mr. Dailey sworn.)

MR. DAILEY: We have started out in this study
by preparing a group of number of cross sections. We have
made sections through each township from 19 south through
26 south. And in addition we have made three north south
sections, one along the - approximately along the western limits of production, one approximately through
the center, and a third approximately along the eastern
limits of production. At the present time, these sections,
the data on them, has been compiled and they are being

finished, been completed. These sections, three of the east-west sections, we have kept the complete samples, and wherevavailable radio activity logs of them. The others we have merely used straight lines to designate the wells, and have shown on there the various tests and shows as reported on the weekly scout characteristics. And we are now starting to correlate all the logs we have available in the area to prepare a Yates structure map of the entire area that we are considering. And we are studying only the graphs in the Yates, Seven Rivers, Queen, Greyburg, and possibly upper San Andres, but I don't believe we would find any dry gas in the upper San Andres. I believe it would be all gas cap.

Upon completion of that, we have gathered back pressure test data, shut in pressure, that was taken during the first part of this year, and a number of gas and electric logs/gas wells throughout the area. The completions and also recompletions on all dry gas wells in the area and those formations. And upon completion of that data, compiled a map with as much of it as we need, and make recommendation as to the limitation of the various gas producing horizons.

upon that a little. We feel when we have completed this study it will probably be the most comprehensive study of the shallow gas areas of southern Lea County. And we

do not believe any attempt should be made to define pools or outlying reservoir boundaries until such time as this study has been completed. Actually the study is being made for that specific purpose. To present the best available geological and engineering data to the Commission for their study in considering our recommendation.

For that reason, we do request that the hearing be postponed until March 15th, at which time we feel we will have completed this study.

MR. DAILEY: One other thing. That omits, of course, some gas production, particularly in the pre -San Andres and in the Habbs structure, and in the Blineberry and several other gas sands.

MR. SPURRIER: Mr. Shafer, I notice one thing. You mentioned shallow gas. What is to become of the deeper gas pay, what would be done on this?

MR. SHAFER: Taking into consideration Continental Oil Company is not a very large producer of gas from deeper horizons, we have confined our study to those shallower zones and in so far as the work we are presently shallower zones and in so far as the work we are presently shallower, it will not cover the deeper gas areas such as the Blineberry, Tubbs, Sand and those other reservoirs below the San Andres section.

MR. SPURRIER: I notice Mr. Dailey said the Hobbs and some other pools would also be left out. Do you have

a suggestion, Mr. Shafer, how we could get the information on those two?

MR. SHAFER: I would suggest the Commission on its own motion call a hearing specifying those various areas or sections which we do not cover in our particular work here and give the - in the same manner you have brought up Case 245 - and give the larger or interested operators in those particular areas an opportunity to bring forward the same type of information we claim to possess.

MR. SPURRIER: In other words, we should give the largest operator in each area the responsibility and give all operators the privilege of submitting data.

MR. SHAFER: That would be my suggestion. Incidentally, while we are still talking about this, we have chosen the date March 15th because it coincides with the date set for the next regular hearing of the Commission.

If that date is changed, any date in March will be satisfactory so far as we are concerned.

MR. SPURRIER: You would probably like to recommend that the case come up at the regular March hearing.

MR. SHAFER: That would be better.

MR. SPURRIER: Fine.

CHAIRMAN SHEPARD: If there is no objection, this case will be continued until the regular March hearing.

We will take up the next case. Case No. 244.

(Mr. Graham reads notice of publication.)

CHAIRMAN SHEPARD: I believe we will let the record show the notice has been read in full and save a little time.

#### FRANK BARNES,

having been first duly sworn testified as follows:

# DIRECT EXAMINATION

#### BY MR. McCORNICK:

- Q State your name and official position please.
- A Frank C. Barnes, geologist with the New Mexico Oil Conservation Commission.

MR. McCORMICK: I would like to insert in the record by reference the notice in Case No. 244.

- Q Mr. Barnes, I will ask you if you are familiar with the proposed pools or extensions to pools as set forth in the notice of Case 244?
- A I am.
- Q I will ask you if on the basis of available information the designated extension and classification of those several pools is reasonable and in conformity. with known geological facts?
- A I believe that is correct, with one exception. I was in the San Juan basin the early part of this week and it appears that in the case of Stony Butte, the Dakots oil pool, that the actual production from the wells in that area is not yet stabilized to the point where a definite pool boundary could be reasonably set up at this time. And I would recommend,

if there is no objection from the operators, that the designation of the Stony Butte, the Dakota oil pools, be put off until a latter date when the area has been more fully developed.

- Q Who are the operators in that pool?
- A The Southern Union Gas Company.

(Off the record.)

- Q Do you have anything else to say about these proposed pools?
- A No, sir.
- Q And is your recommendation then, that the pools as designated in the notice of Case 244 be extended and designated as shown, except the Stony Butte Dakota oil pool?

## A Correct.

MR. McCORMICK: Any questions by anyone? I will ask the Southern Union, Mr. Davis, if he has any recommendation about this matter.

MR. DAVIS: We concur in that recommendation and make it ourselves because we only have one well in the so-called Stony Butte at this time. We don't think it is quite a proper time to make it a designated pool.

MR. McCORNICK: Any questions by the Commission?

MR. SPURRIER: In this Stony Butte pool, I might

let the record show that it was the Southern Union that

made this recommendation. Or I should say, the
Nomenclature Committee made the recommendation at
the instance of Southern Union. Now pending the
naming of a pool in this area your files will show
we have given you permission to drill a well in
an orthodox location, is a wild cat, and if we do not
name this pool according to these recommendations,
which is neither here nor there, then it would be
necessary for Southern Union to make arrangements
to take care of that unorthodox location.

CHAIRMAN SHEPARD: Anyone else? If not, then we will take up the next case, No. 246.

(Reads the notice of publication in Case No. 246.)

MR. McCORMICK: If the Commission please, I might state for the record that Rule 503A provides this: The Commission should meet between the 20th and 25th of each month for the purpose of setting the allowable production for the State for the following calendar month. And 503Bprovides this: The exact time and place of such meeting shall be established in advance of each one and notice given of such setting by publication made on or before. January 10th of each year.

Now at the time these rules were written it was the feeling of the members of the committee that the

appropriate time for meetings was between the 20th and 25th. One consideration was to eliminate a conflict with the Texas hearings and the matter was that was thought to be adequate time so that the proration schedule could be prepared shortly and be distributed shortly after the first of the following month.

Now, if the time for the meetings is to be changed to dates other than those between the 20th and 25th, it would be necessary to amend this rule 503A, which can be done under the notice which has been given in Case 246. And if that is to be done, why, then an order can be entered changing the date, say, from the 15th to the 20th; and then publishing the notice between the 1st and the 10th of January setting out the exact dates for the meetings for 1951.

CHAIRMAN SHEPARD: Anyone else have anything to say on these meeting dates? After trying it for a year, we have decided we would have to move these dates back in order to give plenty of time to make up our proration schedules. Holding them this late in the month it makes it very difficult to get the amount by the first.

MR. McCORMICK: I will ask if anyone has any comment?

6 MR. BALLOU: These dates as you have them here now will conflict with the hearings in other states.
A number of the people here have to attend hearings in

Texas, Louisana and New Mexico. It appears to me they should be moved back one week. I don't want to make any strenuous objection, but it wouldn't be possible for a lot of us to come out here if these dates conflict with other states. And the rule was originally written to take care of that. So that I don't think that it should be changed unless there is a good reason for it.

MR. BOND: With the Stanolind Oil and Gas Company. I would like to urge consideration along the same lines Mr. Ballou has. If the dates could be moved up or back a few days. It is possibly a selfish request on the part of the operators, but it would make operations considerably easier if it could be closer to the 20th or a few days before the middle of the month.

MR. McCORMICK: What dates do you recommand?

MR. BOND: Probably the 19th or 20th of the month, or the 12th and 13th, avoiding as much as possible the 14th, 15th, 16th and 17th.

MR. SPURRIER: It is the Texas hearing?
MR. BOND: Yes, sir.

MR. SPURRIER: Have you tried to get them to change their dates?

MR. BOND: No, sir.

CHAIRMAN SHEPARD: Anyone else have any recommendations?

MR. SHAFER: I would like to say this much. This is

primarily New Mexico we are considering here. It seems to me regardless of conflicts elsewhere this hearing should be held early enough so that our proration schedule could be published on time.

MR. SPURRIER: As Mr. McCormick and Commissioner Shepard stated, that is the reason for the change in these dates.

MR. SETH: Would there be any objection to setting the March allowable at the end of January? Other states set them three months ahead.

(Off the record discussion.)

MR. McCORMICK: I believe we would have to amend too many rules that are not embraced within this call Mr. Seth.

MR. SETH: You could have another hearing. I am sure you could have another hearing in January. Which I hope won't be very long. The legislature will be here. Some states set them three months ahead.

CHAIRMAN SHEPARD: Does anyone have any comments on setting them two months ahead. It would cut them in half and have six meetings instead of twelve.

MR. NICOLA: On behalf of Phillips Petroleum Company I would like to say we would be very much in favor of it.

MR. SHAFER: Continental Oil Company would be very much in accord with establishing the allowable for

a longer period of time. I don't know the mechanics or how you could handle it. Possibly each month simply write an order stating the top allowable hasn't been changed from the succeeding month and the such time if you feel the demand and storage conditions made it necessary to be changed, we could have an open hearing and testify and change it.

CHAIRMAN SHEPARD: What does Humble Oil Company have to offer?

MR. DEWEY: I don't know what reaction of Humble might be to fixing the allowable for a two months' period. I don't know if there will be any great objection to it. We are in accord with accepting the dates as set out in this order in order to get the proration schedule out on time.

MR. STORM: Speaking for Shell, I think if you sellect the dates in the vicinity of the 19th and 20th it would defeat the purpose of calling the case. So far as Shell is in accord with the full schedule of meetings, and I think we would heartily endorse setting the allowable two or even three months in advance. It would lighten the load on the Commission all the way around.

MR. McCORMICK: In one way it wouldn't lighten the load any because there are other hearings that would

be set and other matters that - wherein the interested parties wouldn't want to wait two or three months for a hearing. And so as I view it,

Although you would have allowable hearings only once every two or three months then you would have scattered in between a lot of hearings on other matters which as far as traveling is concerned would probably increase the burden because if you had a hearing on one matter the 10th of the month and another on the 20th, certain operators might have to make two or three trips up here whereas if all were concentrated at one date of the month at the same time the allowable hearing was held, you would probably have only one trip a month.

MR. STORM: To clarify my point on that, I think the Commission will always need one hearing a month to discuss matters other than proration. And in lightening the load, I was thinking of the combining and publication of proration schedules, which is a - which is quite a task. Texas handles them in a much simpler manner than we do in New Mexico.

CHAIRMAN SHEPARD: Anyone else have anything to say?

MR. McCORMICK: Mr. Spurrier, I would suggest to

meet our present problem that we amend this rule 503A to

provide that the Commission shall meet between the 10th

and 20th of each month, and then you will prepare a schedule

of meetings for 1951 between the 10th and 20th. You will have more flexibility than you now have. And then at a later time, if you want to consider putting out a two months' proration schedule, we will have to have a hearing on that and amend a number of rules to provide for that. But I think the idea of a two months' proration schedule does have some merit.

MR. SPURRIER: Suppose we consider the regular hearing dates listed here and just every other month or every other hearing bring up the allowable. Then you would have a stated date for a hearing each month which you could plan for if you wanted to. And you could also know that every other month would be the proration hearing.

MR. SETH: If you are going to do that why couldn't it be set at the end of the month? You wouldn't have much worry with your proration schedule then. Only be a proration schedule gotten out every two months.

MR. McCORMICK: For instance, at the end of December you would have the proration hearing for February and March.

MR. SETH: That's right. That is what they do everywhere else.

MR. McCCRMICK: Do they have that much time lag between the extimate of the demand and the period?

MR. SETH: They don't change it to amount to anything.

(Off the record.)

MR. SPURRIER: Let's put this another way. Is there any objection to putting out a two months' proration schedule?

MR. BALLOU: Sun 0il wouldn't object to a two months' proration schedule.

MR. SPURRIER: You would not?

MR. BALLOU: We would not.

MR. STORM: Shell would not.

MR. DEWEY: One question. We have gone to a great to deal of trouble here/use the bureau of mines estimates on the nominations of the various operators monthly. Whether that would serve the same purpose if we had a two months' schedule or not, I don't know. We would like to retain in this thing the fixed dates throughout the year whenever they may be satisfactory and we can arrange our business in accordance wherewith. The other is that the hearing be held in time so that the proration schedule will get out early enough to be available the first of the month.

(Off the record.)

MR. NICOLA: While we are still on the subject, I would like to express the opinion that we would like to see these hearings between the 20th and 25th. I wouldn't want to let this thing go without telling you what we would like regardless of the proration schedules.

CHAIRMAN SHEPARD: Anybody have anything further? If not, and there is no business coming before us, we will stand adjourned.

STATE OF NEW MEXICO ) : SS. COUNTY OF BERNALILLO )

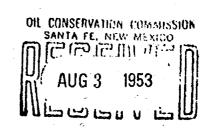
I HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Commission on December 22, 1950, are a true and correct copy to the best of my knowledge, skill and ability.

6. E. Greeson

My commission expires: August 4, 1952

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# OIL CONSERVATION COMMISSION STATE OF NEW MEXICO



CASE 521 (Consolidated with Case 245) These two cases concerning the denomination of gas pools in southeastern New Mexico and the proration of natural gas in the area have been under study of an industry advisory committee and have been successively continued awaiting completion of reports.

# TRANSCRIPT OF HEARING

July 16, 1953 Date

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BEFORE:

Honorable Ed. L. Mechem, Governor Honorable E. S. Walker, Land Commissioner Honorable R. R. Spurrier, Director, OCC

STATE OF NEW MEXICO )

COUNTY OF BERNALILLO)

I HEREBY CERTIFY That the within transcript of proceedings before the Oil Conservation Commission is a true record of the same to the best of my knowledge, skill; and ability.

DONE at Albuquerque, N. M., this 28th day of

My Comm. Ex.: August 4, 1956

E. E. Greeson Notary - Reporter

.....

MR. SPURRIER: We will move on to Case 521, continued from the last hearing.

(Mr. Graham reads the advertisement.)
(Off the record.)

MR. SPURRIER: You now have, I believe, all of you, in your hands the committee report filed by Mr. Hill and dated July 6th.

Now, I notice that this was reprinted by Mr.

Staley's group on July 9th. That was just a week ago. I wonder if we feel that this is the time to make our final recommendations, or I wonder if there are those who would like to consider this and have a chance to talk to your management, as most of you would put it, and bring it up for discussion, and finally resolve this case for the regular August hearing. Does anyone have a comment on that project?

Mr. Hill.

MR. HILL: Yes, Mr. Spurrier, our company would like to see that done. We would like to have the opportunity, and everyone to have the opportunity, of reviewing these recommendations and have a full discussion of the case and perhaps putting on some testimony in the August hearing. We feel also that is the feeling of the other pipeline companies. Perhaps they would like to speak for themselves.

(Off the record.)

MR. SPURRIER: Mr. Hill, would you like to formally introduce this at this time as a matter of record?

MR. HILL: Well, yes, I would like to offer the recommended new rules and attached letter as the official recommendation of the advisory committee in Case 521.

MR. SPURRIER: Thank you. Is there objection to my idea or Mr. Hill's îdea of circulating this for scrutiny until the August hearing.

MR. HOLLOWAY: Mr. Spurrier, there are certain phases of this order that is a little vague to me. I don't know just how it would go over with the management themselves because there's some of it I don't understand. I wonder if there could be a brief discussion to clarify some of the points?

MR. SPURRIER: I think it is entirely in order for you to ask any question you care to.

MR. HOLLOWAY: There are a number of them. I have in mind one, these 40-acre units that already have wells on them. If you can't get your neighbors to join, what happens there? And things of that sort.

MR. MACEY: I may be wrong and subject to correction on it, but I am under the impression that the committee when they worked on this, if you had 80 acres or a 160-acre unit and already had a producing well, you would designate

2b

as an 80-acre unit and get half of an allowable, if the propration unit was 160 acres in that particular pool.

On the well spacing, B, it supercedes statewide
Rule 104 (k), the provisions of statewide Rule 104, paragraph (k) shall not apply to gas pools located in Lea,
Eddy, Chavez and Roosevelt Counties, New Mexico. With
that line, it made me think. Paragraph (k) said it shouldn't
apply to wells which have been drilled or on production
prior to this order. Now, it says it doesn't apply to
that. They are contradicting one another.

MR. SELINGER: The point Mr. Holloway is raising is taken care of by this phrase in Roman Numeral V, Page 2, "Any allocation unit containing less than 150 acres or more than 162 acres shall be a nonstandard unit and its allowable shall be decreased or increased to that proportion of the standard unit." So it automatically takes care of his point. If you have 40 acres, you get a 40-acre allowable; and if you have 80 acres, you get an 80-acre allowable. Automatically taken care of by that provision.

MR. HOLLOWAY: That is what I want to know.

MR. SPURRIER: Anyone else?

MR. SELINGER: I have something. George W. Selinger, with Skelly Oil Company.

I don't want to discuss this here, but bring this

up in connection with the exhibit introduced, which was the rules and regulations as made by the committee.

Under Roman Numeral III on Page 1, "Oil Production from Defined Gas Pools," I recommend the entire paragraph be dekted, because it is now covered under Rule 506, and it really isn't necessary to have that rule at all because the rule written in revision of Rule 506 under Oil Production covers this specific point, so it isn't necessary to include it in these rules at all.

And under IX, Page 4, the last sentence which reads; "The full production of gas from each well shall be charged against the well's allowable regardless of what dsposition has been made of the gas."

We believe gas produced on a lease and utilized on that lease for use of the lease - for lease purposes - rather than gas lift, should not be charged against the well's allowable.

Then, on VI, Paragraph (c), (4), Page 3, the last sentence, which begins "Provided further, that where three proration units are pooled, the well shall not be located more than 1,320 feet from the nearest boundary of any unit so pooled, and ..."

I don't know whether they intended to use "well" or the word "lease."

A VOICE: What rule?

MR. SELINGER: On Page 3, VI, Gas Allocation, and Paragraph (c), (4), on Page 3, Paragraph (4). It starts out "The well to which such additional units are assigned..."

The last sentence of that paragraph, "Provided further, that where three proration units are pooled, the well shall not be located more than 1320 feet from the nearest boundary of any unit so pooled."

I believe that should be clarified as to whether they intended to use the word "lease" or the word "well." The way it is written, that prohibits the drilling of a center of a 40-acre or three 160-acre units which are adjacent. And I don't know whether the committee intended to prohibit the drilling of such wells or not. But I think that part of that paragraph should be clarified.

(Off the record.)

MR. HOLLOWAY: Mr. Spurrier, is that an orthodox location? You have another rule which says --

MR. SELINGER: This now will have to be located in the exact center of 160 acres, apparently.

MR. SPURRIER: Mr. Hill, would you care to try to answer that question? Or, are they right in their assumptions?

MR. HILL: I believe, Mr. Lyon, if you will go into that question --

MR. LYON: Yes, if the Commission please. My name

is Lyon, for the Continental Oil Company.

The purpose of that particular wording in that rule was to make sure that the well was drilled in the center quarter section of the unit formed of three quarter-sections. And it would, as you say, have to be within about 330 feet of the center of that center quarter.

MR. SELINGER: Is that what the committee wants to do, require wells to be located in approximately the center of the 160 acres to get credit for three units?

MR. LYON: You would get credit for three units if located within that restricted area. And the reason we had it worded that way, we felt with three units having a triple allowable, your chances of bringing about inequities due to disproportionate withdrawal from that well are most dangerous for three units in a pool rather than two or four. Therefore, we restricted it to a central location on that particular ground.

MR. HOLLOWAY: Another objection, Mr. Spurrier.

Under Article VIII, "No gas well shall be given an allowable until Form C-104 has been filed, together with a plat showing:

3

- "1. Acreage attributed to said well,
- "2. The locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir, and,

"3. The lease ownership of said leases."

That might result in somebody making a survey around his land to see what his neighbors are doing, and I don't see the purpose.

MR. SPURRIER: How would you modify it, Mr. Holloway?

MR. HOLLOWAY: Simply stop it by filing a certified

plat showing the acreage distributed to the well and the location of all wells on that lease or tract of the whole lease.

MR. SPURRIER: Anyone else?

MR. MACEY: Mr. Selinger, with reference to your comments on Paragraph III, in what way does Rule 506 take care of that provision?

the assumption that it is a gas pool. You don't want to say anything about oil wells in the gas pool. If you have an oil well in a gas pool, it is covered under oil rules in volumetric reservoir equality. What you are doing is doing the same thing here. When the majority of the wells in a reservoir are gas wells, you want to prorate the gas part. And there are a number of gas wells that make fluid. You don't attempt to keep up with the fluid. You have one product that is limited or restricted and let the otherproduct go. Obviously, you can't have a twin control over two different products in the same well bore. You have to either discard one or take one. And these rules are written for

gas wells, trying to restrict the maximum amount of gas produced. In the oil rules, you use the measure of fluid as your maximum limitation. Here you use gas as the maximum limitation.

I think your Rule 506 takes care of socalled classified oil wells.

MR. MACEY: Provided there is a gas-oil ratio; is that right?

MR. SELINGER: Well, those fields that have no limiting gas-oil ratio, I doubt will come in with gas fields as you may classify them from here on out for proration purposes. They are usually of small producing capability. In fact, most of them are way below marginal or minimum class. I think Rule 506 is adequate to take care of it.

MR. SPURRIER: Anyone else?

MR. CHRISTIE: My name is R. S. Christie of Amerada Petroleum Corporation.

We concur in the suggestions made by Mr. Selinger.

As a matter of fact, recommended that to the committee. We don't think it is necessary to try or prorate an oil well in a gas reservoir. As a matter of fact, you might cause some inequities by doing so.

Of course, you always have the privilege of coming in and having a hearing. But I think you would do away with some hearings.

MR. SPURRIER: Anyone else? Is there objection to continuing this case to the August 20th hearing for final recommendations and comment? Without objection, we will continue this case to August 20th.

The next case on the docket would be 555.

• c

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO.

#### BEFORE THE COMMISSION CONSERVATION May 23, 1951

#### CASE No. 245

MR. SPURRIER: Let the record show, no one appeared to testify. The Commission has written testimony on pools not taken up at the first hearing on April 24th. Therefore, the case was closed and taken under advisement.

STATE OF NEW MEXICO COUNTY OF BERNALILLO

I HEREBY CERTIFY that the foregoing and attached transcript of proceedings before the Oil Conservation Commission in Case No. 245, taken on May 23, 1951 at Santa Fe, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, this 20 day of June, 1951.

6-6. Jackson

Reporter

My Commission Expires: August 4, 1952

CASE 245: OCC motion for naming, defining and extending the gas pools of Lea, Eddy and Chaves Counties

The second of th

## DEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

April 16, 1953

OASE 245 and CASE 521: Case 245 - continued - Under terms of Order R-264 which denominated gas pools in Southeastern New Mexice, further testimony will be received for the extension of existing pools or the creation of new pools.

Case 521 - Application of the Commission on its own motion for an order, establishing means and methods for the proration of natural gas in Lea, Eddy, Chaves and Roosevelt Counties. This case was continued in expectation of report of advisory committee which was appointed at the March 17 hearing.

Mg. SPURRIER: I have a letter from the Chairman of the advisory committee to the Oil Conservation Commission on Case 521. It is signed by A. L. Hill, Chairman.

March 24, 1963. As suggested by the Commission, the representative of the New March 24, 1963. As suggested by the Commission, the representative of the El Pase Matural Gas Company acted as chairman of this committee. Spurrier and other Commission personnel, Mr. Taylor of the New Mexica Oil & Gas Engineering Committee and representatives of each of the companies appointed to the advisory committee were present at this meeting.

"A subcommittee was appointed for the study and determination of general rules of gas properties for submission to the advisory committee.

Another subcommittee is to study a report as to any required revisous of present gas pool designations. Each committee consists of a representative from each of the companies represented on the advisory committee.

a.m., March 31. Sameda Oil Corporation represented by George Trimble

E. Keyndell acted as chairman of the general rules subcommittee. They met in the effice of the Oil and Gas Engineering Committee.

"Gulf Oil Corporation represented by Mr. R. L. Hass acting as the chairman of the pool definitions subcommittee met at the Humble Recreation Hall. Each of these subcommittees, subjects for additional study were

agreed upon and provision made for future meeting. The minutes of the initial advisory committee meeting and the meeting of each of the subcommittees have been furnished to the Commission.

"It is recommended that the hearing be kept open and continued until the final report of the advisory committee."

New, you will notice that there is a subcommittee designated for the study what could be properly called Case 245.

Dees anyone else have anything to be heard on either of these two cases? The Commission will continue these two cases until the next regular hearing which will be held on May 19th and we urge you to -- that is the Committee and the subcommittee to preceed with all possible speed. We realise that this is quite a problem but we, nevertheless, would like to have you move as fast as possible. The next case on the decket is Case 497.

STATE OF NEV MEXICO)

COUNTY OF SANTA FE

I hereby certify that the foregoing and attached transcript of hearing in Cases 345 and 521 before the Oil Conservation Commission on April 16, 1953, at Santa Fe, is a true recert of the same to the best of my knowledge, skill and ability.

DATED at Santa Fe, this 28th day of April, 1953.

Andrey Mo Henrickson

My commission expires September 20, 1955.

## BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

April 16, 1953

OASE 245 and CASE 521: Case 246 - continued - Under terms of Order R-264 which denominated gas pools in Southeastern New Mexico, further testimony will be received for the extension of existing pools or the creation of new pools.

Case 521 - Application of the Commission on its own motion for an order, establishing means and methods for the propation of natural gas in Lea, Eddy, Chaves and Roosevelt Counties. This case was continued in expectation of report of advisory committee which was appointed at the March 17 hearing.

MR. SPURRIER: I have a letter from the Chairman of the advisory committee to the Oil Conservation Commission on Case 521. It is signed by A. L. Hill, Chairman.

"As requested by Mr. R. R. Spurrier under letter dated March 19, 1953, the above mentioned advisory committee met in the office of the New Mexico Oil & Gas Engineering Committee in Hobbs, New Mexico at 10:00 a.m., March 24, 1953. As suggested by the Commission, the representative of the Ml Pase Matural Gas Company acted as chairman of this committee. Spurrier and other Commission personnel, Mr. Taylor of the New Mexico Oil & Gas Engineering Committee and representatives of each of the companies appointed to the advisory committee were present at this meeting.

"A subcommittee was appointed for the study and determination of general rules of gas projection for submission to the advisory committee. Another subcommittee is to study a report as to any required revisons of present gas pool designations. Each committee consists of a representative from each of the companies represented on the advicery committee.

\*A meeting of each of these subcommittees was held in Hobbs at 10:00 a.m., March 31.

\*\*Correction\*\*

Oil Corporation represented by George E. Kerndell acted as chairman of the general rules subcommittee. They met in the effice of the Oil and Gas Engineering Committee.

"Gulf Oil Corporation represented by Mr. R. L. Hass acting as the chairman of the pool definitions subcommittee met at the Humble Recreation Hall. Each of these subcommittees, subjects for additional study were

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STATE OF NEW MEXICO)
OCUMTY OF SANTA FM )

I hereby certify that the foregoing and attached transcript of hearing in Cases 245 and 521 before the Oil Conservation Commission on April 16, 1963, at Santa Fe, is a true record of the same to the best of my knowledge, skill and ability.

DATED at Santa Pe, this 28th day of April, 1953.

Audrey M. Henrickson

Hy commission expires September 20, 1955.

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# Memo

# From WILLIAM B. MACEY Chief Engineer

GAS POOLS- SOUTHEAST NEW MEXICO

Area I-- Yates & Seven Rivers---JAICO

Area II-- YATES AND SEVEN RIVERS-LANGMAT

(with Exception of lower 100' of 7-Riv.)

AREA III-- YATES-SEVEN RIVERS-QUEEN-EUMONT

AREA IV-- YARES-SEVEN RIVERS-QUEEN-ARROW

Queen (upper 200')

Memo WILLIAM B. MACEY
Chief Engineer Monument Merce and post to france post

Memo

WILLIAM B. MACEY Chief Engineer

Pag 45- Trubb Amada July Dastes Byers.

Reconneidations Yales water Rivers fates and Lever Revers (allbut love-100' of 7R) Jules 1 Rowers & Queen IK yetes - 7R, Queen (uppor 2001)

December 22, 1952

OIL COURSE ON THE HESTON

DEC. 29 1952

TO ALL EUNICE-MONUMENT POOL OPERATORS:

In compliance with the following letter, a meeting is being called for 9:00 o'clock A.M., January 7th, 1953 at this office.

Glenn Staley, Director N.M. Oil and Gas Engineering Committee

#### LETTER

NEW MEXICO
OIL CONSERVATION COMMISSION

P. O. Box 871 Santa Fe, New Mexico December 18, 1952

Mr. Glenn Staley
New Mexico Oil and Gas Engineering Committee
Box 127
Hobbs, New Mexico

Dear Sir:

In preparation for the proration of gas in Southeastern New Mexico, we would appreciate very much your assistance in getting the oil and gas producers of the Eunice-Monument Fool together for a meeting in your office. We feel that the gasoline plant operators should be present also.

Sincerely,

/8/ R. R. Spurrier Secretary - Director

N.M. Oil and Gas Engineering Committee Hobbs, New Mexico December 22, 1952 Die Lauthest Gas Provation - 1953

## OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

December 18, 1952

Mr. Glenn Staley
New Mexico Oil and Gas Engineering Committee
Box 127
Hobbs, New Mexico

Dear Glenn:

In preparation for the proration of gas in Southeastern New Mexico, we would appreciate very much your assistance in getting the oil and gas producers of the Monument Pool together for a meeting in your office. We feel that the gasoline plant operators should be present also. We suggest the date of January 6, 1953 but will leave that decision and arrangement to you.

Sincerely,

R. R. Spurrier Secretary - Director

RRS:1h

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Dile Southest gas
Reston 1953

Case 521

JAN 1.8 1953

#### NOTICE

A PRELIMINARY MEETING OF COMPANY REPRESENTATIVES AND ENGINEERS FOR THE EUNICE-MONUMENT AREA IS BEING CALLED FOR 9 A. M., JANUARY 27, 1953, AT THE OFFICE OF THE NEW MEXICO OIL & GAS ENGINEERING COMMITTEE, HOBBS, NEW MEXICO.

GLENN STALEY DIRECTOR

#### MINUTES OF EUNICE-MONUMENT POOL OPERATORS MEETING

The meeting of the Eunice-Monument Pool Operators was held in the office of the New Mexico Oil and Gas Engineering Committee, January 7, 1953. The meeting had been called by Mr. R. R. Spurrier, State Geologist, by letter to all operators dated December 18, 1952. The following company representatives were present:

#### COMPANY

### **ADDRESS**

	· · · · · · · · · · · · · · · · · · ·	
R. J. Aldridge, Jr.	The Atlantic Refining Company	Denver City, Texas
A. R. Ballou	Sun Oil Company	Dallas, Texas
D. H. Voss, Jr.	11 11 11	11 11
E. E. Tucker	Tidewater Assoc. Oil Company	Midland, Texas
John Springer	tt ti	11 11
Wesley Buice	Sunray Oil Corporation	er st
George D. Daly	The Atlantic Refining Company	11 11 11
W. H. Hogan	11 11 11	m _m
H. F. Weaver	The Texas Company	Monument, New Mexico
R. T. O'Neil	Phillips Petroleum Company	Odessa, Texas
W. L. Phillips	17 17 51	11
H. C. Webb	11 11	Bartlesville, Oklahoma
E. H. Foster	11 11	Amarillo, Texas
O . P. Nicola, Jr.	11 11 11	Bartlesville, Oklahoma
J. V. Peacock	11 11 !!	Amarillo, Texas
J. W. Cole, Jr.	Gulf Oil Corporation	Fort Worth, Texas
D. C. Sears	ii 11 11	Hobbs, New Mexico
C. M. Bumpass	17 11 11	11 11
Hugh Smith	Phillips Petroleum Company	11 11 11
George G. Todd	Dalport Oil Corporation	Dallas, Texas
W. A. Scott	Shell Oil Company	Hobbs, New Mexico
J. D. Savage	II II II	\$\$ 17 EE
E. C. Hutchinson	Warren Petroleum Corporation	Monument, New Mexico
L. A. Walker	11 11 11	11 11
Dan O. Howard	St 11 71	Tulsa, Oklahoma
F. H. Wolfe	11 11	Seminole, Texas
H. E. Massey	Cities Service Oil Company	Hobbs, New Mexico
E. L. Patterson	Rowan Oil Company	Eunice, New Mexico
J. M. McMahan	Standard Oil Co. of Texas	Royalty, Texas
Prentice R. Watts	Southern Union Gas Company	Hobbs, New Mexico
A. M. Wiederkehr		Dallas, Texas
John R. Rice	The Ohio Oil Company	Hobbs, New Mexico
W. M. Kearley		II II II
W. B. Quesenbury, Jr. N. M. Baird	Wilshire Oil Company, Inc.	Midland, Texas
£1	American Republics Corporation	Houston, Texas
John S. Floeter	tt tt tr	Antonia Mara Maralan
C. A. Shaid	11 11 11	Artesia, New Mexico
Frank Forsyth W. C. Rigg		Midland, Texas
E. D. Dickey	Phillips Petroleum Company Shell Oil Company	Hobbs, New Mexico
M. H. Cullender	Phillips Petroleum Company	Midland, Texas Bartlesville, Oklahoma
Viles P. Sheldon	Charm Oil Company	Artesia, New Mexico
Peck Hardee	Texas-Pacific Coal, & Oil. Co.	Midland, Texas
John Yuronka	17 II 11 11 13 13	Holbs, New Mexico
C. J. Rey, Jr.	The Toxas Company	Fort Worth, Texas
A. E. Willig	th ti ti	11 11 11

#### COMPANY

ADDRESS

K. D. McPeters K. J. Barr	Stanolind Oil and Gas Company	Hobbs, New Mexico
D. L. Irion	Mid-Continent Petroleum Corp.	tt tt
	Amerada Petroleum Corporation	Tulsa, Oklahoma
W. G. Abbott	. 11 11	Monument, New Mexico
J. C. Blackwood	tt ft tt	Midland Texas
R. E. Seifert	n t	11
D. C. Capps		Monument, New Mexico
R. E. Siverson	Sinclair Oil & Gas Company	Hobbs, New Mexico
C. C. Salter	29 17 11 11	n n
C. L. Quast	ti 13 H 11	Odessa, Texas
R. A. Scalapino	El Paso Natural Gas Company	Jal, New Mexico
Barton W. Ratliff	Skelly Oil Company	Hobbs, New Mexico
J. C. Cherry	Humble Oil and Refining Co.	11 11
Thomas F. Gray	Sun Cil Company	Odessa, Texas
A. L. Porter, Jr.	N.M. Oil Conservation Commission	Hobbs, New Mexico
W. B. Macey	11 11 11 11	Santa Fe, New Mexico
R. R. Spurrier	17 17 11 11	n n n
L. A. Hanson	11 11 11	Artesia, New Mexico
George H. Hirschfeld	N.M. Oil & Gas Eng. Committee	Hobbs, New Mexico
Glenn Staley	11 11 11 11	11 11 11

The meeting was called to order by Mr. Spurrier at 9:30 A. M. He stated that the reason for calling the meeting was to enlist the cooperation of all oil operators and gas plant operators within the pool in the working out of some plan for the elimination in so far as is practicable the waste of natural gas that is being produced with the oil from the pool. Mr. Spurrier then turned the meeting over to Mr. William B. Macey, Chief Petroleum Engineer, of the Commission.

Mr. Macey called attention to the high Gas-Oil Ratios in certain portions of the pool. He also called attention to the inability of the gasoline plant located in the northern portion of the area to process all of the gas now being produced with the oil. The discussion that followed brought out existing reservoir conditions; the apparent existence of a gas cap or gas caps in various parts of the pool.

Mr. Dan Howard, an official of Warren Petroleum Corporation, gave an outline of plans his Company had for the expansion of the existing gasoline absorption plant located in north portion of the pool.

Mr. Christie and Mr. Blackwood of the Amerada Petroleum Corporation and Mr. Willig of The Texas Company discussed remedial work that had been done by the companies to eliminate high Gas-Oil Ratios and other operating practices.

Page 3.

The fluxiation in the volume of gas being delivered to the plant through the hours of the day and days of the month was discussed.

After listening to all who wished to discuss the various factors that entered into the problem it was decided that in order to give all interested parties an opportunity to study the situation and consult their engineers and records the meeting be adjourned and another meeting be called by the operators in the near future.

R. R. Spurrier, State Geologist Chariman

GULF H-2110

VICE-PRESIDENT



PETROLEUM AND ITS PRODUCTS

### **GULF OIL CORPORATION**

P.O. DRAWER 1290 FORT WORTH 1, TEXAS March 18, 1953

FORT WORTH PRODUCTION DIVISION

<u>S</u>

Mr. Glenn Staley, Director New Mexico Oil and Gas Engineering Committee Box 127 Hobbs, New Mexico

Dear Mr. Staley:

Complying with the request of Mr. R. R. Spurrier, Secretary and Director of the New Mexico Oil and Gas Conservation Commission, this is to advise that Galf Oil Corporation appeints Mr. E. E. Merkt, Jr., as its representative on the Industry Committee to study the proration of gas in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. Mr. Merkt, Technical Assistant to the Vice-President of the Company's Fort Worth Production Division, is located in our Fort Worth Office and all correspondence with regard to the Committee's activities should be directed to him at this address.

It is presumed that all companies will inform you of their representatives shortly, and a meeting of the Committee scheduled for an early date. In connection with the latter, we shall appreciate as much advance notice as possible.

co: Ar. R. R. Spurrier, Secretary and Director

New Mexico Oil and Gas Conservation Commission

P. O. Box 871 Santa Fe, New Mexico

MAR 2 0 1953

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#### N. M. DIL & GAS ENGINEERING COMMITTEE BOX 127 HOBBS, NEW MEXICO

March 18, 1953

TO:

El Paso Natural Gas Company Southern Union Gas Company Continental Oil Company Gulf Oil Corporation Humble Oil and Refining Company Shell Oil Company Phillips Petroleum Company Texas-Pacific Coal and Oil Company Samedan Oil Corporation

#### Gentlemen:

Mr. R. R. Spurrier, Director of the New Mexico Oil Conservation Commission has appointed your Company to serve on an Advisory Committee to assist the Commission in working out the means and methods for the proration of natural gas in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

Each Company will please designate their representative to serve on this Committee.

The Company acting as Chairman (El Paso Natural Gas Company) has called the first meeting for March 24, 1953 at 10:00 A.M., at the office of the New Mexico Oil and Gas Engineering Committee, Hobbs, New Mexico.

Respectfully submitted,

Glenn Staley

Secretary

GS/no

OIL CONSCRIATION CONTROLL SANTA FE, NEW MEY SO

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

CM 521

March 19, 1953

Chas. F. Taylor - Area Prod. Supt. Gulf Oil Corporation Box 2167 Hobbs, New Mexico

C. C. Wilson - District Supt. Continental Oil Company Box CC Hobbs, New Mexico

J. W. House - Division Supt. Humble Oil and Refining Company Box 1600 Midland Toms

G. R. Bickel Shell Oil Company Ben 1957 Hobbs, New Menico

Eugene Adair Temas Pacific Goal and Oll Company 305 N. Leech Hobbs, New Mexico

E. H. Freter - Land han Phillips - Wireleum Company Box 1781 Amarille, Texas

A. A. Kemmits Samedan Oil Corporation Box 1637 Hobbs, New Mexico

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### OIL CONSERVATION COMMISSION P. O. BOX 871

SANTA FE, NEW MEXICO Letter to Advisory Committee - Case 521

March 19, 1953

J. R. Cole Southern Union Gas Company 132 E. Marcy Street Santa Fe, New Mexico

C. L. Perkins - V. Pres. El Paso Natural Gas Company Box 1492 El Paso, Temas

New Mexico Oil and Gas Engineering Committee Box 127 Hobbe, New Mexico

Oil Conservation Commission S. J. Stanley Ben 2045 Hobbs, New Mexice

Gentlement

Committee to the Oil Conservation Commission on Case 521. This letter will confirm the appointments made at the March 17, 1953 hearing. You will note that the Companies are appointed, not individuals. I feel that a lawyer, engineer or geologist acquainted with prevation matters should be appointed from each Company to serve on the Committee.

The call of the hearing mentioned an order which would establish means and methods of gas presation in Lea, Eddy, Chaves and Reservelt Counties. I believe that it is necessary first to determine whether presation is needed, and this will involve a great amount of study on the gas production statistics available.

It is suggested that the office of the New Mexico Oil and Gas Engineering Committee be used to obtain evidence of ratable take inequalities, if they do exist. The information is available in this office, but Hobbs is more centrally located for a meeting place. The Committee secretary should, I believe, call the first meeting of the Committee. It was stated at the hearing that a report from this Committee would be expected at the

### OIL CONSERVATION COMMISSION

Letter to Advisory Committee - Case 921 March 1953, 19th

April 16, 1983 hearing in Santa No. It is probably true that a comprehensive report cannot be completed by that time, never the less, we would like to have a report at every monthly hearing until the final recommendations are made.

This Committee must be a working Committee. Members appointed to the Committee should be expected to devote considerable time working on this problem, and should be free to attend Committee meetings and hearings when necessary.

Very truly yours,

R. R. Spurrier Secretary - Director

RRSIIh

ADVISORY COMMITTEE

Case # 521

GAS PROPATION
NEW MEXICO OIL CONSERVATION COMMISSION

A meeting of the Advisory Committee was held March 24, 1953, Hobbs, New Mexico, with the following representatives present:

( Not available at present time)

The purpose of the meeting was to discuss the need of gas proration.

R. R. Spurrier opened the meeting with a suggested line of study since a ratable take of gas and predetermined methods on the part of the Commission were non-existant. The requested points of study were outlined as follows:

- 1. The need of proration
- 2. Reservoir Fnergy
- 3. Flares
- 4. High Gas-Oil Ratios
- 5. Limiting Gas-Oil Ratios
- 6. Withdrawal of gas cap in an oil reservoir

Mr. Hill, El Paso Natural Gas Company, was introduced and was named the acting chairman of the Advisory Committee. Since the discussion of proration of gas was to commence with-out formulation of ideas on the part of the Commission and all representatives present a statement was requested from each member present on the subject of the need of gas proration.

GULF Expressed the desire that now is the time to consider, study and develop rules and regulations pertaining to proration.

CONTINENTAL Requested time to consider the problem with the management, however, it was felt that the time has arrived for needed gas proration.

HUMBLE Not only are we in need of gas proration but it is recommended that we advance a step further. The Oil Conservation Commission should head

gas promation to prevent present waste in reservoires created by the gas problem. The nuisance factor at the outset of operations in the State has also changed economically.

EL PASO The probability exists of the completion of a new Pipe Line Company in this area. The present condition inaugurated and practiced by El Paso Gas pertaining to ratable take of gas will be greatly aggravated by other pipe-line-systems. We should study the problem to see if a correction is needed on ratable take under certain conditions of large gas withdrawals from associated oil pools. This protection is probably needed for the ultimate recovery of oil. It is suggested that sub-committees be appointed to study the different phases of the over-all problem. The poll of opinion was continued.

AMERADA Expressed the desire for proration.

PHILLIPS Proration is needed with emphasis on the study of associated and non-associated gas.

STANOLIND Requested time for investigation prior to issuance of a statement.

SOUTHERN UNION Requested time to study the problem prior to issuance of a statement.

SHELL The present system of gas production requires proration.

SAMEDAN We are confronted with a specific instance of the general problem. A definite need of proration is needed in the State. Since a new gas pipe line system will be installed in this area I feel that should the State lag in gas proration the Federal Power Commission will be forced to act.

TEMAS PACIFIC & OIL Request time for further investigation of study

The unequal take of gas from a defined pool with respect to boundary lease lines could result in court action on the part of royalty owners. The numerous instances of dual completions embracing a 10 Acre tract, 86 acre, 120 or 160 acre tract will present a greater problem in the future. It must be remembered that the basic unit is 160 acre. I am greatly pleased over the reaction of the members present and their willingness to cooperate on this matter.

GULF Have the gas fields of the State and unit gas acreage been defined?

SPURRIER It is generally accepted that a unit allowable is based on a 160 acres, a quarter section in the form of a square within the section boundary.

GULF It is evident that spacing is needed.

EL PASO It is impossible to state with any degree of accuracy what sort of a balance will be needed to offset the problem of proration. I feel sure that we cannot hope for contractual position of equity in an existing pool and a balance will be lacking. Therefore, the rules and regulations should be of a flexible nature for our operation. It must be remembered that our major take is confined to residue gas and the "peaks" are filled with the use of dry gas. Fermian Pipe Line's chief source of residue gas will be from the Sprayberry Tred with the anticipation of obtaining a dry-gas source in Lea County, Therefore we will need workable and feasible rules to govern proration. Furthermore an inter-exchange of three purchasers may be required for flexibility. El Paso's nomination or requirements are based on a six to 12 month period and we may need inter-exchange over a long period.

The Advisory Committee should nominate sub-committees to explore the various problems connected with gas proration to study problems pertaining to the definition of a EL PASO: maximum ratio - classification of a gas well - etc. The Advisory Committee should discuss and work-out the general over-all plan of proration. A system of nominated gas on a monthly basis similiar to that of Texas should be discussed. The amount of production of gas should be ad-HUMBLE: justed up or down to realize ratable take. The State of New Mexico should set a period of perhaps six months (6) to adjust for over-production or under-production depending on the circumstance. Certainly over-production of gas associated with oil should be curtailed. Should we appoint a sub-committee to study and define gas caps connected with oil reservoirs? A committee to study At one time the ratio of 50,000 to 1 limit was the defini-EL PASO: the problem of Gas-Oil Ratio Limit. Perhaps a committee should be designated to study inequities. GULF: We couldn't evaluate inequities with existing maps. The problem has been studied. EL PASO: Gas Pools are now defined since they are necessary to initiate proration. Continental Oil Company contributed SAMEDAN: to this study and definition. If necessary we can change HUMBLE: SPURRIER: their boundaries, if major discrepancies exist. The acreage factor has been discussed and perhaps we should include an acreage designation to be filed on Form C-101 (Notice of Intention to Drill) whenever a gas well is to be drilled.

HUMBLE: The C-101

The C-101 for drilling of a gas well should require a

plat.

APURRIER: It must be remembered that an acreage figure does not

give a description or configuration of acreage in

question.

HUMBLE: The shape of a tract has definite significance.

HUMBLE: Oil, wells in a gas reserve will present a problem

especially with a gas reservoir producing a little oil.

EL PASO: Whenever this occurs, a provision should be made for the

production of oil.

HUMBLE: A gas allowable should be nominated in this case and the

production of oil should come from this figure.

SHELL: The problem should be divided into two main thoughts:

1. Associated Gas - Relegating itself to problem of

conservation.

2. Non-Associated Gas - Ratable take

We should decide at the present time the method of app-

roach in associated and non-assiciated gas.

EL PASO: The problem of associated gas is a problem of oil produc-

tion. A method should be provided to prorate associated

gas.

HUMBLE: Will a depth factor be considered on the 160 acre spacing?

SPURRIER: The problems of depth factor have not been extensively

studied at the present time. The 160 acre unit, however,

is a minimum spacing.

EL PASO: More specific rules will be needed to carry on gas proration.

SPURRIER:

A general four-county-wide-rule should be adopted. We can deviate from the general rule when ever specific rules are required.

HUMBLE:

It is recommended to establish committees to study:

(1). Classification of pools - associated and non-associated.

(2.) A Committee on Rules

EL PASO:

It is recommended that a committee study the problem of limiting gas-oil ratio.

STANOLIND:

It is recommended that one committee study both problems to establish a general over-all picture to establish the mechanics of proration. A certain company would consider gas proration based on pressure - and another would consider potential, etc. To divide and establish more than one committee would result in confusion.

PHILLIPS:

There are certain factors which are basic to all pools. Acreage is an example. Consider the adoption of rules of the four counties on a statewide basis. The rules should be written on this basis. It is evident that the adopted rules will not be workable in each field but will be a basis for gas proration. Deviations for a pool can be initiated whenever necessary. It is recommended that the Commission adopt the rules

SHELL:

It is recommended that the Commission adopt the rules and appoint sub-committee for the various problems of proration mechanics.

EL PASO:

The Chairman recommended sub-committees be appointed for associated and non-associated gas. Combine the

rules for the entire conservation of gas in all types of reservoirs. Consider the various mechanics needed in the over-all program and divide the work.

Mississippi and Texas have similiar mechanics, therefore, we could benefit from their experience and work out similiar plans.

EL PASO: My purpose is to explore the Advisory Committee and if it is felt that the one group can operate more efficiently then that is the course we should follow.

EL PASO: One committee should be assigned the task of balancing—
out the ratable take of gas from the various leases —
a committee for associated oil to determine the gas—oil
ratio limit, etc. The other committee should confine
it's problems to the general rules.

PHILLIPS: I feel that a committee should be adopted to define a gas well.

EL PASO: The definition of a gas well should be determined by the Over-all Committee - also the problem of allowable- etc.

A vote was taken and it was unanimously agreed to study these problems with a committee

HUMBLE: I don't feel that a definite rigid definition of a gas well will apply from one field to another. It is recommended that the New Mexico Engineering Committee define the gas pools.

PHILLIPS: A committee should study the over-all picture of gas pools in the area and formulate a definition to define a gas pool. It is expected that it may vary for each pool.

EL PASO: Presented a motion to appoint a committee to study the problem of proration.

SPURRIER: Once the findings of this committee establish the need of proration a State-wide hearing will be called. The case of proration will be wide open at each hearing to accept committee reports and discuss gas proration. It is the consensus of opinion of the Commission that gas proration is necessary.

It was adopted to divide the committee into two parts to study:

- 1. Definition of Pools
- 2. General Rules

It was recommended that each committee have a member outlined in the report of the Commission. Mr. Staley should be advised which person will be assigned to serve on the two committees representing the companies outlined in the letter from the Commission and in turn arrange the meeting. It was agreed to conduct a meeting of the Committees for March 31, 1953 at 10 A.M.

Stanley Stanley

DOMESTIC SERVICE

Check the class of service deshed; otherwise this message will be sent as a full rate telegram

FULL RATE TELEGRAM

DAY LETTER

E

MIGHT LETTER

# WESTERN

1206 10-51

Check the class of service desired; otherwise the message will be sent at the full rate

LETTER TELEGRAM SHIP RADIOGRAM

HO. WDS.-CL. OF SVC. PD. OR COLL. CASH NO. CHARGE TO THE ACCOUNT OF Humble Oil & Refining Company

The following message, subject to the terms on back hereif, which are kereby agreed to

( C O P Y )

Midland, Texas, March 20, 1953

Mr. Glern Staley c/o N. M. Oil & Gas Engineering Committee Hobbs, New Mexico

Hamble Company representative Advisory Committee on gas, J. W. House. Alternate R. S. Deney.

Humble Oil & Refining Company

By J. W. House

MAR 2 3 1953

Mars 52

# OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

March 26, 1953

Mr. Glenn Staley
New Mexico Oil and Gas Engineering Committee
Box 127
Hobbs, New Mexico

Dear Sir:

Reference is made to your telephone conversation of this morning with Mr. W. B. Macey, pertaining to your distribution of Committee reports on gas provation.

You are hereby authorized to reproduce and distribute to all interested parties, copies of any Committee reports obtained by you.

Very truly yours,

WBM:RRS:lh

R. R. Spurrier Secretary - Director

OIL CONSERVATION COMMISSION SANTA FÉ, HE MEXION MEXION MAR 3-0-1953

March 26, 1953

Mr. J. B. Holloway Tide Water Associated Oil Company Mellie Esperson Building P. O. Box 1404 Houston 1, Texas

Dear Mr. Holloways

In reply to your letter of March 23 regarding the Oil Conservation Commission Advisory Committee, Case 521, appointed March 17, 1953 in Santa Fe, New Mexico.

The first meeting of this Committee was held March 24 in Hobbs. The Minutes have not been mailed out. The understanding that this office has with the Director of the Oil Conservation Commission, Mr. R. R. Spurrier, is that all reports of the above Committee shall be mailed to the entire mailing list of this office in order that all operators have knowledge of Committee progress and have the benefit of any suggestions offered to the Commission prior to the hearing to be held April 16, 1953.

Very truly yours,

Clem Staley

GS/no

cc: Hr. R. R. Spurrier Mr. A. L. Hill 70:

El Paso Natural Gas Company
Southern Union Gas Company
Continental Oil Company
Gulf Oil Corporation
Humble Oil & Refining Company
Shell Oil Company
Thillips Fetroleum Company
Texas-Pacific Coal and Oil Company
Samedan Oil Corporation



### Centlemen:

At a meeting of the General Rules Subcommittee of the Advisory Committee to the Jil Conservation Commission of New Mexico on Case 521 regarding Gas Provation in Hobes, New Mexico on March 31, 1953, two motions concerning general rules were made and passed. These motions were as follows:

- 1. That the General Rules Subcommittee recommend to the Advisory Committee that a rule be suggested to the New Mexico Commervation Commission which would include the filing of the following:
  - a. Nonthly gas nominations;
  - b. Assignment of monthly gas allowables;
  - c. Reporting of gas production on a monthly basis;
  - d. The balancing of gas production against allowables over a specified proration period.
- 2. That the General Rules Subcommittee recommend to the Advisory Committee that a rule be suggested to the New Mexico Conservation Commission which would define

It was agreed that each company represented on the Advisory Committee would study the above motions and submit their comments and opinions to the Samedan Oil Corporation, Chairman of the General Rules Subcommittee, on or before April 14, 1953. After all of these comments and opinions have been received, each company will be furnished a copy of them for additional study.

A meeting has been set for April 30, 1953, at 9:00 AM (MST) at the office of the New Mexico Oil and Gas Engineering Committee, Hobbs, New Mexico, at which time final rules will be formulated with reference to the motions set forth in this letter.

Respectfully submitted,

SAMEDAN OIL CORPORATION, Chairman General Rules Subcommittee

m trage & strimble

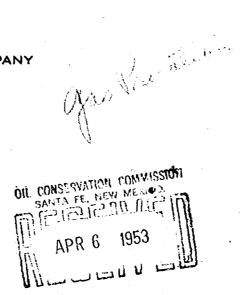
#### SOUTHERN UNION GAS COMPANY

80X 1654

SANTA FE, NEW MEXICO

April 2, 1953

J. R. COLE



Mr. R. R. Spurrier Secretary - Director Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Dear Dick:

Reference is made to your letter of March 19, 1953, advising that our company has been appointed to serve on an Advisory Committee to the Oil Conservation Commission on Case #521.

This is to advise you that Mr. Van Thompson has been appointed to represent Southern Union Gas Company on this Advisory Committee.

Very truly yours,

JRC:JH:dc

cc: C.H. Zachry - Dallas J. C. Reed - Dallas Van Thompson - Dallas

# El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Jexas

April 15, 1953

Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Advisory Committee to the Oil Conservation Commission on Case 521, concerning gas pro-ration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. In Re:

As requested by Mr. R. R. Spurrier's letter dated Gentlemen: March 19, 1953, the above-mentioned Advisory Committee met at the office of the New Mexico Oil and Gas Engineering Committee in Hobbs, New Mexico, at 10:00 A. M., March 24, 1953. As suggested by the Commission, a representative of the El Paso Natural Gas Company acted as chairman of this committee. Mr. Spurrier and other Commission personnel, Mr. Staley of the New Mexico Oil and Gas Engineering Committee, and representatives of each of the companies appointed to the Advisory Committee were present at this

A subcommittee was appointed for the study and determination of general rules on gas proration for submission to the meeting. Advisory Committee. Another subcommittee is to study and report as to any required revisions of present gas pool designations.

Each committee consists of a representative from each of the companies represented on the Advisory Committee.

A meeting of each of these subcommittees was held in Hobbs, New Mexico, at 10:00 A. M., March 31, 1953. Samedan Oil Corp., represented by Mr. George E. Trimble, acted as chairman of the general rules subcommittee, which met at the office of the New Mexico Oil and Gas Engineering Committee New Mexico Oil and Gas Engineering Committee. Gulf Oil Corp. represented by Mr. R. L. Boss, acted as chairman of the pooledefinition subcommittee, which met at the Humble Recreation Hall. In each of these subcommittees, subjects for additional study were agreed upon and provisions made for future meetings.

The minutes of the initial Advisory Committee meeting, as well as the meetings of each of the subcommittees, have been furnished to the Commission. It is recommended that the hearing be kept open and continued until final report of the Advisory Committee.

A. L. Hill, Chairman Gas Proration Advisory Committee

ALH: W: pc: mm

April 15, 1953

Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

> In Re: Advisory Committee to the Oil Conservation Commission on Case 521, concerning gas proration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

Gentlemen:

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Respectfully submitted,

A. L. Hill, Chairman

Cas Proration Advisory Committee

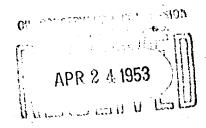
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Case 521

April 18, 1953

MO:

El Paso Natural Gas Company Southern Union Gas Company Continental Oil Company Gulf Oil Corporation Humble Oil and Refining Company Shell Oil Company Phillips Petroleum Company Texas-Pacific Coal and Oil Company Samedan Oil Corporation



Gentlemen:

With reference to the two motions made and passed at the March 31, 1953, meeting of the General Rules Subcommittee concerning gas provation in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, attached are copies of suggested rules and/or opinions received thus far in reference to the above motions.

If and when the suggested rules and/or opinions are received from those companies not as yet heard from copies will be transmitted to each of you upon their receipt by your chairman.

At the regular monthly meeting of the New Mexico Oil Conservation Commission in Santa Fe, New Mexico, on April 16, 1953, Case Number 521 was continued for discussion. At that time Mr. R. R. Spurrier urged the Advisory Committee to complete their assignment as soon as possible. Therefore it is suggested that as soon as the enclosed suggested rules and/or pinions are studied and considered each company who has not already done so should draft a suggested rule or rules covering the motions that were made at the March 31, 1953 meeting of the general rules subcommittee.

In addition so that we might hasten the work of the general rules subcommittee, it is suggested that each company prepare an outline containing those factors that are felt necessary in the final set of rules that the general rules subcommittee will submit to the Advisory Committee. By doing this prior to the April 30, 1953 meeting of the general rules subcommittee it is possible that a discussion and outline of the final set of rules can be agreed upon for consideration of those companies making up the Advisory Committee.

Yours very truly,

SAMEDAN OIL CORPORATION, Chairman General Rules Subcommittee

George E. Trimole

## PROPOSED RULES ON GAS PRORATION AND ALLOCATION STATE OF NEW MEXICO GULF OIL CORPORATION

### ·RULE 602 - ALLOCATION OF GAS PRODUCTION

### (1) Gas Nominations

(a) On or before the tenth day of each calendar month each gas purchaser shall submit to the Conservation Commission, in affidavit form and on forms furnished by the Commission, the estimated volume of gas which said purchaser will require from each pool during the next succeeding calendar month.

The term "gas purchaser" as used herein, shall mean the "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit the nomination. An Operator of the gas well who takes gas at the well head and uses such gas for his own operations either on leases or in a fuel system shall submit the nomination form and likewise processing plants which operate field gathering systems and which are the takers of the gas at the wellhead will be responsible for submitting the nomination form.

### (2) Statewide Hearing

Each month during the regularly scheduled monthly hearing established by the provisions of Rule 503 (b), the Commission shall determine:

- (a) The lawful market demand for gas to be produced from each pool during the following month.
- (b) The volume of gas that can be produced from each pool and each well therein during the following month, without waste.

### (3) Monthly Gas Allowable:

Subsequent to the statewide hearing of the Commission and as soon thereafter as is practicable, the Commission shall fix the monthly allowable of gas to be produced from each pool and said allowable shall be either the lawful market demand from said pool or the volume that can be produced from said pool without waste, whichever is the smaller quantity.

(4) Allocation of allowables to prevent waste and protect correlative rights.

After the Commission finds, upon hearing, that the gas wells in any pool are capable of producing an accumulative volume of gas which is in excess of the current market demand for gas from said pool, or finds that allocation of allowables or the regulation of production of any well or wells is necessary to prevent waste and protect correlative rights, the Commission shall allocate the monthly pool allowable among all wells entitled to produce gas therefrom so as to give each well its fair share of the gas to be produced from the pool, provided that each well shall be restricted to the amount of gas that can be produced without waste. The volume of gas allocated to each well shall be regarded as the monthly allowable for such

well and each well's daily allowable shall be determined by dividing the monthly allowable by the number of days in the month. A gas proration schedule shall be issued by the Commission each month for each allocated gas pool and such schedule shall list each gas well in the pool and the allowable for each well.

(5) Computing and balancing overproduction and underproduction.

If during any month or months of a proration period an operator produced more gas or less gas than the assigned allowable, then the procedure for computing and balancing overproduction and underproduction shall be as follows:

(A) For the purpose of computing and balancing overproduction and underproduction in the various gas pools, the dates 7 a.m., Narch 1 and 7 a.m., September 1, are to be known as "Balancing Dates"; and the six months periods beginning 7 a.m., March 1 and ending 7 a.m., September 1 and beginning 7 a.m., September 1 and ending 7 a.m., March 1, will be considered as separate entities and will be known as "balancing periods."

### (1) UNDERPRODUCTION

- ল ক্ষেত্ৰকালে ক্ৰেডিভ ক্ৰিছিল প্ৰতিষ্ঠা । ত লগতীক্ষা ভাৱত ক্ষেত্ৰকাল ক্ৰিছিল (a) In the event there shall not be produced from any gas well in any gas pool during a balancing period as much pas as is allocated thereto under orders of the Commission, the operator of any such well shall be permitted to carry such underproduction forward to the next succeeding balancing period, as future allowable credit, to be produced during that period.
- (b) The amount of underproduction to be carried forward into any new believing period shall consist of actual underproduction that accrued in the balancing period immediately preceding such new talancing period and the accumulative vell status, as to underproduction, will be adjusted on each balancing date accordingly.
- (c) Underproduction as pertains to any well shall not be made up at a rate in excess of twice the daily average rate required to produce the normal current monthly allowable of the well.
- (d) With respect to a producing well that has been accumulatively underproduced on each of two successive balancing dates, such well shall not be assigned a monthly allowable greater than the maximum monthly production had from such well during the immediately preceding balancing period; provided, however, that such limited allowable as is assigned such well hereunder may be adjusted to a value not to exceed the allowable accruing to such well under the allocation formula, upon certification to the . Commission from the operator thereof that such well is producing gas in excess of the limited allowable assigned it.

### (2) OVER PRODUCTION

(a) Each operator of each gas well in any gas pool may, subject to the hereinafter prescribed conditions, produce such well in excess of the monthly allowable allocated to such well provided that no well shall in any one month produce at a rate in excess of twice the daily average ... rate required to produce the normal current monthly allowable of the well:

The same of a large of the same

### Page 3. Gas Fyrration and Allocation cont'd

- (b) Any well overproduced as of a balancing date, and which well was also overproduced on the balancing date immediately preceding and remained overproduced for the entire period between the two balancing dates, shall be shut in until the overproduction existentent as of the latter of such two balancing dates, is made up; this unless exception is had as provided for in the ext succeeding paragraph hereof.
- (c) The operator of a well which under the provisions of the immediately preceding paragraph would be required to be shut in may, if such operator is of the opinion that complete well shut in will materially damage his well, request a hearing before the Commission which hearing will be held only after due notice is given to all operators in the pool. If after consideration of the evidence submitted at such hearing the Commission finds that such well should not be completely shut in, the Commission may allow the over production charged against it to be made up at a lesser rate than it would be made up if the well were completely shut in.
- (d) Except where complete well shut in is required to make up over production (see paragraph b and c above), overproduction existent as of any balancing date shall be made up during the balancing period immediately fullowing, and may be made up at any time during such period; i.e., a specified fractional part of such over production need not be made up during each month of such balancing period, so long as all of such over production is made up during such balancing period.

### SUGGESTED REVISION OF RULE 403

### Natural Gas From Gas Wells To Be Measured And Volumes Reported Monthly

All natural gas produced shall be accounted for by metering, and the gas production from each well shall be metered exparately. The operator of each gas well shall report monthly to the Commission, on a form prescribed and furnished by the Commission, the volume produced from said well and the disposition or utilization of the volume produced. All volumes reported shall be computed at a base pressure of 10 cunces per square inch above an assumed average barometric pressure of 14.4 pounds per square inch (15.025 psia) and a standard base temperature of 60 degrees Fahrenheit with correction for deviation from Boyle's Law whenever such gas is actually metered at a pressure of 100 pounds per square inch gauge or higher. All volumes are to be submitted to the Commission so as to reach the Commission Office on or before the 25th day of the month next succeeding the month in which the gas was produced.

### DEFINITION OF A GAS WEIL

The term "gas well" is any well (a) which produces non-associated gas, or (b) which produces associated gas at a gas-oil ratio of more than one hundred thousand (100,000) cubic feet of gas to each barrel of crude oil produced from the same horizon.

New Mexico Oil & Gas Eng. Comm. Hobbs, New Mexico April 20, 1953

Samedan Oil Corporation, El Paso Natural Gas Company Southern Union Gas Company Gulf Oil Corporation Humble Oil and Refining Company Shell Oil Company Phillips Petroleum Company Texas Pacific Coal & Oil Company

In regard to the proposals made March 31, 1953, at the first meeting In regard to the proposals made march of the Committee on Means and Methods for of the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee on Means and Methods for the General Rules Subcommittee of the Committee the prevation of gas in New Mexico, Continental Oil Company has the following Gentlemen:

- 1. The proposal for a system involving nominations, allowables and production reports on a monthly basis and the balancinas of gas production on the production reports on a monthly pasts and the palancing of gas production and these allowables on a six-months basis is entirely in accord with our position on these matters as fas as fundamentals are concerned. The specific wording of course matters as fas as fundamentals are concerned. allowables on a six-months pasts is entirely in accord with our position on these matters as fas as fundamentals are concerned. The specific wording, of course, is subject to considerable them. comments: is subject to considerable change for clarification and refinement.
  - 2. In accordance with our original stand which was voiced at the first meeting of the general committee on March 24, a rigid definition of a gas well is a sten in the wrong direction. Such a definition would be applicable in meeting of the general committee on march 24, a rigid definition of a gas we is a step in the wrong direction. Such a definition would be applicable in is a step in the wrong direction. (1) Walla in a gas can and (2) walla in gas or gas it is a step of two situations. is a step in the wrong direction. Such a definition would be applicable in gas or gas either of two situations: (1) Wells in a gas cap and (2) wells in gas or gas either of two situations: (1) wells in a gas cap and (2) wells in gas or gas either of two situations. In the former situation an agacoriated nools become situation and agacoriated nools. condensate pools. In the former situation, an associated pool, properly defined would be contable treated under the present rules or perhaps by concensate pools. In the former situation, an associated pool, properly defined, would be equitable treated under the present rules or perhaps by a slight modification thereof in that such ass can wells would be allowed to defined, would be equitable treated under the present rules of perhaps by a slight modification thereof in that such gas cap wells would be allowed to slight modification thereof in that such gas cap wells would be allowed to shape only that amount of gas calculated by multivious the oil allowed. single modification thereof in that such gas cap wells would be allowable by produce only that amount of gas calculated by multiplying the oil allowable for emission the limiting gas/oil nation A slight modification could recorde for emission the limiting gas/oil nation produce only that amount of gas carculated by multiplying the old allowable by the limiting gas/oil ratio. A slight modification could provide for equivalent withdrawal of the gas can and the nonling of units for proportional volumetric withdrawal of the gas cap and the pooling of units for proportional wolumeuric withdrawal of the gas cap and the pooling of units for proportional allowable. The placing of a rigid gas—oil ratio definition together with generate treatment of the gas can from the oil restion of a recentor could generate treatment of the gas can from the oil restion of a recentor. separate treatment of the gas cap from the oil portion of a reservoir could only negative in inequities. A near-mag well would be given greater flexibility of gas separate treatment of the gas cap from the old portion of a reservoir could only result in inequities. A near-gas well would be given greater flexibility of gas utilization than a limit—hardfull gas well. Also the allowable limit production result in inequities. A near-gas well would be given greater liexibility of gas utilization than a "just-barely" gas Well. Also the allowable liquid production and consequently the allowable reservoir volume workers were to an unreason. and consequently the allowable reservoir volume voidage may vary to an unreasonable degree between two such wells which are direct offsets if the two are and consequency one accommon reservoir volume voltage may vary to an unreable degree between two such wells which are direct offsets if the two are treated under senarate miles providing for senarate allocation evetems. able degree decween two such wells which are direct offsets if the two treated under separate rules providing for separate allocation systems.

The present definition of "casinghead gas" specifically includes gas cap gas The present definition of "casingnead gas" specifically incrudes gas to so that this control may be exercised with only slight change of the rules.

In regard to gas wells in gas or gas condensate pools the definition should the hu walls hut by recentoing. The present definition of Mesa (mall wells) In regard to gas wells in gas or gas condensate pools the definition should not be by wells but by reservoirs. The present definition of "gas well " as"a the producing gas or natural gas from a common source of gas supply as determined the producing gas or natural gas from a common source of the commission is quita proper, if not adequate. Furthermore, the Well producing gas or natural gas from a common source of gas supply as determined by the Commission is quite proper, if not adequate. Furthermore, the by the Commission is quite proper, if not adequate appear to support this viewedefinitions of "condensate" and "natural gas or gas" appear to support this the definitions could be clarified and perhaps be better correlated but the The definitions could be clarified and perhaps be better correlated, but the intent to aganciate them is clear. intent to associate them is clear.

### Page 2. Continental Oil Co. Contod

As each of you know, the characteristics of each reservoir is different from every other and the nature of each is governed by many factors other than gas-oil ratio. In reality, to properly classify reservoirs, it is necessary to study each separately, weighing the facts in a scientific manner and drawing conclusions based on sound engineering principles. A gas reservoir, actually, is a single phase reservoir existing in the gaseous state at reservoir conditions. Any departure from such classification is contrary to sound engineering and sound conservation principles. A gas reservoir, therefore, should be classified by the Commission based upon evidence presented at public hearing after sufficient engineering study has been made.

We hope to have suggested rules and modifications of present rules in readiness for your consideration at our next meeting on April 30.

Respectfully submitted

(Sgd) V.T. Lyon
Continental Cil Company
Member General Rules Subcommittee

New Mexico Oil & Gas Eng. Comm.
Hobbs, New Mexico
April 20, 1953

## PROFOSED MODIFICATION OF DEFINITIONS AND RULES (Submitted by Phillips Petroleum Company) New Mexico Oil Conservation Commission Rules and Regulations

### DEFINITION 24. GAS WELL shall mean

- (1) a well producing gas or natural gas from a pool classified by the Commission as a gas pool, and
- (2) a well with a gas-oil ratio above 100,000 cubic feet of gas per barrel of oil producing oil and/or gas from a pool classified by the Commission as an oil pool.

### PROPOSED MODIFICATION OF RULES

### New Mexico Oil Conservation Commission Rules and Regulations

### RULE 102. NOTICE OF INTENTION TO DRILL CR' RECOMPLETE

Prior to the commencement of operations, notice shall be delivered to the Commission of intention to drill any well for oil or gas on Form C-101. Frior to the commencement of recompletion operations, notice shall likewise be delivered to the Commission of intention to deepen or plug back to any common source of supply other than the existing production horizon.

Notice of intention to drill or recomplete shall be accompanied by a certified lease plat showing lease boundary lines, acreage attributable to the well or unit, the location of the proposed well with reference to property lines, and other wells on the unit.

### RULE 104. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS

- (a) Same as set out in present rules.
- (b) Same as set out in present rules.
- (c) Same as set out in present rules.

  (d) Each well drilled in a defined gas pool shall be located on a tract informing to the special pool rules and shall be located within the tract in
- conforming to the special pool rules and shall be located within the tract in accordance with the special pool rules, provided, however, that the Commission will, in order to protect the rights of the owner, grant exceptions to permit the drilling of wells on tracts smaller than the proration unit prescribed in the special pool rules.
  - (e) Same as set out in present rules.
- (f) The Secretary of the Commission shall have authority to grant an exception to the requirements of (a), (b), (c), and (d) above without notice and hearing where application has been filed in due form and
  - (1) The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and
  - (2) a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or
    - b) All owners of oil and gas leases within such radius consent in writing to the proposed location.
  - (g) Same as set out in present rules.

### Page 2. RULE 104 - Continued

- (h) Same as set out in present rules.
- (i) If the drilling tract is within an allocated gas pool or is placed within such allocated pool at any time after completion of the well and the drilling tract consists of acreage different from the proration unit prescribed in the special pool rules, the allowable for such well shall be increased or decreased in the proportion that the number of acres in the drilling tract bears to the proration unit for the particular pool.
  - (j) Same as set out in present rules.
  - (k) Same as set out in present rules.
  - (1) Same as set out in present rules.
  - (m) Same as set out in present rules.

### RULE 506. GAS - OIL RATIO LIMITATION

- (a) In allocated pools containing a well or wells producing from a reservoir which contains both oil and gas, each proration unit shall be allowed to produce only that volume of oil and/or gas equivalent, at reservoir conditions, to the volume of oil end/or gas allowed to be produced as a top unit allowable for the pool. In the event the Commission has not set a gas-oil ratio limit for a particular oil pool, the limiting gas-oil ratio for the pool shall be 2,000 cubic feet of gas for each barrel of oil produced. All wells in an allocated pool shall be placed on the proration schedule.
  - (b) Same as set out in present rules.
    - (1) Same as set out in present rules.
- (2) Any unit containing a well or wells producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of oil and/or gas equivalent, at reservoir conditions, to the volume of oil and/or gas allowed to be produced as a top unit allowable for the pool.
  - (3) Same as set out in present rules.
  - (4) Same as set out in present rules.
  - (c) Same as set out in present rules.
  - (d) Same as set out in present rules.

### RULE 602. ALLOCATION OF GAS PRODUCTION

When the Commission finds, upon hearing, that production from any gas pool is in excess of the current market demand therefor, or finds that production from the reservoir should be regulated in order to prevent waste or protect correlative rights, the Commission shall promulgate such special pool rules and regulations as are necessary to allocate the allowable pool production among the connected wells in the pool upon a reasonable basis and recognizing correlative rights. The Commission shall include in the proration schedule for such pool any gas well which it finds is being unreasonably discriminated against, through denial or access to a gas transportation facility, which is reasonably capable of handling the tupe of gas produced by such well.

### Page 3. RULE 602 - Continued

Such special pool rules and regulations shall not necessarily be limited to the following matters, but shall;

- 1. Delineate the pool limits,
- 2. Fix the standard proration unit,
- 3. Establish well location requirements within the standard proration unit,
- 4. Provide for exceptions to standard proration unit and well location requirements,
- 5. Provide for the filing of a certified plat setting out attributable acreage, well location, line measurements, etc.,
- 6. Establish an allocation formula,
- 7. Establish applicable well test rules,
- 8. Provide for the filing of nominations and the determination of the reasonable market demand for the pool,
- 9. Provide for the adjustment of allowable to satisfy the reasonable market demand as determined,
  - 10. Establish the tolerance that will be allowed with respect to over or underproduction of the assigned allowable,
  - ll. Provide for the filing of regular monthly production reports for each well in the field, and
  - 12. Provide for further consideration of the special pool rules at any and all such times as may be necessary.

### RULE 603. PROPATION FERIOD

The proration period for a gas pool shall be at least six months, and the reasonable market demand for each gas pool shall be determined for each month in the period, upon notice and hearing, at least thirty days prior to each proration period.

### RULE 604. ADJUSTMENT OF ALIOWABLES

At such time as the actual production from a gas pool for each month is known, the net allowable for the pool shall be adjusted so as to satisfy the reasonable market demand as previously determined so that each gas proration unit shall have a reasonable opportunity to produce its fair share of the gas production from the pool and so that correlative rights shall be protected.

### EXAMPLE

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### Special Pool Rules

1. Drilling and/or spacing units, 640 acres in size consisting of one section according to the U. S. Public Land Surveys, are hereby established for the development of the pool, which pool limits are described as follows:

(Description of pool limits as determined by the Commission upon hearing.)

Each well hereafter drilled in said pool, shall be drilled in the center of its unit, and in no event farther than 660 feet from the center of the unit, provided, however, that exceptions will be granted in accordance with Rule 104 (f) of the Commission.

Operators shall file with the Commission a certified plat for each well, which plat shall set out distinctly all of those things pertinent to the determination of the acreage credit claimed therefor.

- 2. Allocation Formula A formula shall be, and is, hereby adopted for the purpose of allocating gas production to the wells in the pool, which formula shall consist of acreage and pressure as herein defined.
- 3. Acreage Factor The acreage factor shall be the acreage attributable to the proration unit upon which the well is drilled. If two or more wells are drilled on a proration unit, the acreage attributable to each well shall be the total number of acres in the proration unit divided by the number of wells in the proration unit.
- 4. Pressure Factor The pressure factor shall be the shut-in well-head pressure as determined at the end of a 24-hour shut-in period.
- 5. Allowable The total allowable for the pool as determined by the Commission, after deductions have been made for wells which are incapable of producing their allowables as determined hereby, shall be distributed among the remaining wells in the pool on the following basis:

The allowable production of gas from individual wells shall be determined by the proportion that the product of acreage times pressure for the individual well bears to the summation of this product with respect to all other such wells in the pool.

6. Nominations - During each regularly scheduled hearing as established under Rule 503 (b) for the months of February and August, each person or persons having market demands on the pool shall submit to the Commission, nominations of those demands for each month of the proration period, April through September, and October through May, respectively.

After consideration of the above nominations, the Commission shall establish the reasonable market demand for the pool for each month of the following proration period.

7. Production - Production reports on all wells shall be reported in accordance with Rule 1110 of the Commission.

### Page 2 - Special Pool Rules continued.

8. Total Allowable - The total allowable to be allocated to the wells in the pool shall be determined by the Commission in the following manner:

The total allowable for the current month shall be equal to the total market demand for the current month plus the total market demand for the preceding month less the net field status at the end of the second preceding month.

9. Underproduction and Overproduction - All underproduction and overproduction occurring during any month shall be carried as a credit in favor of the well or a charge against the well, as the case may be, and added to or subtracted from the well's allowable for the next month. When a well's overproduction exceeds three times its current monthly allowable, said well shall be immediately shut-in by the operator and no gas produced therefrom until all overproduction is made up. When a well connected to a market outlet has accumulated underproduction in excess of three times its current monthly allowable, such excess underproduction shall be cancelled unless otherwise ordered by the Commission.

(Note: The provisions concerning over and underproduction can be modified with respect to individual pools, depending upon the anticipated variation in production from the pool.)

10. Jurisdiction over this cause is hereby retained for the purpose of changing, modifying, adding to, or altering this order, if at any further hearing or from other evidence adduced before the Commission, it appears that such change, modification, addition, or alteration should be made.

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Mr. George E. Trimble SAMEDAN OIL CORPORATION, Chairman General Rule Sub-Committee

Dear Sir:

Southern Union Gas Company's ideas as to the Motions made and carried at the meeting on March 31, 1953, are set out below:

### Motion 1.

- A. On or before the twentieth day of each calendar month, each gas purchase shall file with the Commission nominations in the form of affidavits, stating the volume of gas which will be purchased by it from each pool in the field during the succeeding calendar day month. These nominations will conform to the actual volume of gas which the gas purchaser in good faith anticipates it will actually withdraw during the succeeding month.
- B. Allowables for each gas well shall be fixed by the Commission on a monthly basis by determining a pool allowable production of gas which shall be divided and allocated to each gas well in each pool based on an allocation formul. which shall include, but not be limited to, pressure, potential, and acreage. Du. adjustments shall be made by the Commission for deficient wells so that the total pool allowable may be produced from both the deficient and non-deficient wells in the pool.
- C. Gas produced from a gas well will be reported by the operator monthly on form C-115.
- D. The balancing period shall be six months. Over and under production shall be balanced in accord with proration rules submitted by Humble.

### Motion 11

The term "gas well" is any well which produces natural gas not associated or blended with crude petroleum oil at the time of production.

Yours very truly

A. M. Wiederkehr (Sgd) Reservoir Engineer

AMW: bg

SUGGESTIONS FROM REPRESENTATIVES OF SHELL OIL COMPANY TO COMMITTEE FOR RECOMENDATION OF RULES FOR PROPATION OF GAS IN EDDY, LEA, CHAVES AND REOSEVELT COUNTIES, NEW MEXICO, TO NEW MEXICO OIL CONSERVATION COMMISSION.

Submitted by: Shell Oil Company

### Associated Gas

The only suggestion that we have to make with reference to associated gas is that Number 24 of the definitions of the rules be changed to read as follows:

124. Gas well shall mean a well producing gas or natural gas from the intervals which within a certain geographical area have been designated by the Commission

as a non-associated gas pool."

The magnitude of the gas-liquid ratio should not be considered as a controlling factor in determining whether a well is a gas well or an oil well. Thus many gas condensate reservoirs have gas-liquid ratios considerably less than 100,000 cubic feet of gas per barrel of condensate which arbitrary factor is incorrectly considered by some as the dividing mark between an oil well and a gas well. A gas-liquid ratio of 50,000 to 1 in the Tubbs pool is not wasteful but such a gas-liquid ratio in the oil pools in the same area would constitute waste. Hence, we think any well in a defined oil pool should be prorated as an oil well regardless of its gas-liquid ratio.

Non-Associated Gas

Rule 605 should be amended to read as the Commission has suggested which is as follows, to-wit:

"RULE 605 - GAS PROPATION UNITS

Commission, after notice and hearing, shall fix the gas proration unit for that pool.

"(b) Proration Units of 160 acres are hereby established for all defined gas pools in Eddy, Lea, Chaves and Roosevelt Counties, New Mexico, and deviation there from may be had only upon Commission order, after notice and hearing.

"(c) A Normal Gas Proration Unit shall consist of approximately 160 surface contiguous acres which shall be a legal subdivision (quarter section) of the U.S.

Public Land Survey.

"(d) Exception to Paragraph (c) above may be obtained after due notice and hearing where the acreage involved is 160 acres or less; the acreage is contiguous where the acreage lies wholly within a governmental Section."

Rule 606 should be added to read as follows:

"RULE 606 - AUTHORIZATION FOR THE PRODUCTION OF GAS

"(a) Gas proration periods shall be six months long and shall run from April 1 to September 30 inclusive and from October 1 to the following March 31 inclusive.

and August, the Commission shall determine the amount of gas to be produced from all allocated gas pools in Eddy, Lea, Chaves and Roosevelt Counties during the gas proration period which immediately follows the said determination. The Commission will consider all evidence of market demand and lease uses of gas and determine the amount of gas to be produced from all allocated gas pools in such counties during the following proration period. The amount so determined will be allocated among the gas pools in such counties in the manner provided in Rule 607; provided, however, that no part of said amount shall be allocated to any pool which is without a common purchaser market. Effective the first day of each proration period the Commission will issue a gas proration schedule for the gas pools so receiving allocations which such schedule will authorize the production of gas from the various units in accordance therewith. Any well completed on or after the first day of the proration period within a pool that appears on a proration schedule is authorized to produce such amounts of gas as said well may be capable

of producing without waste up to the top gas unit allowable determined in accordance with Rule 607. The allowable production for such well shall be effective at 7:00 A.M. on the date of completion, provided that Form C-104 is approved during the proration period in which the well is completed, otherwise the allowable will be effective at 7:00 A.M. on the first day of the proration period in which Form C-104 is approved and provided further a supplementary schedule is issued by the Commission establishing the effective date and the daily rate of production permitted the remainder of the proration period. A tabulation of supplementary gas proration schedules issued during any proration period shall be distributed by the fifth day of the month following their issuance.

(c) No well shall be placed on the proration schedule until Form C-104

and form C-110 have been filed with the Commission.

Rule 607 should be added substantially in the form proposed by the Commission. However, we suggest amendment to sub-paragraph (d) of the Commission's proposed rule and the addition of sub-paragraphs (j) and (k) to cover the matter of underproduction and over-production. Rule 607, as suggested by us, would read as follows:

"RULE 607 - GAS PRORATION"

(a) In allocated gas pools, the allocation between pools is in accordance with the top of the producing depth of the pool and the corresponding proportional factor set out below. The depth to the casing shoe or the top perforation in the casing, whichever is the higher in the first well completed in a pool determines the depth classification for the pool. Top unit allowables shall be calcualted for each of the several ranges of depth in the following prorations. The relations of an inertal balance of firetal

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(c) The 160-acre proportional factor shall be applied to pools developed

on the normal statewide 160-acre spacing pattern.

(d) Normal unit allowables shall be set by the Commission on a daily basis. However, such daily rates shall not control as to the time of production which, subject to the common purchasers! duty of rateable take may occur at any time within a proration period.

"(e) Top unit allowables for each range of depth shall then be determined by multiplying the normal unit allowable by the proportional factor for each depth range as set out in the table hereinabove; any fraction of a M. C. F. shall be regarded as a full M. C. F. for both normal and top unit allowables.

(f.) The top unit allowables hereinabove determined shall be assigned to

the respective pools in accordance with each pool a depth range. Allowables to marginal units will be assigned in accordance with the nominations submitted by the operators on Form C-115. Such nominations must be based upon the ability of the well to produce without waste; otherwise the allowable will be assigned on the basis of the latest available production figures. The sum of the allocation to all marginal units plus the sum of the allocation to all non-marginal units in each pool shall constitute the allocation for each pool. The Committee of the Co

"(g) The allocation to each pool shall in turn be prorated or distributed to the respective units in each pool in accordance with the proration plan of the particular gas pool, whereby any such plan exists. Where no proration plan exists then the pool allocation shall be distributed or prorated to the respective marginal and non-marginal units therein as determined hereinabove.

"(h) Each proration period the distribution or proration to the respective units in each pool shall be changed in order to take into account all new wells which have been completed and were not in the proration schedule during the

previous proration period.

"(i) The provision of Rule 104 (i) et seq. shall be adhered to where ap-

plicable in fixing top unit allowables.

"(j) In the event that there shall not be produced from any gas well in a pool during a proration period as much gas as is allocated thereto on the proration schedule for that period, the amount of such underproduction shall be carried forward to the next succeeding period. However, a well that has been accumulative underproduced on each of two successive proration periods because of its marginal capacity shall, during the following proration period not be assigned an allowable greater than the maximum production had from such well during the immediately preceding proration period; provided further, however, that such limited allowable as is assigned such a well hereunder may be adjusted to a value not to exceed the allowable accruing to such well under the allocation formula upon certification to the Commission from the operator thereof that such well is capable of producing gas in excess of the limited allowable assigned it.

"(k) Each operator of each gas well in a pool may produce such well in excess of the allowable allocated to such well provided that no well shall in any proration period produce an excess of old and one-fourth times its allowable for such period. Any well overproduced during a proration period shall be cut back during the succeeding proration period until the overproduction is made up."

Rule 1107 should be amended to read as follows:

"RULE 1107 - REQUEST FOR (OIL) (GAS) ALLOWABLE (Form C-104)

"It is necessary that this form be submitted by the operators before an initial allowable will be assigned to any completed oil well. Form C-104 is to be submitted in QUADRUPLICATE to the Commission office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on the date of completion, provided completion report is filed during month of completion. The completion date shall be that date, in the case of an oil well, when oil is delivered into the stock tanks.

"Form C-110, Certificate of Compliance and Authorization to Transport Oil

or Natural Gas, shall accompany Form C-104.

"When a gas well is involved, a plat certified by the operator as being correct on a scale on one inch equals 1,000 feet setting out acreage attributable to the well, the well locations and line measurements shall accompany and be attached to each copy of Form C-104."

Rule 902 should be amended by adding thereto the following additional sub-paragraph:

"(d) Subject to the other provisions of this rule each common purchaser that has a pipe line or lines connecting different gas pools to the same truck pipe line shall take from such pools rateably according to the ratios of the allocations made to such pools respectively on the proration schedule."

Rule 602 should be amended to show that it is to be applied whenever allocation of gas production is necessary to protect correlative rights as well as when such is necessary to prevent waste.

Distributed by: N. M. OIL & GAS ENGINEERING COMMITTEE April 20, 1953 Hobbs, New Mexico

## PROPOSED RULES FOR GAS PROPATION AND ALLCCATION LEA, EDDY, CHAVES, AND PROSEVELY COUNTIES NEW MEXICO.

(Submitted by: Humble Oil and Refining Company)

### RULD 1: Definition of Gas-Well

Gas well shall mean a well producing with a gas-oil ratio in excess of 100,000 cubic feet of gas per barrel of oil.

### EULE 2:

Any gas well producing from a reservoir which contains both oil and gas shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio multiplied by the top unit allowable currently assigned to the pool.

### RULE 3: Purchaser Nominations

Purchasers of gas shall file with the Commission in the form of affidavits, stating the volume of gas which be purchased from each pool during the next proration period. Said nominations shall be filed on or before the 20th day of the month preceding the proration period and shall be adjusted monthly by filing supplemental nominations with the Commission on or before the 20th day of each calendar month in the form of affidavits, stating the volume of gas which will be purchased from each pool during the next succeeding calendar day month. These nominations will conform to the actual volume of gas which the gas purchaser in good faith anticipates it will actually withdraw during the proration period and the calendar day month. Said nominations shall be on forms prescribed by the Commission and shall state nominations for casinghead gas, associated gas well gas, and non-associated gas well gas.

In order to ascertain the market demand for units producing from non-associated gas reservoirs, the Commission shall consider nominations and actual production. Nominations for the subsequent months shall be adjusted by applying the difference between the latest monthly production total and the total nominations for that month to the total nominations for gas for said wells which have been submitted for the subsequent month.

### RULE 4: Allocation of Gas and Unit Size

Allowables shall be assigned to a unit on a monthly basis, and the total of the allowables assigned to the unit on a monthly basis within the proration period shall be the allowable of the unit for the proration period. In setting allowables, the Commission may take into consideration any and all facts which it may deem pertinent for the purpose of preventing waste and protecting correlative rights of owners in each pool. Allowables for each gas well producing from a non-associated gas reservoir shall be fixed by the Commission by determining a pool allowable production of gas which shall be divided and allocated to each gas well in a pool in the amount that the acreage allocated to said well bears to the total acreage allocated to all wells in each pool, but due adjustment shall be made by the Commission for deficient wells so that the total pool allowable may be produced from both the deficient and non-deficient wells in the pool. For the purpose of allocating acreage and assignment of allowables to gas wells, the unit of proration for gas shall consist of such multiples of 40 acres as the operator elects, and no unit shall consist of less than 160 or more than 640 acres. The operator of a gas well or wells in a pool shall file with the Commission for approval a plat showing the location and the coreage assignable to the well.

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Each operator shall regulate the production of gas from gas wells so that each well in each pool will produce during each calendar month approximately its proportion of its allowable for said pool and that all over and underproduction will be kept reasonably in balance among the gas wells in each pool. In operator of a gas well may produce a well in excess of the monthly allowable allocated to it and a purchaser may purchase said gas, provided that no waste is occasioned thereby and no well shall be permitted to produce in excess of twice the daily assigned allowable.

### RULE 6: Balancing Over and Underproduction

For the purpose of computing and balancing overproduction and underproduction in a pool, the dates 7 A.M., March 1, and 7 A.M., September 1, are to be known as proration periods.

#### UNDERPRODUCTION

- (1) In the event there shall not be produced from any gas well in the pool, during a proration period, as much gas as is allocated thereto under orders of the Commission, the operator of any such well shall be permitted to carry such underproduction forward to the next succeeding proration period, as future allowables credit, to be produced during that period.
- (2) The amount of underproduction to be carried forward into any new proration period as allowed production during such new proration period, shall consist of the actual underproduction that accrued in the proration period immediately preceding such new proration period, and the accumulative well status, as to underproduction, will be adjusted on each proration date accordingly.
- (3) Underproduction as pertains to any well shall not be made up at a rate in excess of twice the daily average rate required to produce the normal current monthly allowable of the well.
- (4) With respect to a producing well that has been accumulatively underproduced on each of two successive balancing dates, such well shall not be
  assigned a monthly allowable greater than the maximum monthly production had
  from such well during the immediately preceding proration period; provided,
  however, that such limited allowable as is assigned such well hereunder may be
  adjusted to a value not to exceed the allowable accruing to such well under
  the allocation formula, upon certification to the Commission from the operator
  thereof that such well is producing gas in excess of the limited allowable
  assigned it.

### OVERPRODUCTION

- (1) Each operator of each gas well in the pool, may, subject to the hereinafter prescribed conditions, produce such well in excess of the monthly allowable allocated to such well, provided that no well shall in any one month produce at a rate in excess of twice the daily average rate required to produce the normal current monthly allowable of the well.
- (2) Any well overproduced as of a balancing date, and which well was also over roduced on the balancing date immediately preceding and remained overproduced for the entire period between the two balancing dates, shall be shut-in until the overproduction, existent as of the later of such two balancing dates, is made up; this unless exception is had as provided for in the next succeeding paragraph hereof.

### Pg. -3- Rule 6 Cont 1.

- (3) The operator of a well which, under the provisions of the immediately preceding paragraph, would be required to be shut-in may, if such operator is of the opinion that complete well shut-in will materially damage his well, request a hearing before the Commission, which hearing will be held only after due notice is given to all operators in the field. If, after consideration of the evidence submitted at such hearing, the Commission finds that such well should not be completely shut-in, the Commission may allow the overproduction charged against it to be made up at a lesser rate than it would be made up if the well were completely shut-in.
- (4) Except where well shut-in is required in making up overproduction (See Paragraphs (2) and (3) above), overproduction existent as of any balancing date shall be made up during the proration period immediately following, and may be made up at any time during such period; i. e., a specified fractional part of such overproduction need not be made up during each month of such proration period, so long as all of such overproduction is made up during such proration period.

Distributed by: N. M. OIL & GAS ENGINEERING COMMITTEE April 20, 1953 Hobbs, New Mexico SUGGESTED RULES FOR GAS PRORATION AND ALLOCATION IN LEA, EDDY, CHAVES AND ROOSEVELT COUNTIES, NEW MEXICO

(SUEM\_TIED, BY SANEDAN CLL CORP.) La Saprantin Commence of the C

# DIFFINITION OF A GAS WELL.

- A gas well shall mean:

  1. Any well producing natural gas only from a pool classified by the Commission as a gas pool, and
  - Any well in which the gas oil ratio exceeds One Hundred Thousand (100,000) cubic feet to one barrel of oil from a pool classified by the Commission as an oil pool.

### NCMINATIONS AND ALLOWABLES

- 3. During each regularly scheduled hearing as established under Rule 503-B-for the months of February and August each person or persons having market demands or classified gas pools shall submit to the Commission nominations in the form of affidavits stating the plume of gas which will be purchased from each classified gas pool for each month of the proration period, April 1 through September 30 and for the period of October 1 through March 31 of the following falendar year. These nominations will conform to the actual , volume of ges which the gas purchaser in good faith anticipates it will actually withdraw during the months of the succeeding proration period.
- 2. After consideration of the above nominations, the Commission shall determine (a) The lawful market demand for gas to be produced from each classified gas pool during the months of the succeeding proration period; (and (b) The volume of gas that can be produced from such classified gas pool without waste. The Commission shall then fix the monthly allowables of gas to be produced from the pool at the lawful market demand or at the volume that can be produced from such pool, without waste whichever is the emaller quantity. The monthly pool allowables shall be allocated among all wells entitled to produce gas therefrom so as to give each well its fair share of the gas to be produced from the pool so as to protect correlative rights, provided that each well shall be restricted to the amount of gas that can be produced from it without waste. The volumes of gas so allocated to each well shall be regarded as the monthly allowables for such well.
- 3. For the purpose of computing and balancing overproduction and underproduction in a classified gas pool, the dates of 7 AM April 1 and 7 AM October 1 are to be known as proration periods.

### UNDERPRODUCTION

- 1. In the event there shall not be produced from any gas well in the pool, during a balancing period, as much gas as is allocated thereto under orders of the Commission, the operator of any such well shall be permitted to carry such underproduction forward to the next succeeding balancing period, as future allowable credit, to be produced during that period.
- The amount of underproduction to be carried forward into any new balancing period as allowed production during such new balancing period, shall consist of the actual underproduction that accrued in the balancing period immediately preceding such new talancing period, and the accumulative well status, as to underproduction, will be adjusted on each balancing date accordingly.

### Page 2 Suggested Rules for Gas Proration

- 3. Underproduction as pertains to any well shall not be made up at a rate in excess of three times the daily average rate required to produce the normal current monthly allowable of the well.
- 4. With respect to a producing well that has been accumulatively underproduced on each of two successive balancing dates, such well shall not be assigned a monthly allowable greater than the maximum monthly production had from such well during the immediately preceding balancing period; provided, however, that such limited allowable as is assigned such well hereunder may be adjusted to a value to exceed the allowable accruing to such well under the allocation formula, upon certification to the Commission from the operator thereof that such well is producing gas in excess of the limited allowable assigned it.

### OVERPRODUCTION

- 1. Each operator of each gas well in the pool, may, subject to the hereinafter prescribed conditions, produce such well in excess of the monthly
  allowable allocated to such well, provided that no well shall in any one
  month produce at a rate in excess of three times the daily average rate
  required to produce the normal current monthly allowable of the well.
- 2. Any well overproduced as of a balancing date, and which well was also overproduced on the balancing date immediately preceding and remained overproduced for the entire period between the two balancing dates, shall be
  shut-in until the overproduction, existent as of the later date of such
  two balancing dates, is made up; this unless exception is had as provided
  in the next succeeding paragraph hereof.
- 3. The operator of a well which, under the provisions of the immediately preceding paragraph, would be required to be shut-in may, if such operator is of the opinion that complete well shut in will materially damage his well, request a hearing before the Commission, which hearing will be held only after due notice is given to all operators in the field. If, after consideration of the evidence submitted at such hearing, the Commission finds that such well should not be completely shut in, the Commission may allow the overproduction charged against it to be made up at a lesser rate than it would be made up if the well were completely shut in.
- 4. Except where well shut in is required in making up overproduction (see 2 and 3 above), overproduction existent as of any balancing date shall be made up during the balancing period immediately following, and may be made up at any time during such period; i.e., a specified fractional part of such overproduction need not be made up during each month of such balancing period, so long as all of such overproduction is made up during such balancing period.

### FILING OF REPORTS

Each producer, purchaser, pipe line company, gasoline plant operator, or carbon black operator producing or taking gas from a well or wells in a classified gas pool shall prepare and file monthly gas reports (Form C-111) with the Commission showing the disposition and acquisition of the total volume of gas withdrawn during the monthly period.

### PAGE 3 Suggested Rules for Cas Froration

### GAS PRORATION UNITS.

- 1. Before issuing a proration schedule for an allocated gas pool, the Commission, after notice and hearing, shall fix the gas proration unit for that pool.
- 2. Proration Units of 160 acres shall be established for all defined gas pools in Eddy, Lea, Chaves and Roosevelt Counties, and deviation therefrom may be had only upon Commission order, after notice and hearing.

New Mexico Oil & Gas Eng. Comm. Hobbs, New Mexico April 20, 1953

Case 52/

April 21, 1953

OIL COMMENT OF THE PROPERTY OF

Wit.

El Faco Matural Cae Company Southern Union Cae Company Continental Oil Company Chif Oil Corporation Humble Oil & Refining Company Shall Oil Company Fhillips Petroleum Company Tamas-Facific Coal and Oil Company Samedan Oil Corporation

#### Centlement

Attached please find the occasion and opinions of the Tomas Pacific Coal and Oil Company with reference to the two motions made and passed at the March 31, 1983, meeting of the General Rules Sub-Committee on gas promition in Lea, Eddy, Chaves, and Rossevelt Counties, New Maxico, which were received this date.

To date all suggested rules and/or comments and opinions concerning the two motions have been received with the exception of the Kl Faco Matural das Company.

Yery truly yours,

SAMEDAN OIL O'RIVEATION, Chairman Comerci Rules Subsemultes

Whape E. Samble

enclosure

Chairman, General Rules Sub-Committee 502 V - J Tower Midland, Texas

Dear Sir:

With reference to the two motions under by Humble Gil and Refining Company before the General Rules Sub-Committee meeting at Hebbs, New Hexico, on March 31, 1953, the following comments and opinions are submitted:

- 1. Texas Pacific is of the opinion that the motion for the sub-committee to recommend to the Advisory Committee a rule on proration is premature. It is believed that further study is necessary to determine the specific needs for gas proration.
- 2. Texas Pacific veted for the motion recommending a rule be suggested which would define a gas well. Such a rule could classify a well as a gas well if it produces from a reservoir which contains both eil and gas and with a gas/eil ratio in emeass of 100,000 subic feet per barrel. Such a well's allowable could be assigned on a volumetrix or some other equitable basis. Provisions in the rule should be made to classify a gas well that produces condensate and is not associated with an oil reservoir. Such a well should not be judged on its gas/eil ratio but on a distillation test of its liquid if it produces with a gas-liquid ratio of less than 100,000 cubic feet per barrel.

TEXAS PACIFIC COAL AND OIL COMPANY

Peck Hardee, Jr.
Division Petroleum Engineer

PH/JE



SANTA FE, NEW ME:

(MAY-4 1953

### SKELLY OIL COMPAN

PRODUCTION DEPARTMENT

J. S. FREEMAN VICE PRESIDENT

E. A. JENKINS GENERAL SUPERINTENDENT

### **TULSA 2, OKLAHOMA**

April 30, 1953

W. P. WHITMORE CHIEF PETROLEUM ENGINEER

13

G. W. SELINGER PRORATION ATTORNEY

J. H. McCULLOCH CHIEF CLERK

Mr. R. R. Spurrier New Mexico Oil Conservation Commission Santa Fe, New Mexico

Dear Sir:

The next Statewide hearing has been set for May 19, 1953, at which time the Commission will consider Case No. 521, which we believe is the Statewide Proration of Cas and likewise will consider Case No. 532.

We have received suggestions from a number of operators and additional suggestions have been coming in daily. Also a number of advisory and subcommittees have been considering these matters. It becomes apparent that considerable consideration has to be given by the various operators, and it is our belief that most operators will not be prepared for that statewide hearing which, incidentally, conflicts with the International Petroleum Exposition set from the 14th to the 23 of May. Insofar as our own company is concerned we would like to have additional time to thoroughly go into these matters, and we would earnestly recommend that these two cases be set for the June 16 hearings so as to allow the additional time for consideration of these important matters by all of the operators.

We, therefore, earnestly urge your continuing these matters from the May hearings to the June hearings, and advise all operators sufficiently before hand so that all can be properly advised in the matter. We would appreciate hearing from you in this regard.

Yohrs very truly,

George W. Selinger

GWS: dd

### El Paso Natural Gas Company

### TENTH FLOOR BASSETT TOWER

El Paso, Texas

May 16, 1953

ADDRESS REPLY TO:
1006 MAIN STREET - ROOM 1901
HOUSTON 2, TEXAS

Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

In Re:

Advisory Committee to the Oil Conservation Commission on Case 521, concerning gas proration in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.

#### Gentlemen:

The two subcommittees to the above mentioned advisory committee have continued their work since our report at the last Regular Hearing of the Commission on April 16, 1953.

The subcommittee investigating the need for revision of present gas-pool designations has completed its work, and its report has been forwarded to the Advisory Committee.

The subcommittee on general rules has drafted a set of recommendations on gas proration rules. These have been printed and distributed to the members of the subcommittee, who now have until May 26 in which to submit their approval or corrections to the Chairman of the subcommittee. Unless indicated corrections require another meeting of the subcommittee, the Chairman of the Advisory Committee is to be advised that the recommendations as distributed are the final recommendations of the subcommittee.

A meeting of the Advisory Committee will be called after final report is made by the general rules subcommittee, at which time action will be taken on the reports of both subcommittees. It is recommended that Case 521 be kept open and continued until final report of the Advisory Committee.

Respectfully submitted,

A. L. Hill El Paso Natural Gas Company Chairman, Gas Proration Advisory Committee

ALH: W:pc

( Ase 521 May 16, 1953 Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico Advisory Committee to the Oil In Re: Conservation Commission on Case 521, concerning gas proration in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Gentlemeni The two subcommittees to the above mentioned advisory committee have continued their work since our report at the last Regular Hearing of the Commission on April 16, 1953. The subcommittee investigating the need for revision of present gas-pool designations has completed its work, and its report has been forwarded to the Advisory Committee. The subcommittee on general rules has drafted a set of recommendations on gas proration rules. These have been printed and distributed to the members of the subcommittee, who now have until May 26 in which to submit their approval or corrections to the Chairman of the subcommittee. Unless indicated corrections require another meeting of the subcommittee, the Chairman of the Advisory Committee is to be advised that the recommendations as distributed are the final recommendations of the subcommittee. A meeting of the Advisory Committee will be called after final report is made by the general rules subcommittee, at which time action will be taken on the reports of both subcommittees. It is recommended that Case 521 be kept open and continued until final report of the Advisory Committee, Respectfully submitted, A. L. H111 El Paso Natural Gas Company Chairman, Gas Proration Advisory Committee ALH: W: DC



May 14, 1953

TO:

El Paso Natural Gas Company
Southern Union Gas Company
Continental Oil Company
Gulf Oil Corporation
Humble Oil and Refining Company
Shell Oil Company
Phillips Petroleum Company
Texas-Pacific Coal and Oil Company
Samedan Oil Corporation
Permian Basin Pipe Line Company

### Gentlemen:

Attached, please find the final draft of rules adopted by the General Rules Subcommittee of the Advisory Committee to the New Mexico Oil Conservation Commission on Case 521 and a letter of transmittal to the Chairman of the Advisory Committee.

If there are no corrections to be made after your study of the above draft and letter, it is requested that you submit your approval in writing to the writer not later than ten days after receipt of the draft and letter, so that the report may be formally submitted to the Advisory Committee.

Yours very truly,

SAMEDAN OIL CORPORATION, Chairman General Rules Subcommittee

BY: George E. Trimble

Mr. A. L. Hill El Paso Natural Gas Company, Chairman Advisory Committee to the New Mexico Oil Conservation Commission on Case 521 1006 Main Street Houston, Texas

Dear Sir:

Pursuant to your request the General Rules Subcommittee has completed formulating a general set of rules for gas proration in Lea, Eddy, Roosevelt, and Chaves Counties, New Mexico and this report is attached for disposition by the Advisory Committee.

It is to be pointed out that these rules in no way are binding on the member companies, but were adopted by a majority vote of the General Rules Subcommittee. Also, it should be pointed out that these rules constitute a minimum basis for initiating a proration program for the four county area. It was the majority opinion of the General Rules Subcommittee that when gas proration is effected in the four county area applicable rules on a field by field basis should be formulated by hearing.

Yours very truly,

SAMEDAN OIL CORPORATION, Chairman GENERAL RULES SUBCOMMITTEE

BY: /s/ George E. Trimble
George E. Trimble

## CENERAL RULES FOR GAS PRORATION IN LEA, EDDY, ROOSEVELT, AND CHAVES COUNTIES, NEW MEXICO

All State-wide Gas Rules not modified by the General Rules Sub-Committee are applicable to the Four-County-Area.

### DEFINITION OF A GAS WELL (Modified definition #24 of State-Wide Rules)

of gas supply from a gas pool determined by the Commission.

### Modified State-wide Rule 104 (f)

- (f) The Secretary of the Commission shall have authority to grant an exception to the requirements of (a), (b), (c), and (d), (refer to Rule 104-Oil Conservation Commission), above without notice and hearing where application has been filed in due form and
  - (1) The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and
  - (2) a) The Ownership of all oil and Gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or
  - b) All owners of oil and gas leases within such radius consent in writing to the proposed location.

### Suggested addition to State-wide Rule #506

### RULE 506 (e)

In a gas pool, as defined by the Oil Conservation Commission, each proration unit containing an oil well producing in excess of five barrels of crude oil per day shall be permitted to produce an oil allowable calculated by dividing the gas allowable as assigned to a gas well on the same unit size as the oil well by the gas-oil ratio of the oil well. The maximum allowable which may be assigned such well shall be the top unit oil allowable as determined by Rule 505 unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste.

# Modified State-wide Rule 601

#### RULE 601 ALLOCATION OF GAS PRODUCTION

- (a) At such time as the Commission determines that allocation of gas production is necessary to prevent waste or to protect correlative rights the Commission, after notice and hearing, shall consider the nominations of purchasers from each gas pool and other relevant data, and shall fix the allowable production of each pool, and shall allocate production among the gas wells in the pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in (b) below, the general rules of this section shall apply to each gas pool allocated under these rules.
- (b) After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.
- (c) The term "gas purchaser" as used herein, shall mean the "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit the nomination. An Operator of the gas well who takes gas at the well head and uses such gas for his own operations either on leases or in a fuel system shall submit the nomination form.

# Modified State-wide Rule 602

#### RULE 602 PRORATION UNITS

For the purposes of gas allocation in the absence of special pool rules a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.

#### Modified State-wide Rule 603

#### RULE 603 - ALLOCATION

(a) At least 30 days prior to the beginning of each gas proration period the

Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by the purchasers of gas their nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which he purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.

(b) The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the proration schedule all wells producing from any reservoir appearing on the proration schedule. The total allowable to be allocated to the wells in the pool shall be determined by the Commission in the following manner:

The total allowable for the current month shall be equal to the total market deman for the current month plus the total market demand for the preceding month less the net field status at the end of the second preceding month.

- (c) The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage allotted to such non-marginal units; provided that for this purpose standard units as defined in Rule 602 above shall be deemed to contain 160 acres. For the purpos of assignment of allowables to gas wells, the unit of providing shall consist of no less than 160 acres nor more than 640 acres. More than one provation unit may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
- (1) All acreage in such units may reasonably be presumed to be productive of gas; and

Page 4.

- (2) the multiple unit so formed shall not have an over-all length or width exceeding 5280 feet; and
- (3) the well to which such additional units are assigned shall be located not closer to any boundary of such pooled units than the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first mentioned boundary. Provided further, that where three proration units are pooled the well shall not be located more than 1320 feet from the nearest boundary of any unit so pooled.

#### Modified State-wide Rule 604

RULE 604 BALANCING OF PRODUCTION

#### (a) Underproduction

The dates 7:00 A.M. March 1, and 7:00 A.M. September 1, shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period, but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If, at the end of the first succeeding proration period a greater amount of allowable remains unproduced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

# (b) Overproduction

A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If at the

end of the first succeeding proration period the well is/overproduced it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time a well is overproduced as amount equalling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut in of the well would result in material damage to the well.

## Modified State-wide Rule #605

#### RULE 605 GRANTING OF ALLOWABLES

- (a) No gas well shall be given an allowable until Form C-104 has been filed together with a plat showing (1) acreage attributed to said well and (2) the locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir and (3) the lease ownership of said leases.
- (b) Allowables to newly completed gas wells shall commence on the date of completion or the date of filing of Form C-104 and plat described above, whichever date is later.

# Suggested Rule #606

#### RULE 606 REPORTING OF PRODUCTION

The production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission so as to reach the Commission on or before the twenty-fifth day of the month next succeeding the month on which the gas was produced.

Distributed by:
N.M. Oil and Gas Engineering Committee
Hobbs, New Mexico
5-14-53

Case 521

May 15, 1953

TO:

El Paso Natural Cas Company
Southern Union Gas Company
Continental Oil Company
Gulf Oil Corporation
Humble Oil and Refining Company
Shell Oil Company
Phillips Petroleum Company
Texas-Pacific Coal and Oil Company
Samedan Oil Corporation
Permian Basin Pipe Line Company



#### Gentlemen:

The attached corrected copy of General Rules for Gas

Proration in Lea, Eddy, Roosevelt, and Chaves Counties,

New Mexico, should be substituted for Page 3 of the original
report, mailed May 14, 1953, to correct an omission occurring
in the last sentence of Paragraph (b). The phrase "total
allowable for the preceding month was omitted in the incorrect
sentence. The incorrect sentence reads as follows:

The total allowable for the current month shall be equal to the total market demand for the current month plus the total market demand for the preceding month less the net field status at the end of the second preceding month.

Yours very truly,

SAMEDAN OIL CORPCRATION, Chairman General Rules Subcommittee

BY: George E. Trimble

Distributed by:
N.M. Oil and Gas Engineering Committee
Hobbs, New Mexico
5-18-53.

#### Page 3. (CORRECTED)

Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by the purchasers of gas their nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which he purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.

(b) The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the proration schedule all wells producing from any reservoir appearing on the proration schedule. The total allowable to be allocated to the wells in the pool shall be determined by the Commission in the following manner,

The total allowable for the current month shall be equal to the total market demand for the current month plus the total market demand for the preceding month less the total allowable for the preceding month less the net field status at the end of the second preceding month.

- (c) The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage allotted to such non-marginal units; provided that for this purpose standard units as defined in Rule 602 above shall be deemed to contain 160 acres. For the purpose of assignment of allowables to gas wells, the unit of proration shall consist of no less than 160 acres normore that 640 acres. More than one proration unit may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
- (1) All acreage in such units may reasonably be presumed to be productive of gas; and

# MINUTES OF THE GENERAL RULES SUB-COMMITTEE ON GAS PRORATION

FOR LEA, EDDY, ROOSEVELT, AND CHAVES COUNTIES, NEW MEXICO (10);
MAY 12, 1953

MAY 1 8 1953

OIL CONSERVATION COMMISSION

The meeting was called to order at 9:00 A.M. (MST). The Acting Secretary called a roll and read the minutes of the Arril 30, 1953 meeting with a correction noted as follows:

Paragraph (k), Page 5, which commences with the sentence "The provisions of (h), (i), and (j) above shall apply only to wells completed after the effective date of this rule, etc..." should be deleted from the record.

The attendance record of those present is attached.

A letter submitted by Wilshire Oil Corporation was read by the Chairman. This letter was attached to the April 30, 1953 Minutes.

A Draft of Proposed Rules as prepared by Continental Oil Company was distributed to the members present.

Discussion of the Sub-Committee commenced with Rule 506 of the Oil Conservation Commission.

A Motion made by Humble Oil and Refining Company follows:

Rule 506 (e) In a gas pool, as defined by the Oil Conservation Commission, each proration unit containing an oil well producing in excess of five barrels of crude oil per day shall be permitted to produce an oil allowable calculated by dividing the gas allowable as assigned to a gas well on the same unit size as the oil well by the gas—oil ratio of the oil well. The maximum allowable which may be assigned such well shall be the top unit oil allowable as determined by Rule 505 unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste.

An amendment to the above motion was presented by Phillips Petroleum Company, to be added to the main motion as made by Humble. The words to be added to read as follows:

"provided that the gas produced from the well is saved and marketed."

The Phillips amendment was not carried by the following vote:

El Paso Natural Cas Company	Nay
Southern Union Gas Company	Abstain
Continental Oil Company	Aye
Gulf Oil Corporation	ilay
Humble Oil & Refining Company	Nay
Shell Oil Company	Nay
Phillips Petroleum Company	Aye
Texas-Pacific Coal & Oi Company	Nay
Samedan Oil Corporation	Abstain
Permian Basin Pipe Line Company	Aye

The vote on the main motion without the amendment was as follows:

El Paso Natural Gas Company	Aye
Southern Union Gas Company	Aye
Continental Oil Company	Nay
Gulf Gil Corporation	Aye.
Humble Oil & Refining Company	Ave
Shell Oil Company	Nay
Phillips Petroleum Company	Aye
Texas-Pacific Coal & Cil Company	Aye
Samedan Oil Corporation	Aye
Permian Easin Pipe Line Company	Aye

The Continental Oil Company discussed their proposed rules as submitted at this meeting. Each member of the General Rules Sub-Committee then submitted their comments and opinions concerning the above proposed rules.

A motion was made by Humble Oil and Refining Company to adopt Continental Oil Company's Proposed Rules 601, 602, 603, 604, 605, and 606, except that in 601 (a) the words reading as follows to be deleted: "At such time as the Commission determines that allocation of gas production is necessary to prevent waste or to protect correlative rights", and in 601 (b) add Phillips' Proposed Rule #8 which reads as follows:

8. Total Allowable - The total allowable to be allocated to the wells in the pool shall be determined by the Commission in the following manner:

The total allowable for the current month shall be equal to the total market demand for the current month plus the total market demand for the preceding month less the net field status at the end of the second preceding month.

In Rule 603 (c) of Continental Oil Company's Proposed Rules the following sentence to be added after the 160-Acres in the sixth line of Paragraph (c): "For the purpose of assignment of allowables to gas wells; the Unit of Proration shall consist of no less than 160-Acres nor more than 640 Acres and that Paragraph 603 (c)

```
No. 3 be deleted. Pertaining to Continentals' Proposed Rule 604 the word "shall"
  in the phrase wit shall be classified" change to "may" to read "it may be classified to the phrase with shall be classified."
        Phillips Petroleum Company made an amendment to the main motion that Paragrap.
Page 3.
   Permian Pasin Pipe Line Company seconded the motion.
    No. 9 as proposed by Phillips with reference to Over and Under Production be sub-
      stituted for the Rule 604 Sec. (a) and Sec. (b) as proposed by Continental.
            Gulf Oil Corporation added a third amendment to the original motion to the
      Permian Basin Pipe Line Company seconded the motion
         effect that a Section (c) be added to Rule 601 as proposed by Continental to read
               "The term "gas purchasers", as used herein, shall mean the "taker" of gas
           at the well-head and it shall be the responsibility of said "taker" to submit the
            nomination. An operator of the gas well who takes gas at the well-head and uses
              such gas for his own operations either on leases or in a fuel system shall submit
          as follows:
               the nomination form and that the last sentence under Rule 601 (c) starting with
               numore than one proration unit..... be deleted and that Part #2 of Section non be
                           Samedan Oil Corporation seconded the motion.
                        The original motion as made by Humble was withdrawn by the "maker" and with
                       The mueting was adjourned for lunch.
                       The meeting was called to order at 1:15 P.M.
                    the consent of the "second" a new motion was made by Humble that the motion pre-
                 deleted.
                     viously withdrawm be considered with the amendments, however, in voting on the
                      motion and the three amendments that the Rules as proposed by Continental Oil
                       Company with amendments be voted upon section-by-section for clarification.
                             With reference to Rule 601 (a) as proposed by Continental the motion to adopt
                         this rule with the deletion of the words "At such time as the Commission determines
                          that allocation of gas production is necessary to prevent waste or to protect
                           correlative rights" was discussed. The motion was not carried by the following vota
                                               Southern Union Gas Company
```

Continental Oil Company	Aye
Gulf Oil Corporation	Nay
Humble Oil and Refining Company	Aye
Shell Oil Company	Aye
Phillips Petroleum Company	Aye
Texas-Pacific Coal. & Oil Company	Nay
Samedan Oil Corporation	Aye
Permian Basin Pipe Line Company	Nay

The Rule 601 (a) as proposed and written by Continental was adopted by the following vote:

El Paso Natural Gas Company	Aye
Southern Union Gas Company	Aye
Continental Oil Company	Aye
Gulf Oil Corporation	Aye
Humble Oil and Refining Company	Nay
Shell Oil Company	Nay
Phillips Petroleum Company	Nay
Texas-Pacific Coal & Oil Company	Aye
Samedan Oil Corporation	Nay
Permian Basin Pipe Line Company	Aye

Rule 601 (b) as proposed and written by Continental was adopted by unanimous vote.

The amendment made by Gulf to include a Section (c) under Rule 601 to read as follows: "The term "gas purchaser" as used herein, shall mean the "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit the nomination. An Operator of the gas well who takes gas at the wellhead and user such gas for his own operations either on leases or in a fuel system shall submit the nomination form." was carried by the following vote:

El Paso Natural Gas Company	Aye
Southern Union Gas Company	Aye
Continental Oil Company	Abstain
Gulf Oil Corporation	Aye
Humble Oil and Refining Company	Aye
Shell Oil Company	Aye
Phillips Petroleum Company	Aye
Texas-Pacific Coal & Oil Company	Abstain
Samedan Oil Corporation	Aye
Permian Basin Pipe Line Company	Aye

Rule 602 as proposed and written by Continental was adopted by unanimous vote.

Rule 603 (a) as proposed and written by Continental was adopted by unanimous vote.

Rule 603 (b) as proposed by Continental and as amended to include Phillips' Rule #8 entitled "Total Allowable" to be added at the end of the section were voted upon and passed; carried by the following vote:

- 1. The amendment to add Phillips' Rule #8 (Total Allowable) was carried unan-imously.
- 2. The amended motion was carried by nine ayes and one abstain by Southern Union Gas Company.

The Gulf Oil Corporation withdrew their original amendment with reference to Rule 603 (c) and stated that they would agree with the Rule 603 (c) proposed by Continental provided that the addition of the sentence proposed by Humble to be inserted following the words "160-Acres", (sixth line of Section (c). The Humble addition reads as follows:

For the purpose of assignment of allowables to gas wells, the unit of proration shall consist of no less than 160 Acres nor more than 640 Acres. Humble agreed to withdraw their amended motion with reference to the deletion of Part 3 of Section (c).

To avoid any confusion in the adoption of Rule 603 (c) the following is a clarification of the proposed Rule:

- (c) The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage allotted to such non-marginal units; provided that for this purpose standard units as defined in Rule 602 above shall be deemed to contain 160 acres. For the purpose of assignment of allowables to gas wells, the unit of proration shall consist of no less than 160 acres nor more than 640 acres. More than one proration unit may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
- (1) All acreage in such units may reasonably be presumed to be productive of gas; and
- (2) the multiple unit so formed shall not have an over-all length or width exceeding 5280 feet; and
- (3) the well to which such additional units are assigned shall be located not closer to any boundary of such pooled unit; than the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first mentioned boundary. Provided further that where three proration units are pooled the well shall not be located more than 1320 feet from the nearest boundary of any unit so pooled.

The vote on the adoption of the above Rule was as follows:

El Paso Natural Gas Company	Yes
Southern Union Gas Company	No
Continental Oil Company	Yes
Gulf Oil Corporation	Yes
Humble Oil and Refining Company	Yes
Shell Oil Company	No
Phillips Petroleum Company	Yes
Texas-Pacific Coal & Oil Company	Yes
Samedan Oil Corporation	Yes
Permian Basin Pipe Line Company	Yes

With reference to Rule 604 as proposed by Continental the amendment to substitute Rule #9 of the Suggested Phillips' Rules for Sections (a) and (b) as written by Continental was not carried by the following vote:

El Paso Natural Gas Company	Nay
Southern Union Gas Company	Aye
Continental Oil Company	Abstain
Gulf Oil Corporation	Nay
Humble Oil and Refining Company	Nay
Shell Oil Company	Nay
Phillips Petroleum Company	Aye
Texas-Pacific Coal and Oil Company	Abstain
Samedan Oil Corporation	Aye
Permian Basin Pipe Line Company	Aye

A motion was made by Humble to adopt Rule 604 as proposed by Continental as written with the exception that the word "may" be substituted for the word "shall" in the last sentence of Section (a). The motion was carried by a vote of nine ayes and one abstain by Permian Basin Pipe Line Company.

Rule 605 as proposed by Continental was adopted as written by the following vote:

El Paso Natural Gas Company	Abstain
Southern Union Gas Company	Abstain
Continental Oil Company	Aye
Culf Oil Corporation	Aye
Humble Oil and Refining Company	Aye
Sheïl Oil Company	Ayre
Phillips Petroleum Company	Aye
Texas-Pacific Coal & Oil Company	Aye
Samedan Oil Corporation	Aye
Permian Basin Pipe Line Company	Abstain

With reference to Rule 606 as proposed by Continental, the Gulf Oil Corporation amended the main motion by inserting the words "submitted to" in place of "reported each month to" in the second sentence of the above rule and inserting the words

"so as to reach the Commission on or before the 25th day of the month next succeeding the month in which the gas is produced." These words to be inserted after the word "Commission" as appearing in the second sentence of the above rule. The amendment and amended motion with reference to Rule 606 was carried unanimously.

This completes the unfinished business of adopting a general set of rules for Gas Proration in the Fcur-County-Area. Southern Union Gas Company made a motion which was seconded and stated to delete any adoption of State-Wide Rules as written from final report of the General Rules Sub-Committee. The motion was carried by nine eyes and one may cast by Humble Oil and Refining Company.

A motion was made by Numble Oil and Refining Company stating that the Sub-Committee write the Rules adopted and submit to the Advisory Committee and dissolve the General Rules Sub-Committee.

An amendment was made by Samedan Oil Corporation which stated that in writing the final rules a recommendation should be made that the Sub-Committee recommend to the Advisory Committee that the rules be submitted at the May 19th Commission Hearing in Santa Fe, New Mexico. This amendment was not carried by the following vote:

El Paso Natural Gas Company	No
Southern Union Gas Company	No
Continental Oil Company	Absent
Gulf Oil Corporation	No
Humble Oil and Refining Company	Absent
Shell Oil Company	No
Phillips Petroleum Company	Yes
Texas-Pacific Coal & Oil Company	No
Samedan Cil Corporation	Yes
Permian Basin Pipe Line Company	No

An amendment was made by Permian Basin Pipe Line Company that the Rules Sub-Committee prepare a report of the final rules-submit the same to each member of the sub-committee-allow a 10 day waiting period for divergent views or acquiescence by the members of the sub-committee and thereby allow each member to study the final rules in toto.

The amendment was carried by the following vote:

El Paso Natural Gas Company

Southern Union Gas Company

Continental Oil Company

Gulf Oil Corporation

Humble Oil and Refining Company

Shell Oil Company

Phillips Petroleum Company

Texas-Pacific Coal and Oil Company

Samedan Oil Corporation

Permian Basin Pipe Line Company

Yes

Yes

The amended main motion was carried unanimously.

The meeting was adjourned.

S. J. Stanley Acting Secretary

Distributed by: N.M. Oil & Gas Engineering Committee Hobbs, New Mexico 5-14-53.

# ATTENDANCE RECORD

#### NAME

# George E. Trimble Stanley J. Stanley Robert H. Regan

W. L. Morris H. A. DuPont Ed Noble

A. A. Kemnitz W. G. Abbott

Max E. Curry Kenneth J. Barr

E. W. Nestor

R. L. Hughston Peck Hardee Jr. Glenn Staley

C. M. Bumpass

G. D. Walker

W. C. Rigg

J. V. Peacock

E. H. Foster

M. H. Cullender

G. E. Stahl W. E. Aineworth

Van Thompson Quilman B. Davis

A. L. Hill

F. Norman Woodruff S. F. Holmesly

R. S. Dewey

K. C. Heald Jr.

J. H. Vickery

W. H. Hogan

Elvis A. Utz

Victor T. Lyon

W. B. Macey

E. E. Tucker

J. E. Springer

C. E. Hinkle

D. K. Spellman Jr.

E. M. Wolf

## COMPANY

Samedan Oil Corporation

Oil Conservation Commission Magnolia Petroleum Company . 17 U. S. Geological Survey Samedan Oil Corporation 11 Amerada Petroleum Corporation Skelly Oil Company Stanolind Cil & Gas Company Shell Oil Company Shell Oil Company Texas-Pacific Coal & Oil Company N. M. Oil & Gas Engineering Comm. Gulf Oil Corporation មេ 17 Phillips Petroleum Company 12 11 11 ١ì Permian Basin Pipeline Co. Southern Union Gas Company 11 17 El Paso Natural Gas Company 11 12 11 Humble Oil & Refining Company 11 11 87 11 11 Atlantic Refining Company

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N. M. Oil Conservation Comm.

N. M. Oil Conservation Comm.

Tidewater Associated Oil Co.

Humble Oil & Refining Company

Humble Oil & Refining Company

Continental Oil Company

The Ohio Oil Company

#### CITY

Midland, Texas Hobbs, New Mexico Eunice, New Mexico Hobbs, New Mexico Midland, Texas Hobbs, New Mexico Monument, New Mexico Hobbs, New Mexico Hobbs, New Mexico Hobbs, New Mexico Midland, Texas Midland, Texas Hobbs, New Mexico Hobbs, New Mexico Fort Worth, Texas Hobbs, New Mexico Amarillo, Texas Bartlesville, Oklahoma Cmaha, Nebraska Dallas, Texas 11 Houston, Texas Ħ Houston, Texas Midland, Texas Hobbs, New Mexico Midland, Texas Santa Fe, New Mexico

Fort Worth, Texas Santa Fe, New Mexico Midland, Texas Roswell, New Mexico

Midland, Texas Houston, Texas

# RULE 601 ALLOCATION OF GAS PRODUCTION

- (a) At such time as the Commission determines that allocation of gas production is necessary to prevent waste or to protect correlative rights the Commission, after notice and hearing, shall consider the nominations of purchasers from each gas pool and other relevant data, and shall fix the allowable production of each pool, and shall allocate production among the gas wells in the pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in (b) below, the general rules of this section shall apply to each gas pool allocated under these rules.
- (b) After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.

# PROFOSED RULE 602 PROPATION UNITS

For the purposes of gas allocation in the absence of special pool rules a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U.S. Public Land Surveys. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.

# PROPOSED RULE 603 ALLOCATION

(a) At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by the purchasers of gas their nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which he purchases gas. The Commission shall consider nominations of

purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.

- (b) The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the proration schedule all wells producing from any reservoir appearing on the proration schedule.
- (c) The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage allotted to such non-marginal units; provided that for this purpose standard units as defined in Rule 602 above shall be deemed to contain 160 acres. More than one proration unit may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
- (1) All acreage in such units may reasonably be presumed to be productive of gas; and
- or width exceeding 5280 feet; and
- (3) the well to which such additional units are assigned shall be located not closer to any boundary of such pooled units than the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first mentioned boundary. Provided further that where three proration units are pooled the well shall not be located more than 1320 feet from the nearest boundary of any unit so pooled.

#### PROPOSED RULE 604 BALANCING OF PRODUCTION

# (a) Underproduction

known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period, but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If, at the end of the first succeeding proration period a greater amount of allowable remains unproduced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it shall be classified as a marginal well and its allowable reduced to the well's ability to produce.

# (b) Overproduction

A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If at the end of the first succeeding proration period the well is still overproduced it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time a well is overproduced as amount equalling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut in of the well would result in material damage to the well.

(c) No gas well shall be produced at a daily rate which would constitute waste.

#### RULE 605 CRANTING OF ALLOWABLES

- (a) No gas well shall be given an allowable until Form C-104 has been filed together with a plat showing (1) acreage attributed to said well and (2) the locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir and (3) the lease ownership of said leases.
- (b) Allowables to newly completed gas wells shall commence on the date of completion or the date of filing of Form C-104 and plat described above, whichever date is later.

# RULE 606 REPORTING OF PRODUCTION

The production from each gas well shall be metered separately and the gas production therefrom shall be reported each month to the Commission on forms furnished by the Commission. The operator shall show on such form what disposition has been made of the gas produced. The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas.

Case 521 13

# GENERAL OFFICES 120 BROADWAY, NEW YORK

AMERADA PETROLEUM CORPORATIONS

BEACON BUILDING

P. O. BOX 2040

Tulsa 2, okla.

JUN 1 - 1953

May 27, 1953

Mr. A. L. Hill; Chairman Advisory Committee on Gas Proration - New Mexico El Paso Matural Gas Company 1006 Main Street Houston, Texas

#### Dear Sir:

It is the opinion of the Amerada Petroleum Corporation that the proration of natural gas in the State of New Mexico and more particularly in the area of Lea, Eddy, Chaves and Roosevelt Counties is necessary for the prevention of physical waste and the protection of correlative rights.

Under this premise we have reviewed the recommendations of your subcommittees, working under the direction of the Advisory Committee appointed by the Commission, and concur in their recommendations with the following exceptions, to wit:

- 1. An amendment to Rule 506 providing for prorating an oil well completed in a gas reservoir is not necessary. The present rules provide a method of taking care of such a contingency.
- 2. Provision should be made to permit a tolerance in the size and shape of units, particularly in those areas already developed or where present oil wells can be dually completed for gas. We suggest that proposed Rule 602 be revised as follows:

After Public Land Surveys insert:

a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all offsetting operators, if such units comply with the following conditions:

(1) All lands therein lie within the same section;

"Provided, however, that a gas provation unit other than

(2) All acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots.

pur rule Where these general rules would result in a conflict with the present operating practices, hearings should be held to adopt special field rules.

With reference to the report of the Subcommittee on definition of pools, we are not in agreement with the statement that all the shallow gas wells in Townships 2h and 25 are producing from the Queen Sand. We presume this can be satisfactorily resolved when the various pools come up for hearing.

We would appreciate your consideration in the above matters when you make your report to the Commission.

Yours very truly,

AMERADA PETROLEUM CORPORATION

By R. S. Christie

RSCIVA

Nr. R. R. Spurrier, Secretary
New Mexico Oll Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

# OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

May 20, 1953

Mr. Olemn Staley Box 127 Hobbs W M

Dear Hr. Staley:

RB: 000 Care 521

I believe your committee acted as distributor for the minutes mentioned in the attached letter from Mr. Pennington. I will greatly appreciate it if you will have the requested copies sent to him.

Sincerely,

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EAUinr

Magnolia Pipe Line Co. Dallas 1 - Texas

Con 521

MIDLAND, TEXAS 502 V. & J. TOWER

May 21, 1953

<u>س</u>٠

El Paso Natural Gas Company
Southern Union Gas Company
Continental Oil Company
Gulf Oil Corporation
Humble Oil and Refining Company
Shell Oil Company
Phillips Petroleum Company
Texas-Pacific Coal and Oil Company
Samedan Oil Corporation
Permian Basin Pipo Line Company



Gentlemen:

There will be a meeting of the General Rules Sub-Committee of the Advisory Committee to the New Mexico Oil Conservation Commission on Case 521 regarding gas proration on June 2, 1953 at 9:00 AM (MST) in the office of the New Mexico Oil and Gas Engineering Committee in Hobbs, New Mexico.

This meeting is called for the purpose of completing any unfinished business so that we can submit the rules which have been adopted by this committee to the Advisory Committee.

Very truly yours,

SAMEDAN OIL CORPORATION, Chairman General Rules Subcommittee

By Deorge E. Trimble
George E. Trimble

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXIDO.

JUN 1 1953

May 21, 1953

TO: El Paso Natural Gas Company
Southern Union Gas Company
Continental Oil Company
Gulf Oil Corporation
Humble Oil and Refining Company
Shell Oil Company
Phillips Petroleum Company
Texas-Pacific Coal and Oil Company
Samedan Oil Corporation
Permian Basin Pipe Line Company

#### Gentlemen:

There will be a meeting of the General Rules Sub-Committee of the Advisory Committee to the New Mexico Oil Conservation Commission on Case 521 regarding gas proration on June 2, 1953 at 9:00 A. M. (MST) in the office of the New Mexico Oil and Gas Engineering Committee in Hobbs, New Mexico.

This meeting is called for the purpose of completing any unfinished business so that we can submit the rules which have been adopted by this Committee to the Advisory Committee.

Very truly yours,

SAMEDAN OIL CORPORATION, Chairman General Rules Sub-Committee

BY: /s/ George E. Trimble

Distributed by: N. M. Oil and Gas Engineering Committee Hobbs, New Mexico 5-26-53. June 12, 1953

New Mexico Oll Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Re: Advisory Committee to the Oil Conservation Commission on Case 521 concerning gas proration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

# Gentlemen:

The subcommittee on general rules met on June 2, 1953, at Hobbs, New Mexico, at which time final rules were proposed for presentation to the Advisory Committee. As you were advised in our report at the last regular hearing of the Commission, the subcommittee investigating the need for revision of present gas pool designations has completed its work. The final report of both subcommittees will be considered by the Advisory Committee at a meeting to be called in the near future.

It is believed that the final report of the Advisory Committee can be submitted to the Oil Conservation Commission at their regular meeting in July.

Respectfully submitted,

A. L. Hill El Paso Natural Gas Company, Chairman, Gas Proration Advisory Committee

ALHIWIC

Copyn

WPMV El Paso Natural Gas Company TENTH FLOOR BASSETT TOWER ADDRESS REPLY TO El Paso, Texas GU CONSCIONATION COMMISSION June 12, 1953 New Mexico Oil Conservation Commission ().
P. O. Box 871
Santa Fe, New Mexico Re: Advisory Committee to the OII

Conservation Commission on Case 521,

concerning gas proration in Lea Chaves and Roosevelt Counties, New Mexico.

The subcommittee on general rules met on June 2, 1953, at Hobbs, New Mexico, at which time final rules were proposed for presentation to the Advisory rules were presentation to the Advisory rules were proposed for presentation to the Advisory rules were pr Gentlemen: rules were proposed for revision of presentation to the Advisory

Committee. As you were advised in our report at the last

regular hearing of the Commission, the subcommittee investigat
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regular hearing of the Commission of present was not designations. regular nearing of the Commission, the subcommittee investigating the need for revision of present gas pool designations the need for revision of present gas pool designations are the need for revision of present gas pool designations. The final report of both subcommittees has completed its work. The final report of both subcommittees will be considered by the Advisory Committee at a meeting to be called in the near future. be called in the near future.

It is believed that the final report of the Advisory Committee can be submitted to the Oil Conservation Commission at their regular meeting in July. Respectfully submitted,

El Paso Natural Gas Company, Chairman, Gas Proration
Advisory Committee

ALH:W:C

Case 521 El Paso Natural Gas Company TENTH FLOOR BASSETT TOWER ADDRESS REPLY TO: 1306 MAIN STREET - ROOM 1901 HOUSTON 2, TEXAS El Paso, Jexas June 18, 1953 OIL CONSERVATION COMMISSION.

SANTY TO THE MEXICO. JUN 2 2 1953

New Mexico Oil Conservation Commission
P. O. Box 871

Santa Fe, New Mexico

A meeting of the Advisory Committee to the New Mexico Oil Conservation Commission on Case 521, concerning Dear Sir: Mexico Ull Conservation Commission on Case 521, concerning gas proration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, is hereby called for June 25, 1953, at 9:00 A. M. (MST), in the offices of the New Mexico Oil and Gas Engineering Committee in Hobbs New Mexico ing Committee in Hobbs, New Mexico.

This meeting is for the purpose of consideration of the final reports prepared by the two appointed subcommittees so that recommendations may be formulated by this Advisory Committee for presentation to the New Mexico 011 Conservation Commission.

very truly yours,

El Paso Natural Gas Company, Chairman, Gas Proration Advisory Committee

ALH: FNW:pc

OIL UNSERVATION COMMISSION

SANTA FE. NEW MEXICO.

EL PASO NATURAL GAS COMPANY Tenth Floor Bassett Tower

El Paso, Texas

Advisory Committee on Gas Proration July 6, 1953 Gentlemen:

New Mexico Gil Conservation Commission Case 521

Attached are two (2) copies of the final recommendations on rules for gas provation to formally present the recommendations to the New Mexico Oil Conservation and gas pool designations as approved at our meeting of June 25, 1953. It is my Commission at its meeting in Santa Fe on July 16. If the recommendations as written intention to formally present the recommendations to the New Mexico Oil Conservation do not correctly reflect the action taken by the Committee on any points, please so Commission at its meeting in Santa Fe on July 16. If the recommendations as written advise me not later than July 10 in order that such revisions that are necessary do not correctly reflect the action taken by the Committee on any points, please can be made prior to submittal to the Commission. can be made prior to submittal to the Commission.

In an informal discussion between Mr. R. R. Spurrier and Mr. Ben Howell, Mr. Spurrier submitted to the Commission at the July

In an informal discussion between Mr. R. R. Spurrier and Mr. Ben Howell, Mr. Spurrier, a full discussion of them will be deferred until the August meeting. indicated that if the recommendations are submitted to the Commission at the deferred until the August meeting. As was stated several times at our various meetings, it is understood that although companies are free to take whatever position they choose in any hearings on the subject before the Commission.

these recommendations are those of the Committee as a whole, the individual members are free to take whatever position they choose in any hearings on the As your Chairman, I would like to take this opportunity to thank each member of the committee for your cooperation, and to particularly thank Messrs. Staley and Stanley As your Chairman, I would like to take this opportunity to thank each member of the for the work which they did in providing a weeting place and taking care of the Committee for your cooperation, and to particularly thank Messrs. Staley and minutes of the meetings.

Very truly yours,

A. L. Hill

GENERAL RULES FOR GAS PRORATION
FOR USE IN DEFINED GAS FIELDS LOCATED IN
THE FOUR-COUNTY AREA COMPRISED OF
LEA, EDDY, CHAVES AND ROOSEVELT COUNTIES, NEW MEXICO
RECCMMENDED BY THE ADVISORY COMMITTEE TO
THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

- I. DEFINITION OF A GAS WELL (Supersedes Statewide Definition 24)

  GAS WELL shall mean a well producing gas or natural gas from a common source of gas supply from a gas pool determined by the Commission.
- II. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS
  - A. (Supersedes Statewide Rule 104 (f))

    The Secretary of the Commission shall have authority to grant an exception to the requirements of Statewide Rule 104, Sections (a), (b), (c), and (d), without notice and hearing where application has been filed in due form, and,
  - 1. The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and,
  - 2. (a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or,
  - (b) All owners of oil and gas leases within such radius consent in writing to the proposed location.
  - B. (Supersedes Statewide Rule 104 (k))
    The provisions of Statewide Rule 104, Paragraph (k), shall not apply to
    gas pools located in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
- III. OIL PRODUCTION FROM DEFINED GAS POOLS
  In a gas pool, as defined by the Oil Conservation Commission, each proration unit containing a well producing in excess of five barrels of crude oil per day shall be permitted to produce an oil allowable calculated by dividing the gas allowable as assigned to a gas well on the same unit size as said well by the gas-oil ration of said well. The maximum oil allowable which may be assigned said well shall be the top unit oil allowable as determined by Statewide Rule 505 unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste.
- IV. GAS PRORATION (Supersedes Statewide Rule 602)
  - A. At such time as the Commission determines that allocation of gas production from gas wells producing from any pool in this four-county area is necessary to prevent waste or to protect correlative rights, the Commission, after notice and hearing, shall consider the nominations of gas purchasers from such gas pool and other relevant data, and shall fix the allowable production of such pool, and shall allocate production among the gas wells in such pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in B. below, the general rules of this section shall apply to each gas pool allocated under these rules.

- B. After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.
- C. The term "gas purchaser" as used in these rules, shall mean any "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit a nomination.

# V. PRORATION UNITS

For the purpose of gas allocation in the absence of special pool rules, a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys, provided, however, that a gas proration unit other than a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all offsetting operators, if all acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.

# VI. GAS ALLOCATION (Supersedes Statewide Rule 602)

- A. At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which it purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.
- B. The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above, setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the proration schedule the gas wells in the pool delivering to a gas transportation facility, and shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to the pool shall be determined by the Commission in the following manner: The total allowable for a month shall be equal to the total market demand for that month plus the amount of any overproduction, or less the amount of any underproduction during the second preceding month.
- C. The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the

total acreage alloted to such non-marginal units; provided that for this purpose standard units shall be as defined in Rule V above. More than one proration unit or fractional parts thereof may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:

- 1. No more than 640 acres shall be assigned to any one well,
- 2. All acreage in such units may reasonably be presumed to be productive of gas,
- 3. The multiple unit so formed shall not have an overall length or width exceeding 5,280 feet.
- 4. The well to which such additional units are assigned shall be located not closer to any boundary of such pooled units that the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first-mentioned boundary; provided further, that where three proration units are pooled the well shall not be located more than 1,320 feet from the nearest boundary of any unit so pooled, and,
- 5. Exceptions to the provisions of this rule may be granted by the Commission after notice and hearing or after the Commission has been furnished waivers by all offsetting operators.
- VII. BALANCING OF PRODUCTION (Supersedes Statewide Rule 604)

A. Underproduction

The dates 7:00 A. M. January 1 and 7:00 A. M. July 1 shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If, at the end of the first succeeding produced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

# B. OVERPRODUCTION

A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If, at the end of the first succeeding proration period, the well is still overproduced, it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut-in of the well would result in material damage to the well.

#### VIII. GRANTING OF ALLOWABLES

- A. No gas well shall be given an allowable until Form C-104 has been filed together with a plat showing:
  - 1. acreage attributed to said well,
- 2. the locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir, and,
  - 3. the lease ownership of said leases.
- B. Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility or the date of filing of Form C-104 and plat described above, whichever date is the later.
- IX. REPORTING OF PRODUCTION

  The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission so as to reach the Commission on or before the twenty-fifth day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced. The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas.

REVISIONS AND ADDITIONS TO ORDER NUMBER R-264 IN CASE 245
DESIGNATING, NAMING, DEFINING AND EXTENDING THE GAS POOLS
OF LEA, EDDY AND CHAVES COUNTIES, NEW MEXICO
RECOMMENDED BY THE ADVISORY COMMITTEE TO
THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

- 1. It is recommended that the Jalco Gas Pool be extended to include all of sections 15, 16, 17, 20, 21, 22, 27, 28; the E/2 of Section 29; E/2 of Section 32; and all of Sections 33 and 34; all in Township 26 South, Range 37 East.

  It is pointed out that the El Paso Natural Gas Company's Rhodes Unit (Storage) Area is located within the boundaries of the Jalco Gas Pool and production of gas from that area should not be restricted or affected by Jalco Gas Pool rules so long as the cumulative total input gas exceeds cumulative total withdrawals and, in addition, that during such period, Jalco Gas Pool rules apply to the storage area only subject to the Unit Agreements and Rule No-405.
- 2. It is recommended that the vertical limits designated in III (2) of Order No. R-264, "That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to a point 200 feet below the top of the Queen formation thereby including all of the Seven Rivers formation", be amended to read as follows: That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to the top of the Grayburg formation thereby including all of the Yates, Seven-Rivers, and Queen formations.
- 3. It is recommended that, whereas geologic evidence establishes that the present Terry-Blinebry Pool and the Blinebry Gasl Pool are a common reservoir, the Blinebry Gas Pool be extended to include productive acreage presently included in the Terry-Blinebry Pool and other acreage indicated productive by development, to wit: All of Sections 1, 2, 3; E/2 of Section 4; E/2 of Section 9; N/2 of Section 10; N/2 of Section 11; all of Section 12, 13, 24, and 25; all in Township 21 South, Range 37 East, and that the designation Terry-Blinebry Pool be discontinued.
- 4. It is recommended that, inasmuch as the Blinebry Gas Pool, as recommended in 5 above, contains low ratio oil wells as well as condensate and gas wells, special rules for allocation be adopted.
- 5. It is recommended that the producing formation in the Blinebry Gas Pool shall be defined as that part of the Yeso formation included from the base of the upper Yeso sandy section which occurs at an averagedepth of 450 ft.below the Glorieta formation and which is the stratigraphic equivalent of the Clear Fork formation of West Texas to the top of the Drinkard sandy member or Tubb Sand.

- 6. It is recommended that the Justis Gas Pool for production from the Glorieta formation be designated as recommended by Gulf Oil Corporation in the Gas Pool Delineation Study of Southeastern Lea County, New Mexico.

  The vertical limit is suggested as the 200 feet immediately below the Glorieta datum. The horizontal limits include the SW/4 of Section 1; SE/4 of Section 2; E/2 of Section 11; W/2 of Section 12; W/2 of Section 13; E/2 of Section 14; E/2 of Section 23; W/2 of Section 24; all in Township 25 South, Range 37 East.
- 7. It is recommended that for wells presently or subsequently completed as gas producers outside the boundaries of defined gas pools the burden for having same included in gas pools should be placed on the Operator as outlined in Rule 1122.

# Note:

In reviewing designated gas pools, the subcommittee recognized the fact that within the area of designated gas pools and adjacent areas, there are a number of gas wells which are producing from the gas caps of oil reservoirs and subject to the oil proration rules pertaining thereto; and, therefore, that these wells will not be subject to the rules pertaining to gas pools.

NEW MEXICO OIL & GAS ENGINEERING COMMITTEE July 9, 1953 HOBBS, NEW MEXICO

# EL PASO NATURAL GAS COMPANY Tenth Floor Bassett Tower El Paso, Texas

July 6, 1953

Advisory Committee on Gas Proration New Mexico Oil Conservation Commission Case 521

#### Gentlemen:

Attached are two (2) copies of the final recommendations on rules for gas proration and gas pool designations as approved at our meeting of June 25, 1953. It is my intention to formally present the recommendations to the New Mexico Oil Conservation Commission at its meeting in Santa Fe on July 16. If the recommendations as written do not correctly reflect the action taken by the Committee on any points, please so advise me not later than July 10 in order that such revisions that are necessary can be made prior to submittal to the Commission.

In an informal discussion between Mr. R. R. Spurrier and Mr. Ben Howell, Mr. Spurrier indicated that if the recommendations are submitted to the Coinmission at the July meeting, a full discussion of them will be deferred until the August meeting.

As was stated several times at our various meetings, it is understood that although these recommendations are those of the Committee as a whole, the individual member companies are free to take whatever position they choose in any hearings on the subject before the Commission.

As your Chairman, I would like to take this opportunity to thank each member of the Committee for your cooperation, and to particularly thank Messrs. Staley and Stanley for the work which they did in providing a meeting place and taking care of the minutes of the meetings.

Very truly yours,

A. L. HILL

GENERAL RULES FOR GAS PRORATION FOR
USE IN DEFINED GAS FIELDS LOCATED IN THE
FOUR-COUNTY AREA COMPRISED OF LEA, EDDY,
CHAVES AND ROOSEVELT COUNTIES, NEW MEXICO
RECOMMENDED BY THE ADVISORY
COMMITTEE TO THE OIL CONSERVATION COMMISSION OF
NEW MEXICO ON CASE 521

- I. DEFINITION OF A GAS WELL (Supersedes Statewide Definition 24)

  GAS WELL shall mean a well producing gas or natural gas from a common source of gas supply from a gas pool determined by the Commission.
- II. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS
  - A. (Supersedes Statewide Rule 104 (f))

    The Secretary of the Commission shall have authority to grant an exception to the requirements of Statewide Rule 104, Sections (a), (b), (c), and (d), without notice and hearing where application has been filled in due form, and,
    - 1. The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and,
    - 2. (a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or,
    - (b) All owners of oil and gas leases within such radius consent in writing to the proposed location.
  - B. (Supersedes Statewide Rule 104 (k)
    The provisions of Statewide Rule 104, Paragraph (k), shall not apply to
    gas pools located in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
- III. OIL PRODUCTION FROM DEFINED GAS POOLS

In a gas pool, as defined by the Oil Conservation Commission, each proration unit containing a well producing in excess of five barrels of crude oil per day shall be permitted to produce an oil allowable calculated by dividing the gas allowable as assigned to a gas well on the same unit size as said well by the gas-oil ration of said well. The maximum oil allowable which may be assigned said well shall be the top unit oil allowable as determined by Statewide Rule 505 unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste.

- IV. GAS PRORATION (Supersedes Statewide Rule 602)
  - A. At such time as the Commission determines that allocation of gas production from gas wells producing from any pool in this four-county area is necessary to prevent waste or to protect correlative rights, the Commission, after notice and hearing, shall consider the nominations of gas

purchasers from such gas pool and other relevant data, and shall fix the allowable production of such pool, and shall allocate production of such pool, and shall allocate production among the gas wells in such pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in B. below, the general rules of this section shall apply to each gas pool allocated under these rules.

- B. After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.
- C. The term "gas purchaser" as used in these rules, shall mean any "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit a nomination.

### V. PRORATION UNITS

For the purpose of gas allocation in the absence of special pool rules, a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys, provided, however, that a gas proration unit other than a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all offsetting operators, if all acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.

### VI. GAS ALLOCATION (Supersedes Statewide Rule 602)

- A. At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which it purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.
- B. The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above, setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the

proration schedule the gas wells in the pool delivering to a gas transportation facility, and shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to the pool shall be determined by the Commission in the following manner: The total allowable for a month shall be equal to the total market demand for that month plus the amount of any overproduction, or less the amount of any underproduction during the second preceding month.

- C. The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage alloted to such non-marginal units; provided that for this purpose standard units shall be as defined in Rule V above. More than one proration unit or fractional parts thereof may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
  - 1. No more than 640 acres shall be assigned to any one well,
  - 2. All acreage in such units may reasonably be presumed to be productive of gas,
  - 3. The multiple unit so formed shall not have an overall length or width exceeding 5, 280 feet.
  - 4. The well to which such additional units are assigned shall be located not closer to any boundary of such pooled units that the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first-mentioned boundary; provided further, that where three proration units are pooled the well shall not be located more than 1,320 feet from the nearest boundary of any unit so pooled, and,
  - 5. Exceptions to the provisions of this rule may be granted by the Commission after notice and hearing or after the Commission has been furnished waivers by all offsetting operators.

### VII. BALANCING OF PRODUCTION (Supersedes Statewide Rule 604)

### A. Underproduction

The dates 7:00 A.M. January 1 and 7:00 A.M. July 1 shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If, at the end of the first succeeding proration period, a greater amount of allowable remains unproduced than was carried forward as underproduction, the amount carried forward to

the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

### B. OVERPRODUCTION

A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If, at the end of the first succeeding proration period, the well is still overproduced, it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut-in of the well would result in material damage to the well.

### VIII. GRANTING OF ALLOWABLES

- A. No gas well shall be given an allowable until Form C-104 has been filed together with a plat showing:
  - 1. Acreage attributed to said well,
  - 2. The locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir, and,
  - 3. The lease ownership of said leases.
- B. Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility or the date of filing of Form C-104 and plat described above, whichever date is the later.

### IX. REPORTING OF PRODUCTION

The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission so as to reach the Commission on or before the twenty-fifty day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced. The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas.

New Mexico Oil & Gas Engineering Committee July 9, 1953 Hobbs, New Mexico REVISIONS AND ADDITIONS TO ORDER NUMBER k-264 IN CASE 245 DESIGNATING, NAMING, DEFINING AND EXTENDING THE GAS POOLS OF LEA, EDDY AND CHAVES COUNTIES NEW MEXICO RECOMMENDED BY THE ADVISORY COMMITTEE TO THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

1. It is recommended that the Jalco Gas Pool be extended to include all of sections 15, 16, 17, 20, 21, 22, 27, 28; the E/2 of Section 29; E/2 of Section 32; and all of Sections 33 and 34; all in Township 26 South, Range 37 East.

It is pointed out that the El Paso Natural Gas Company's Rhodes Unit (Storage) Area is located within the boundaries of the Jalco Gas Pool and production of gas from that area should not be restricted or affected by Jalco Gas Pool rules so long as the cumulative total input gas exceeds cumulative total withdrawals and, in addition, that during such period, Jalco Gas Pool rules apply to the storage area only subject to the Unit Agreements and Rule No. 405.

- 2. It is recommended that the vertical limits designated in III (2) of Order No. R-264, "That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to a point 200 feet below the top of the Queen formation thereby including all of the Seven Rivers formation", be amended to read as follows: That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to the top of the Grayburg formation thereby including all of the Yates, Seven-Rivers, and Queen formations.
- 3. It is recommended that, whereas geologic evidence establishes that the present Terry-Blinebry Pool and the Blinebry Gas Pool are a common reservoir, the Blinebry Gas Pool be extended to include productive acreage presently included in the Terry-Blinebry Pool and other acreage indicated productive by development to wit: All of Sections 1, 2, 3; E/2 of Section 4; E/2 of Section 9; N/2 of Section 10; N/2 of Section 11; all of Section 12, 13, 24, and 25; all in Township 21 South, Range 37 East, and that the designation Terry-Blinebry Pool be discontinued.
- 4. It is recommended that, inasmuch as the Blinebry Gas Pool, as recommended in 5 above, contains low ratio oil wells as well as condensate and gas wells, special rules for allocation be adopted.
- 5. It is recommended that the producing formation in the Blinebry Gas Pool shall be defined as that part of the Yeso formation included from the base of the upper Yeso sandy section which occurs at an average depth of 450 ft. below the Glorieta formation and which is the stratigraphic equivalent of the Clear Fork formation of West Texas to the top of the Drinkard sandy member or Tubb Sand.

- 6. It is recommended that the Justis Gas Pool for production from the Glorieta formation be designated as recommended by Gulf Oil Corporation in the Gas Pool Delineation Study of Southeastern Lea County, New Mexico.

  The vertical limit is suggested as the 200 feet immediately below the Glorieta datum. The horizontal limits include the SE/4 of Section 1; SE/4 of Section 2; E/2 of Section 11; W/2 of Section 12; W/2 of Section 13; E/2 of Section 14; E/2 of Section 23; W/2 of Section 24; all in Township 25 South, Range 37 East.
- 7. It is recommended that for wells presently or subsequently completed as gas producers outside the boundaries of defined gas pools the burden for having same included in gas pools should be placed on the Operator—as outlined in Rule 1122.

### Note:

In reviewing designated gas pools, the subcommittee recognized the fact that within the area of designated gas pools and adjacent areas, there are a number of gas wells which are producing from the gas caps of oil reservoirs and subject to the oil proration rules pertaining thereto; and, therefore, that these wells will not be subject to the rules pertaining to gas pools.

-150 J

New Mexico Oil & Gas Engineering Committee July 9, 1953 Hobbs, New Mexico

# El Paso Natural Gas Company

TENTH FLOOR BASSETT TOWER

El Paso, Texas

ADDRESS REPLY TO: 1006 MAIN STREET - ROOM 1901 HOUSTON 2, TEXAS

July 6, 1953

Advisory Committee on Gas Proration New Mexico Oil Conservation Commission Case 521

#### Gentlemen:

Attached are two (2) copies of the final recommendations on rules for gas proration and gas pool designations as approved at our meeting of June 25, 1953. It is my intention to formally present the recommendations to the New Mexico Oil Conservation Commission at its meeting in Santa Fe on July 16. If the recommendations as written do not correctly reflect the action taken by the Committee on any points, please so advise me not later than July 10 in order that such revisions that are necessary can be made prior to submittal to the Commission.

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1. Z An

GENERAL RULES FOR GAS PRORATION
FOR USE IN DEFINED GAS FIELDS LOCATED IN
THE FOUR-COUNTY AREA COMPRISED OF
LEA, EDDY, CHAVES AND ROOSEVELT COUNTIES, NEW MEXICO
RECOMMENDED BY THE ADVISORY COMMITTEE TO
THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

- I. DEFINITION OF A GAS WELL (Supersedes Statewide Definition 24)
  GAS WELL shall mean a well producing gas or natural gas from
  a common source of gas supply from a gas pool determined by
  the Commission.
- II. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS
  - A. [Supersedes Statewide Rule 104 (f)]

    The Secretary of the Commission shall have authority to grant an exception to the requirements of Statewide Rule 104, Sections (a), (b), (c), and (d), without notice and hearing where application has been filed in due form, and,
  - 1. The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and,
  - 2. (a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or,
  - (b) All owners of oil and gas leases within such radius consent in writing to the proposed location.
  - B. [Supersedes Statewide Rule 104 (k)]
    The provisions of Statewide Rule 104, Paragraph (k), shall not apply to gas pools located in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
- III. OIL PRODUCTION FROM DEFINED GAS POOLS
  In a gas pool, as defined by the Oil Conservation Commission,
  each proration unit containing a well producing in excess of
  five barrels of crude oil per day shall be permitted to produce
  an oil allowable calculated by dividing the gas allowable as
  assigned to a gas well on the same unit size as said well by
  the gas-oil ratio of said well. The maximum oil allowable which
  may be assigned said well shall be the top unit oil allowable
  as determined by Statewide Rule 505 unless, after hearing, the
  Commission shall amend this rule as it applies to a particular
  pool in order to prevent waste.
- IV. GAS PRORATION (Supersedes Statewide Rule 602)
  - A. At such time as the Commission determines that allocation of gas production from gas wells producing from any pool in this four-county area is necessary to prevent waste or to protect correlative rights, the Commission, after notice and hearing, shall consider the nominations of gas purchasers from such gas pool and other relevant data, and shall fix the allow-

able production of such pool, and shall allocate production among the gas wells in such pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in B. below, the general rules of this section shall apply to each gas pool allocated under these rules.

- B. After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.
- C. The term "gas purchaser" as used in these rules, shall mean any "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit a nomination.

### V. PRORATION UNITS

For the purpose of gas allocation in the absence of special pool rules, a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U.S. Public Land Surveys, provided, however, that a gas proration unit other than a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all off-setting operators, if all acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.

### VI. GAS ALLOCATION (Supersedes Statewide Rule 602)

- A, At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which he purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.
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shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to the pool shall be determined by the Commission in the following manner: The total allowable for a month shall be equal to the total market demand for that month plus the amount of any overproduction, or less the amount of any underproduction during the second preceding month.

- C. The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage alloted to such non-marginal units; provided that for this purpose standard units shall be as defined in Rule V above. More than one proration unit or fractional parts thereof may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
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- 5. Exceptions to the provisions of this rule may be granted by the Commission after notice and hearing or after the Commission has been furnished waivers by all offsetting operators.
- VII. BALANCING OF PRODUCTION (Supersedes Statewide Rule 604)

Underproduction

The dates 7:00 A. M. January 1 and 7:00 A. M. July 1 shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period

in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If,

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a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut-in of the well would result in ma-

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REVISIONS AND ADDITIONS TO ORDER NUMBER R-264 IN CASE 245
DESIGNATING, NAMING, DEFINING AND EXTENDING THE GAS POOLS
OF LEA, EDDY AND CHAVES COUNTIES, NEW MEXICO
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  It is pointed out that the El Paso Natural Gas Company's Rhodes Unit (Storage) Area is located within the boundaries of the Jalco Gas Pool and production of gas from that area should not be restricted or affected by Jalco Gas Pool rules so long as the cumulative total input gas exceeds cumulative total withdrawals and, in addition, that during such period, Jalco Gas Pool rules apply to the storage area only subject to the Unit Agreements and Rule No-405.
- 2. It is recommended that the vertical limits designated in III (2) of Order No. R-264, "That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to a point 200 feet below the top of the Queen formation thereby including all of the Seven Rivers formation", be amended to read as follows: That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to the top of the Grayburg formation thereby including all of the Yates, Seven-Rivers, and Queen formations.
- 3. It is recommended that, whereas geologic evidence establishes that the present Terry-Blinebry Pool and the Blinebry Gas Pool are a common reservoir, the Blinebry Gas Pool be extended to include productive acreage presently included in the Terry-Blinebry Pool and other acreage indicated productive by development, to wit: All of Sections 1, 2, 3; E/2 of Section 4; E/2 of Section 9; N/2 of Section 10; N/2 of Section 11; all of Section 12, 13, 24, and 25; all in Township 21 South, Range 37 East, and that the designation Terry-Blinebry Pool be discontinued.
- 4. It is recommended that, inasmuch as the Blinebry Gas Pool, as recommended in 5 above, contains low ratio oil wells as well as condensate and gas wells, special rules for allocation be adopted.
- 5. It is recommended that the producing formation in the Blinebry Gas Pool shall be defined as that part of the Yeso formation included from the base of the upper Yeso sandy section which occurs at an average depth of 450 feet below the Glorieta formation and which is the stratigraphic equivalent of the Clear Fork formation of West Texas to the top of the Drinkard sandy member or Tubb Sand.

- 6. It is recommended that the Justis Gas Pool for production from the Glorieta formation be designated as recommended by Gulf Oil Corporation in the Gas Pool Delineation Study of Southeastern Lea County, New Mexico.

  The vertical limit is suggested as the 200 feet immediately below the Glorieta datum. The horizontal limits include the SW/4 of Section 1; SE/4 of Section 2; E/2 of Section 11; W/2 of Section 12; W/2 of Section 13; E/2 of Section 14; E/2 of Section 23; W/2 of Section 24; all in Township 25 South, Range 37 East.
- 7. It is recommended that for wells presently or subsequently completed as gas producers outside the boundaries of defined gas pools the burden for having same included in gas pools should be placed on the Operator as outlined in Rule 1122.

Note:

In reviewing designated gas pools, the subcommittee recognized the fact that within the area of designated gas pools and adjacent areas, there are a number of gas wells which are producing from the gas caps of oil reservoirs and subject to the oil proration rules pertaining thereto; and, therefore, that these wells will not be subject to the rules pertaining to gas pools.

### EL PASO NATURAL GAS COMPANY EL PASO, TEXAS

July 14, 1953

Honorable R. R. Spurrier Secretary, Oil Conservation Commission Santa Fe, New Mexico

Dear Mr. Spurrier:

On behalf of the Advisory Committee appointed by the Commission to suggest gas proration rules for use in southeastern New Mexico, the undersigned as Chairman wishes to report that your Advisory Committee has met and has given careful consideration to drafting suggested rules and other recommendations.

After numerous meetings and much discussion, the attached rules and recommendations are submitted as suggestions approved by a majority of the Committee.

The Committee was not unanimous on many points and no member of the Committee is precluded from submitting its own ideas or suggestions to the Commission. The Committee did not reach an agreement as to when and how these proposed rules should be made applicable to designated gas pools in the four-county area.

The Committee wishes to express its appreciation for the useful assistance and helpful advice given by Mr. Macey, Mr. Stanley and other members of the Commission's staff, and for the valuable use of the New Mexico Oil and Gas Engineering Committee's facilities which were furnished so generously by Mr. Staley.

A. L. Hill, Chairman

GENERAL RULES FOR GAS PRORATION
FOR USE IN DEFINED GAS FIELDS LOCATED IN
THE FOUR-COUNTY AREA COMPRISED OF
LEA, EDDY, CHAVES AND ROOSEVELT COUNTIES, NEW MEXICO
RECOMMENDED BY THE ADVISORY COMMITTEE TO
THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

- I. DEFINITION OF A GAS WELL (Supersedes Statewide Definition 24)

  GAS WELL shall mean a well producing gas or natural gas from a common source of gas supply from a gas pool determined by the Commission.
- II. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS
  - A. [Supersedes Statewide Rule 104 (f)]
    The Secretary of the Commission shall have authority to grant an exception to the requirements of Statewide Rule 104, Sections (a), (b), (c), and (d), without notice and hearing where application has been filed in due form, and,
  - 1. The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and,
  - 2. (a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or,
  - (b) All owners of oil and gas leases within such radius consent in writing to the proposed location.
  - B. [Supersedes Statewide Rule 104 (k)]
    The provisions of Statewide Rule 104, Paragraph (k), shall not apply to gas pools located in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
- III. OIL PRODUCTION FROM DEFINED GAS POOLS
  In a gas pool, as defined by the Oil Conservation Commission, each proration unit containing a well producing in excess of five barrels of crude oil per day shall be permitted to produce an oil allowable calculated by dividing the gas allowable as assigned to a gas well on the same unit size as said well by the gas-oil ratio of said well. The maximum oil allowable which may be assigned said well shall be the top unit oil allowable as determined by Statewide Rule 505 unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste.
  - IV. GAS PRORATION (Supersedes Statewide Rule 602)
    - A. At such time as the Commission determines that allocation of gas production from gas wells producing from any pool in this four-county area is necessary to prevent waste or to protect correlative rights, the Commission, after notice and hearing, shall consider the nominations of gas purchasers from such gas pool and other relevant data, and shall fix the allow-

able production of such pool, and shall allocate production among the gas wells in such pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in B. below, the general rules of this section shall apply to each gas pool allocated under these rules.

- B. After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.
- C. The term "gas purchaser" as used in these rules, shall mean any "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit a nomination.
- For the purpose of gas allocation in the absence of special pool rules, a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U.S. Public Land Surveys, provided, however, that a gas proration unit other than a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all offsetting operators, if all acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.
- VI. GAS ALLOCATION (Supersedes Statewide Rule 602)
  - A. At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which he purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.
  - B. The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above, setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the proration schedule the gas wells in the pool delivering to a gas transportation facility, and

shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to the pool shall be determined by the Commission in the following manner: The total allowable for a month shall be equal to the total market demand for that month plus the amount of any overproduction, or less the amount of any underproduction during the second preceding month.

- C. The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the total acreage alloted to such non-marginal units; provided that for this purpose standard units shall be as defined in Rule V above. More than one proration unit or fractional parts thereof may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:
- 1. No more than 640 acres shall be assigned to any one well,
- 2. All acreage in such units may reasonably be presumed to be productive of gas,
- 3. The multiple unit so formed shall not have an overall length or width exceeding 5,280 feet,
- 4. The well to which such additional units are assigned shall be located not closer to any boundary of such pooled units that the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first-mentioned boundary; provided further, that where three proration units are pooled the well shall not be located more than 1,320 feet from the nearest boundary of any unit so pooled, and,
- 5. Exceptions to the provisions of this rule may be granted by the Commission after notice and hearing or after the Commission has been furnished waivers by all offsetting operators.
- VII. BALANCING OF PRODUCTION (Supersedes Statewide Rule 604)
  - A. Underproduction

    The dates 7:00 A. M. January 1 and 7:00 A. M. July 1 shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within

the first succeeding proration period shall be cancelled.

at the end of the first succeeding proration period, a greater amount of allowable remains unproduced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

B. Overproduction

A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If, at the end of the first succeeding proration period, the well is still overproduced, it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut-in of the well would result in material damage to the well.

### VIII. GRANTING OF ALLOWABLES

- A. No gas well shall be given an allowable until Form C-104 has been filed together with a plat showing:
  - 1. acreage attributed to said well,
- 2. the locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir, and,
  - 3. the lease ownership of said leases.
- B. Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility or the date of filing of Form C-104 and plat described above, whichever date is the later.
- IX. REPORTING OF PRODUCTION

  The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission so as to reach the Commission on or before the twenty-fifth day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced. The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas.

- 6. It is recommended that the Justis Gas Pool for production from the Glorieta formation be designated as recommended by Gulf Oil Corporation in the Gas Pool Delineation Study of Southeastern Lea County, New Mexico.

  The vertical limit is suggested as the 200 feet immediately below the Glorieta datum. The horizontal limits include the SW/4 of Section 1; SE/4 of Section 2; E/2 of Section 11; W/2 of Section 12; W/2 of Section 13; E/2 of Section 14; E/2 of Section 23; W/2 of Section 24; all in Township 25 South, Range 37 East.
- 7. It is recommended that for wells presently or subsequently completed as gas producers outside the boundaries of defined gas pools the burden for having same included in gas pools should be placed on the Operator as outlined in Rule 1122.

### Note:

In reviewing designated gas pools, the subcommittee recognized the fact that within the area of designated gas pools and adjacent areas, there are a number of gas wells which are producing from the gas caps of oil reservoirs and subject to the oil proration rules pertaining thereto; and, therefore, that these wells will not be subject to the rules pertaining to gas pools.

Case 52/ 15

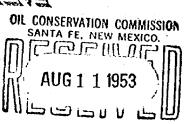
# MAGNOLIA PETROLEUM COMPANY

A SOCONY-VACUUM COMPANY

### LEGAL, DEPARTMENT

21 DALLAS 4. TEXAS

August 7, 1953



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FLOYD B. PITTS
W. E. MCKELLAR, JR.
ASSETANT

Mr. R. R. Spurrier
Secretary of New Mexico Oil
Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Spurrier:

Magnolia Petroleum Company does not plan to be present on the hearing of Case 52h involving the rules for gas proration in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

In an informal way we would like to point out two or three ways in which we think that the rules could be improved upon.

Rule III, on page 1, should be made clearer so that there can be no misunderstanding that a well producing less than five barrels of crude oil is unaffected thereby.

The existing wells should be exempted from the spacing requirements set out in Rule VI-C-4.

The last paragraph of Rule VII-B should be amended to provide that the Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in, upon public hearing after due notice. The rest of the paragraph should be deleted. If this is not agreeable then other reasons for granting an exception to the rule other than "material damage to the well" should be set out in the paragraph. One of these reasons, if they are

set out in the rule, should be that if the complete shut in of the well might subject the leases which are held by production from such well to possible termination by reason of such cessation of production, then the Commission, upon a hearing after due notice, could allow the overproduction to be made up at a lesser rate than would be the case if the well were completely shut in. No operator should be subjected to a possible suit for termination of his lease by reason of any such shut down ordered by the Commission.

These suggestions are submitted for your consideration. If any additional information is desired we will be glad to furnish the same upon request.

Kindest personal regards.

Yours very truly,

Ross Madole

Ross Madole

RM: pb

cc: W. H. Speaker

Humble

SUGGESTED AMENDMENT TO SUBSECTION VI C OF PROPOSED GENERAL RULES FOR GAS PRORATION. (3. he substituted for honograph Y.)

Where not nore than two proration units are assigned to a well, the well shall not be located closer than 660 feet to the longest boundary of the pooled units nor less than 1320 feet from the shortest boundary of the pooled units. Where three or more units are pooled the well shall not be located closer than 1320 feet of the outer boundary of the pooled unit.

### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 521 Order No. R-356

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER ESTABLISHING MEANS AND METHODS FOR THE PRORATION OF NATURAL GAS IN LEA, EDDY, CHAVES AND ROUSEVELT COUNTIES, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m., on March 17, 1953, April 16, 1953, May 19, 1953, June 16, 1953, July 16, 1953, and August 20, 1953, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 28 day of August, 1953, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received in the hearings, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of the cause and the subject matter thereof.
- (2) That for the prevention of waste and protection of correlative rights proper special Rules and Regulations relating to the proration of gaswell gas produced in the gas pools of Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, should be promulgated.

### IT IS THEREFORE ORDERED:

SECTION A. That the following rules pertaining to gas well spacing in defined gas pools and acreage requirements for drilling tracts within the defined limits of gas pools in Eddy, Lea, Chaves and Roosevelt Counties, be and the same hereby are adopted effective immediately.

# I. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS.

- RULE 1. The Secretary of the Commission shall have authority to grant an exception to the requirements of Statewide Rule 104, Sections (a), (b), (c), and (d), without notice and hearing where application has been filed in due form, and,
- (a) When the necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and

### (b) When either one of the following is applicable:

- l. When the ownership of all oil and gas leases within a radius of 1320 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location.
- 2. When all owners of oil and gas leases within such radius consent in writing to the proposed location.

(The above provisions of Rule 1 supersede Rule 104 (f).)

RULE 2. The provisions of Statewide Rule 104 Paragraph (k), shall not apply to gas pools located in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

SECTION B. That the following rules shall apply to defined gas pools in Eddy, Lea, Chaves and Roosevelt Counties only after hearings are held and an order issued on each individual pool. These rules shall be considered as "standby rules" and shall be used as a guide in establishing pool rules.

### II. GAS PRORATION.

RULE 3. At such time as the Commission determines that allocation of gas production from gas wells producing from any pool in this four county area is necessary to prevent waste or to protect correlative rights, the Commission, after notice and hearing, shall consider the nominations of gas purchasers from such gas pool and other relevant data, and shall fix the allowable production of such pool, and shall allocate production among the gas wells in such pool upon a reasonable basis with due regard to correlative rights. Unless special pool rules are adopted as provided in Rule 4 below, the general provisions of this rule shall apply to each gas pool allocated under this rule.

RULE 4. After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.

(The above provisions of Rules 3 and 4 supersede Statewide Rule 602)

### III. PRORATION UNITS.

RULE 5. For the purpose of gas allocation in the absence of special pool rules, a standard proration unit shail consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys; provided, however, that a gas proration unit other than a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all offsetting operators, if all acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres. Any standard proration unit consisting of between 158 and 162 contiguous surface acres shall be considered as containing 160 acres for the purpose of gas allocation.

At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been IV. GAS ALLOCATION. given. The Commission shall cause to be submitted by each gas purchaser given. The Commission shall cause to be submitted by each gas purchaser its "Preliminary Nominations" of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period, by months, from each gas pool from which it purchases gas. The Commission shall consider the "Preliminary Nominations" of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period. or gas mar may be produced without waste within the ensuing profation performance without waste within the ensuing profation performance within the ensuing performance win

RULE 7. Each month, the Commission shall cause to be submitted by each gas purchaser its "Supplemental Nominations" of the amount of gas which each in good faith actually desires to purchase within the ensuing pro-Commission. which each in good from which it purchases gas. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing protetion month, and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. Included in the monthly proration schedule shall be a tabulation of allowable and production for the second preceding month together with an adjusted and production for the second preceding month. Said adjusted allowable allowable computation for the second preceding month. shall be computed by comparing the actual allowable assigned with the actual production. In the event the allowable assigned is greater than the actual production, the allowables assigned the top allowable units shall be reduced proportionately, and in the event the allowable assigned is less than the proproportionatery, and in the event the anomalie assigned to 18 18 min the pro-duction then the allowables assigned the top allowable units shall be increased proportionately. "Supplemental Nominations" shall be submitted on a form prescribed by the Commission.

The Commission shall include in the proration schedule the gas wells in the pool delivering to a gas transportation facility, or lease gathering system, and shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility, which is reasonably capable of handling the type of gas produced by such well.

The total allowable to be allocated to the pool each month shall be equal to the sum of the supplemental nominations together with any adjustment which the Commission deems advisable.

RULE 8. The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and ailocated ratably among the non-marginal units in the proportion that the acreage contained in each unit bears to the total acreage allotted to such non-marginal units; provided that for this purpose standard units shall be as defined in Rule 5 above. More than one proration unit or fractional parts thereof may be assigned to a gas well and the allowables assigned said well may be increased proportionately, provided that:

a. No more than 640 acres shall be assigned to any one

b. All acreage in such units may reasonably be presumed well. to be productive of gas.

- c. The multiple unit so formed shall not have an overall length or width exceeding 5,280 feet.
- d. Where not more than two proration units are assigned to a well, the well shall not be located closer than 660 feet to the longest boundary of the pooled units nor less than 1320 feet from the shortest boundary of the pooled units. Where three or more units are pooled the well shall not be located closer than 1320 feet to the outer boundary of the pooled unit.
- e. Exceptions to the provisions of this rule may be granted by the Commission after notice and hearing or after the Commission has been furnished waivers by all offsetting operators.

(The above provisions of Rules 6, 7 and 8 supersede Statewide Rule 602)

### V. BALANCING OF PRODUCTION

RULE 9. Underproduction: The dates 7:00 A.M. January 1 and 7:00 A.M. July I shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If, at the end of the first succeeding proration period, a greater amount of allowable remains unproduced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

RULE 10. Overproduction: A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If, at the end of the first succeeding proration period, the well is still overproduced, it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut in of the well would result in material damage to the well.

(The above provisions of Rules 9 and 10 supersede Statewide Rule 604)

### VI. GRANTING OF ALLOWABLES.

RULE 11. No gas well shall be given an allowable until Form C-104 and Form C-110 have been filed together with a plat showing acreage attributed to said well and the locations of all wells on the lease.

RULE 12. Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility or the date of filing of Form C-104 and Form C-110 and the plat described above, whichever date is the later.

### VII. REPORTING OF PRODUCTION.

RULE 13. The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission so as to reach the Commission on or before the twentieth day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced. The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas; provided, however, that gas used on the lease for consumption in lease houses, treaters, combustion engines and other similar lease equipment shall not be charged against the well's allowable.

### VIII. DEFINITIONS.

RULE 14. A gas well shall mean a well producing gas or natural gas from a common source of gas supply from a gas pool determined by the Commission.

(The above Rule supersedes Statewide Definition A-24)

RULE 15. The term "gas purchaser" as used in these rules, shall mean any "taker" of gas either at the wellhead or at any point on the lease where connection is made for gas transportation or utilization. It shall be the responsibility of said "taker" to submit a nomination.

DONE at Santa Fe, New Mexico on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

R. R. SPURRIER, Secretary

SEAL

### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CONSOLIDATION OF CASES 245 AND 521 ORDER No. R-264-A

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER DESIGNATING, NAMING, DEFINING AND EXTENDING THE GAS POOLS OF LEA, EDDY AND CHAVES COUNTIES, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 16, 1953, May 19, 1953, June 16, 1953, July 16, 1953, and August 20, 1953, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this /O day of November, 1953, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received in the hearings, and being fully advised in the premises,

### FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of this case.
- (2) That by virtue of Order No. R-264 entered February 17, 1953, in Case No. 245, the Commission defined and classified certain gas pools of Lea, Eddy and Chaves Counties, New Mexico, and ordered further testimony taken at the April 16, 1953, Commission hearing in the premises,
- (3) That at the April 16, 1953, Commission hearing it was ordered that Cases 245 and 521 be, and they were at that time consolidated for purposes of the record.
- (4) That successive hearings were had May 19, June 16, July 16, and August 20, 1953, on the case as consolidated, resulting in Order R-356, being the special "stand-by" rules and regulations in the matter of proration of gas-well gas producible from the gas pools of Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, and as classified and defined in Order R-264.
- (5) That by reason of interim development, the areal boundary of the Jalco Gas Pool as fixed by Order R-264 should be extended in accordance with testimony adduced at the hearings.
- (6) That the vertical productive limits of the Eumont Gas Pool as fixed by Order R-264 should be changed to include therein all the Queen formation.
- (7) That the vertical productive limits of the Blinebry Gas Pool as fixed by Order R-264 should be more specifically defined.

(8) That the areal and vertical productive limits of the Justis Gas Pool heretofore defined and classified as a gas pool by Order No. 850 should be redefined areally and vertically.

### IT IS THEREFORE ORDERED:

- (1) That Order R-264, as hereinafter amended, and Order R-356 be and they hereby are declared to be supplementary orders.
- (2) That the areal boundary of the Jalco Gas Pool, as described in Order R-264, be, and the same hereby is extended to include therein, as a part of said pool, the following described area:

Township 26 South, Range 37 East, NMPM All of Sections 15, 16, 17, 20, 21, 22, 27 and 28; E/2 Section 29; E/2 Section 32; all of Sections 33 and 34

- (3) That Section III (2) of Order R-264 be, and the same hereby is amended to read as follows:
  - "III (2) That the producing formation of the Eumont Gas Pool shall extend from the top of the Yates formation to the top of the Crayburg formation, thereby including all of the Yates, Seven Rivers and Queen formations."
- (4) That Section VI (2) of Order R-264 be, and the same hereby is amended to read as follows:
  - "VI (2) That the producing formation of the Blinebry Gas Pool shall be that part of the Yeso formation included from the base of the Upper Yeso sandy section, which occurs at an average depth of 450 feet below the Glorieta formation, to the top of the Tubb sand."
- (5) That that part of Appendix 'A' of Order No. 850 relating to the Justis Gas Pool pursuant to Rule 5 of said order be, and the same hereby is amended to read as follows:

"Appendix A - The producing formation of the Justis Gas Pool shall be the 200 feet immediately below the top of the Glorieta formation; that the said pool, classified as a gas pool, is described as follows:

Township 25 South, Range 37 East, NMPM SW/4 Section 1; SE/4 Section 2; E/2 Section 11; W/2 Section 12; W/2 Section 13; E/2 Section 14; E/2 Section 23; W/2 Section 24

Cases No. 245 and 521 Order No. R-264-A

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN I. MECHEM, Chairman

E. S. WALKER, Member

R. R. SPURRIER, Member and Secretary

SEAL

Mr. B. W. Hebb - Houston, Texas

NEW MEXICO GAS PRORATION RULES

A copy of subject rules, as adopted by the committee appointed to study this subject, are attached. The rules represent the majority opinion of the group, but probably do not entirely represent the thinking of any individual company serving on the committee. The proposed rules are believed to be reasonably acceptable in their present form, but for clarification the following changes are recommended:

### Page 1

I

### <u>Definitions of Gas Well</u> - change to read:

"Gas well shall mean a well producing from a common source of supply which has been designated by the commission to be a gas pool."

The definition adopted by the committee is clumsily worded and ambiguous.

### Added Definition:

Gas purchaser shall mean any "taker" of gas either at the wellhead or at any point on the lease where connection is made for gas transportation or utilization.

This definition replaces rule IV C.

### II Paragraph A. lines 2 and 3

Change "sections" to "section".

Delete "(a), (b), (c), and":

The provisions of the sections deleted do not apply to these gas rules.

### Sub-paragraph 2 (a) line 2

Change "660" to "1320".

This distance corresponds to gas spacing whereas the figure 660, which was copied with this wording from statewide rule 104(f), applies to oil proration units specifically.

Mr. E. W. Mebb Page 2

### Oil Production from Defined Gas Pools III

Delete entire paragraph.

Substitute the following:

"No well producing from any pool allocated under these rules shall be allowed to produce a under these rules shall be allowed to produce a greater daily amount of liquid hydrocarbons than the greater daily amount of liquid hydrocarbons than the top unit oil allowable determined by statewide rule top unless after hearing the commission shall soft unless after hearing the commission shall 505, unless, after hearing, the commission shall amend this rule as it applies to a particular pool in order to prevent waste or protect correlative

The deleted provision not only is not necessary, but is contrary to the intent of the commission in regulating gas pools. Rules governing gas pools should regulate gas by setting gas allowables not regulating gas pools. Rules governing gas pools should regulate gas by setting gas allowables, not oil allowables. The liquid produced from wells in gas pools should be cleared as a matter of course through its second course and positions. through its gas allowable and periodic tests.

### Page 2

#### Section C IA

Delete entire section.

This is remedied in definitions.

### Paragraph B, line 8 VI

Delete entire sentence beginning; "The Commission shall include ---." Substitute; "The Commission shall include in such proportion school and analysis analysis and analysis analysis and a include in such proration schedule all wells completed in and capable of producing from any pool allocated under these rules."

The wording adopted by the committee is of no value for the purpose for which it was intended and value for the purpose for which it was intended and was proposed by individuals who were "grinding their own axes" under the pretext that the wording is taken Mr. E. W. Webb

from the conservation statute, which is true but imfrom the conservation statute, which is true but immediate the placing a well on the proration schedule that the well will be connected. In the insurance that the well will be connected out is no insurance that between the producer and the insurance contract between the producer and is a matter of contract between the producer. Page 3 is no insurance that the Well will be connected. That is a matter of contract between the producer and purchaser. is a matter of contract between the producer and pur the wording would enable an interpretation of his gas production on his chaser. Turthermore all of his gas production on his cheater utilizing all of his left off the schedule.

Line 13

Delete sentence beginning "The total allowable ---".

"Such schedule shall set forth each well's current gas allowable, which shall be its fair and equitable the pool allowable, as determined under share of the pool allowable, as determined the share of the pool allowable, as determined the second provisions of rule VI C below; accrued during the production or underproduction allowable which shall be production or underproduction allowable which shall be preceding month; and the net allowable which Substitute the following: production or underproduction accrued during the second preceding month; and the net allowable which shall be the current allowable plus said underproduction or the current allowable plus said underproduction from the second preceding month. the current attowable plus said underproduction of tess said overproduction from the second preceding month.

This wording substituted to cure defects believed to exist in last sentence of this rule recommended to be deleted as noted below.

The present wording is calculated to adjust nominations by actual production experience. The effect, however, would lead to confusion. tions by actual production experience. The effect, however, would lead to confusion. For instance, if prometer, would lead to confusion. The effect, however, would lead to confusion a given month freatly exceeded that the surge of demand, succeeding to the allowable of the difficulties excess would be added to the allowable of the difficulties excess would be added to the allowable of the demand. The effect is to multiply the demand. The effect is to multiply that demand exceeding month. Vagaries of weather and market demand wrought by the vagaries of weather and market demand. Actually, these unknown factors should be handled by these unknown as that is the purpose of the justing nominations, as that is the purpose of supplemental nominations. be deleted as noted below.

Section C. line 3

Change "amount" to "proportion". Proportion makes the intent a little clearer.

Mr. E. W. Webb Page 4

### Page 3

### Line 2 after "shall be"

Delete rest of sentence, substitute therefor; "construed to contain 160 acres, notwithstanding variations therefrom within the limitations of rule V above."

The committee apparently did not understand the intent of the former wording, and it was changed for brevity. The purpose of this language is to relieve the commission of having to deal with small variations (up to 2 acres) from the standard units for allowable purposes. Units with 158 or 162 acres would be given credit for 160 acres and be treated exactly like a tract that contained precisely 160 acres.

### .VI Sub-paragraph 4, line 2

Change "that" to "then".

### Line 7

Change comma after "pooled" to a period. Delete "and".

### Page 4.

### VIII A 2

Delete "and the immediately surrounding leases".

### **A.3**

Delete.

### IX Line 2

Substitute for word "submitted" the words "reported on a form designated by the commission.

The word "submitted" is ambiguous and does not indicate the intent of the rule. The substituted wording gives the proper directions and indicates exactly how the gas production is to be reported.

Mr. E. W. Webb Page 5

In addition to the changes recommended for the gas rules and in connection therewith it is further recommended that definition No. 51 in the statewide rules be changed as follows:

### Line 4

Change "seventh" to "sixth".

The definition would then read as follows:

"Proration period shall mean for oil the proration month and for gas six consecutive calendar months which shall begin at 7:00 a.m. on the first day of a calendar month and end at 7:00 a.m. on the first day of the <u>sixth</u> succeeding month." (Correction underscored).

The present wording would imply a 7-month proration period, whereas the wording just preceding it in the same definition definitely states the period should be six months. For consistency and clarity the change recommended above should be made.

Your approval of the rules as amended herein is recommended.

MONEUM IN L. JUNIUS TOTAL

H. L. Johnston Regional Manager of Production Southwestern Region

HLJ-MC Enc

Carbon copies to: HGD-Div. Prod., M. Dist. Prod., H.

### EL PASO NATURAL GAS COMPANY

Tenth Floor Bassett Tower

El Paso, Texas

July 6, 1953

Advisory Committee on Gas Proration New Mexico Gil Conservation Commission Case 521

#### Gentlemen:

Attached are two (2) copies of the final recommendations on rules for gas proration and gas pool designations as approved at our meeting of June 25, 1953. It is my intention to formally present the recommendations to the New Mexico Oil Conservation Commission at its meeting in Santa Fe on July 16. If the recommendations as written do not correctly reflect the action taken by the Committee on any points, please so advise me not later than July 10 in order that such revisions that are necessary can be made prior to submittal to the Commission.

In an informal discussion between Mr. R. R. Spurrier and Mr. Ben Howell, Mr. Spurrier indicated that if the recommendations are submitted to the Commission at the July meeting, a full discussion of them will be deferred until the August meeting.

As was stated several times at our various meetings, it is understood that although these recommendations are those of the Committee as a whole, the individual member companies are free to take whatever position they choose in any hearings on the subject before the Commission.

As your Chairman, I would like to take this opportunity to thank each member of the Committee for your cooperation, and to particularly thank Messrs. Staley and Stanley for the work which they did in providing a meeting place and taking care of the minutes of the meetings.

Very truly yours,

A. L. H111

# GENERAL RULES FOR GAS PRORATION FOR USE IN DEFINED GAS FIELDS LOCATED IN THE FOUR-COUNTY AREA COMPRISED OF LEA, EDDY, CHAVES AND ROOSEVELT COUNTIES, NEW MEXICO RECCAMENDED BY THE ADVISORY COMMITTEE TO THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

- I. DEFINITION OF A GAS WELL (Supersedes Statewide Definition 24)

  GAS WELL shall mean a well producing gas or natural gas from a common source of gas supply from a gas pool determined by the Commission.
- II. WELL SPACING; ACREAGE REQUIREMENTS FOR DRILLING TRACTS
  - A. (Supersedes Statewide Rule 104 (f))

    The Secretary of the Commission shall have authority to grant an exception to the requirements of Statewide Rule 104, Sections (a), (b), (c), and (d), without notice and hearing where application has been filed in due form, and.
  - 1. The necessity for the unorthodox location is based on topographical conditions, or is occasioned by the recompletion of a well previously drilled to another horizon, and,
  - 2. (a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or,
  - (b) All owners of oil and gas leases within such radius consent in writing to the proposed location.
  - B. (Supersedes Statewide Rule 104 (k))
    The provisions of Statewide Rule 104, Paragraph (k), shall not apply to
    gas pools located in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
- III. OIL PRODUCTION FROM DEFINED GAS POOLS
  In a gas pool, as defined by the Oil Conservation Commission, each proration unit containing a well producing in excess of five barrels of crude oil per day shall be permitted to produce an oil allowable calculated by dividing the gas allowable as assigned to a gas well on the same unit size as said well by the gas-oil ration of said well. The maximum oil allowable which may be assigned said well shall be the top unit oil allowable as determined by Statewide Rule 505 unless, after hearing, the Commission shall amend this rule as it applies to a particular pool in order to prevent waste.
- IV. GAS PRORATION (Supersedes Statewide Rule 602)
  - A. At such time as the Commission determines that allocation of gas production from gas wells producing from any pool in this four-county area is necessary to prevent waste or to protect correlative rights, the Commission, after notice and hearing, shall consider the nominations of gas purchasers from such gas pool and other relevant data, and shall fix the allowable production of such pool, and shall allocate production among the gas wells in such pool upon a reasonable basis with due regard for correlative rights. Unless special pool rules are adopted as provided in B. below, the general rules of this section shall apply to each gas pool allocated under these rules.

- B. After notice and hearing, the Commission, in order to protect correlative rights, or prevent waste, or both, may promulgate special rules, regulations or orders pertaining to any gas pool.
- C. The term "gas purchaser" as used in these rules, shall mean any "taker" of gas at the wellhead and it shall be the responsibility of said "taker" to submit a nomination.

#### V. PRORATION UNITS

For the purpose of gas allocation in the absence of special pool rules, a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys, provided, however, that a gas proration unit other than a legal quarter section may be formed after notice and hearing by the Commission, or after the Commission has been furnished waivers from all offsetting operators, if all acreage is contiguous and does not contain more than four legal quarter-quarter sections and/or lots. Any allocation unit containing less than 158 acres or more than 162 acres shall be a non-standard unit and its allowable shall be decreased or increased to that proportion of the standard unit allowable that the number of acres contained therein bears to 160 acres.

### VI. GAS ALLOCATION (Supersedes Statewide Rule 602)

- A. At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been issued. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period by months from each gas pool from which it purchases gas. The Commission shall consider nominations of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste within the ensuing proration period.
- B. The Commission shall cause to be submitted each month supplemental nominations from purchasers of gas in like manner as the nominations described above, setting out changes, if any, which should be made due to fluctuations of market demand. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. The Commission shall include in the proration schedule the gas wells in the pool delivering to a gas transportation facility, and shall include in the proration schedule of such pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to the pool shall be determined by the Commission in the following manner: The total allowable for a month shall be equal to the total market demand for that month plus the amount of any overproduction, or less the amount of any underproduction during the second preceding month.
- C. The allocation to a pool remaining after subtracting the capacities of marginal units shall be divided and allocated ratably among the non-marginal units in the amount that the acreage contained in each unit bears to the

total acreage alloted to such non-marginal units; provided that for this purpose standard units shall be as defined in Rule V above. More than one proration unit or fractional parts thereof may be assigned to a gas well and the allowables assigned said well may be increased proportionately provided that:

- 1. No more than 640 acres shall be assigned to any one well,
- 2. All acreage in such units may reasonably be presumed to be productive of gas,
- 3. The multiple unit so formed shall not have an overall length or width exceeding 5,280 feet.
- 4. The well to which such additional units are assigned shall be located not closer to any boundary of such pooled units that the distance represented by 25% of the length of the longer of the two boundaries of said pooled unit which are adjacent to said first-mentioned boundary; provided further, that where three proration units are pooled the well shall not be located more than 1,320 feet from the nearest boundary of any unit so pooled, and,
- 5. Exceptions to the provisions of this rule may be granted by the Commission after notice and hearing or after the Commission has been furnished waivers by all offsetting operators.

## VII. BALANCING OF PRODUCTION (Supersedes Statewide Rule 604)

A. Underproduction

The dates 7:00 A. M. January 1 and 7:00 A. M. July 1 shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled. If, at the end of the first succeeding produced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

### B. OVERPRODUCTION

A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If, at the end of the first succeeding proration period, the well is still overproduced, it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut in until it is in balance.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut in upon a showing at public hearing after due notice that complete shut-in of the well would result in material damage to the well.

# VIII. GRANTING OF ALLOWABLES

- A. No gas well shall be given an allowable until Form C-104 has been filed together with a plat showing:
  - 1. acreage attributed to said well,
- 2. the locations of all wells on the lease and the immediately surrounding leases producing from the same reservoir, and,
  - 3. the lease ownership of said leases.
- B. Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility or the date of filing of Form C-104 and plat described above, whichever date is the later.
- IX. REPORTING OF PRODUCTION

  The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission so as to reach the Commission on or before the twenty-fifth day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced. The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas.

NEW MEXICO OIL & GAS ENGINEERING COMMITTEE July 9, 1953 HOBBS, NEW MEXICO REVISIONS AND ADDITIONS TO ORDER NUMBER R-264 IN CASE 245
DESIGNATING, NAMING, DEFINING AND EXTENDING THE GAS POOLS
OF LEA, EDDY AND CHAVES COUNTIES, NEW MEXICO
RECOMMENDED BY THE ADVISORY COMMITTEE TO
THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON CASE 521

- 1. It is recommended that the Jalco Gas Pool be extended to include all of sections 15, 16, 17, 20, 21, 22, 27, 28; the E/2 of Section 29; E/2 of Section 32; and all of Sections 33 and 34; all in Township 26 South, Range 37 East.

  It is pointed out that the El Paso Natural Gas Company's Rhodes Unit (Storage) Area is located within the boundaries of the Jalco Gas Pool and production of gas from that area should not be restricted or affected by Jalco Gas Pool rules so long as the cumulative total input gas exceeds cumulative total withdrawals and, in addition, that during such period, Jalco Gas Pool rules apply to the storage area only subject to the Unit Agreements and Rule No-405.
- 2. It is recommended that the vertical limits designated in III (2) of Order No. R-264, "That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to a point 200 feet below the top of the Queen formation thereby including all of the Seven Rivers formation", be amended to read as follows: That the producing formation in the Eumont Gas Pool shall extend from the top of the Yates formation to the top of the Grayburg formation thereby including all of the Yates, Seven-Rivers, and Queen formations.
- 3. It is recommended that, whereas geologic evidence establishes that the present Terry-Blinebry Pool and the Blinebry Gasl Pool are a common reservoir, the Blinebry Gas Pool be extended to include productive acreage presently included in the Terry-Blinebry Pool and other acreage indicated productive by development, to wit: All of Sections 1, 2, 3; E/2 of Section 4; E/2 of Section 9; N/2 of Section 10; N/2 of Section 11; all of Section 12, 13, 24, and 25; all in Township 21 South, Range 37 East, and that the designation Terry-Blinebry Pool be discontinued.
- 4. It is recommended that, inasmuch as the Blinebry Gas Pool, as recommended in 5 above, contains low ratio oil wells as well as condensate and gas wells, special rules for allocation be adopted.
- Pool shall be defined as that part of the Yeso formation included from the base of the upper Yeso sandy section which occurs at an averagedepth of 450 ft.below the Glorieta formation and which is the stratigraphic equivalent of the Clear Fork formation of West Texas to the top of the Drinkard sandy member or Tubb Sand.

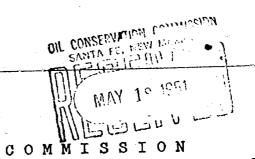
- 6. It is recommended that the Justis Gas Pool for production from the Glorieta formation be designated as recommended by Gulf Oil Corporation in the Gas Pool Delineation Study of Southeastern Lea County, New Mexico.

  The vertical limit is suggested as the 200 feet immediately below the Glorieta datum. The horizontal limits include the SW/4 of Section 1; SE/4 of Section 2; E/2 of Section 11; W/2 of Section 12; W/2 of Section 13; E/2 of Section 14; E/2 of Section 23; W/2 of Section 24; all in Township 25 South, Range 37 East.
- 7. It is recommended that for wells presently or subsequently completed as gas producers cutside the boundaries of defined gas pools the burden for having same included in gas pools should be placed on the Operator as outlined in Rule 1122.

#### Note

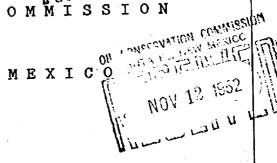
In reviewing designated gas pools, the subcommittee recognized the fact that within the area of designated gas pools and adjacent areas, there are a number of gas wells which are producing from the gas caps of oil reservoirs and subject to the oil proration rules pertaining thereto; and, therefore, that these wells will not be subject to the rules pertaining to gas pools.

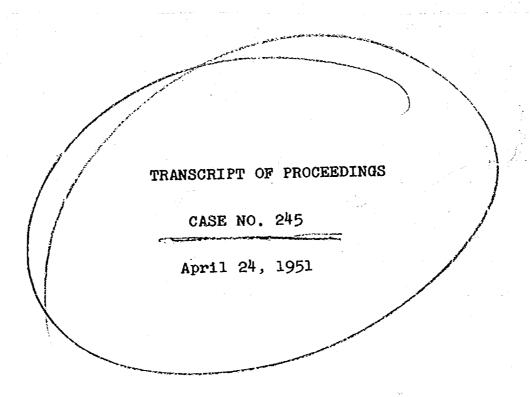
NEW MEXICO OIL & GAS ENGINEERING COMMITTEE July 9, 1953 HCBBS, NEW MEXICO



OIL CONSERVATION COMMISSION

STATE OF NEW MEXIC





E. E. GREESON
COURT REPORTER
UNITED STATES COURT HOUSE
TELEPHONE 2-0872
ALBUQUERQUE, NEW MEXICO

# DEFORE THE OIL CONSERVATION COMMISSION April 24, 1951

CASE NO. 245: A case which has been continued twice for lack of information to designate the gas pools of Lea, Eddy and Chaves Counties.

CHAIRMAN SHEPARD: The next case to be taken up is Case 245, which has been continued twice and this time we will hear it.

(Mr. Graham reads the Notice of Publication.)
CHAIRMAN SHEPARD: Is the Continental ready?

MR. SANDERS: Tes, sir. My name is H. W. Sanders. I represent Continental Oil Company. We have testimony to put on relative to the shallow gas pools in South eastern Lea County above the San Andres Formation. We have some large exhibits to hang on the wall and we ask your indulgence while we put them up.

CHAIRMAN SHEPARD: All right, sir, you may proceed.

MR. SANDERS: H. W. Sanders, appearing for Continental Oil Company, Fort Worth; Paul N. Colliston, from Houston; Henry Forbes, from Fort Worth; and Homer Dailey, from Midland.

CHAIRMAN SHEPARD: You may proceed.

MR. SANDERS: Will you swear the witnesses, please? (Witnesses sworn.)

MR. SANDERS: As I stated a while ago, Continental oil Company proposes to introduce evidence on the shallow gas fields in southeastern Lea County, New Mexico, above the San Andres formation.

Under Rule 601, the Commission was required to initiate proceedings to name, classify and define the limits of all the known producing gas pools. Accordingly, the Commission of its own motion issued a call in Case No. 245 a hearing on December 22, That was continued to March 15, 1951, by the request of Continental Oil Company and was again continued until this date. In order to make a study for the benefit of the Oil Conservation Commission, Continental Oil Company, who is appearing in its own behalf with the assistance of geologists and engineers from the Atlantic Refining Company, Stanolind Oil and Gas Company and Standard Oil Company of Texas, has made a study of the subsurface formations and gas pools above the San Andres Formation in southeasterna Lea County. They made a study covering the period of six months and they examined about 2000 well logs, both electrical and sample. The results of the study are presented to the Commission for whatever action it deems necessary or wishes to take.

As a result of this study, we have come to the conclusion that the gas pools could fall in approximately four pools. We, in this testimony, will call in areas one, two, three and four. In outlining these various areas we have used the 160 acre unit of the survey which is also the state wide gas unit, I believe. After we had completed our study, on April 12, a meeting of the engineers of, I believe the Lea County engineering Committee was called and at that time we presented evidence, not evidence, but a report to them of our findings as a result of our study. We have made a study, as I said before, over a term of six months and the

engineers of all interested parties were invited to sit in, so this testimony will not come as a surprise.

With those preliminary remarks, I would like to proceed to put on testimony. I would first like to question Mr. Henry Forbes.

#### FORBES. HENRY F.

having been first duly sworn, testified as follows:

# DIRECT EXAMINATION

# By MR. SANDERS:

- Q Your name is H. F. Forbes, is it not?
- A les, cir-
- You are employed by Continental Oil Company?
- Yes, sir.
- Q In what capacity?
- A Area Petroleum Engineer.
- Q Do you have a degree in petroleum engineering?
- A Yes, sir.
- Q Where did you get that degree or take that degree?
- A Colorado School of Mines.
- Q What year did you finish?
- 1938.
- Q What course did you take?
- I took general engineers course in petroleum engineering.
- Q Did you study any courses in geology?
- Yes, sir.
- A.Plain geology and structural geology, minerology, field geology, Q What were those courses?

and such subjects.

- Q Have you had any experience in subsurface engineering in the Permian Basin of West Texas and New Mexico?
- A Yes, sir.
- Q About how many years?
- A Approximately six years.
- Q Have you are you still working with the subsurface engineering in that particular area, the Permian Basin?
- A Yes, sir.

MR. SANDERS: Is the Commission satisfied with the qualification of the witness?

CHAIRMAN SHEPARD: Yes.

- Q Mr. Forbes, you are familiar with the study made by the Continental Oil Company, are you not?
- A I am.
- Q Will you proceed in your own words to give the Commission a report of that study?
- A Yes, sir. Mr. Sanders just mentioned many well logs were studied, approximately 2000, and those of you that know some of the sample logs in Lea County know it was rather difficult in making exact correlations. As a result of studying these logs, we drew three cross sections north and south from Township 20 on to the state line. Then we drew cross sections across each township east and west cross sections across each township down to the state line in order to get some sort of an idea as to the

general over all geology of the area.

Before we start on the study, I think it better to define oil pools as set forth by the Commission. This is definition No. 44, as found on Page 5 of the Rules and Regulations of the Commission. "Pool means an underground reservoir containing a common accumulation of crude petroleum oil or natural gas, or both. Each zone of a general structure, which zone is completely separated from any other sone in the structure, is covered by the word "pool" as used herein. "Pool" is synonymous with "common source of supply" and with "common reservoir"."

We shall use the term "Pool" as thus defined in this report with the following additional consideration. It is our opinion that Yates and Seven Rivers and Queen formations were separate reservoirs. However, due to development throughout south eastern Lea County, these pools have been connected together by hundreds of well bores. Therefore, it is virtually impossible, at least we believe it is impractical, to separate that by zones, individual zones within a formation.

As Mr. Sanders stated, as a result of this study, we came out with four major gas pools in this area. There are some more gas pools probably in southeastern Lea County but they have not been defined.

First, I would like to present a structural map of southeastern Lea County contoured on top of Yates. We call that Exhibit No. 1. This gives the general over all structural relation of these various pools and will be of use to us later on in our

report here.

During 1927 on up through 1930 shallow development extended from Texas on up through Lea County. Until about 1930 the entire area was fairly well drilled up. At that time due to economic conditions, drilling ceased to a large extent and was resumed about 1935 to 1936 from 1935 to 1940 the area was more or less completely drilled up.

At the same time the El Paso Natural Gas Company was taking gas from some of these gas wells. However, their outlet was rather limited. I believe it just went through El Paso and in 1946 it was extended on to Galifornia markets which is enhanced the gas markets and more drilling, particularly in these gas areas, have taken place.

In outlining this study, I would like to give a little bit about stratigraphy. The first geological formation encounter is Rustler Anhydrite and dolomite and is rather thin, approximately 150 feet. The Salado is the salt formation that you generally find in this area and is from 1200, approximately 1200 feet thick. Under that is the Tansill formation which is about 175 feet thick of anhydrite and dolomite. Below that is the Yates which is the first formation we will consider in our study here.

The Yates is approximately 200 to 300 feet thick. It is sand and anhydrite and dolomite. Underneath that is the Seven Rivers formation which is about 400 feet and consists of dolomite in the place of sand lenses and dolomite and some anhydrite.

Underneath the Seven Rivers is the Queen formation which is predominantly sand although we classify it into sand bodies with dolomite in between them. This member is approximately 300 feet thick. Immediately below that is the Grayburg sandy dolomite 250 feet thick and then the San Ancres. This study covers down including the San Andres.

Inasmuch as the geology of the area ties in, we believe very closely with the pools that we have outlined, I would like to give a general description of the area.

On Exhibit 1, you will notice there is a ridge running from north to south from Township 21 to state line and approximately six miles east of that is another ridge running from approximately 22 to state line. This western ridge, the one we previously mentioned, is the eastern portion of the Capitan reef which extends on west towards Carlsbad. The eastern ridge on Exhibit 1 is part of the Central Basin Platform. Between those two ridges there is what we call a trough area and you can notice on - I am going to call this Exhibit 2 - generalised east and west cross sections. You will notice that as we come up through here (indicating), we have our structures and more or less trough area and then on to the larger and the anticlinal structure of the Central Basin Platfora. That holds true until this point is reached (indicating). This ridge then broadens out into a larger anticlinal which is the Penrose-Skelly pool. The fourth structural feature in this study is the Eunice-Monument Pool which is the anticlinal type.

In defining gas pools we have started with the Capitan The oil was originally laid down in what we believe to be a common reservoir oil gas outlet on the western side of the reef, probably all of these small structures that you see along the reef, high, and probably the same gas, -oil and water-oil contacts. Since that time, they have been disturbed by development and withdrawals. As you cross the reef, you come into what we just previously mentioned as the trough area. These zones carry over the crest of the reef fairly well. That is the Yates, all the various sand members of the Yates, and the upper portion of the Seven Rivers. However, when it comes to troughed area, you have a lethological change in your section and it becomes tighter, less permeable and your anhydrite showing above your Yates starts dipping down into your Yates formation. Since practically all the production from this area here is from the Yates and Seven Rivers, we have used that as the vertical thickness in the Yates and Seven Rivers formations for that pool.

At this time I would like to introduce Exhibit No. 3, the gas pool designation map, suggested gas pool designation map. Area one colored in orange; area two colored in green; area three in blue; and area four in red.

You will notice that the contours on the reef follow very closely to our colored area on our gas area map. We have also made another separation on this reef area from our back reef area and that is that we find that the sulphur content and the gas is generally higher in this reef structure than it is in area two or the back reef part.

Area two has been defined as a separate gas pool and includes the Yates and Seven Rivers formations. All but the lower one hundred feet of the Seven Rivers formation, the boundary, the eastern boundary on this area two was defined by the lask shows in the Yates and Seven Rivers formations on wells on this side. Wells on this side generally showed Tates and Seven Rivers gas. Continental on their Jack leases down here completed a gas well on this side and a dry hele on that side which extended from the boundary on up. This boundary as it good between Arrowe head and the green area is defined by poor wells, lack of shows and edge wells on the Arrowhead and was brought up in that map. We don't have too much development in that area.

To go back a little further, to show why we did not extend the eastern portion of the area, or the green area further I would like to explain on this cross section, on Exhibit 2. As you came ever the top of the reef structure into what we call the trough area and start up your flank of your larger anticolinal you find that your permeabilities decrease and very little gas shows are found in the Yates and SevenaRivers fermations. In the meantime you will encounter oil in the Queen fermation as you some east and the major portion of the production in the Langlico-Mattix and Penrese poels are from the Queen fermation. We consider that to be gas-cap gas and have not included it in the study of dry gas reservoirs.

The third area under consideration is the Eunice-Monument area. The boundaries of that have been placed to more or less follow the development of the area and plus the shows that have

been encountered on wells that have been brandenhead. Here again our zonian theory comes into play in that we do not believe there was originally vertical communication between formations in the Eunice-Monument Pool. However, since that time due to connecting well bores, brandenheads and so forth we believe them to be connected.

Around the southern portion of Eunice is a small area or Queen oil wells. As it soon progresses over the anticlinal structure, you will find that wells drilled up in this portion of the field are not producing the same gas as the oils are producing. In other words, they are producing from the Queen formation although they may be producing oil from the Grayburg. That is behind brandenhead wells.

Inasmuch as this is a small area of oil compared to the large area of gas we have included the Queen formation with the Seven Rivers and Yates formations in area three.

Area four, roughly outlines the productive limits of the Arrowhead pool. The eastern boundary of this area has been defined dueto poor wells, dry holes and the fact that when we corrolated our cross sections across here we could not corrolate individual sand stringers of the Queen formation over in the Arrowhead. It was extremely difficult to carry the sand strings clean into the area. Shows have been encountered in the Seven Rivers, Queen and Yates. Therefore, all three formations have been included in this area of the pool. This Arrowhead pool is also further defined by our structure map. You will notice that the rementrants on the northwest side which is fairly barren have

poor wells, some dry holes encountered. In more or less the same boundaries as in area two were used on the southern

Probably the main thing too, in area one is Yates and boundary. Seven Rivers; area two. Yates and Seven Rivers; area three, Yates, Seven Rivers and Queen; four, Yates, Seven Rivers and Queen formations. I believe that is all I have.

MR. SANDERS: Before we throw this discussion open for questions, I would like to add a few remarks.

This testimony is put on only to delineate gas pools. You notice he didn't touch on well spacing or allocation of production and it wasn't within the scope of that study to do so. I stated in the beginning that the engineers of the interested operators were invited to git in on the study, by that that they were invited to participate in the study. But they were invited to inspect the progress of the study. If anybody wants to know why we included certain sections or quarter sections or 40 or 80 acres within one area and not another, our answer to that would be that our study didn't show that it should be included therein.

Of course, we know the testimony is only for the help of the Oil Conservation Commission to do with as it sees fit. We certainly are not in the position of saying that anybody should be bound by the results of our study. We made this six months study for the information and benefit of the Oil Conservation Commission in performing its duty. I anybody has any questions they would like to as Mr. Forbes, he will be glad to answer

them in explanation of the result of our study.

MR. SELINGER: George Selinger with Skelly. Will you please refer to your Exhibit 3, particularly Section 31-24 South, 37 East, Section 625 South, 37 East.

MR. FURBES: Take it a little slever.

MR. SELLEGARE: Section 31-24 South, 37 East, and the immediate section to the south which it Section 625 South, 37 East. You have the line of demarkation between areas one and two going through the approximate middle of the Skelly 911 Company's Sherrell lease. You know that the wells on both sides of that dividing line are producing from the same reservoir, do you not, or has your study been that extensive?

MR. FORBES: Yes, on the same reservoir?
MR. SELINGER: Yes.

MR. FORRES: Yes, Queens and Seven Rivers.

MR. SELINGER: That's right. In area one you have placed 200 acres of the 300 acres in area two and 120 acres of the 320 acres in area one, which results in a subnormal gas unit of only one hundred twenty acres, when in truth and fact there are two gas wells which would be normally entitled to a normal 160 acres.

In calling that to your attention, it is our suggestion that - and we would like to put into evidence Skelly's Exhibit One, that area one with respect to Township 24 S, 37 E, be deleted with respect to the southwest quarter of Section 31 and in Township 25 S, Range 37 E, that instead of the west half of

Sections 6 be placed in area one, that it read the NWt of the NWt and the St of the NWt and the SWt of Section 6 and that area two be corrected with respect to Township 24S, Range 37E, to read instead of the north half and the southeast quarter of Section 31 read all of Section 31 and with respect to Township 25S, Range 37E, which now reads the Bt of Section 6, be corrected to read the Bt and the NEt of the NWt of Section 6 which is in effect transferring the entire lease into one area. We have no objections to throwing the entire 320 acres either in area one area two but since they have place the - the suggestion has been to place the section into area two - we wouldn't have any objection to throw the 320 acres in area two.

MR. FORBES: I think that is fixed primarily from a structural -

MR. HOMER DAILEY: There are several gas wells in that immediate area and we theregishabat place there picked the boundary on the structure and sulphur contents of the gas. In that particular place we did not have much data on the sulphur contents. That is why that boundary was placed in there. Actually from the structural map if a person were going to make a change in that boundary, I believe it would be better to move the boundary over so that would be included in area one rather than in area two.

MR. SELINGER: I might point out to the Commission that there are no wells in the NW<sup>1</sup> of Section 6 and there is only one well in the extreme SW of the SW of Section 6 so that there won't be any offset obligations or any moving of equities or rights of offset obligations whatsoever.

MR. SANDERS: I would like to ask Mr. Dailey a question. Did you consider surface ownership in your study? MR. DAILEY: We did not.

MM. SELINGER: But the effect is to correct a submarginal subunit with respect to acreage. In other words, one of our wells would not be on a normal 160 whereas the other well would have an abnormal unit of 200 acres and we feal that equities would be better preserved by the correction of two uniform units rather than having a subnormal and abnormal unit.

MR. SANDERS: We don't object to the request of the Skelly Oil Company at all.

CHAIRMAN SHEPARD: Any further questions? MR. EUGENE T. ADAIR: Mr. Chairman. CHARDMAN SHEPARD: Will you oppe forward and state

your name?

MR. ADATR: Eugene Adair, representing Texas Pacific Goal and Oil Company. I might state to the Commission that at this time we have no quarred whatsoever with the results shown by Centimental. However, we would like for the record, to ask a for questions.

Mr. Ferses, this comprehensive study that you have just completed was necessarily based, was it not, upon such information as you had available to you at that time?

MR. FOREES: That's right.

MR. ABAIR: And as future drilling and future development operations are conducted in the area, you will have available to you additional information which may require the Commission to revise the pools, the pool gas pool lines.

MR. FORBES: That's right.

MR. ADAIR: I will refer you to the northern portion of Township 22 South, Range 36 East where you will observe that gas pool one, the line separating gas pool one from gas pool two to the east coming through that Township splits several of Texas Pacific Coal and Oil Company's leases. Is that not correct?

MR. DAILEY: It does, the basic lease. It doesn't within any one section. It does some of your basic leases where they extend across more than one section.

MR. ADAIR: Now, as an additional drilling is done along that line and additional information becomes available, it may require that line separating those two pools be shifted some one way or another.

MR. FORBES: That's right. This is the best we can draw from our information.

MR. ADAIR: At the present time?

MR. FORBES: At the present time.

MR. ADAIR: It is not intended to be a permanent line?

MR. FORBES: It is unless you can furnish additional information.

MR. ADAIR: Additional information will change the line if necessary?

MR. FORBES: If it warrants it.

MR. ADAIR: So, then, it is not intended to be a

permanent line delineating the gas pools.

MR. FORBES: No.

MR. ADAIR: That is all I have.

MR. DATLEY: Perhaps that should be clarified just a little bit. In several instances the area is not fully developed, of course, for gas and we have included areas within that pool on the basis of reported when some of the oil wells were drilled. Naturally, when a person goes in there and attempts to recomplete some of the wells or develop some of that assesse for gas would necessarily change our thoughts a little bit.

JACK M. CAMPBELL: Mr. Chairman.

CHAIRMAN SHEPARD: Mr. Campbell.

MR. CAMPBELL: Gulf Oil Corporation, Jack M. Campbell, Reswell. Gulf would like to suggest to the Commission a modinfication of one pertion of the proposed delineation of gas pools and would like to introduce some evidence. I wonder if the Commission wants to hear it now or after lunch.

CHARIMEN; SHEPARD: If you have evidence, I believe we will held it up and stand in resess until 1:30, and at that time we will resume where we left off.

(Recess.)

MR. SPURRIER: Commissioner Shepard has instructed me to go ahead and open the meeting for the purpose of taking testimony. He will be here at some later time. Mr. Sanders.

MR. SANDERS: If the Commission please, we have obtained permission from the Gulf to complete our testimony before they put on their testimony.

MR. SPURRIER: You may proceed.

MR. SANDERS: Mr. Forbes, I don't believe it has been clearly brought out in the testimony as to the vertical severance between each area as to the formation of dry gas. Would you take each area individually and point out that to the Commission?

MR. FORBES: Yes, sir. In area one, the vertical distance or vertical separation between pools is the Yates and Seven Rivers and doesn't go any further down than that. In area two, we have used the Yates and Seven Rivers with the exception of the lower 100 feet of Seven Rivers. We believe that is partially gas cap gas, so were Yates and all of Seven Rivers with the exception of below 100 feet. Area three and four both Yates and Seven Rivers andQueen formations. In the Queen fermation it is the upper 200 feet of theQueen formation. In other words, the Yates, Seven Rivers and upper 200 feet of Queen.

MR. SANDERS: They are considered dry gas?

MR. FORBES: They are considered dry gas reservoirs.

MR. SANDERS: Have you any suggested name for these various areas, pool names?

MR. FORBES: Yes. We have some that have been suggested which we are in accord with. In area one it has been suggested that this area be called the Jalco, combination of the Cooper-Jal field. Area two is Langemat gas pool, combination of Langlie-Mattix pool. Area three might be called the Eumont gas pool.

Area four is Arrew pool.

MR. SANDERS: That is all.

MR. McCommick: I would like to ask Mr. Ferbes sene

questions. In area three what is the eil producing herizon? MR. FORDES: From the Grayburg and the San Andres, with the exception of the small strip around here which is the Queen.

ME. Meconscion: In NO. 1 what is the oil producing Parts?

MR. PORRES: From the Yates and Seven Rivers, princis pally the Seven Rivers fernation.

MR. Necommick: What are the gas producing herizons 18 No. 12

MR. FOREES: The same fermations. In other words in Area 1 At.is probably sas cap sas, the majority of it. The upper two sence, as we classify the Tates, has a lower sulphur consent and it has strictly free gas, we believe. However, like I described before that the fermations have been connected by well beros so long that it is difficult to m

MR. Mecommick: How would you suggest the Commission could determine the difference between a gas well and oil well for classification purposes and proration purposes in No. 1, the Jaloe?

MR. FORBES: Well, inasmuch as there is no limitation ratio on that peel at the present time, I don't think we are tee bothered about that situation.

MR. McCORMICK: Well, would you prorate all the wells there as gas wells and let them produce as much oil as would come up with that quantity of gas?

MR. FORBES: Inasmuch as we have considered this as a gas peel, gas reserveir, they will have to be prerated under some allegation formulated later.

MR. McCOMMICH: I know this is entside the scope of your original examination but for the benefit of the Commission I blink we would like your views on it. Say that there is one well that is producing a large quantity of oil and then in the adjoining section a well is producing dry gas from the same horison or same formation, would both those wells be classified as gas wells?

MR. FORBES: No, I den't Velieve so.

MR. MgCOMMICK: Well, new "

MR. FORBES: I understand year problem. I prefer to defer the answer on that.

MR. McCOMMICK: I gathered from your statement a little while age that all wells that were produced, that were completed say, in the upper three pays would be automatically classified as gas wells and these that were completed below that in the San Andres and Grayburg or Grayburg and San Andres would be automatically classified as eil wells.

MR. FORBES: Are you talking about area one or three?

MR. McCORMICK: Well, either one. I think the problem

is the same. I may not have the formations exactly stated correctly.

Just go back up to the Eumont, your oil is produced from the Grayburg and San Andres.

MR. FORBES: That's right.

MR. McCORMICK: Any well completed in those formations would you suggest they be classified as oil wells?

MR. FORBES: That's right.

MR. McCORMICK: And all that were completed above these formations would be automatically classified as gas wells?

MR. FORBES: That is in the upper 200 feet of theQueen on up through the Seven Rivers and lates, yes, sir.

MR. McCORMICK: Isn't that going to be quite a problem when you have one formation split like that?

MR. FORBES: I den't think it will be. It may be a problem to a certain extent but with electrical logs and so forth new, I think it can be done.

MR. McCCMICK: Go back down to the Jakes shere, just repeat for me the gas producing horizons.

MR. FORBES: On this Jalos field the producing formations are Tates and Seven Rivers.

MR. MeCORMICK: For gas?

MR. FORRES: For gas.

MR. McCOMMICK: And what are the oil producing horizons?

MR. FORBES: They are all producing oil from the Yates and Seven Rivers formations. Now, then, in regard to prorating it, how you can handle that, I am not prepared to answer it at the present time. I do believe this is a separate gas pool from this over here.

MR. McCORMICK: In No. 2, what are the/producing horizons?

MR. FORRES: Yates and in all but the lewer 100 feet of the Seven Rivers.

MR. McCORMICK: What are the oil producing horizons?

MR. FORBES: The Queen and the lower part of = the

lower 100 feet of the Seven Rivers.

MR. McCOMMICK: How about the No. 4?

MR. FORBES: All three herizens. Yates, Seven Rivers and Queen are gas herizens and with your oil.

MR. McCORMICK: If a well were completed in New2, in Yetes, then it would be automatically classified as a gas well?

MR. FORSES: That's right,

MR. McCOMMICK: And also, all except the lower 100 feet of the Seven Rivers would be automatically classified as a gas well?

MR. FORBES: That's right.

MR. McCOMMICK: And if it were produced from the lower 100 feet of the Seven Rivers or the Queen it would be automatically an oil well?

MR. PORBES: We believe it would be gas cap gas.

MR. Mecondick: And should be prerated as an oil well?

MR. FOREES: I wouldn't say at this time who ther is should be or not. It would be similar to the Langlie-Mattix

MR. MOCORMICK: Are the gathering lines of the gas purchasing companies in all of those areas, I presume they are. MR. FORBES: Yes, sir, I believe they are. I don't pool at the present time. MR. DATLEY: I believe they are in everything except knew how far El Paso goes up here. MR. POCOMMICK: How about the market for gas in the ME. DAILEY: There are ealy at the present time three gas wells inside that area. The gas from, I believe, two of these ares four. three Wells anyway is used objectly it gas purposes. MR. MCCORMICK: I would like for you to tall me No. L. which companies operate in each of the areas that you know which are gathering purchasing companies? That is, for high MR. DAILEY: Dry high pressure gas? ME. DATLEY: Actually as far as I know, El Paso purchases some gas in area three and so does Southern Union. pressure gas. The El Paso parchases dry gas through this area in through here, No. 1. Whether Charles Henry Johnson purskieses any dry sas there I do not know. In area two the El Paso is the main Purchases. However, I believe the Southern Union Purchases from one or two Wells in the area. When Mattix had the line throughthere thoughthere