

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea,

I, Robert L. Summers
Publisher

Of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period of 2 weeks.

beginning with the issue dated September 22, 1952

and ending with the issue dated September 22, 1952

Publisher.

Sworn and subscribed to before me this 22 day of September, 1952

Petty Deal
Notary Public.

My commission expires January 25, 1953

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE

September 22, 1952

NOTICE OF PUBLICATION

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico.
STATE OF NEW MEXICO
TO:

All persons having any right, title, interest or claim in the following case, and notice to the public.

CASE 408:

Public notice is hereby given that a joint meeting of the New Mexico Oil Conservation Commission and the Railroad Commission of Texas will be held at 10 o'clock a. m. October 7, 1952, at the Scharbauer Hotel, Midland, Texas, for the purpose of considering proration methods and equalization of allowables in oil and gas pools embracing lands within the states of Texas and New Mexico—namely: the West Dollarhide, West Dollarhide-Devonian, West Dollarhide-Fuselman and West Dollarhide-Drinkard Pools, as denominated in New Mexico.

GIVEN under the seal of the Oil Conservation Commission of New Mexico on this 19th day of September, 1952.

State of New Mexico
Oil Conservation Commission
R. R. Spurrier,
Secretary.

(SEAL)

RE: CASE 408

Albuquerque Journal October 25 1952

N. M., Texas to Adjust Border Oil Allowables, Official Says

From The Journal's
Santa Fe Bureau

SANTA FE, Oct. 24 — An official of the Oil Conservation Commission said here today that Texas and New Mexico conservation officials will "definitely adjust allowables" in oil pools lying under the state line.

Returning from a meeting of the two commissions at Midland, Tex., Chief Engineer Bill Macey said the adjustments would be on two of the four levels of the fast-developing Dollarhide Field. There is some doubt, he said, as to whether two other levels extend across the state barrier.

Those that do lie under both states are the Drinkard and the Devonian zones.

Macey said it was the consensus of the recommendations made to

the commissions that Texas change its restrictions to meet those now in force in New Mexico. At present New Mexico allows production of 80 barrels per day in the Drinkard level and 135 in the Devonian.

Texas regulation calls for 91 barrels in one and 100 in the other —but production is restricted to 23 days per month while New Mexico producers can work full time.

Macey said the two Commissions would meet in Santa Fe after the transcript of yesterday's meeting has been completed to decide just what regulations to adopt. The commissions have long felt that uniform regulations should be in effect to protect producers on both sides of a state line.

New Mexico
OIL CONSERVATION COMMISSION

GOVERNOR EDWIN L. MECHEM
CHAIRMAN
LAND COMMISSIONER GUY SHEPARD
MEMBER
STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR



P. O. BOX 371
SANTA FE, NEW MEXICO

N. M. and Texas Reach Agreement On Two Oil Zones

SANTA FE, Jan. 9 (AP)—Texas and New Mexico today reached a landmark agreement on oil production in two oil zones lying in both states.

Three members of the Texas Oil Conservation Commission and two members of the New Mexico Oil Conservation Commission clinched the agreement after months of study and at the previous joint meeting. The agreement covers the Clearfork and Devonian zones of the Permian basin. Clearfork is a wide pool. Clearfork is designated; New Mexico has the Drinkard zone. The zones lie in Anderson, Texas, and Lea County, New Mexico.

Richard R. Spurrier, director of the New Mexico oil conservation commission, said the two bodies agreed on the following terms:

The Clearfork-Drinkard zone will produce 2,200 barrels a day; for the Devonian zone, the production will be 310 barrels a day. These apply to the entire zone.

New Mexico has the allowable production of 2,200 barrels a day for the Clearfork-Drinkard zone. In Texas the Clearfork-Drinkard allowable has been 91, and the Devonian allowable 100 barrels.

Although the figures are unchanged for Texas, the agreement actually represents a considerable increase in the Texas allowable for the two zones. Texas has been allowing production there only on the basis of 22 days a month; under the agreement production in the two zones in Texas will be on a basis of each day of the month.

Continued on Page One

N. M. and Texas Reach Agreement On Two Oil Zones

Continued from Page One

been producing 2,200 barrels a month, its allowable now goes up to 3100.

"The real advantage of this mutual agreement between the two states is that it will prevent drainage," Spurrier explained. "For instance, if New Mexico wells had been producing more than those allowed in Texas there was the danger of drainage to the detriment of Texas wells. This should put production on an even basis." The commissioners were impressed by the fact that the entire Texas production was thought this was important enough to warrant all the time being here to settle the matter. Spurrier feels very definitely that the question of settling state oil production is to avert the possibility of federal government intervention.

"We feel that when the two states can settle such problems it means the field has already been entered and is occupied and there is no excuse for the federal government to try to take over."

The Texas commissioners present were Olin Culberson, chairman; Gen. E. O. Thompson and William J. Murray and Asst. Chief Engineer George Singletary. Spurrier and Governor Mechem represented the OCC. The third member, Land Commissioner E. S. Walker, was busy with another meeting and could not attend.

The development, the first, marks a milestone in New Mexico's oil relations with her neighbor state. Texas, however, has had similar agreements with at least one state, Louisiana.

In Effect Feb. 1

The new orders are effective Feb. 1.

"Both commissions were emphatic in setting up the agreement," Spurrier said, "that it is not in any way, shape or form constituting a precedent for other

*From
Albuquerque
Journal*

1-10-53

Case 408

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

STATE OF NEW MEXICO TO:
All persons having any right, title,
interest or claim in the following case,
and notice to the public.

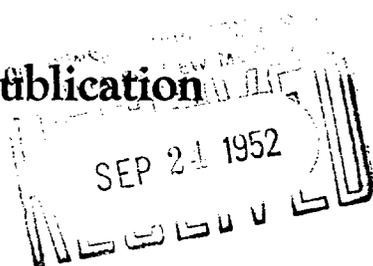
CASE #08:
Public notice is hereby given that a joint
meeting of the New Mexico Oil Conserva-
tion Commission and the Railroad Com-
mission of Texas will be held at 10 o'clock
a.m. October 7, 1952, at the Scharbauer
Hotel, Midland, Texas, for the purpose of
considering proration methods and equali-
zation of allowables in oil and gas pools
embracing lands within the states of Texas
and New Mexico—namely: the West Dol-
larhide, West Dollarhide-Devonian, West
Dollarhide-Fusselman and West Dollar-
hide-Drinkard Pools, as denominated in
New Mexico.

GIVEN under the seal of the Oil Con-
servation Commission of New Mexico on
this 19th day of September, 1952.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
E. R. Sparrier, Secretary

(Seal)
Pub. Sept. 23, 1952.

Affidavit of Publication



State of New Mexico }
County of Santa Fe } ss.

I, Charles T. Patten, being first duly sworn,

declare and say that I am the (Business Manager) (~~Editor~~) of the New

Mexican, a daily newspaper, published in the English
Language, and having a general circulation in the City and County of Santa Fe, State of
New Mexico, and being a newspaper duly qualified to publish legal notices and adver-
tisements under the provisions of Chapter 167 of the Session Laws of 1937; that the
publication, a copy which is hereto attached, was published in said paper ~~once each week~~

for one time ~~consecutive weeks~~, and on the same day of each week in
the regular issue of the paper during the time of publication, and that the notice was
published in the newspaper proper, and not in any supplement, ~~once each week~~

one time publication being on the

23rd day of September, 1952,

~~and the publication~~; that payment
for said advertisement has been (duly made), or (assessed as court costs); that the
undersigned has personal knowledge of the matters and things set forth in this affidavit.

Charles T. Patten
Editor-Manager

Subscribed and sworn to before me this 23rd
day of September, A.D., 1952

Anna T. Grubbe
Notary Public

My Commission expires
June 14, 1953

PUBLISHER'S BILL

3 lines, one time at \$ 3.10
..... lines, times, \$
Tax \$
Total \$ 3.10

Received payment,
.....

By

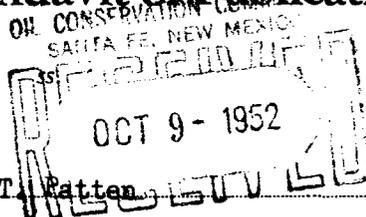
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

STATE OF NEW MEXICO TO:
All persons having any right, title, interest or claim in the following case, and notice to the public.
CASE 408: (Readvertised)
Public notice is hereby given that a joint meeting of the New Mexico Oil Conservation Commission and the Railroad Commission of Texas will be held at 10 o'clock a.m. on October 23 1952, at the City Hall in Midland, Texas, for the purpose of considering proration methods and equalization of allowables in oil and gas pools embracing lands within the states of Texas and New Mexico—namely, the West Dollarhide, West Dollarhide-Devonian, West Dollarhide-Fusselman and West Dollarhide-Drinkard Pools, as denominated in New Mexico.
GIVEN under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, on this sixth day of October, 1952.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
R. R. SPURRIER, Secretary.
(Seal)
Pub. Oct. 8, 1952.

Affidavit of Publication

State of New Mexico }
County of Santa Fe }



I, Charles T. Patten, being first duly sworn, declare and say that I am the (Business Manager) (~~Editor~~) of the New Mexican, a daily newspaper, published in the English Language, and having a general circulation in the City and County of Santa Fe, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy which is hereto attached, was published in said paper ~~once each week~~ for one time ~~in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement,~~ ~~in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement,~~ for one time ~~in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement,~~ publication being on the 8th day of October, 1952, ~~and in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement,~~; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.

Charles T. Patten
Editor-Manager

PUBLISHER'S BILL

32 lines, one time at \$ 3.20
..... lines, times, \$
Tax \$
Total \$ 3.20
Received payment,
.....
By

Subscribed and sworn to before me this 8th day of October, A.D., 1952
Anna K. Crimbee
Notary Public
My Commission expires June 14, 1953

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Robert L. Summers
Publisher

Of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period of —

One weeks.

beginning with the issue dated —

October 9, 1952 ✓

and ending with the issue dated —

October 9, 1952 ✓

Robert L. Summers
Publisher.

Sworn and subscribed to before me this 9 day of —

October 1952 ✓
Notary Public.

My commission expires Betty Beale

January 25, 1953

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE

Oct. 9, 1952

NOTICE OF PUBLICATION
State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico.

STATE OF NEW MEXICO TO:

All persons having any right, title, interest or claim in the following case, and notice to the public.

CASE 408: (Readvertised)

Public notice is hereby given that a joint meeting of the New Mexico Oil Conservation Commission and the Railroad Commission of Texas will be held at 10 o'clock a. m. on October 23, 1952, at the City Hall in Midland, Texas, for the purpose of considering proration methods and equalization of allowables in oil and gas pools embracing lands within the states of Texas and New Mexico—namely, the West Dollarhide, West Dollarhide-Devonian, West Dollarhide-Fusselman and West Dollarhide-Drinkard Pools, as denominated in New Mexico.

GIVEN under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, on this sixth day of October, 1952.

State of New Mexico,
Oil Conservation Commission,
R. R. SPURRIER,
Secretary.

(SEAL)

New Mexico
OIL CONSERVATION COMMISSION

CHIEF ENGINEER EDWIN L. MCGHEE
CHAIRMAN
LAND COMMISSIONER W. V. SHEPARD
MEMBER
STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR



P. O. BOX 871
SANTA FE, NEW MEXICO

September 19, 1952

Editor
THE NEW MEXICAN
SANTA FE N M

Dear Sir:

Re: Notice(s) of Publication
Case 408

Please published the enclosed notices one time immediately on receipt of this request. Please proofread carefully and send a copy of the paper carrying such notices to this office.

Upon completion of publication, send publisher's affidavit in duplicate. For payment, please submit statement in duplicate, and sign and return the enclosed voucher. (Do not fill in.) We should have these immediately after publication in order that the legal notice will be on hand for the holding of the hearing which it advertises, and also so that there will be no delay in your receiving proper payment.

Please publish the notices not later than Immediately on receipt.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. SPURRIER
Secretary - Director

Encl.

New Mexico
OIL CONSERVATION COMMISSION

GOVERNOR EDWIN L. MECHEM
CHAIRMAN

LAND COMMISSIONER GUY SHEPARD
MEMBER

STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR



P. O. BOX 871
SANTA FE, NEW MEXICO

October 6 - 1952

Editor
THE NEW MEXICAN
Santa Fe, N. M.

Dear Sir:

Re: Notice(s) of Publication
Case 408 - Readvertised.

Please published the enclosed notices one time immediately on receipt of this request. Please proofread carefully and send a copy of the paper carrying such notices to this office.

Upon completion of publication, send publisher's affidavit in duplicate. For payment, please submit statement in duplicate, and sign and return the enclosed voucher. (Do not fill in.) We should have these immediately after publication in order that the legal notice will be on hand for the holding of the hearing which it advertises, and also so that there will be no delay in your receiving proper payment.

Please publish the notices not later than as soon as received.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. SPURRIER
Secretary - Director

Encl.

New Mexico
OIL CONSERVATION COMMISSION

GOVERNOR EDWIN L. MECHEM
CHAIRMAN
LAND COMMISSIONER GUY SHEPARD
MEMBER
STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR



P. O. BOX 871
SANTA FE, NEW MEXICO

October 6 - 1952

Editor
HOBBS NEWS-SUN
HOBBS, N. M.

Dear Sir:

Re: Notice(s) of Publication
Case 408 (Readvertised)

Please published the enclosed notices one time immediately on receipt of this request. Please proofread carefully and send a copy of the paper carrying such notices to this office.

Upon completion of publication, send publisher's affidavit in duplicate. For payment, please submit statement in duplicate, and sign and return the enclosed voucher. (Do not fill in.) We should have these immediately after publication in order that the legal notice will be on hand for the holding of the hearing which it advertises, and also so that there will be no delay in your receiving proper payment.

Please publish the notices not later than as soon as received, please.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. SPURRIER
Secretary - Director

Encl.

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE - NEW MEXICO

STATE OF NEW MEXICO TO:

All persons having any right, title,
interest or claim in the following
case, and notice to the public.

CASE 408:

Public notice is hereby given that a joint meeting of the New Mexico Oil Conservation Commission and the Railroad Commission of Texas will be held at 10 o'clock a.m. October 7, 1952, at the Scharbauer Hotel, Midland, Texas, for the purpose of considering proration methods and equalization of allowables in oil and gas pools embracing lands within the states of Texas and New Mexico - namely: the West Dollarhide, West Dollarhide-Devonian, West Dollarhide-Fusselman and West Dollarhide-Drinkard Pools, as denominated in New Mexico.

GIVEN under the seal of the Oil Conservation Commission of New Mexico on this 19th day of September, 1952.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


R. R. Spurrier
Secretary

S E A L

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
SANTA FE - NEW MEXICO

STATE OF NEW MEXICO TO:

All persons having any right,
title, interest or claim in
the following case, and notice
to the public.

CASE 405: (Readvertised)

Public notice is hereby given that a joint meeting of the New Mexico Oil Conservation Commission and the Railroad Commission of Texas will be held at 10 o'clock a.m. on October 29, 1952, at the City Hall in Midland, Texas, for the purpose of considering proration methods and equalization of allowables in oil and gas pools embracing lands within the states of Texas and New Mexico - namely, the West Dollarhide, West Dollarhide-Devonian, West Dollarhide-Fusselman and West Dollarhide-Drinkard Pools, as denominated in New Mexico.

GIVEN under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, on this sixth day of October 1952.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurier
R. R. SPURIER,
Secretary

S E A L

JOINT HEARING

RAILROAD COMMISSION OF TEXAS

AND

OIL CONSERVATION COMMISSION OF NEW MEXICO

OCTOBER 23, 1952

To Consider

DETERMINATION OF EQUITABLE ALLOWABLES FOR
THE DOLLARHIDE CLEARFORK, DOLLARHIDE DEVONIAN,
DOLLARHIDE SILURIAN AND DOLLARHIDE ELLENBURGER FIELDS

ANDREWS COUNTY, TEXAS

AND

THE WEST DOLLARHIDE FIELDS

LEA COUNTY, NEW MEXICO

Prepared By:

The Pure Oil Company
Production Engineering Department
Fort Worth, Texas

RESERVOIR DATA
DOLLARHIDE CLEARFORK FIELD

1. PHYSICAL PROPERTIES OF RESERVOIR ROCK

- a. Approximate Average Porosity - Per Cent - 10.40
- b. Approximate Average Permeability - Millidarcys - 9.20
- c. Approximate Average Interstitial Water Saturation - Per Cent - 18.28

(Note: Porosity, Permeability and Saturation data taken from core analysis on Cities Service Oil Company E. P. Cowden "G" No. 8 and The Pure Oil Company E. P. Cowden "A" No. 33-C - No. 33-C cored entire Clearfork section.)

2. STRUCTURAL FEATURES OF RESERVOIR

- a. General Geological description of the reservoir

The Dollarhide Clearfork structure is anticlinal with the major axis running north and south; however, recent drilling in Lea County, New Mexico indicates the field may extend a considerable distance to the west. The Clearfork reservoir produces from approximately 6200' to 7000' from dolomite and lime containing some fissured and some vugular porosity. Porosity development is heterogeneous with poor correlation of the individual porosity streaks even between adjacent wells.

- b. Original Gas-Oil Contact - Feet Subsea - None

Original Water-Oil Contact - Feet Subsea - Level still in doubt -
there is some indication it may be as high as -3750'.

- c. Ratio of Gas-Cap Volume to Oil Zone Volume - -

- d. Dip of Producing Zone - Approximately 300 feet per mile in south end of reservoir.

RESERVOIR DATA
DOLLARWIDE CLEARFORK FIELD

3. CHARACTERISTICS OF RESERVOIR FLUIDS

- a. Average Gravity of Stock Tank Oil - 38.1° API
- b. Estimated Saturation Pressure - 2190 PSI @ -3400'
Formation Volume Factor - Ebls. Reservoir Oil/Bbl. Stock Tank Oil
At Original Pressure - 1.390 @ 2889 PSI
At Saturation Pressure - 1.402 @ 2190 PSI
At 1836 PSI FVF - 1.358
- c. Viscosity of Reservoir Oil - Centipoise
At Original - 0.610 @ 2889 PSI
At Saturation Pressure - 0.572 @ 2190 PSI
At 1836 PSI Viscosity - 0.630
- d. Dissolved Gas-Oil Ratio @ 0 PSI Separator Pressure - Cu.Ft./Bbl. Stock Tank Oil
At Original Pressure - 803
At Saturation Pressure - 803
At 1836 PSI - 707

4. PRESSURES AND TEMPERATURES

- a. Estimated Original Reservoir Pressure @ -3400' - 2889 PSI
Estimated Original Reservoir Temperature @ -3400' - 110° F.
- b. Reservoir Pressure History - PSI (Arithmetic Avg.)
See attached graph
- c. Average Shut-In Time Prior to Pressure Survey - 24 hours minimum

RESERVOIR DATA
DOLLARHIDE CLEARFORK FIELD

d. Productivity Index - Bbls./Day/PSI Pressure Drop

Average - 0.656

Maximum - 2.92

Minimum - 0.127

(Productivity index data is from nine wells)

5. STATISTICAL DATA

a. Oil Production - Bbls. Per Day - See attached graph

b. Average Weighted Gas-Oil Ratio - See attached graph

c. Water Production - Per Cent of Total Fluid - See attached graph

d. Number of Producing Wells - 82 (as of July 1, 1952)

Number of Limited Capacity Wells - 10

Number of High Gas-Oil Ratio Wells - 2

Number of Salt Water Producing Wells - 11

e. Approximate Developed Acreage - 3280

f. Spacing Pattern - Acres Per Well - 40

g. Volume of Gas Flared - MCF/Day - None (gas is flared only in emergency)

h. Volume of Air, Gas or Water Injected into the Reservoir - None

i. Stage of Depletion - Primary

6. INDIVIDUAL WELL PROBLEMS

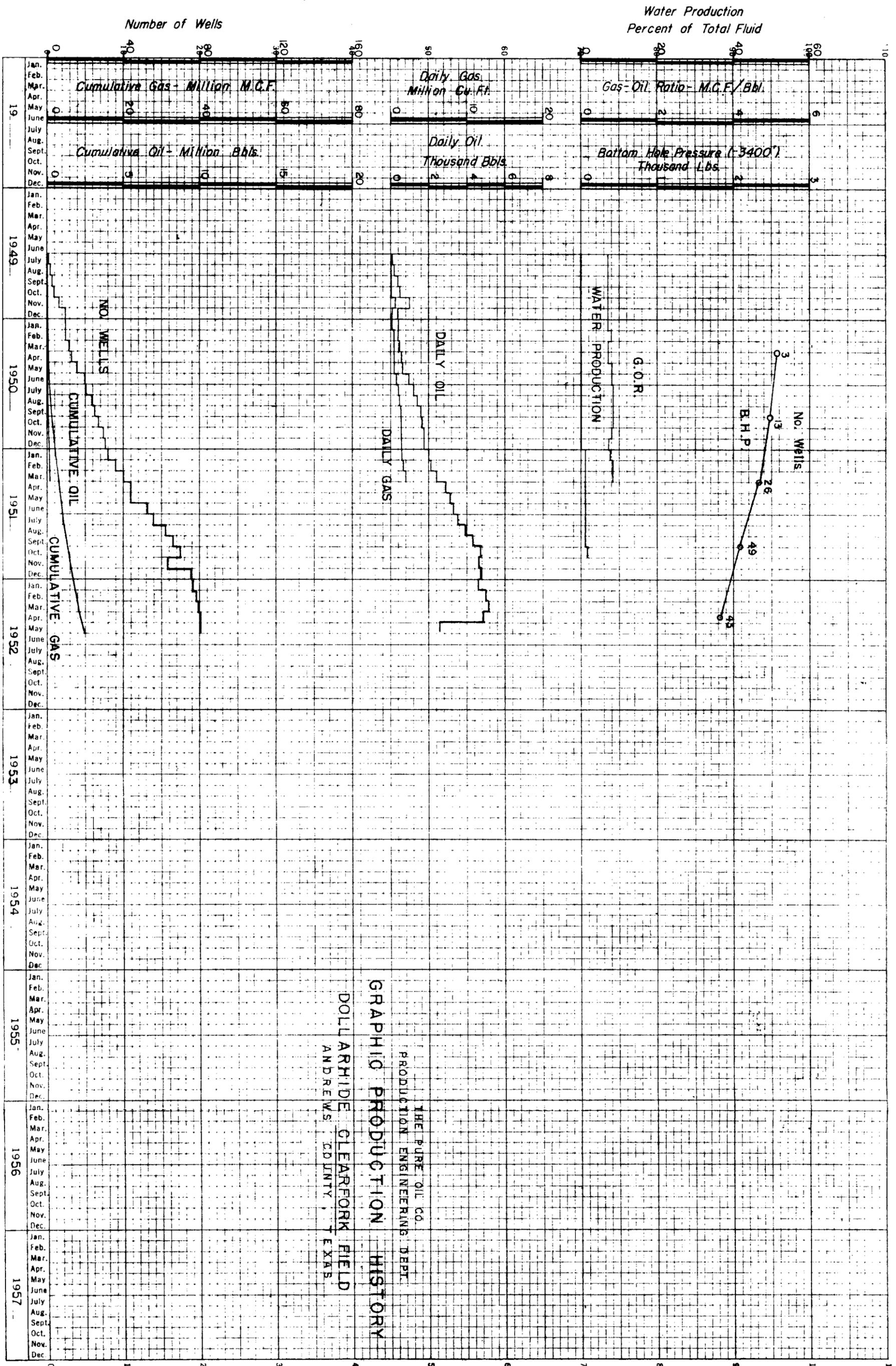
There are no particular well problems considering the field as a whole. The permeable zones in the Clearfork are not as clearly defined as many other Clearfork Fields in the West Texas - New Mexico Area. This has necessitated the use of stage acid techniques involving

RESERVOIR DATA
DOLLARHIDE CLEARFORK FIELD

the use of temporary blocking agents. Those edges of the field which are now defined show poor porosity and permeability as establishing such limits as well as structural considerations. These wells located on such limits are comparatively weak wells and have or will in the near future require artificial lift.

7. GENERAL RESERVOIR MECHANICS

The Dollarhide Clearfork Field produces from a solution-gas drive. The success of an individual well depends largely on whether the well penetrates porous and permeable zones. The occurrence of porosity does not necessarily follow the structure, and this heterogeneity makes evaluation of the Clearfork reservoir difficult. Production history to date is typical of solution-gas drive reservoirs.



THE PURE OIL CO.
 PRODUCTION ENGINEERING DEPT.
GRAPHIC PRODUCTION HISTORY
 DOLLARHIDE CLEARFORK FIELD
 ANDREWS COUNTY, TEXAS

DOLLARHIDE CLEARFORK FIELD
ANDREWS COUNTY, TEXAS
DISTRICT 8
PRODUCTION HISTORY

Year	Month	No. Wells	Oil Production - Bbls.			Gas Production - MCF			GOR ₄	Daily Water-Bbls.3	BHP @ -3100' P.S.I. No. Wells 5
			Daily ²	Monthly ¹	Accumulative	Monthly	Accumulative				
1949	July	1	139	4,302	4,302	3,406	3,406	708			
	Aug.	2	190	5,877	10,179	4,161	7,557	708			
	Sept.	3	421	12,623	22,802	8,937	16,504	708			
	Oct.	4	504	15,618	38,420	11,057	27,561	708			
	Nov.	7	1,000	29,988	68,408	21,232	48,793	708			
	Dec.	10	432	13,378	81,786	9,472	58,265	708			
	Yearly Total			<u>81,786</u>		<u>58,265</u>					
1950	Jan.	10	445	13,806	95,592	9,775	68,040	708			
	Feb.	10	448	12,531	108,123	9,794	77,834	782			
	Mar.	12	563	17,450	125,573	12,354	90,188	708			
	Apr.	13	634	19,023	144,596	13,654	103,842	713	2633	1	
	May	16	684	21,211	165,807	17,249	121,091	813			
	June	20	1,052	31,574	197,381	24,970	146,061	790			
	July	21	1,223	37,903	235,284	31,769	177,830	838			
	Aug.	24	1,400	43,415	278,699	37,411	215,241	862			
	Sept.	25	1,609	48,261	326,960	40,355	255,596	836			
	Oct.	27	1,716	53,209	380,169	43,841	299,437	824			
	Nov.	30	1,833	54,978	435,147	43,938	343,375	799			
	Dec.	31	1,771	54,911	490,058	39,950	383,325	728			
	Yearly Total			<u>408,272</u>		<u>325,060</u>					

- 1 - EB reported production
- 2 - Calendar days
- 3 - Dollarhide Engineering Committee Factual Data.
- 4 - GOR of 708 was determined by average of original GOR from Pure 28-C, 33-C, 37-C, & 54-C.
- 5 - BHP from Cities Service R.W.Cowden H-1 - (** - From Pure Oil Company's wells)
- * - Starting in April GOR's are determined by Gasoline Plant take.

DOLLARHIDE CLEAFORK FIELD
 ANDREWS COUNTY, TEXAS
 DISTRICT 8
 PRODUCTION HISTORY

Year	Month	No. Wells	Daily ²	Oil Production - Bbls.		Gas Production - MCF		GOF ⁴	Daily Water-Bbls. ³	BHP @ -3400'	No. Wells
				Monthly ¹	Accumulative	Monthly	Accumulative				
1951	Jan.	32	2077	64,401	554,459	50,038	433,363	777	21	2329	26
	Feb.	36	2153	60,277	614,736	49,279	482,642	818	24		
	Mar.	41	2557	79,268	694,004	64,781	547,423	817	25		
	April	44	2902	87,060	781,064				31		
	May	44	3132	97,090	878,154				33		
	June	53	3292	98,773	976,927				31		
	July	56	3572	110,742	1,087,669				38		
	Aug.	62	3951	122,467	1,210,136				45		
	Sept.	66	4374	131,227	1,341,363				57		
	Oct.	70	4705	145,850	1,487,213				71		
	Nov.	63	4686	140,572	1,627,785						
	Dec.	75	4731	146,649	1,774,434						
Yearly Total			1,284,376							2080	49
1952	Jan.	76	4672	144,820	1,919,254					1836	43
	Feb.	78	5048	146,382	2,065,636						
	Mar.	79	5185	160,747	2,226,383						
	April	81	4926	147,774	2,374,157						
	May	81	2663	82,542	2,456,699						
	June										
Yearly Total											

Yearly Total

- 1 - EB Reported Production
- 2 - Calendar Daily Rate
- 3 - Dollarhide Engineering Committee Factual Data
- 4 - GOR's Determined from Gasoline Plant Take

RESERVOIR DATA
DOLLARHIDE DEVONIAN FIELD

1. PHYSICAL PROPERTIES OF RESERVOIR ROCK

- a. Approximate Average Porosity - Per Cent - 12.57
- b. Approximate Average Permeability - Millidarcys - 39.5
- c. Approximate Average Interstitial Water Saturation - Per Cent - 19.90

(Note: Saturation data taken from core analysis on Magnolia E. P. Cowden "B" 10 and "B" 11, Cities Service Oil Company E. P. Cowden "G" No. 8, and The Pure Oil Company "A" No. 49-D. Porosity and permeability data taken from core analysis on these wells and Magnolia E. P. Cowden "B" 9.)

2. STRUCTURAL FEATURES OF RESERVOIR

- a. General geological description of reservoir

The Dollarhide Devonian structure is a north-south faulted anticline whose limits are defined by a major north-south fault to the east and by the formation's dipping into the water-oil contact (5300 feet subsea) on the west. Recent development has proved a westward extension from the north end of the field into Lea County, New Mexico. Two northeast-southwest faults cross the field. There is apparently poor communication across the southernmost of these faults, as evidenced by bottom hole pressures in the south end of the field being consistently lower than those in the field north of the fault. The formation is eroded on the crest of the structure, and there are two areas of complete truncation. Production is from a fractured dolomite and a weathered chert of Devonian age.

RESERVOIR DATA
DOLLARHIDE DEVONIAN FIELD

- b. Original Gas-Oil Contact - Feet Subsea - None
Original Water-Oil Contact - Feet Subsea - -5300'
- c. Ratio of Gas-Cap Volume to Oil Zone Volume - -
- d. Dip of Producing Zone - Approximately 750 feet per mile to the west
3. CHARACTERISTICS OF RESERVOIR FLUIDS
- a. Average Gravity of Stock Tank Oil - 41.2° API
- b. Estimated Saturation Pressure - 2775 PSI @ -4600'
Formation Volume Factor - Bbls. Reservoir Oil/Bbl. Stock Tank Oil
At Original Pressure - 1.682 @ 3233 PSI
At Saturation Pressure - 1.695 @ 2775 PSI
At 2166 PSI FVF - 1.560
- c. Viscosity of Reservoir Oil - Centipoise
At Original Pressure - 0.41 @ 3233 PSI
At Saturation Pressure - 0.40 @ 2775 PSI
At 2166 PSI Viscosity - 0.435
- d. Dissolved Gas-Oil Ratio @ 0 PSI Separator Pressure - Cu.Ft./Bbl. Stock
Tank Oil
At Original Pressure - 1190
At Saturation Pressure - 1190
At 2166 PSI - 930
4. PRESSURES AND TEMPERATURES
- a. Estimated Original Reservoir Pressure @ -4600' - 3233 PSI
Estimated Original Reservoir Temperature @ -4600' - 120° F.

RESERVOIR DATA
DOLLARHIDE DEVONIAN FIELD

- b. Reservoir Pressure History - PSI (Arithmetic Avg. - Areally Weighted)

See attached graph

- c. Average Shut-In Time Prior to Pressure Survey - 48 hours minimum

- d. Productivity Index - Bbls./Day/PSI Pressure Drop

Average - 0.363

Maximum - 1.05

Minimum - 0.064

(Note: Productivity Index data from seventeen wells)

5. STATISTICAL DATA

- a. Oil Production - Bbls. Per Day - See attached graph

- b. Average Weighted Gas-Oil Ratio - See attached graph

- c. Water Production - Per Cent of Total Fluid - Currently 0.7 of 1%

- d. Number of Producing Wells - 132 (as of July 1, 1952)

Number of Limited Capacity Wells - 21

Number of High Gas-Oil Ratio Wells - 37

Number of Salt Water Producing Wells - 7

- e. Approximate Developed Acreage - 5280

- f. Spacing Pattern - Acres Per Well - 40

- g. Volume of Gas Flared - MCF/Day - None (Gas is flared only in emergency)

- h. Volume of Air, Gas or Water Injected into the Reservoir - None

- i. Stage of Depletion of Reservoir - Primary

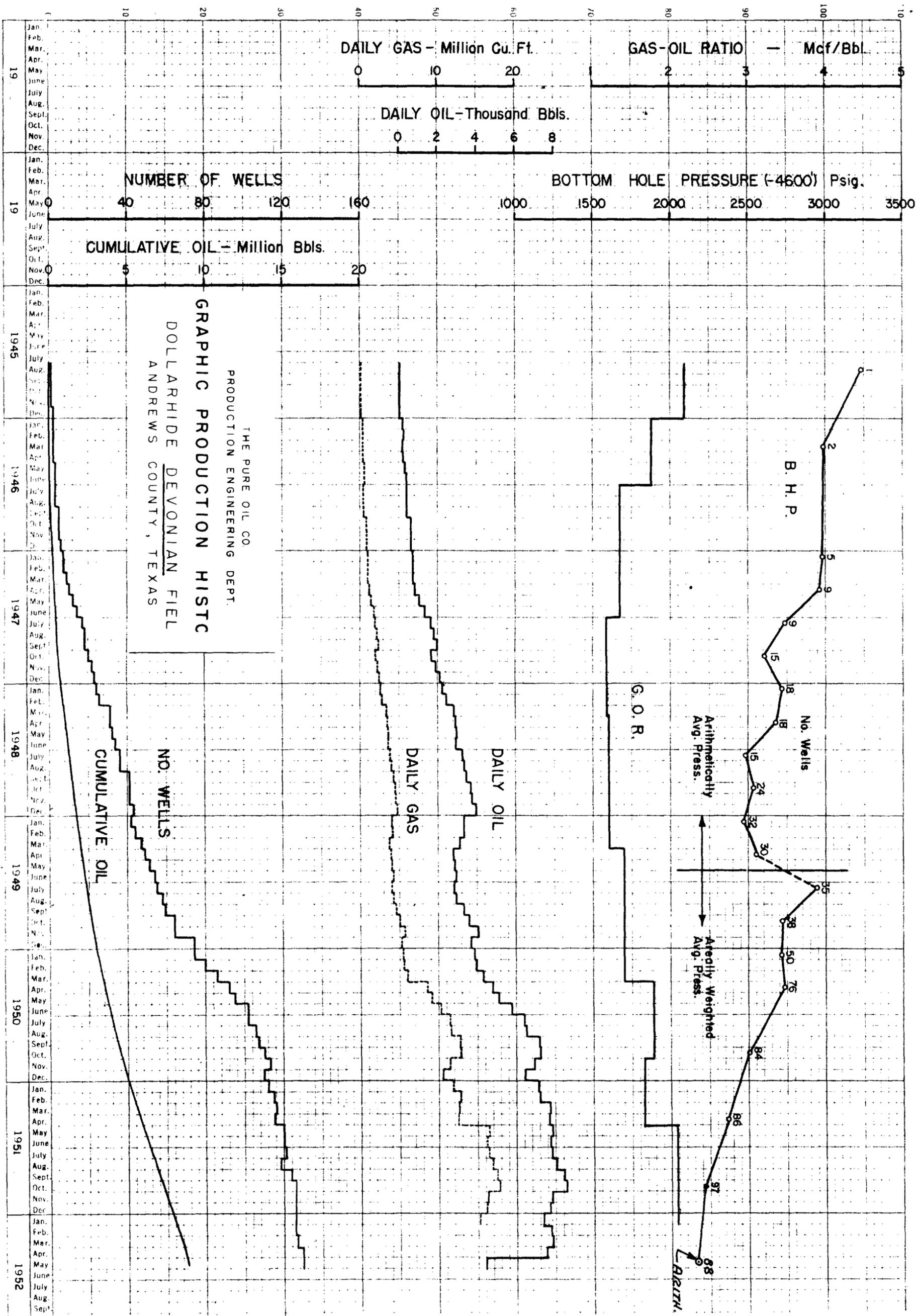
6. INDIVIDUAL WELL PROBLEMS

The only difficulty is with wells located high on structure which are high gas-oil ratio wells. This is to be expected in a solution-gas drive field having good gravity segregation.

RESERVOIR DATA
DOLLARHIDE DEVONIAN FIELD

7. GENERAL RESERVOIR MECHANICS

The Dollarhide Devonian Field produces from a solution-gas drive. In addition, good gravity segregation is apparent, as the high gas-oil wells, in most every case, are located on the crest of the structure. Factors favoring gravity segregation are the dip of the structure (750 ft. per mile) and the fractured type of porosity. Fluid segregation occurs more easily in fractured porosity than in intergranular or intercrystalline porosity. Production history to date is typical of solution-gas drive reservoirs.



DOLLARHIDE FIELD
ANDREWS COUNTY, TEXAS

DISTRICT 8

PRODUCTION HISTORY

Year	Month	No. Wells	Daily	011 Production - Bbls.		Gas Production - MCF		GOR	Daily Water-Bbls.	BHP @ -4600'	No. Wells			
				Monthly	Accumulative	Monthly	Accumulative							
1945	Aug.	1	71	2,215	2,215	4,842	4,842	2186	0	3233	1			
	Sep.	1	71	2,136	4,351	4,669	9,511	2186	0					
	Oct.	1	83	2,561	6,912	5,598	15,109	2186	0					
	Nov.	1	86	2,594	9,506	5,670	20,779	2186	0					
	Dec.	2	83	2,587	12,093	5,655	26,434	2186	0					
	Yearly Total				12,093		26,434							
	1946	Jan.	2	228	7,064	19,157	12,369	38,803	1751			0	2985	2
		Feb.	2	255	7,146	26,303	12,513	51,316	1751			0		
		Mar.	2	211	6,534	32,837	11,441	62,757	1751			0		
		Apr.	2	236	7,085	39,922	12,406	75,163	1751			0		
		May	3	362	11,210	51,132	19,629	94,792	1751			0		
		June	3	392	11,769	62,901	20,608	115,400	1751			0		
July		3	389	12,071	74,972	16,199	131,599	1342	0					
Aug.		3	373	11,575	86,547	15,534	147,133	1342	0					
Sep.		5	395	11,839	98,386	15,888	163,021	1342	0					
Oct.		5	651	20,180	118,566	27,082	190,103	1342	0					
Nov.		5	650	19,503	138,069	26,173	216,276	1342	0					
Dec.		6	674	20,888	158,957	28,032	244,308	1342	0					
Yearly Total				146,864		244,308								

DOLLARHIDE FIELD
ANDREWS COUNTY, TEXAS
DISTRICT 8
PRODUCTION HISTORY

Year	Month	No. Wells	Daily ²	Oil Production - Bbls.		Gas Production - MCF		GOR 3	Daily Water-Bbls/d	BHP @ -1600' ⁵ P.S.I.	No. Wells
				Monthly	Accumulative	Monthly	Accumulative				
1947	Jan.	7	736	22,804	181,761	30,603	274,911	1342	0	2981	5
	Feb.	7	737	20,645	202,406	27,706	302,617	1342	0		
	Mar.	9	712	22,070	224,476	29,618	332,235	1342	0		
	Apr.	10	805	24,160	248,636	32,423	364,658	1342	0	2955	9
	May	12	1,042	32,297	280,933	43,343	408,001	1342	0		
	Jun.	14	1,311	39,337	320,270	52,790	460,791	1342	0		
	Jul.	17	1,625	50,389	370,659	59,207	519,998	1175	3	2739	9
	Aug.	18	1,819	56,403	427,062	66,274	586,272	1175	3		
	Sep.	18	1,971	59,128	486,190	69,475	655,747	1175	3		
	Oct.	20	1,647	51,064	537,254	60,000	715,747	1175	3	2606	15 **
	Nov.	22	1,883	56,479	593,733	66,363	782,110	1175	3		
	Dec.	23	2,072	64,233	657,966	75,474	857,584	1175	3		
Yearly Total			499,009	613,276							
1948	Jan.	24	2,245	69,596	727,562	81,775	939,359	1175 *	3	2710	18
	Feb.	26	2,414	70,013	797,575	82,265	1,021,624	1175	3		
	Mar.	31	2,823	87,508	885,083	102,822	1,124,446	1175	3		
	Apr.	31	2,876	86,275	971,358	104,134	1,228,580	1207	11 ***	2679	18
	May	32	2,962	91,822	1,063,180	110,829	1,339,409	1207	11		
	June	34	2,900	87,011	1,150,191	105,022	1,444,431	1207	11		
	Jul.	36	3,232	100,197	1,250,388	120,938	1,565,369	1207	0	2485	15
	Aug.	36	3,310	102,625	1,353,013	123,868	1,689,237	1207	0		
	Sep.	41	3,483	104,500	1,457,513	126,132	1,815,369	1207	14		
	Oct.	41	3,699	114,669	1,572,182	138,405	1,953,774	1207	14	2534	24
	Nov.	41	3,718	111,527	1,683,709	134,613	2,088,387	1207	0		
	Dec.	43	3,952	122,523	1,806,232	147,885	2,236,272	1207	0		
Yearly Total			1,148,266	1,378,688							

*** - Starting in April, daily water is from Dollarhide Engineering Committee Factual Data.
 * - In the general GOR survey (Oct.-Nov.-Dec.), the Union of California Oil Co. omitted the decimal point in a gas volume figure. It should have been 46 MCF instead of 458 MCF. Using the 46 MCF, the weighted GOR will be 1175 instead of 1355, used by the RRC. Incorrect gas volume as of Jan. 1948 @ 1355 GOR is 918,369 MCF (Accumulative) and 674,061 MCF for the year 1947.

- ***- Magnolia's Cowden C-2 omitted in compiling this pressure.
- 1 - EB reported production
- 2 - Calendar days
- 3 - GOR and Daily Water from RBC Annual Recap.
- 4 - Magnolia's Cowden C-2 and C-3 omitted in compiling these pressures - these wells have low pressures and apparently have a constricted connection with the remainder of the reservoir.

DOLLARHIDE FIELD
ANDREWS COUNTY, TEXAS
DISTRICT 8
PRODUCTION HISTORY

Year	Month	No. Wells	Oil Production - Bbls.			Gas Production - MCF			GOR 3	Daily Water-Bbls. 5	BHP @ 4600' 4 P.S.I. No. Wells
			Daily 7	Monthly 1	Accumulative	Monthly	Accumulative	GOR 3			
1949	Jan.	42	3,323	103,001	1,909,233	124,322	2,360,594	1207	11	2466	32
	Feb.	44	3,331	93,281	2,002,514	112,590	2,473,184	1207	8		
	Mar.	47	3,085	95,660	2,098,174	115,462	2,588,646	1207	6		
	Apr.	49	2,799	83,959	2,182,133	117,794	2,706,440	1403	8	2544	30
	May	51	2,841	88,058	2,270,191	123,545	2,829,985	1403	8		
	June	54	2,922	87,672	2,357,863	123,004	2,952,989	1403	7		
	July	55	2,806	86,993	2,444,856	122,051	3,075,040	1403	6	2578	35
	Aug.	58	2,918	90,457	2,535,313	126,911	3,201,951	1403	7	(2942)	Weighted Avg.
	Sept.	59	3,343	100,299	2,635,612	140,719	3,342,670	1403	8		
	Oct.	64	3,590	111,281	2,746,893	156,127	3,498,797	1403	10	2552	38
	Nov.	64	4,054	121,605	2,868,498	170,612	3,669,409	1403	11	(2723)	Weighted Avg.
	Dec.	74	3,708	114,943	2,983,441	161,265	3,830,674	1403	10		
Yearly Total			1,177,209		1,594,402						
1950	Jan.	74	3,872	120,043	3,103,484	168,420	3,999,094	1403	18	2647	50
	Feb.	80	3,925	109,900	3,213,384	154,190	4,153,284	1403	15	(2714)	Weighted Avg.
	Mar.	86	4,310	133,624	3,347,008	187,474	4,340,758	1403	18		
	Apr.	92	4,807	144,201	3,491,209	256,245	4,597,003	1777	12	2686	76
	May	95	5,134	159,148	3,650,357	282,806	4,879,809	1777	16	(2736)	Weighted Avg.
	June	102	5,773	173,195	3,823,552	307,768	5,187,577	1777	15		
	July	102	6,430	199,330	4,022,882	354,209	5,541,786	1777	18		
	Aug.	106	6,522	202,169	4,225,051	359,254	5,901,040	1777	22		
	Sept.	107	7,192	215,770	4,440,821	383,423	6,284,463	1777	20		
	Oct.	110	7,208	223,435	4,664,256	397,044	6,681,507	1777	15	2475	84
	Nov.	113	6,938	208,132	4,872,388	342,585	7,024,092	1646	18	(2501)	Weighted Avg.
	Dec.	110	6,434	199,461	5,071,849	328,313	7,352,405	1646	21		
Yearly Total			2,088,408		3,521,731						

1 - EB reported production

2 - Calendar days

3 - GOR from R.R.C. Annual Recap.

4 - Magnolia's Cowden C-2 and C-3 omitted in compiling these pressures - these wells have low pressures and apparently have a constricted connection with the remainder of the reservoir.

*Starting in April GOR's are weighted averages.

5 - Dollarhide Engineering Committee Factual Data.

DOLLARHIDE FIELD
ANDREWS COUNTY, TEXAS
DISTRICT 8
PRODUCTION HISTORY

Year	Month	No. of Wells	Oil Production - Bbls.			Gas Production - MCF			GOR 3	Daily Water-Bbls/d	BHP @ -4600'	
			Daily 2	Monthly 1	Accumulative	Monthly	Accumulative	P.S.I.			No. Wells	
1951	Jan.	112	7160	221,975	5,293,824	365,371	7,717,776	1646	28	2397 (2363) Weighted Avg.	86	
	Feb.	115	7192	201,384	5,495,208	331,478	8,049,254	1646	25			
	Mar.	116	7737	239,847	5,735,055	394,788	8,444,042	1646	30			
	Apr.	115	7706	231,187	5,966,242	380,534	8,824,576	1646	82			
	May	120	7827	242,632	6,208,874	505,645	9,330,221	2084	33			
	June	120	7747	232,395	6,441,269	484,311	9,814,532	2084	28			
	July	121	7864	243,793	6,685,062	508,065	10,322,597	2084	50			
	Aug.	118	8150	252,647	6,937,709	526,516	10,849,113	2084	65			
	Sept.	124	8453	253,580	7,191,289	528,461	11,377,574	2084	66			
	Oct.	126	8563	265,442	7,456,731	553,181	11,930,755	2084	58			
	Nov.	126	7852	235,567	7,692,298	490,922	12,421,677	2084	52			
	Dec.	126	7740	239,948	7,932,246	500,052	12,921,729	2084				
Yearly Total			2,860,397		5,569,324					2213	97	
1952	Jan.	126	7319	226,889	8,159,135	472,837	13,394,566	2084		2166	88	
	Feb.	126	7795	226,043	8,385,178							
	Mar.	127	7873	244,062	8,629,240							
	Apr.	130	7582	227,468	8,856,708							
	May	130	4452	138,015	8,994,723							
Yearly Total												

- 1 - ER Reported Production
- 2 - Calendar Days
- 3 - Weighted Ratios
- 4 - Dollarhide Engineering Committee Factual Data

FIELD RULES

DOLLARHIDE DEVONIAN FIELD

RULE 1. (As amended by Order No. 8-18,517, effective June 12, 1950.)

No well for oil or gas shall hereafter be drilled for completion or completed at any point less than nine hundred thirty-three (933) feet from any other well drilling to or completed in the Devonian reservoir, and situated on the same lease, or less than five hundred fifty (550) feet from any lease line, property line, or subdivision line; provided however, that the Commission, in order to prevent waste or to prevent the confiscation of property, will grant exceptions to permit drilling within shorter distances than herein prescribed whenever the Commission shall have determined that such exceptions are necessary either to prevent waste or to prevent the confiscation of property. When an exception to this rule is desired, application therefor shall be filed and will be acted upon in accordance with the applicable provisions of Commission Statewide Rules 37 and 38, which applicable provisions of said rules are incorporated herein by reference.

In applying this rule the general order of the Commission relating to the subdivision of property shall be observed.

Discussion

(This rule is designed to give the operator certain leeway while developing the field on forty acre spacing. The operator is given a tolerance of 110' at the lease boundaries and 387' within the lease, compared to nominal 660' - 1320' spacing. There are four producing horizons in this field necessitating a minimum of two and possibly four wells in each forty acre tract. In addition, there exists in the Silurian pay zone an extensive cavern complicating the drilling of the leases. By exercising the 387' tolerance within the lease, the second well on a forty acre tract has been so located as to avoid this difficulty in several instances.)

well 2. The casing program of well 2 shall include the following:
(3) strings of pipe and cement shall be set in accordance with the following program.

(a) The surface string shall consist of new or reconditioned pipe that has been previously tested to one thousand (1000) pounds per square inch. The strings shall be set at least twenty (20) feet below the top of the Red Beds and shall be cemented to the surface of the ground. Cement shall be allowed to stand a minimum of twenty-four (24) hours before drilling the plug or initiating tests.

Discussion

(Note: The surface string is to serve as a conductor to provide protection for any shallow fresh water bearing beds and also provides a suitable anchor enabling the operator to control the Yates Sand sea in instances where such difficulty is experienced. As a matter of record, several blowouts have been experienced in the Yates even though the Yates is set capable of producing gas in commercial quantities.)

(b) The intermediate string shall consist of new or reconditioned pipe that has been previously tested to twenty-four hundred (2400) pounds per square inch and shall be set not less than one hundred (100) feet into the White Limestone underlying the Yates. Sufficient cement shall be used to fill the annular space back of the pipe to at least as high as the bottom of the surface pipe. The volume of cement to be used to obtain this height of fill-up shall be one and one half (1½) times the volume required for normal fill-up. Cementing shall be allowed to stand a minimum of twenty-four (24) hours before drilling the plug or initiating the tests.

This string shall be tested by either lowering of the fluid level or by application of pump pressure. If test is made by lowering the fluid level the well shall be bailed dry or at least to a point midway between the bottom of the

string and the top of the cement behind the string and shall be allowed to stand a minimum of two (2) hours. If after that period the fluid level shows a rise equivalent to two (2) per cent of the distance bailed then this string shall be condemned and repaired so as to exclude water. Thereafter, the casing shall again be tested in the same manner.

If test is made by the application of pump pressure the mud laden fluid in the hole shall be replaced with clear water and a pressure of at least twelve hundred (1200) pounds per square inch shall then be applied. If at the end of thirty (30) minutes this pressure shows a drop of one hundred (100) pounds per square inch, or more, then this string shall be condemned and repaired so as to exclude water. Thereafter the casing shall again be tested in the same manner.

Discussion

(The purpose of the intermediate string is to ease off from subsequent deeper drilling the salt section which is encountered between about 1200 feet and 2600 feet, and provide protection from possible blowouts or lost circulation in the Yates as drilling proceeds to greater depths. Were this string not employed, it would be necessary to carry saturated salt water mud to total depth, which would in all likelihood cause lost circulation in the various pay sections.)

(c) The producing or oil string shall consist of new or reconditioned pipe that has been tested to twenty-eight hundred (2800) pounds per square inch. Sufficient cement shall be used to fill the annular space back of the pipe to at least four thousand (4000) feet below the surface of the ground. Cementing shall be by the pump and plug method and cement shall be allowed to stand a minimum of twenty-four (24) hours before drilling the plug or initiating tests.

The string shall be tested by either application of pump pressure or lowering of the fluid level. If test is made by lowering the fluid level the wells shall be bailed dry or at least to a point midway to the bottom of the string and the

top of the cement behind the string, and shall be allowed to stand a minimum of two (2) hours. If after this period the fluid level shows a rise equivalent to two (2) per cent of the distance bailed then this string shall be condemned and repaired so as to exclude water. Thereafter, this string shall again be tested in the same manner.

If this string is tested by the application of pump pressure then the mud laden fluid in the hole shall be replaced with clear water and a pressure of at least fifteen hundred (1500) pounds per square inch applied. If at the end of thirty (30) minutes the pressure shows a drop of one hundred and fifty (150) pounds per square inch, or more, then the string shall be condemned and repaired so as to exclude water. Thereafter, it shall again be tested in the same manner. The Christmas tree fittings and well head connections shall have a working pressure of two thousand (2000) pounds per square inch or a test pressure of (4000) pounds per square inch.

Discussion

(This rule provides for an oil string securely cemented to prevent mixing of fluids from different zones due to migration behind the casing. Whether oil migrates from one formation to another or salt water migrates into a producing formation, waste would result. This rule was promulgated to prevent such waste.)

RULE 3. (As amended by Order No. 8-18,517, effective June 12, 1950.)

The acreage assigned the individual oil well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. No proration unit shall not contain more than forty (40) acres except as hereinafter provided, and the two points farthestmost removed one from the other and contained within any proration unit shall not be in excess of twenty-one hundred (2100) feet apart; provided however, that in the case of long and narrow leases or in cases where because of the shape of a lease such is necessary to permit the utilization of tolerance acreage the Commission may, after proper showing, grant exceptions to the limitations as to the shape of the proration units as herein contained. All proration units however, shall consist of acreage which can reasonably be considered to be productive of oil.

If after the drilling of the last well on any lease and the assignment of acreage to each well thereon in accordance with the regulations of the Commission there remains an additional unassigned lease acreage of less than forty (40) acres than and in such event the remaining unassigned lease acreage up to and including a total of twenty (20) acres may be assigned to the last well drilled on such lease or may be distributed between any group of wells on such lease or royalty subdivision thereof so long as the proration unit or units resulting from the inclusion of such additional acreage meets the limitations prescribed by the Commission.

Operators shall file certified plats of their properties in the field, which plats shall show all of those things pertinent to the determination of the acreage claimed for each well hereunder.

Discussion

(Forty acre allocation units were set up for the Devonian, Silurian and Ellenburger reservoirs. The Silurian and Ellenburger reservoirs early in their

producing lives showed excellent pressure communication indicating one well capable of draining forty acres. Early pressure history in the Devonian was erratic. Later, drilling showed this pay to be faulted accounting for early inconsistencies in pressure history. Also interference tests conducted by The Pure Oil Company showed communication in this pay indicating one well capable of draining forty acres.

Field rules have not been promulgated for the Clearfork zone. Development has been on forty acre spacing.)

RULE 4. The daily total oil allowable for the field as fixed by the Commission, after deductions have been made for marginal wells, high gas-oil ratio wells and wells which are incapable of producing their allowables, shall be distributed among the remaining producing wells in the field on the following basis:

(a) The daily acreage allowable for each well shall be that proportion of seventy-five (75%) per cent of the daily field allowable which the acreage assigned to the well bears to the acreage assigned the remaining wells in the field.

(b) The daily per well allowable for each well shall be determined by dividing twenty-five (25%) per cent of the daily field allowable by the remaining number of producing wells in the field.

(c) The total daily oil allowable for each well shall be the sum of its acreage and per well allowables.

Discussion

(The allowable production formula works as follows: If the top per well and unit allowable is 100 barrels per day, then the well receives 75 barrels for being located in a 40 acre proration unit and 25 barrels for the well. If a well is drilled and is assigned to 26.7 acres, then its allowable would be:

$$\frac{26.7}{40} \times 75 + 25 = 50 + 25 = 75 \text{ barrels per day}$$

In this case, the well would obtain 50 bbls. per day for being situated on a 26.7 acre tract and 25 barrels per day for the well itself.

This allocation formula was adopted as a means of maintaining more or less equal withdrawal from the different units, and still recognize the economic fact that the cost of a well on a small tract is the same as one on a larger tract.

This rule also allows an operator to assign the last undrilled acreage of a lease, so long as it is less than twenty acres, to a previously drilled forty acre

unit. This is to prevent the drilling of wells which might have a questionable payout. For instance, if ten acres of a lease remained undrilled and its acreage was assigned to a previously drilled forty acre unit, the allowable for that unit would become:

$$\frac{50}{40} \times 75 \div 25 =$$

$$9\frac{1}{4} \div 25 = 119 \text{ barrels per day}$$

In this example, 9 $\frac{1}{4}$ barrels per day is allowed for the 50 acres and 25 barrels for the well.)

RESERVOIR	<u>NEW MEXICO</u>			<u>TEXAS</u>		
	NO. OF WELLS	TOP PER WELL ALLOWABLE	TOTAL ALLOWABLE	NO. OF WELLS	TOP PER WELL ALLOWANCE	TOTAL ALLOWABLE
Clearfork (Drinkard)	1	80	80	85	91	7281
Devonian	4	135	525	134	100	10271
Ellenberger	5	211	1055	44	100	4084
Silurian (Fusselman)	3	135	405	59	180	8638
				.		
				.		
				.		
				.		

ILLEGIBLE

GAS-OIL RATIO SURVEYS

West Texas District 8

Special Order No. 8-2,927, Requiring Gas-Oil Ratio Surveys in Railroad Commission District 8, Effective October 1, 1941, as Amended By Order No. 8-4,521, Effective December 4, 1942, Order No. 8-5,554, Effective November 3, 1943, Order No. 8-6,594, Effective August 14, 1944, Order No. 8-8,357, Effective November 14, 1945, Order No. 8-12,039, Effective March 1, 1948, Order No. 8-16,271, Effective September 1, 1949, Order No. 8-19,827, Effective January 1, 1951, Order No. 8-20,528, Effective April 1, 1951, and Order No. 8-23,708, Effective July 1, 1952.

WHEREAS, The Railroad Commission of Texas has, from time to time, held hearings pertaining to the determination of gas-oil ratios of oil wells located in fields of Commission District No. 8 (West Texas); and thereafter and thereupon entered and promulgated its Order No. 8-4251, dated December 3, 1942, and amendments thereto, authorizing and requiring gas-oil-ratio tests of oil wells in said district; and

WHEREAS, Upon consideration of the evidence adduced at subsequent hearings and from production records of fields in said district, the Commission is of the opinion and finds that in order to prevent waste in said district its Order No. 8-4251, as amended, should be further amended.

NOW, THEREFORE, IT IS ORDERED (As Amended by Order No. 8-23,708, Effective July 1, 1952.) By the Railroad Commission of Texas that, effective July 1, 1952, Commission Order No. 8-4251, dated December 3, 1942, as amended, be and the same is hereby further amended to require gas-oil-ratio tests of all wells in Commission District No. 8 (West Texas) as hereinbelow set out:

(1) Each operator of oil wells in fields listed on "Exhibit A" attached hereto shall, during the periods set forth on said exhibit, make a gas-oil-ratio test of each such well under the conditions prescribed for such test on Commission Form GO-2 and report the results thereof to the Commission on said form not later than the 15th day of the month following the test period prescribed. On the 16th day of the month following the test period the District Supervisor of said district shall issue pipe line severance notices for all delinquent leases.

(2) It shall be the duty of the District Supervisor of said district to advise the Commission, in writing, of his recommendations for additional fields to be added to said "Exhibit A" and/or deletions therefrom; such recommendations to be made twice each year so as to arrive in the Commission's Engineering Department not later than January 15th and July 15th of each year beginning July 15, 1952.

IT IS FURTHER ORDERED That this cause be held open on the docket for such other and further orders as may be necessary.

"EXHIBIT A"
SCHEDULESHOWING GAS-OIL-RATIO TESTING PERIODS
FOR FIELDS IN RAILROAD COMMISSION DISTRICT
NO. 8, EFFECTIVE JULY 1, 1952.

Survey Periods: January, February, March and July, August and September. All wells to be tested during each period.

Embar Permian	Goldsmith 5600'
Fullerton	Parks (Pennsylvanian)
Fullerton Wolfcamp	Seminole
	T.X.L. Devonian

Survey Periods: December, January, February and June, July, August. All wells to be tested during each period.

Keystone Devonian	Keystone Holt
Keystone Ellenberger	Keystone Silurian

Survey Periods: April, May, June and October, November, December. All wells to be tested during each period.

Abell Upper Permian	Monahans North
Abell Upper McKee	Shipley Silurian
Abell Silurian Montoya	Sweetie Peck Lower Wolfcamp
Cogdell	North Ward Estes
Diamond "M" Canyon Lime	Weiner Colby

Kelly-Snyder
Kermit Ellenberger

Survey Periods: April, May, June (all wells). October, November, December (all wells that had gas-oil ratios in excess of the permitted ratio during the preceding survey period for those wells).

Abell	Keystone (Lime)
Abell (2200' Permian)	Keystone South
Abell (3800' Permian)	Krasner (Clearfork)
Abell North (San Andres)	Levelland
Abell Northwest	Lehn Apco North (1600')
Apco Warner	Mason
Brown & Thorpe (Clearfork)	Monahans (Clearfork)
Brown & Thorpe (Glorietta)	Monahans (Ellenberger)
Chapman	Reinecke
Clairemont (Lower Pennsylvanian)	North Scarborough
Cogdell (San Andres)	North Snyder (Strawn Zone B)
Cordona Lake	North Snyder (Strawn Zone C)
Diamond "M" (Clearfork)	Tunstill
Emperor	Vealmoor
Emperor (Deep)	East Vealmoor
Emperor (Holt)	Von Roeder
Fort Stockton	Wellman
Halley	Wheeler (Devonian)
Hobo (Pennsylvanian)	Wheeler (Ellenberger)
Kelly-Snyder (Cisco)	Wheeler (Silurian)
	Yates

Railroad Commission of Texas

OIL AND GAS DIVISION



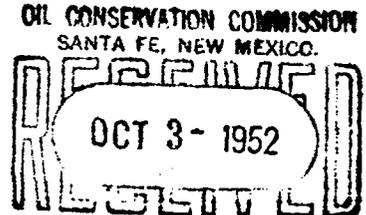
AUSTIN, TEXAS

Case 4 08

COMMISSIONERS
OLIN CULBERSON
CHAIRMAN
ERNEST O. THOMPSON
WILLIAM J. MURRAY, JR.
O. D. HYNDMAN, SECRETARY

HARRY M. BATIS
CHIEF SUPERVISOR
ARTHUR H. BARBECK
CHIEF ENGINEER
L. E. DAVIS
AUDITOR

September 30, 1952



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

Dear Dick:

We have just been advised by the Scharbauer Hotel at Midland that facilities are not available in that hotel for our joint hearing to be held October 7, 1952. We have, therefore, contacted and secured approval to hold the hearing in the City Hall at Midland, Texas on that day. We will, also, see that the bulletin board in the Scharbauer Hotel will reflect where the hearing is to be held.

Kindest personal regards and am looking forward to seeing you at Midland.

Yours very truly,

Arthur
Arthur H. Barbeck,
Chief Engineer

AHB:cbr

10-4-52

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	<input type="checkbox"/>
DAY LETTER	NIGHT LETTER

WESTERN UNION

1206

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise this message will be sent at the full rate	
FULL RATE	<input checked="" type="checkbox"/> LETTER TELEGRAM
VICTORY LETTER	SHIP RADIOGRAM

W. P. MARSHALL, PRESIDENT

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
			State of New Mexico OIL CONSERVATION COMMISSION	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Chairman Olan Culberson
 Texas Railroad Commission
 Tribune Bldg.
 Austin, Texas

New Mexico Commission monthly hearing on October 15. Unable to make Midland hearing on October 14. Suggest October 21.

R.R. Spurrer

DIRECTOR

Case 4-118

Railroad Commission of Texas

OIL AND GAS DIVISION



AUSTIN, TEXAS

October 27, 1952

COMMISSIONERS

GLIN CULBERSON
CHAIRMAN

ERNEST O. THOMPSON

WILLIAM J. MURRAY, JR.

O. D. HYNDMAN, SECRETARY

HARRY M. BATIS
CHIEF SUPERVISOR

ARTHUR H. BARBECK
CHIEF ENGINEER

L. E. DAVIS
AUDITOR

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

Dear Mr. Spurrier:

I am enclosing copy of the transcript covering hearing held in Midland on October 23, 1952 on the Dollarhide Clearfork, Devonian, Ellenberger, and Silurian Fields, Andrews County, Texas.

Yours very truly,

George F. Singletary, Jr.
George F. Singletary, Jr.,
Assistant Chief Engineer

GFS:cbr
ENC.



Memo

From
R. R. SPURRIER
Director

To

This order backdated
because it was
made 1 week before
schedule. Please
affix signature.
R.R.S.

REGISTER

JOINT MEETING OF THE NEW MEXICO OIL CONSERVATION COMMISSION WITH THE
RAILROAD COMMISSION OF TEXAS IN MIDLAND, TEXAS, OCTOBER 23, 1952.

<u>NAME</u>	<u>COMPANY</u>	<u>ADDRESS</u>
White, L. C.	Oil Conservation Commission	Santa Fe, New Mexico
Thompson, Raybourne	Pure Oil Company	Houston, Texas
Duree, Jack T.	Pure Oil Company	Fort Worth, Texas
Keener, M.	Pure Oil Company	Fort Worth, Texas
Herbert, L.	Pure Oil Company	Fort Worth, Texas
Britton, Stanley G.	Pure Oil Company	Midland, Texas
Shaver, Charles E.	Humble Oil & Rfg. Co.	Midland, Texas
Hubbard, W. E.	Humble Oil & Rfg. Co.	Houston, Texas
Porter, A. L. Jr.	Oil Conservation Commission	Hobbs, New Mexico
Ford, Ollie J., Jr.	Magnolia Petroleum Co.	Kermit, Texas
Thurman, Earl G., Jr.	Magnolia Petroleum Co.	Kermit, Texas
Keeler, E. P.	Magnolia Petroleum Co.	Dallas, Texas
Hirschfield, G. H.	N. M. Oil & Gas Engr. Comm.	Hobbs, New Mexico
Massey, H. E.	Cities Prod. Corp. & Cities Service	Hobbs, New Mexico
Bates, W. E.	The Texas Company	Midland, Texas
Mills, John	The Texas Company	Midland, Texas
Ray, C. J., Jr.	The Texas Company	Fort Worth, Texas
Gordon, R. V.	Amerada Petroleum Corp.	Midland, Texas
Blackwood, J. C.	Amerada Petroleum Corp.	Midland, Texas
House, J. W.	Humble Oil & Rfg. Co.	Midland, Texas
Dewey, R. S.	Humble Oil & Rfg. Co.	Midland, Texas
Ponder, J. L.	Humble Oil & Rfg. Co.	Midland, Texas
Hamilton, W. B.	Phillips Petroleum Co.	Midland, Texas
Loveless, Charles C., Jr.	N. M. Oil & Gas Assn.	Roswell, New Mexico
Bedford, C. F.	Stanolind Oil & Gas Company	Fort Worth, Texas
West, T. M.	Moore Expl. Company	Midland, Texas
Winton, J. C.	Gulf Oil Corporation	Midland, Texas
Walker, J. D.	Gulf Oil Corporation	Fort Worth, Texas
Upchurch, Claude E.	Gulf Oil Corporation	Fort Worth, Texas
Newsom, Y. B.	Gulf Oil Corporation	Roswell, New Mexico
Straughan, H. L., Jr.	Gulf Oil Corporation	Roswell, New Mexico
Falcon, F.	Shell Oil Company	Hobbs, New Mexico
Main, M. K.	Shell Oil Company	Midland, Texas
Leonard, R. J.	Leonard Oil Company	Roswell, New Mexico
Elliott, F. O.	Independent Operator	Roswell, New Mexico
Kennedy, Joseph, D.	J. C. Maxwell	Fort Worth, Texas
Haynie, Robert B.	J. C. Maxwell	Midland, Texas
Kaderli, H. H.	Skelly Oil Company	Midland, Texas
Selinger, George	Skelly Oil Company	Tulsa, Oklahoma
Ehlers, Allen	Skelly Oil Company	Midland, Texas
Cooper, J. D.	Skelly Oil Company	Tulsa, Oklahoma
Chapman, J. C.	Skelly Oil Company	Monahans, Texas
Swain, H. W.	Continental Oil Company	Midland, Texas
Clarke, Alex Jr.	Stanolind Oil & Gas Company	Fort Worth, Texas
Smith, James K.	Stanolind Oil & Gas Company	Fort Worth, Texas
Blankenship, W. A. Jr.	Stanolind Oil & Gas Company	Roswell, New Mexico

lh

cc:

General E. O. Thompson
Mr. Geo. Singletary

AMERADA PETROLEUM CORPORATION
TULSA, OKLAHOMA

Case 408
RS

WESTERN UNION TELEGRAM

RUSH

CLASS OF SERVICE **Straight**

DATE **October 23, 1952** TIME **9:50 A. M.**

TO **R. R. Spurrier, Secretary
New Mexico Oil Conservation Commission
& Railroad Commission of Texas Hearing
Council Chamber of the City Hall
Midland, Texas**

URGE STATE LINE POOLS ACCEPT PRESENT NEW MEXICO METHOD
OF DETERMINING ALLOWABLE BELIEVING SUCH ALLOWABLES WILL PROTECT
CORRELATIVE RIGHTS AND WILL NOT RESULT IN PHYSICAL WASTE.

AMERADA PETROLEUM CORPORATION

J. E. LOW

CONFIRMATION

CHARGE—AMERADA PETROLEUM CORPORATION

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
OCT 27 1952

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

June 2, 1953

C
O
P
Y

Mr. George F. Singletary, jr.
Railroad Commission of Texas
Oil and Gas Division
Tribune Building
Austin, Texas

Dear Sir:

Mr. Macey was not sure that copies of the attached orders had been sent to your office as to decisions on the Dollarhide Pools concerning which joint hearings were held by this Commission and the Railroad Commission of Texas. We therefore enclose for your information Orders R-265, R-265-A, and a current allowable order.

It might also be noted that a case is now under advisement whereby pool names are being changed as follows:

West Dollarhide to Dollarhide-Eilenburger;
West Dollarhide-Devonian to Dollarhide-Devonian;
West Dollarhide-Drinkard to Dollarhide-Drinkard;
West Dollarhide-Fusselman to Dollarhide-Fusselman;
West Dollarhide-Queen to Dollarhide-Queen.

Very truly yours,

WR
For W. B. Macey
Chief Engineer

(DISTRICT 8 GAS-OIL RATIO SURVEYS—Cont'd)

Survey Periods: January, February, March (all wells). July, August, September (all wells that had a gas-oil ratio in excess of the permitted ratio during the preceding survey period for those wells).

Adair	Jordan (4500)
Adair (Wolfcamp)	Jordan (Connell)
Addis (Strawn)	Jordan (Ellenberger)
Andector (Ellenberger)	Jordan (Fusselman)
Block 31 (Devonian)	Jordan (Tubb)
Block 31 (Ellenberger)	McElroy
C-Bar (San Andres)	Midkiff (Spraberry)
North Cowden	North Riley
North Cowden (Deep)	Ropes
South Cowden	Sand Hills (McKnight)
Crossett (Devonian)	Sand Hills (Ordovician)
Donnelly (San Andres)	Sand Hills (Tubb)
Driver (Spraberry)	Sand Hills, West
Dune	Tex-Harvey (Floyd Sand)
Edwards	Waddell
Foster	University Waddell (Devonian)
Germania	University Waddell
Johnson	(Ellenberger)
Jordan	Yarborough & Allen

Survey Periods: July, August and September (all wells). January, February, March (all wells that had gas-oil ratios in excess of the permitted ratio during the preceding survey period for those wells).

Anton Irish	Martin Ellenberger
Bedford Devonian	Martin McKee
Bedford Ellenberger	Means
Dollarhide Clearfork	Midland Farms
Dollarhide Devonian	Nelson
East Dollarhide Devonian	Owby
Dollarhide Ellenberger	Russell
Dollarhide Silurian	Russell North Devonian
Embar Ellenberger	Shafter Lake Devonian
Emma	Shafter Lake Ellenberger
Flanagan Clearfork	Shafter Lake Wolfcamp
Fuhrman Mascho	Spraberry Deep
Fullerton 8500'	Three Bar
Fullerton Ellenberger	T.X.L. Ellenberger
Fullerton South Ellenberger	T.X.L. Silurian
Goldsmith	T.X.L. (Tubb Sand)
Goldsmith Clearfork	Union
Goldsmith Devonian	Wasson
Goldsmith North Devonian	Wasson (66)
Goldsmith Ellenberger	Wasson (72)
Goldsmith North	
Goldsmith North Silurian	

Survey Periods: October, November, December (all wells). April, May, June (all wells that had ratios in excess of the permitted ratio during the preceding survey period for those wells).

Brownfield South Canyon	Pecos Valley H. G.
Cedar Lake	Robertson
Dorward	Rocker "A"
Doss	West Seminole
Doss Canyon	Slaughter
Garza	Smyer
Good	Sweetie Peck Devonian
Jones Ranch	Sweetie Peck Ellenberger
Landon	Sweetie Peck Pennsylvanian
Malicky	T.C.I. (San Andres)
	Welch
	Yellowhouse

OTHER PERIODS

Tucker—all wells to be taken quarterly during the months of January, April, July and October.

Salt Creek—all wells to be taken quarterly during the quarters ending on first day of the following months: January, April, July, October.

New Mexico
OIL CONSERVATION COMMISSION

GOVERNOR EDWIN L. MECHEM
CHAIRMAN

LAND COMMISSIONER GUY SHEPARD
MEMBER

STATE GEOLOGIST R. R. SPURRIER
SECRETARY AND DIRECTOR



P. O. BOX 871
SANTA FE, NEW MEXICO

September 19 1952

Editor
HOBS NEWS-SUN
HOBS NEW MEXICO

Dear Sir:

Re: Notice(s) of Publication
Case 408

Please published the enclosed notices one time immediately on receipt of this request. Please proofread carefully and send a copy of the paper carrying such notices to this office.

Upon completion of publication, send publisher's affidavit in duplicate. For payment, please submit statement in duplicate, and sign and return the enclosed voucher. (Do not fill in.) We should have these immediately after publication in order that the legal notice will be on hand for the holding of the hearing which it advertises, and also so that ther will be no delay in your receiving proper payment.

Please publish the notices not later than Immediately on receipt

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. SPURRIER
Secretary - Director

Encl.

THE PURE OIL COMPANY

GENERAL OFFICES, 35 EAST WACKER DRIVE, CHICAGO.

TEXAS PRODUCING DIVISION

P. O. BOX 2107

FORT WORTH 1, TEXAS

December 29, 1952

Mr. W. B. Macey
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Macey:

Attached, please find a copy of the Railroad Commission of Texas order setting forth gas-oil ratio surveys in District 8, in which the Dollarhide Fields are located. This is being forwarded in response to your request, and we wish to express our apologies in being very negligent in getting this particular information forwarded to you.

Yours very truly,

Jack T. Duree
Jack T. Duree

JTD:br
att.

RS

Railroad Commission of Texas

OIL AND GAS DIVISION



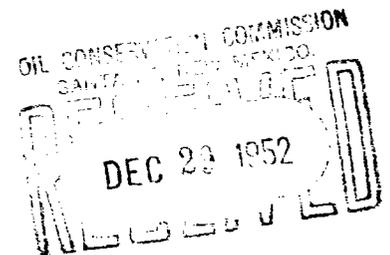
AUSTIN, TEXAS

December 22, 1952

COMMISSIONERS
OLIN CULBERSON
CHAIRMAN
ERNEST O. THOMPSON
WILLIAM J. MURRAY, JR.
O. D. HYNDMAN, SECRETARY

HARRY M. BATIS
CHIEF SUPERVISOR
ARTHUR H. BARBECK
CHIEF ENGINEER
L. E. DAVIS
AUDITOR

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



Dear Dick:

This is in reply to your letter of December 17, 1952, addressed to the Commission, in which your Commission extended invitation to Santa Fe to discuss the promulgation of orders for the Dollarhide Pools.

The Commission, at a conference this date, instructed me to advise you that Commissioners Ernest O. Thompson and Olin Culberson, together with Assistant Chief Engineer, George F. Singletary, Jr., will arrive in Santa Fe for the discussion on January 9, 1953 at 2:00 p.m. A conflict arose in regard to the January 8th date in that the Commissioners are to attend a meeting in Wichita Falls on that date; however, they find it convenient to proceed from that city to Santa Fe on January 9.

We in the Railroad Commission, wish for all of you, our friends in New Mexico, a joyous Christmas and a very Happy New Year.

Yours very truly,

A handwritten signature in cursive script that reads "Arthur H. Barbeck".

Arthur H. Barbeck,
Chief Engineer

AHB:cbr

cc - General Ernest O. Thompson
Judge Olin Culberson
Mr. George F. Singletary, Jr.

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

SYMBOLS

DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

W. P. MARSHALL, PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

.LA63 DA393

D= AUA223 RX PD=AUSTIN TEX 4 1200P=

Case 408

:DICK SPURRIER=

:STATE CAPITOL SANTA FE NMEX=

DUE TO THE CRITICAL ILLNESS AND MOMENTARILY EXPECTED DEATH OF MRS ERNEST THOMPSON WIFE OF GENERAL THOMPSON THE HEARING SCHEDULED FOR MIDLAND OCTOBER 7 WILL BE POSTPONED UNTIL OCTOBER 14 AT THE SAME HOUR AND PLACE THIS FOR YOUR INFORMATION=(

DLIN CULBERSON CHAIRMAN RAILROAD COMMISSION OF TEXAS=1

35014
[Handwritten signatures and notes]

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	<input checked="" type="checkbox"/> SERIAL
DAY LETTER	NIGHT LETTER

WESTERN UNION

1206

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise this message will be sent at the full rate	
FULL RATE	DEFERRED
CODE	NIGHT LETTER

W. P. MARSHALL, PRESIDENT

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
		Paid	Oil Conservation Commission	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Sept. 17-1952

Olin Culberson
Texas Railroad Commission
Austin, Texas

Agreeable New Mexico Oil Conservation Commission to meet in Midland for hearing on Dollarhide Pool week of October 6th. Prefer 7th or 8th. Have no interest in Texas football.

New Mexico Oil Conservation Comm.
By: R. R. Spurrier
Secretary - Director

lh: cc: Gen. E. O Thompson
Wm. J. Murray, Jr.

Case 408

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WESTERN UNION

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W. P. MARSHALL, PRESIDENT

SYMBOLS

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=(44)55

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LA96 KA403

K TUB386 PD=TULSA OKLA 18 405P=

FR R SPURRIER=

SEP 18 PM 4 1952

OIL CONSERVATION COMMISSION MABRY HALL SANTA FE NMEX=

PLEASE ADVISE DATE OF JOINT HEARING WITH TEXAS RAILROAD COMMISSION AS SOON AS SET=

GEORGE W SELINGER SKELLY OIL CO=

Case 408

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.
RECEIVED
SEP 18 1952
ALBETT

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM THE PATRONS CONCERNING THE SERVICE

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a full rate telegram	
FULL RATE TELEGRAM	
DAY LETTER	NIGHT LETTER

WESTERN UNION

1206

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise this message will be sent at the full rate	
FULL RATE	LETTER TELEGRAM
VICTORY LETTER	SHIP RADIOGRAM

W. P. MARSHALL, PRESIDENT

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
			OIL CONSERVATION COMMISSION	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Call to

SEPTEMBER 19 1952

**MR GEORGE SELINGER
SKELLY OIL COMPANY
TULSA OKLAHOMA**

JOINT HEARING SET FOR 10 A.M. OCTOBER 7 SCHARBAUER HOTEL MIDLAND

DICK SPURRIER

CLASS OF SERVICE
 This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

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SYMBOLS
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VLT=Int'l Victory Ltr.

W. P. MARSHALL, PRESIDENT

(33)

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LA02 DA604

D= AUA608 PD=AUSTIN TEX 17 529P=

R R SPURRIER=

NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE NMEX=

HEARING SET AS PER YOUR REQUEST 10 AM BAKER HOTEL DALLAS
 OCTOBER 10

ERNEST O THOMPSON RR COM=

OIL CONSERVATION COMMISSION
 SANTA FE, NEW MEXICO.
RECEIVED
 SEP 18 1952

Hearing date Oct. 7th Seabower Hotel Midland

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

W. P. MARSHALL, PRESIDENT

SYMBOLS

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VLT=Int'l Victory Ltr.

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LA69 DA383

D. AUB174 PD=AUSTIN TEX 18 322P=

R R SPURRIER, SECRETARY=

OIL CONSERVATION COM SANTA FE NMEX=

OIL CONSERVATION COMMISSION
SANTA FE NEW MEXICO.
RECEIVED
SEP 18 1952

JOINT HEARING WITH NEW MEXICO OIL CONSERVATION COMMISSION FOR DETERMINING EQUITABLE ALLOWABLES FOR THE DOLLARHIDE FIELDS EXTENDING ACROSS THE TEXAS AND NEW MEXICO STATE LINES HAS BEEN SCHEDULED BY THE TEXAS RAILROAD COMMISSION AT TEN AM TUESDAY OCTOBER 7, 1952 IN THE SCARBAUER HOTEL IN MIDLAND TEXAS=

HARRY M BATIS CHIEF SUPERVISOR OIL AND GAS DIV
RR COM OF TEX=

Case 408

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE
 This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1220

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

W. P. MARSHALL, PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

LA 94 DB383

D. AUB201 LONG PD=AUSTIN TEX 16 504P=
 R R SUPURRIER, SECY=

SEP 16 PM 4 50

OIL CONSERVATION COMMISSION=SANTA FE NMEX=

AT YOUR SUGGESTION THE HEARING ON THE DOLLARHIDE FIELD WAS DIRECTED TO BE SET AT MIDLAND TEXAS ON OCTOBER 10. IT NOW DEVELOPS THAT COMMISSIONER THOMPSON HAS INSTRUCTED OUR PROATION DEPARTMENT TO SET IT AT THE BAKER HOTEL AT DALLAS ON OCTOBER 10. THIS IS THE DAY BEFORE THE TEXAS OKLAHOMA GAME AND IT WILL BE IMPOSSIBLE TO GET ANY PLACE IN DALLAS TO MEET. IF YOUR COMMISSION WANTS TO COME TO THE FOOTBALL GAME I FEEL THAT IT SHOULD DO SO WITHOUT USING THIS HEARING AS AN EXCUSE. EXCEPT AND UNLESS YOUR COMMISSION DESIRES IT TO BE HELD THERE INSTEAD OF IN MIDLAND I WILL NOT SIGN THE NOTICE SETTING IT THERE. PLEASE ADVISE BY WIRE AT ONCE=

OLIN CULBERSON, CHAIRMAN RAILROAD COMMISSION OF TEXAS:

Case 408

SEP 17 1952
 SANTA FE, NEW MEXICO
 OIL CONSERVATION COMMISSION

MCR

Leafoak -

6545

- 2000 91 (4-6000-7000) ^{Per} well
4000 117

Devonian -

8050

- 100 (75 ac 25 well) 40

Silurian -

8345

- 180 (75 25) 40

Ellenberg -

10,000

- 100 (75 25) 40



Canadian Pacific Hotels

BANFF SPRINGS HOTEL
BANFF, ALBERTA

Memo

From
R. R. SPURRIER
Director

To Gov. Mechem

Please advise if the
date is satisfactory
to you and I will
answer (Barbeck)
Texas RR Comm
accordingly

RECEIVED
OFFICE OF THE GOVERNOR
SANTA FE, N.M.
DEC 29 1 58 PM '92

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 16, 1953

C
 Mr. George Singletary,
 Assistant Chief Engineer
 Railroad Commission of Texas
 Tribune Building
 AUSTIN, TEXAS

Dear Sir:

O
 Following is a tabulation of the 1953 scheduled dates in New Mexico for Gas-Oil Ratio Surveys and Bottom Hole Pressure Surveys in the Dollardhide Pools of West Texas and New Mexico:

POOL.....	West Dollardhide Drinkard	West Dollardhide Devonian	West Dollardhide Fusselman	West Dollardhide Ellenburger
P Gas-Oil , Ratios	January	January & February	January	January & February
Y Bottom-Hole, Pressures	November	April	February	August

I believe it would be advisable to have two surveys a year in the Fusselman (Silurian) and Ellenburger zones, in February and August. Since we have already established our 1953 GOR survey dates and since in some cases the ratios have probably already been run, we might forgo trying to establish dates that correspond for the pools during 1953 and get together before 1954 and set definite dates. I doubt very seriously if any of the New Mexico wells in any of the zones are over the limiting ratio of 2000.

We are going to write our order and provide for definite dates as outlined above for bottom-hole pressures. Our first order will be an emergency order effective February 1, 1953, since the Attorney General tells us it isn't legal for us to have hearings outside New Mexico. However, we are going to call a hearing for the month of February and introduce the record of the Midland meeting, and operate the field on the allowables as agreed upon under an emergency until a final order can be written.

Let me know what you think of the survey dates.

Yours very truly,

WBM:nr

W. B. Macey, Chief Engineer

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

December 17, 1952

**Texas Railroad Commission
Tribune Building
Austin, Texas**

Gentlemen:

The New Mexico Oil Conservation Commission extends to you an invitation to Santa Fe to discuss the promulgation of orders for the Dollarhide Pools.

I respectfully suggest that you come January 8th to the 14th, 1953, the 8th being preferable. Please advise.

We also take this opportunity to wish you all a Merry Christmas and a Happy New Year.

Sincerely yours,


R. R. Spurrier
Secretary - Director

RRS:lh

cc:

Governor Edwin L. Mechem

Mr. E. S. Walker

C

O

P

Y

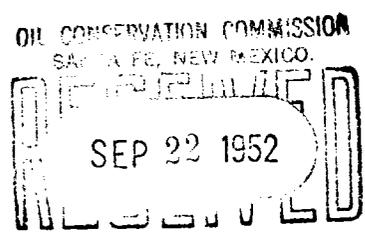
			<u>40</u>
5000 - 6000	-	1.33	60
6000 - 7000	-	1.77	80
7000 - 8000	-	2.33	105
8000 - 9000	-	3.00	135
9000 - 10,000	-	3.77	170
10,000 - 11,000	-	4.67	211
11,000 - 12,000	-	5.67	256
12,000 - 13,000	-	6.75	304
13,000 - 14,000	-	8.00	360

				N.m.	Tex.	
9600	West Dollenhede (Ellenberger)	-	4.67	-	211	100
6100	<u>Orinburg</u> (Clearfork)		1.77	(70)	80	91
8150	Fusselman		3.00		135	180
7400	Denonian		3.00	(75)	135	100

Well Database Pools

Pool	Co.	Lease	Well No	Unit-sec	Elev.	TD	Gloe	Tobbs	Woodford	Dev.	T.S./In.	T.Simp	T.Mix	T.D.
Ellen	Gulf	LEONARD A	79	M-33	3177	10310	5180	6050	7535	7640	8690	9365	9745	1025
	SKelly	Mexico T	1	D-32	3170	10200	5165	6085	7610	7610	8690	9300	9645	1018
Devonian	Gulf	LEONARD A	11	K-33	3185	8025	5250	6120	7600	7720	8690	9130	9508	1000
	"	"	15	F-33	3181	8062	5095	6210	7590	7835	8690	9215	9650	1015
	STANLIND	STATE Y	1	H-32	3197	8935	5225	6175	7555	7553	8690	9186	9492	1001
	Texas Co	Penny	2	I-5	3148	8405	5317	6190	7700	8177	8690	9250	9778	1057
Fusselman	ELLIOTT	ELLIOTT-A11	1	H-31	3144	8691	5105	5965	7580	7580	8610	9328	9712	1027
	SKelly	Mexico T	3	I-32	3190	10320	5200	6068	7545	7654	8661	9328	9712	1027
	"	"	5	L-32	3157	8745	5106	6220	7470	7583	8668	9333	9778	1057
Deerham	SKelly	Mexico T	2	H-5	3169	10215	5170	6040	7515	7625	8625	9333	9778	1057
	ELLIOTT	MEXICO K	1	P-29	3219	9177	5367	5980	8016	8016	8661	9328	9712	1027
Queen	SINCLAIR	STATE A2A	1	A-6	3114	3749	5023	6140						
	SKelly	MEXICO O	1	H-6	3125	6997	5023	6140						

WRM



RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

OIL AND GAS DOCKET NO. 126
#8 - 24,494

IN RE: CONSERVATION AND PREVENTION OF
WASTE OF CRUDE PETROLEUM AND
NATURAL GAS IN THE DOLLARHIDE
CLEARFORK, DOLLARHIDE DEVONIAN,
DOLLARHIDE ELLENBERGER, AND
DOLLARHIDE SILURIAN FIELDS,
ANDREWS COUNTY, T E X A S

Austin, Texas
September 18, 1952

NOTICE OF HEARING
PERTAINING TO A DETERMINATION OF EQUITABLE ALLOWABLES
FOR THE DOLLARHIDE CLEARFORK, DOLLARHIDE DEVONIAN, DOLLARHIDE ELLENBERGER
AND DOLLARHIDE SILURIAN FIELDS, AND THE ADOPTION OF FIELD RULES
FOR THE DOLLARHIDE CLEARFORK FIELD
ANDREWS COUNTY, TEXAS

NOTICE IS HEREBY GIVEN To the public and all interested persons that the Railroad Commission of Texas, on its own motion, will hold a Hearing, in conjunction with the Oil Conservation Commission of New Mexico, at ten a.m., TUESDAY, OCTOBER 7, 1952, in the Scharbauer Hotel in Midland, Texas, for the purpose of adjusting allowables for the Dollarhide Clearfork, Dollarhide Devonian, Dollarhide Ellenberger, and Dollarhide Silurian Fields, all located in Andrews County, Texas, and for the further purpose of adopting field rules for the Dollarhide Clearfork Field in order to bring about the most efficient rate of production from these reservoirs.

Since these Dollarhide reservoirs extend across the state lines and inequities in field allowables exist as a result of differences in the methods of their determination in the two states, a previous joint meeting was held in Santa Fe, New Mexico, by the Railroad Commission of Texas and the Oil Conservation Commission of New Mexico for the purpose of discussing the problem of inequities in withdrawals from the Dollarhide reservoirs in the two states; and as a result of that meeting and because of the progress in the development of the fields, this Hearing is called, and is to be heard jointly with a similar Hearing to be called by the Oil Conservation Commission of New Mexico for the purpose of determining what allowables are necessary to bring about an equity in the withdrawals of oil from the Dollarhide Clearfork, Dollarhide Devonian, Dollarhide Ellenberger, and Dollarhide Silurian reservoirs extending across the state lines of Texas and New Mexico.

PURSUANT To said Hearing, the Commission will enter such rules, regulations, and orders as in its judgment may be necessary as a result of the findings of the two regulatory bodies.

RAILROAD COMMISSION OF TEXAS
Olin Culberson, Chairman
Ernest O. Thompson, Commissioner
W. J. Murray, Jr., Commissioner

(SEAL)

ATTEST:

O. D. Hyndman, Secretary

Case 408
RS

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

OIL AND GAS DOCKET NO. 126

#8 - 24,657

IN RE: CONSERVATION AND PREVENTION OF
WASTE OF CRUDE PETROLEUM AND
NATURAL GAS IN THE DOLLARHIDE
CLEARFORK, DOLLARHIDE DEVONIAN,
DOLLARHIDE ELLENBERGER, AND
DOLLARHIDE SILURIAN FIELDS,
ANDREWS COUNTY, T E X A S

Austin, Texas
October 7, 1952

NOTICE OF HEARING
PERTAINING TO A DETERMINATION OF EQUITABLE ALLOWABLES
FOR THE DOLLARHIDE CLEARFORK, DOLLARHIDE DEVONIAN, DOLLARHIDE ELLENBERGER
AND DOLLARHIDE SILURIAN FIELDS, AND THE ADOPTION OF FIELD RULES
FOR THE DOLLARHIDE CLEARFORK FIELD
ANDREWS COUNTY, TEXAS

NOTICE IS HEREBY GIVEN To the public and all interested persons that the Railroad Commission of Texas will, at ten a.m., OCTOBER 23, 1952, in the Council Chamber of the City Hall, in Midland, Texas, hold the Hearing it heretofore scheduled by its Notice of Hearing No. 8 - 24,494 to be heard at ten a.m., OCTOBER 7, 1952, in Midland, Texas, in conjunction with the Oil Conservation Commission of New Mexico, for the purpose of adjusting allowables for the Dollarhide Clearfork, Dollarhide Devonian, Dollarhide Ellenberger, and Dollarhide Silurian Fields, all located in Andrews County, Texas, and for the further purpose of adopting field rules for the Dollarhide Clearfork in order to bring about the most efficient rate of production from these reservoirs.

Since these Dollarhide reservoirs extend across the state lines and inequities in field allowables exist as a result of differences in the methods of their determination in the two states, a previous joint meeting was held in Santa Fe, New Mexico, by the Railroad Commission of Texas and the Oil Conservation Commission of New Mexico for the purpose of discussing the problem of inequities in withdrawals from the Dollarhide reservoirs in the two states; and as a result of that meeting and because of the progress in the development of the fields, this Hearing was called, and is to be heard jointly with a similar Hearing to be called by the Oil Conservation Commission of New Mexico for the purpose of determining what allowables are necessary to bring about an equity in the withdrawals of oil from the Dollarhide Clearfork, Dollarhide Devonian, Dollarhide Ellenberger, and Dollarhide Silurian reservoirs extending across the state lines of Texas and New Mexico.

FOLLOWING Said Hearing, the Railroad Commission of Texas will enter such rules, regulations, and orders as in its judgment may be necessary as a result of the findings of the two regulatory bodies.

RAILROAD COMMISSION OF TEXAS

Olin Culberson, Chairman

Ernest O. Thompson, Commissioner

W. J. Murray, Jr., Commissioner

(S E A L)

ATTEST:
O. D. Hyndman, Secretary

Case 408

January 8, 1953

MEMORANDUM TO THE COMMISSION:

Commission-called hearing pertaining to the Dallarhide Clearfork, Dallarhide Devonian, Dallarhide Ellenburger and Dallarhide Silurian Fields, Andrews County, Texas

HEARING -

October 23, 1952

APPEARANCES -

See transcript

This was a joint hearing held by the Texas Railroad Commission and the Oil Conservation Commission of New Mexico for the purpose of adjusting allowances for the above-named fields, all located in Andrews County, Texas and for the further purpose of adopting field rules for the Dallarhide Clearfork in order to bring about the most efficient rate of production from these reservoirs.

Testimony introduced by various operators concerned indicates that the Dallarhide Clearfork and Dallarhide Devonian fields produce from the respective reservoirs, which are common across State lines in Andrews County, Texas and Lea County, New Mexico. Information submitted by the same operators indicates that the Ellenburger reservoir and the Silurian reservoir are separated between states by a saddle containing water.

Reservoir information on the Clearfork is as follows: average porosity, 10.4%; average permeability, 9.2 md.; average interstitial water saturation, 18.20%; original water-oil contact, -3750'; dip of the producing zone, approximately 300' per mile in the south end of the reservoir; estimated saturation pressure, 2190 psi at 3400'; formation volume factor at the saturation pressure, 1.402; original reservoir pressure, 2889 psi at -3400'; present reservoir pressure, 1836 psi at -3400'. The Dallarhide Clearfork structure is anti-clinal with a major axis running north and south and the reservoir produces from approximately 6200' to 7000' from Dolomite and Limestone contacts from fissured and some regular porosity. Porosity development is heterogeneous with poor correlation of individual porosity streak between adjacent wells. The occurrence of porosity does not necessarily follow the streak, therefore, the success of an individual well depends largely on whether the well penetrates porous and permeability zones. Production history to date is typical of solution-gas drive reservoirs.

Physical properties of the Devonian reservoir are as follows: average porosity, 12.5%; average permeability, 39.5%; average water saturation, 19.9%; original water-oil contact, -5300'; dip of the producing zone, 750' per mile to the west; saturation pressure, 2775 psi at -4600'; estimated original reservoir pressure, 3233 psi at -4600'; present reservoir pressure, 2166 psi at -4600'; formation volume factor at saturation pressure, 1.695; formation volume factor at present reservoir pressure, 1.56; dissolved gas-oil ratio, 1190 at the original pressure

ILLEGIBLE

and the saturation pressure; the present reservoir pressure dissolved gas-oil ratio, 930. The Dollardike Devonian structure is a north-south faulted anticline defined by a major north-south fault to the east and by the formations dipping into the water-oil contact on the west. Poor communication across the southernmost of the fault is evidenced by bottom-hole pressures in the south end of the field being consistently lower than those in the field north of the fault. Production is from a fractured dolomite and weathered chert of the Devonian age. Only difficulty is with wells located high on structures which are high gas-oil ratio wells. This, however, is to be expected in a solution-gas drive field having good gravity segregation.

No reservoir information was submitted on either the Ellenberger or Silurian reservoirs.

It is recommended that:

1. The Clearfork and Devonian Fields be exempted from shutdown days.
2. The allowable for the Clearfork be established at 91 barrels per day.
3. The Devonian allowable be established at 100 barrels of oil per day.
4. The field rules now in effect for the reservoirs other than the Clearfork be adopted by the Clearfork Reservoir, which are as follows:
 - a. Spacing, 550' from property line and 933' between wells drilled to the same horizon.
 - b. Surface casing set 20' below top of the red beds and cementing to the surface; intermediate string set 100' into the white lime underlying the Yates.
 - c. Original units of 40 acres.
 - d. Allocation based 75% on acreage and 25% per well.

Since no up-to-date reservoir performance was submitted on the Ellenberger and Silurian, it is difficult to recommend a MER for these two reservoirs, however, apparently both reservoirs have a water-drive and both reservoirs produce in both New Mexico and Texas with a water table between. In New Mexico the allowable for Ellenberger wells is 211 barrels per day, while in Texas it is 100 barrels per day. In New Mexico the allowable for Silurian wells is 135 barrels per day and in Texas it is 180 barrels per day. In the opinion of the writer, the allowables for these two fields should be more nearly equal in Texas and New Mexico and should be so set after discussion with representatives of the New Mexico Commission.

Respectfully submitted,

LLEGIBLE

George F. Singletary, Jr.,
Assistant Chief Engineer

GFB:chr

RECOMMENDATION APPROVED:

RECOMMENDATION REJECTED:

_____	CHIEF ENGINEER	_____
_____	CHAIRMAN	_____
_____	COMMISSIONER	_____
_____	COMMISSIONER	_____