

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

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February 14, 1944

Mr. Chas. C. Roripaugh  
Division Manager  
Shell Oil Company, Inc.  
Petroleum Building  
Midland, Texas

Dear Mr. Roripaugh:

At Mr. Staley's request permission is hereby granted the Shell Oil Company to run distillate with oil from your State A No. 1 gas well, Hobbs Pool, New Mexico, in the total amount of 1000 barrels pending a permanent decision of this Commission in this matter.

Very truly yours,

John M. Kelly  
Director.

JMK:MS  
cc Glenn Staley

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

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October 5, 1943

Mr. Chas. C. Roripaugh  
Division Manager  
Shell Oil Company, Inc.  
Petroleum Building  
Midland, Texas

Dear Mr. Roripaugh:

Your request of September 23rd requesting permission to run distillate with oil is being held up pending an Order of this Commission, requested at public hearing by the Gulf Oil Company on a similar case in the same pool.

You will be notified as to the result of this case and therefore will be able to guide your future requests accordingly.

Very truly yours,

John M. Kelly  
Director.

JMK:MS



SHELL OIL COMPANY  
INCORPORATED

PETROLEUM BUILDING

MIDLAND, TEXAS

September 23, 1943

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Gentlemen:

We herewith request temporary permission to be allowed to run to the pipe line distillate produced in conjunction with the gas production from our State "A" No. 1 gas well, completed from the Byers Sand in the Hobbs Pool. This permission is requested on a temporary basis, pending the results of your consideration of the request by the Gulf Oil Corporation for the establishment of a distillate allowable for their gas well producing from the Byers Sand. } *Δ E A L O N E Unit G*

Six barrels of distillate per day are produced from approximately one-half million cubic feet of gas, this being the average daily gas flow from the well at this time. As the distillate is extremely volatile, a greater portion is recovered by mixing with the oil rather than allowing it to accumulate in a separate tank. This request for permission to run the distillate on a basis of six barrels per day is therefore made so that the distillate can be produced and run with the oil from the lease to recover the greatest percentage of the distillate.

Yours very truly,

SHELL OIL COMPANY, INC.

By: *Charles D. Orin*  
Division Manager

*RUF.*  
JHM:RUF:ud:rj

*Also on same unit are Shell State 2 & 4 for the full amount of the unit allowable - see Permitting Schedule for 9-43 - in Pro. Ach 10-43 GOR 3800. Map 3500 for Hobbs. Also, 10-43 Pro Ach. shows Humble-Bowers A5 N E S E, Unit I, 30 185-38 E producing full amount of unit allowable, on which unit full production in Case 46, asserts Humble-Bowers A1, is completed as R. Gas Sand.*

Case 46

JUL 14 1943

P. O. Box 2038  
Pittsburgh, 30, Pa.

July 10, 1943

Mr. Rush Greenslade  
Tulsa, Oklahoma

Subject: West Grimes No. 4 - RK-23

Dear Sir:

Please refer to your letters dated June 3 and July 7, in regard to reservoir conditions in the 3700-foot sand at Hobbs, New Mexico, and to a sample taken from the well at 3500 ft. in the latter part of June.

Shortly after receiving the sample, the pressure in the bomb was raised to 2500 psi at 92°F., its contents agitated to insure equilibrium, and a portion was transferred to our dew point apparatus. The pressure was then slowly dropped at constant temperature until liquid was observed. From these observations, it was concluded that the dew point of the contents of the bomb was approximately 750 psi, indicating that it was dry gas at reservoir temperature and at pressures above 750 psi.

While, for reasons already discussed with Dr. Knappen and Mr. Gray, observations made on bottom hole samples such as that sent to us from Grimes 4 cannot be regarded as comparable to those made on separator samples taken from tubed wells, there can be little doubt that the fluid entering the well is a single phase gas. Confirmation of this conclusion is obtained from the very high ratio of gas to liquid (100,000 cubic feet per barrel) and the complete absence of color in the condensate as reported from the field. In recombination experiments made in this laboratory on fluids from many reservoirs, we have never found a case of such high gas-fluid ratio which did not assume single phase when brought to reservoir conditions, nor is there a single instance where a fluid producing a water-white liquid did not likewise assume single phase.

It is understood that tubing will be run in the well at some future time. If so, perhaps it would be worthwhile to obtain separator samples so that data of greater accuracy could be secured.

JUL 15 1943

Mr. Rush Greenslade  
Page 2

July 10, 1943

There is attached a drawing of the bomb as received as requested  
by Mr. Gray.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Paul D. Foote".

Paul D. Foote

HTK/mso

RECEIVED  
JUL 11 1943

NEW MEXICO  
OIL CONSERVATION COMMISSION

GOVERNOR JOHN E. MILES, Chairman  
STATE LAND COMMISSIONER H. R. RODGERS, Member  
STATE GEOLOGIST JOHN M. KELLY, Secretary



P. O. Box 871

SANTA FE, NEW MEXICO

December 29, 1942

Mr. J. W. Anderson  
Division Superintendent  
Gulf Oil Corporation  
Gypsy Production Division  
Hobbs, New Mexico

Re: C-110 for Well No. 4 (gas well), Unit C, 32-18S-38E.

Dear Mr. Anderson:

Reference is made to your letter of December 24 submitting C-110 to cover the above captioned gas well producing condensate along with the gas used for commercial purposes. Accompanying your letter is C-102 and C-103 approved to plug back so as to turn the well in question into a gas well.

On the December Proration Schedule is Gulf, West Grimes No. 7, an oil well on the same proration unit. There is also in the well file for the latter well an approved C-110. The question arises whether there should be an additional C-110 to cover well No. 4, the gas well producing condensate, or whether there should be a new C-110 to cover both the oil well and the gas well producing condensate.

Circular 5, Division 2, Rule 35, governs the issuance of C-110.

A new C-110 is to be executed and submitted for approval in three cases; namely, upon the change of operating ownership, change of transporter or when C-110 is cancelled by the Commission for cause.

The instant situation covers neither of the foregoing cases. The instant case is simply including in C-110 an additional well which is a gas well producing some condensate. The well in question producing condensate should be covered by C-110 in that it produces "liquid hydrocarbons from a gas well" as provided by said rule. If, however, the new C-110 to cover the gas well only which you submit is approved it may cause some confusion as to the existing C-110 to cover the oil well on the same unit. Since no new C-110 is required and since the gas well producing the condensate should be within the provisions of C-110 the following is recommended: Revise a C-110 which you submit along the following lines: at the top designate it as "amended". In the space for "Wells No. \_\_\_\_\_", insert No. 4 and 7, indicating No. 4 as gas well producing condensate. There is not enough space for this but you can

12-29-42

attain the result by interlineation. Within the body of the amended C-110, for the purpose of clarity of records for all parties concerned, state in substance that this amended certificate is intended to amend C-110 covering Gulf, West Grimes well No. 7, an oil well, dated December 10, 1941, and approved December 23, 1941, so as to include Gulf, West Grimes No. 4, a gas well producing condensate.

In making your C-115, Monthly Report, report the production of the condensate in accordance with the directions just below the middle of said report designated as: "(4) Report distillate, condensate or other liquid hydrocarbons (other than oil) in this column, starting with \*." That will keep the oil and the condensate produced upon the same unit separated so as to preclude confusion.

The C-110 which you submitted and the enclosures C-102 and C-103 in proof of your compliance with the rules and regulations to turn said well into a gas well are herewith returned.

I hope the foregoing suggestions will straighten the matter out for you.

Very truly yours,

Carl B. Livingston  
Chief Clerk & Legal Advisor.

CEB:MS  
cc Glenn Staley  
Roy Yarbrough  
Shell Pipe Line Company - Houston

Hobbs, New Mexico  
July 24, 1943

Mr. W. B. Wilson  
Box 661  
Tulsa, 2 Oklahoma

Dear Sir:

In view of the hearing before the State Oil Conservation Commission concerning the disposal of condensate produced in the Company's No. 4 West Grimes gas well, pertinent data relative to the gas reservoir has been requested. A report is herewith submitted on the investigation of available data pertaining to the "Big Gas" or Byers zone. These data have been compiled primarily to determine, if possible, what fluid media - as they are commonly recognized - are present within this reservoir. It is not within the scope of this report nor am I qualified to discuss the phenomena related to the condensation of gas and whether or not such phenomena occur within the reservoir or within the bore hole.

Much exact data relative to the Byers zone are lacking. Sample information is particularly meagre, but from the few widely distributed logs that are available, some idea as to the lithology, thickness, and stratigraphic position of the zone are possible.

The Byers zone appears to have an average thickness of 25 feet, and is composed predominantly of porous sandstone although interbedded anhydrite and dolomite are present. Of particular importance is the fact the zone occurs over the structure at the uniform interval of 300 feet above the top of the Hobbs dolomite. From this apparent uniformity of interval, it is possible to estimate with some degree of accuracy the position of the zone in many wells from which samples are lacking through this portion of the stratigraphic section.

The method of procedure in attempting to ascertain what showings were reported from this zone has been to closely examine scout tickets, drilling records, and any other available data on all wells within the pool. If any showing were reported which fell within the interval between a maximum of 320 feet and a minimum of 280 feet above the Hobbs dolomite, it was assumed to be in the Byers and in the rare cases where possible was confirmed by samples. The nature of the showings and the respective wells from which they were reported have been indicated on the accompanying copy of the structure map of the field.

In evaluating these data, the most concrete evidence is furnished from those wells where either a blow-out occurred and some estimate of gas

JUL 26 1943

Page 2

Mr. W. B. Wilson

July 24, 1943

was possible, or where definite information regarding water was reported as in the several wells drilled with cable tools in the south end of the pool. Gas ranging in volume from 2,000 MCF to 80,000 MCF was reported in 11 wells. Salt water was encountered in 5 wells and in one instance, in the Stanolind No. 26 Capps, SE SW 3- 19S-38E, a showing of gas was reported in the top of the sand although the main portion of the zone was water-bearing.

Drillers records, particularly in those wells where rotary equipment was used, are not top dependable, and in view of the fact that in only 4 wells was a showing of oil and gas reported by the driller, such meagre evidence is hardly sufficient to confirm the presence of oil within the reservoir. However, if only from their numerical preponderance, some consideration should be given the numerous gas showings recorded in drilling reports. Also the fact that the wells in which these showings were reported are segregated on the higher part of the structure is added verification of them as evidence that only gas is present over the greater part of the structure. It will be noted from the map that with but few exceptions all the gas showings reported fall within the minus 400 foot contour (as drawn on the Hobbs dolomite).

Direct evidence relative to the existence of oil within the reservoir is lacking. Particularly significant is the fact that in the Stanolind No. 11 Byers, NE NE 4-19S-38E, some 7,000 MCF gas were encountered in the Byers zone while in the southwest offset, the No. 33 Byers, which is only 12 feet lower structurally, a hole full of water was reported. It is improbable that oil could have been confined to such a limited interval without having been indicated in either of the above wells. Mention was previously made of the well in which both gas and water were present within this zone.

The evidence suggests the following conditions relative to the Byers reservoir: It is a zone composed predominantly of porous sandstone and has an average thickness of 25 feet. It occurs over the structure at a relatively uniform interval of 300 feet above the Hobbs dolomite. Over the greater portion of the structure - more specifically, within the minus 400 foot contour - the zone may be expected to contain only gas, and throughout the remaining portion, or along the flanks, the zone contains salt water or is barren. There is no direct evidence that the reservoir contains oil.

Respectfully submitted,

*R. L. Boss*

R. L. Boss

cc - Mr. S. G. Sanderson (2)

RLP/zbm

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

well is produced primarily for gas, the production of said liquid hydrocarbons is incidental to such gas production.

3. On the same 40-acre tract is Gulf Oil Corporation-West Grimes Well No. 7, producing from a reservoir, predominately oil, in the White Crystalline Lime below the Big Gas Sand Zone, shown on the proration schedule as Unit C and as a non-marginal unit producing the full allowable of crude petroleum oil under applicable proration orders.

IT IS THEREFORE ORDERED:

A. That the pool in the Big Gas Sand Zone shall be designated as the Big Gas Sand Pool in the Hobbs Field.

B. That Gulf Oil Corporation-West Grimes Well No. 4 shall be permitted to produce and market said water white liquid hydrocarbons in whatever amount produced in the manner set out in 2 above, notwithstanding any proration order or gas-oil ratio order; provided that the gas thus produced does not exceed in volume 25% of its open flow potential.

C. That Gulf Oil Corporation-West Grimes Well No. 7 and the proration of its production to its corresponding Unit C, as set out in 3 above, are unaffected by this order.

That this order shall become effective on the first day of the proration month next succeeding the month in which said order is adopted. The production and marketing of said water-white liquid hydrocarbons from said Well No. 4 theretofore are ratified and confirmed. Reservation is made herein for a final order upon further hearing as provided by law.

Done at Santa Fe, New Mexico, on the day and year hereinabove designated.

OIL CONSERVATION COMMISSION

JOHN J. DEMPSEY, CHAIRMAN

H. R. RODGERS, MEMBER

JOHN N. KELLY, SECRETARY

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OIL CONSERVATION COMMISSION  
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 THE  
STATE OF NEW MEXICO FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 46

ORDER NO. \_\_\_\_\_

THE APPLICATION OF THE GULF OIL  
CORPORATION TO CONNECT TO PIPE LINE  
AND RUN CONDENSATE FROM ITS WEST  
GRIMES NO. 4 LOCATED IN THE NORTHEAST  
QUARTER OF THE NORTHEAST QUARTER OF THE  
NORTHWEST QUARTER OF SECTION 32, TOWNSHIP  
18 SOUTH, RANGE 38 EAST, HOBBS POOL, NEW  
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at ten o'clock A.M., August 3, 1943, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 1943, the Commission having before it for consideration the testimony adduced at the hearing of said case and being fully advised in the premises, the Commission finds:

F I N D I N G S

1. That the Big Gas Sand Zone is in the general structure of the Hobbs Field, is a reservoir containing an important common accumulation of natural gas, is completely separated from any zone now producing in the White Crystalline Limestone below, thereby constituting the Big Gas Sand Zone, a separate pool within the meaning of the basic Oil Conservation Act as amended.

2. That the Gulf Oil Corporation-West Grimes Well No. 4, in the NE1/4 Section 32, 18S-38E, has been recompleted as a gas well so as to produce from the Big Gas Sand Zone. Said well is producing large quantities of gas, being beneficially utilized for fuel purposes. With such gas production is produced at the surface a substantial quantity of water-white liquid hydrocarbons of high gravity and of a highly volatile nature. Said

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# NEW MEXICO OIL CONSERVATION COMMISSION

GOVERNOR JOHN J. DEMPSEY  
CHAIRMAN

LAND COMMISSIONER H. R. RODGERS  
MEMBER

STATE GEOLOGIST JOHN M. KELLY  
SECRETARY



DIRECTOR  
JOHN M. KELLY

ADDRESS ALL COMMUNICATIONS  
TO THE DIRECTOR

*Santa Fe, New Mexico*

November 29, 1943

Mr. John M. Kelly  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear John:

The rough draft in effect simply gives the Commission's approval to the production of the condensate in Gulf-Grimes No. 4, so as to clear the operator with the Federal Tender Board under the Connally Act; however, the legal difficulties encountered are not as simple as they appear for the reason we do not have any gas statute as such. Our statute authorizes gas regulation to prevent waste in a number of ways but nearly all of these are in connection with an oil pool. A distinct gas pool is quite another thing. The statute authorizes the Commission to limit production of gas to prevent waste but what is waste where gas is produced in an oil pool may not be waste at all when the gas is produced from a gas pool. Except to prevent injury to neighboring properties (treated in the latter portion herein), I do not believe the Commission has power under existing law to limit the amount of gas to be produced from a gas pool where the gas is applied to beneficial use for the following reasons:

Under Section 2 (a), Oil Conservation Act, gas produced for beneficial use in any amount would not be a dissipation of reservoir energy--the purpose of that provision is obviously to conserve energy for the lifting of oil in a pool predominately oil. In the same section provision is made against that form of underground waste that would tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recoverable from a pool. If this were a pool predominately oil, excessive gas production would tend to reduce the amount of recoverable oil but it is predominately a gas pool. An engineering question involved is: will gas produced in large volume in any amount tend to reduce the total quantity of natural gas ultimately recoverable from the pool?

Section 2 (b), Oil Conservation Act. This section prevents surface waste. Within the surface waste is the unnecessary or excessive surface loss or destruction without beneficial use, however caused, of natural gas etc. The gas is, according to testimony, being applied to beneficial use--to heat the Army camp, supply Hobbs and Roswell with fuel gas.

Section 2 (c) includes another form of waste in excess of market demand but that section applies to oil and not gas.

The safest ground we have to stand on is Section 10 (7) the requiring of wells to be "operated and produced in such manner as to prevent injury to neighboring leases or properties". But upon this point there is no testimony.

If one well from a gas pool is curtailed to 25%, why not all of them? That would require a public hearing on the limitation of gas production in gas pools to prevent injury to neighboring properties.

I believe as far as we can go is to approve the production of distillate up to 25% of open flow of the well but beyond that the production of condensate would have no approval. The excess of distillate, if any, would be without approval and should be returned to the ground when no approval can be obtained in order to prevent surface waste. If the operator chose to produce a gas well at a higher rate than 25% and put the gas to beneficial use and return the excess distillate to the ground, I doubt whether the 25% limitation would be valid, until a general hearing is called to limit gas to prevent injury to neighboring properties. That would no doubt be highly controversial.

It is most apparent that this seemingly simple small matter can develop into a block-buster unless all angles are considered. The Shell and Stanolind will come in with the same thing as the Gulf. The same or a kindred question no doubt will arise in other fields, especially the matter of limiting gas production in gas fields.

In another connection inasmuch as the condensate is treated as oil taking its character as such in the form it takes at the surface we encounter the following legal obstacles which I think have all been surmounted in the suggested order; they are:

If the condensate is oil, then we have to take Gulf-Grimes No. 4 out of the Hobbs Proration Order. That was done by finding that the pool is a gas pool and by expressly taking the matter herein out of the Hobbs Proration Order.

According to the exhibits Gulf-Grimes No. 4 has been known to produce as high as 45 barrels of condensate per day. That could exceed the top unit allowable <sup>when the known</sup> is only somewhat lower than it is now. The amount of condensate produced daily would not always make Gulf-Grimes No. 4 a marginal well. To meet this situation Gulf-Grimes No. 4 has simply been left out of the operation of the State-wide Proration Order in the same way as pools other than Lea and Eddy.

John H. Kelly

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If we treat condensate as oil we are not afoul of the gas-oil ratio order but, as said before, we made a finding that Gulf-Grimes No. 4 is in a pool predominately gas, then in the order provision was made wherein the condensate was authorized to be produced and marketed up to 25% of the open flow regardless of any gas-oil ratio order.

Very truly yours,

*Carl B. Livingston*  
Chief Clerk & Legal Adviser

CEL:MS



PETROLEUM AND ITS PRODUCTS

# GULF OIL CORPORATION

TULSA · OKLAHOMA

September 10, 1943.

GYPSY  
DIVISION

RUSH GREENSLADE  
VICE PRESIDENT

New Mexico Conservation Commission,  
Santa Fe, New Mexico.

Attention: Mr. John M. Kelly, Secretary.

Gentlemen:

My attention has been called to the fact that slight discrepancies have been made in the amount of gas produced from our West Grimes well No. 4 and the amount reported to you on Form C-115. It has also been noted that the gas production figures we included on our request that a condensate allowable be assigned to this well, vary slightly from the actual gas produced.

The errors which were made were due partly to the figures on gas sold to the Lea County Water Company being reported one month late; that is, actual sales for July were reported on the August statement, August sales reported on September statement, etc. Also on some of the statements the gas reported as being sold to Lea County Water Company was figured on the wrong pressure base.

The difficulties which were responsible for the incorrect figures have been overcome, however, and the figures now being reported are on a current basis, and correctly calculated.

The variations between the correct figures and the figures reported on Report C-115 and on our application for assignment of allowable are small and probably of no great importance. However, we are calling these variations to your attention so that the record may be corrected.

The following statement shows the corrected figures for the months in which the discrepancies occurred:

	<u>Gross M.C.F.</u> <u>Actual Prod.</u>
1942 - July	2,054
August	3,505
September	5,620
October	1,891
November	21,793
December	74,601
1943 - January	49,302
February	29,836
March	33,833
April	14,452

Yours very truly,

SRS:mc

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

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March 30, 1944

Mr. Lloyd L. Gray  
Gulf Oil Corporation  
Tulsa, Oklahoma

Re: Case No. 46, Order No. 563

Dear Mr. Gray:

Enclosed is a copy of Order No. 563, in the  
above captioned case.

Very truly yours,

John M. Kelly  
Director

By

Chief Clerk & Legal Adviser

CEB:MS

OF CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

July 8, 1943

The Santa Fe New Mexican  
Santa Fe, New Mexico

Hobbs Daily News-Sun  
Hobbs, New Mexico

Re: Case No. 42, Notice for Publication

Gentlemen:

Please publish the enclosed notice once, immediately.  
Please proof read the notice carefully and send a copy of the  
paper carrying such notice.

UPON COMPLETION OF THE PUBLICATION, PLEASE SEND  
PUBLISHER'S AFFIDAVIT.

For payment please submit statement in duplicate  
accompanied by voucher executed in duplicate. The vouchers  
must be signed by a notary in the space provided on the back  
of the voucher. The necessary voucher blanks are enclosed.

Very truly yours,

John M. Kelly  
Director

By

Chief Clerk & Legal Advisor

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PETROLEUM AND ITS PRODUCTS

# GULF OIL CORPORATION

TULSA · OKLAHOMA

April 7, 1943

GYPSY  
DIVISION  
RUSSELL G. LOWE  
ASSISTANT ATTORNEY

Mr. Carl B. Livingston,  
Chief Clerk and Legal Adviser,  
Oil Conservation Commission,  
Santa Fe, New Mexico.

Dear Mr. Livingston:

No. 13,965 - West Grimes Lease No. 4 -  
NE $\frac{1}{4}$  NE $\frac{1}{4}$  NW $\frac{1}{4}$  32 - 18 $\text{S}$  - 38 East,  
Lea County, New Mexico.

Replying further to your letter of April 1st to Mr. Sanderson, copy of which was sent to me, it is our thought it would be preferable for the Oil Conservation Commission to call a general state-wide hearing; this, for the reason that much of the information that should be obtained and incorporated in any application is not known to the Gulf Oil Corporation at this time nor is it readily accessible, and for Gulf Oil Corporation to put on a case it would have to make extensive investigations which would have a state-wide scope, whereas, the hearing could be called by the Oil Conservation Commission, at which time the operators in the various areas affected could produce the facts and thus minimize the labors of all interested parties.

I should appreciate your reaction to the foregoing suggestion.

Yours very truly,

RGL:W  
CC-Mr. Sanderson



PETROLEUM AND ITS PRODUCTS

# GULF OIL CORPORATION

TULSA · OKLAHOMA

April 5, 1943

GYPSY  
DIVISION

RUSSELL G. LOWE  
ASSISTANT ATTORNEY

Mr. Carl B. Livingston,  
Chief Clerk and Legal Adviser,  
Oil Conservation Commission,  
Santa Fe, New Mexico

Dear Mr. Livingston:

No. 13,965 - West Grimes Lease No. 4 -  
NE $\frac{1}{4}$  NE $\frac{1}{4}$  NW $\frac{1}{4}$  32 -18S - 38 East,  
Lea County, New Mexico.

I appreciate your forwarding me copy of your letter to  
Mr. Sanderson under date of April 1st, and particularly your  
personal note.

I shall advise with you further in regard to this matter.

With very kindest of personal regards, I am,

Yours very truly,

RGL.W

*Russell Lowe*

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

April 1, 1943

AIRMAIL  
SPECIAL DELIVERY

Mr. E. G. Sanderson  
General Superintendent  
Gulf Oil Corporation  
Tulsa, Oklahoma

Re: Gulf Oil Corporation - West Primes No. 4, located in the  
NE 1/4 Sec. 32-136-338, Hobbs Field - application to  
produce condensate from gas reservoir not producing  
crude oil.

Dear Mr. Sanderson:

With regard to your above captioned application to produce and  
market condensate, the Commission deems it advisable to hold a hearing  
upon condensate since matters concerning condensate no doubt will arise  
elsewhere. Any hearing for the promulgation of an order should be  
broad enough to include such other matters as may arise in the future.  
In other words, with the hearing sufficiently broad, the Commission  
would have a foundation for the promulgation of an order to govern  
condensate generally and thereby preclude individual hearings as each  
condensate matter arises from time to time.

Your application is informal in the form of a letter. Please  
now file your formal petition broad enough to include condensate matters  
generally.

Inasmuch as the hearing upon petition is held before the  
Commission in its quasi-judicial capacity I am taking the liberty of  
transmitting a carbon copy of this letter to your counsel, R. G. Lowe,  
Esquire, who has represented your Company before this Commission for  
many years.

Very truly yours,  
John W. Kelly  
Director

CHL:MS  
cc R. G. Lowe

By

Chief Clerk & Legal Advisor

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

(36)

SYMBOLS

- DL = Day Letter
- NT = Overnight Telegram
- LC = Deferred Cable
- NLT = Cable Night Letter
- Ship Radiogram

A. N. WILLIAMS  
PRESIDENT

NEWCOMB CARLTON  
CHAIRMAN OF THE BOARD

J. C. WILLEVER  
FIRST VICE-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

VA491 73 5 EXTRA=WUX TULSA OKLA VIA SANTAFE NMEX FEB 8 1918 5 41

JOHN M KELLY=

316 SOUTH ALISO ALBQ=

I HAVE TODAY MAILED APPLICATION FOR HANDLING CONDENSATE PRODUCED FROM GULF OIL CORPORATIONS WEST GRIMES NUMBER FOUR UNIT C SECTION THIRTY TWO DASH EIGHTEEN SOUTH DASH THIRTY EIGHT EAT. WE ARE RUNNING SO SHORT ON TANK STORAGE ROOM THAT I WOULD APPRECIATE IT IF YOU COULD APPROVE THE RUNNING OF 1.154 BARRELS OF CONDENSATE SUBJECT OF COURSE TO LATER ADJUSTMENT WHEN FORMAL RULING IS MADE IN THIS MATTER=

S G SANDERSON GENERAL SUPT GULF OIL CORPN.

C 1.154.

*206 8215*

No..... Phoned to *ALBQ*  
 Time Phoned *5:55 PR*  
 Attempts *1 5:46 PR*  
*1 5:20*

*mail*

Hobbs, New Mexico  
February 25, 1943

Mr. Glenn Staley, Proration Umpire  
Lea County Operators Committee  
Hobbs, New Mexico

Dear Mr. Staley:

The Commission is hereby granting the Gulf Oil Corporation permission to run 1500 barrels of condensate from their West Grimes No. 4, Hobbs Pool, Lea County, New Mexico.

This production is to be recorded on your books and is to be taken into consideration when a proration order is issued governing this well and this type of production.

Very truly yours,

JOHN M. KELLY, DIRECTOR

CC-S. G. Sanderson  
Gulf Oil Corporation  
Tulsa, Oklahoma

JMK:NB

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

February 24, 1943

Gulf Oil Corporation  
Tulsa, Oklahoma

Attention: S. C. Sanderson

Re: Gulf-West Grimes No. 4, Hobbs Field - Application  
to run condensate.

Dear Mr. Sanderson:

This is to acknowledge receipt of your letter of February 17 with regard to your application to run a large amount of condensate that has accumulated for the well noted in the caption.

Mr. Kelly has had the matter of condensate from this well under study for some time and your letter will have his attention immediately upon his return.

Very truly yours,

John M. Kelly  
Director

By

Chief Clerk & Legal Advisor

CEL:MS

Hobbs, New Mexico  
December 24, 1942

Carl B. Livingston  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Dear Sir:

On August 26, 1940, Gulf Oil Corporation's West Grimes No. 4, in NE NE NW Sec. 32-18S-38E, was plugged back and perforated for completion as a gas well in the "Big Gas" sand as authorized and reported in the attached approved copies of forms C-102 and C-103.

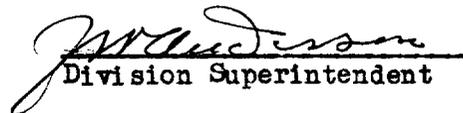
Gas from this well has been used primarily for domestic purposes. Increased distribution this summer, occasioned by connection to the Lea County Water Company's system, precipitated the need for continuous removal of condensate from the produced gas. On November 28, a high pressure separator was placed in service.

Condensate production from the well varies over a comparatively wide range dependent on rate of takes, atmospheric conditions, etc. West Grimes No. 4 is located on the same producing unit, C 32-18S-38E, with West Grimes No. 7, a Hobbs Dolomite producer. Therefore, we wish to be granted permission to produce and transport the condensate produced with the gas from the No. 4 well.

Executed copies of C-110 are attached for your approval.

Yours very truly,

GULF OIL CORPORATION  
GYPSY PRODUCTION DIVISION

  
Division Superintendent

WDM/fk

CC - Sanderson - 12  
Sanderson - 13

Gulf Oil Corporation  
Box 1667  
Hobbs, New Mexico  
Please return

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

RECEIVED  
JUN 24 1940  
HOBBS OFFICE

MISCELLANEOUS NOTICES

submit this notice in triplicate to the Oil Commission or its proper agent before the work specified herein begins. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commissioner or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of notice by checking below:

NOTICE OF INTENTION TO TEST CASING SHUT-OFF		NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL	
NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
NOTICE OF INTENTION TO REPAIR WELL			
NOTICE OF INTENTION TO DEEPEN WELL		NOTICE OF INTENTION TO PLUG WELL &	

RECEIVED  
JUN 25 1940  
HOBBS OFFICE

Perforate csg to produce big gas XX  
Hobbs, New Mex. June 21, 1940  
Place Date

OIL CONSERVATION COMMISSION,  
Santa Fe, New Mexico.

Gentlemen:

Following is a notice of intention to do certain work as described below at the Gulf Oil Corporation  
Gypsy Prodn. Division West Grimes Well No. 4 in NE NE NW  
Company or Operator Lease  
of Sec. 32, T. 18S, R. 36E, N. M. P. M., Hobbs Field,  
Lea County.

FULL DETAILS OF PROPOSED PLAN OF WORK  
FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

Authority is requested to plug with cement from total depth to casing seat and perforate casing between 3630' and 3700', or into Byars "big gas" zone. This gas is to be used to gas-lift other wells in Hobbs Pool (Immediate need at North Grimes Nos. 3 and 4 in Sec. 21-18S-38E).

This well now has a canvas packer set at 4036' and one unsuccessful attempt was made in 1934 to remove it. Should it be impossible to remove the packer now the tubing will be cut off immediately above the packer and a Baker Cement Retainer set near the bottom of the casing. Heavy Fiber-Aquagel mud will then be pumped through the cement retainer to plug the lower producing section. Then 30' of cement will be placed on top of the retainer to insure successful shut off. With the lower section properly plugged the casing will then be perforated as described above.

Approved JUN 21 1940, 19 1940  
except as follows:

Gulf Oil Corporation - Gypsy Prodn. Div.  
Company or Operator

By C. C. Cummings

Position District Superintendent

Send communications regarding well to

Name C. C. Cummings

Address Hobbs, New Mexico.

OIL CONSERVATION COMMISSION,  
By Roy Garbunovich  
Title OIL & GAS INSPECTOR

**RECEIVED**  
**SEP 7 1940**  
 OFFICE

**NEW MEXICO OIL CONSERVATION COMMISSION**  
 Santa Fe, New Mexico

**MISCELLANEOUS REPORTS ON WELL**

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut-offs, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL		<b>Plug back and perforate casing in big gas zone</b>	<b>XX</b>

**Hobbs, New Mexico**

**September 2, 1940**

Place

Date

OIL CONSERVATION COMMISSION  
 Santa Fe, New Mexico.

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

**Gulf Oil Corp-Gypsy Prodn. Division** **West Grimes** Well No. **4** in the  
 Company or Operator Lease

**NE NE NW** of Sec. **32**, T. **18N**, R. **30E**, N. M. P. M.,

**Hobbs** Field, **Lea** County

The dates of this work were as follows: **Cemented Aug 21, 1940. Casing perforated Aug 26, 1940**

Notice of intention to do the work was ~~was not~~ submitted on Form C-102 on **June 21,** 19**40** and approval of the proposed plan was ~~was not~~ obtained. (Cross out incorrect words.)

**DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED**

Aug 21, 1940. Original T.D. 4153', a canvas packer set at 4035' on 3" tubing. Cut tubing off at 4000', set Baker Cement retainer at 3909' and squeezed 70 sax 4% Aquagel cement below and placed 5 sax 4% Aquagel cement on top of retainer, Present T.D. 3905'. After cement set, swabbed dry and tested dry for 1 hour.

Aug 26, 1940: Perforated 7" casing as follows:

Depth	No.Holes	Approx.Intervals	Depth	No.Holes	Approx.Intervals
3700-3685	4	5'	3670-3660	43	3" (Main gas)
3684-3675	11	1'	3659 1/2-3646	28	6"
3674 1/2-3670 1/2	10	6"	3645-3630	4	5'

After shots tested 23,750,000 cu. ft. gas. Shut in pressure 1625#.

Witnessed by **C. C. Cummings** **Gulf Oil Corporation** **District Superintendent**  
 Name Company Title

Subscribed and sworn to before me this

**2nd** day of **September**, 19**40**

*J. W. Garner*  
 Notary Public

My Commission expires **February 25, 1942.**

I hereby swear or affirm that the information given above is true and correct.

Name *R. J. Cummings*

Position **District Superintendent**

Representing **Gulf Oil Corp-Gypsy Prodn. Div.**  
 Company of Operator

Address **Hobbs, New Mexico.**

Remarks:

*Roy Garbrough*  
 Name  
 Title

OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

Certificate of Compliance and Authorization to Transport Oil

Company or Operator Gulf Oil Corporation Lease West Grimes  
Address Hobbs, New Mexico Tulsa, Okla  
(Local or Field Office) (Principal Place of Business)  
Unit C Wells No. 4 Sec. 38 T18S R38E Field Hobbs County New Mexico.  
Kind of Lease Privately owned Location of Tanks On lease.  
Transporter Shell Pipe Line Co Address of Transporter Hobbs, New Mexico.  
(Local or Field Office)  
Houston, Tex Percent of oil to be transported 100. Other transporters author-  
(Principal Place of Business) ized to transport oil from this unit are 00 %

REMARKS:

Refer to Mr. J. W. Anderson's letter attached.

The undersigned certifies that the rules and regulations of the Oil Conservation Commission have been complied with except as noted above and that gathering agent is authorized to transport the percentage of oil produced from the above described property and that this authorization will be valid until further notice to the transporter named herein or until cancelled by the Oil Conservation Commission of New Mexico.

Executed this the 24 day of December, 194 2.

Gulf Oil Corp  
(Company or Operator)

By Lester LeFavour  
Title District Supt.

State of New Mexico. }  
County of Lea } ss.

Before me, the undersigned authority, on this day personally appeared Lester LeFavour known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states that he is authorized to make this report and has knowledge of the facts stated herein and that said report is true and correct.

Subscribed and sworn to before me, this the 24 day of December, 194 2

Notary Public in and for Lea County, New Mexico.  
My com. expires Feb 25-1946.

Approved: \_\_\_\_\_ 194 \_\_\_\_\_

OIL CONSERVATION COMMISSION

By \_\_\_\_\_

### INSTRUCTIONS

This form shall be executed and filed in quadruplicate with the Oil Conservation Commission at Santa Fe, New Mexico, covering each unit from which oil is produced. A separate certificate shall be filed for each transporter authorized to transport oil from a unit. After said certificate has been approved by the Oil Conservation Commission, one copy shall be forwarded to the transporter, one copy returned to the producer, and two copies retained by the Oil Conservation Commission.

A new certificate shall be filed to cover each change in operating ownership and each change in the transporter, except that in the case of a temporary change in the transporter involving less than the allowable production for one month the operator shall, in lieu of filing a new certificate, notify the Oil Conservation Commission at Santa Fe, New Mexico, and the transporter authorized by certificate on file with the Commission, by letter of the estimated amount of oil to be moved by the transporter temporarily moving oil from the unit and the name of such temporary transporter and a copy of such notice shall also be furnished such temporary transporter. Such temporary transporter shall not move any more oil than the estimated amount shown in said notice.

This certificate when properly executed and approved by the Oil Conservation Commission shall constitute a permit for pipe line connection and authorization to transport oil from the property named therein and shall remain in full force and effect until

- (a) Operating ownership changes
- (b) The transporter is changed or
- (c) The permit is cancelled by the Commission

If any of the rules and regulations of the Oil Conservation Commission have not been complied with at the time this report is filed, explain fully under the heading "REMARKS."

In all cases where this certificate is filed to cover a change in operating ownership or a change in the transporter designated to move oil, show under "REMARKS" the previous owner or operator and the transporter previously authorized to transport oil.

A separate report shall be filed to cover each producing unit as designated by the Oil Conservation Commission.

Hobbs, New Mexico  
January 14, 1943

Mr. Carl B. Livingston  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

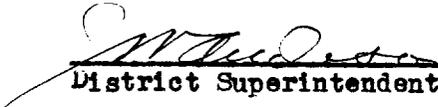
Dear Sir:

Complying with your request of January 9, 1943,  
we have analyzed the condensate from the West Grimes No. 4  
unit C sec. 32-18S-38E.

Enclosed are the analysis data and affidavit to  
certify.

Yours very truly,

GULF OIL CORPORATION

  
District Superintendent

JWA/fk

Encl.

STATE OF NEW MEXICO

ss

COUNTY OF LEA

On this the 14th. day of January, 1943 personally appeared before me, the undersigned notary public, D.C. Sears, to me known to be a representative of the Gulf Oil Corporation, who on his oath states:

That the analysis attached hereto is a true and correct copy of distillation test made on gasoline obtained from Gulf Oil Corporation's W. Grimes No. 4 well (gas well) Unit C Sec. 32-18S-38E. Hobbs Pool.

D.C. Sears

Sworn to and subscribed before me this 14th. day of January, 1943.

Patricia McHenry  
Notary Public  
Lea County

My commission expires  
Oct. 24, 1943

GASOLINE  
DISTILLATION TEST

Company.....Gulf Oil Corporation  
Sample From.....West Grimes No. 4 Gas Well  
Date Of Test.....January 14, 1943  
Indicated Gravity and Temp.....73° @ 66° F.  
A.P.I. Gravity.....72.2  
Color.....Water White  
Doctor Test.....Positive  
Corrosion Test.....Positive  
Reid Vapor Pressure @ 100° F.....9.75 Lbs.

Initial Boiling Point	80° F.
5 Per cent Over @	101 "
10 " " " "	117 "
20 " " " "	132 "
30 " " " "	150 "
40 " " " "	166 "
50 " " " "	184 "
60 " " " "	200 "
70 " " " "	218 "
80 " " " "	248 "
90 " " " "	290 "
End Point " "	347 "
Recovery	94.0 %
Residue	1.1 "
Distillation Loss	4.9 "
Recovery @ 100° F.	5.0 "
Recovery @ 120 "	11.0 "
Recovery @ 212 "	66.0 "
Evaporation-Recovery	15.9 " @ 134.5° F.

Tested By D. G. Serna

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

P. O. Box 871

January 9, 1943

C  
O  
P  
Y  
  
Honorable Glenn Staley  
Proration Office  
Hobbs, New Mexico

Re: C-110 for Well No. 4 (gas well) Unit C,  
32-18S-38E. Gulf Oil Corporation.

My dear Glenn:

Reference is made to your letter of December 28  
with regard to the fluid being produced from the above  
captioned gas well. The enclosed copy of letter to Mr.  
J. W. Anderson is self-explanatory.

With kindest personal regards.

Very truly yours,

JOHN M. KELLY  
DIRECTOR

BY

Chief Clerk & Legal Advisor

CHL:MS

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

P. O. Box 371

January 9, 1943

C  
O  
P  
Y  
Mr. J. W. Anderson  
Division Superintendent  
Gulf Oil Corporation  
Gypsy Production Division  
Hobbs, New Mexico

Re: C-110 for Well No. 4 (gas well), Unit C,  
32-18S-33E.

Dear Mr. Anderson:

Reference is made to your letter of December 24.

Please supply certified copy of analysis of fluid being produced in the gas well in question in order to determine whether the fluid be condensate in fact or crude oil. This information will be greatly appreciated.

Very truly yours,

JOHN N. KELLY  
DIRECTOR

BY

Chief Clerk & Legal Advisor

CHL:MS  
cc Glenn Staley

## LEA COUNTY OPERATORS COMMITTEE

HOBBS, NEW MEXICO

January 18, 1943

*Copy of letter to Carl Livingston*

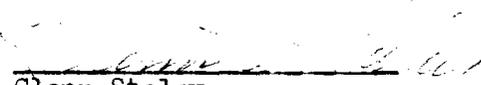
Hon. Carl Livingston  
Oil Conservation Commission  
Santa Fe, N.M.

Dear Carl:

Please refer to my letter to you of December 28 in which was discussed Gulf Oil Corporation's request to run 650 barrels of condensate from their Grimes No. 4 well in the Hobbs Field. In this letter I stated that the gas is coming from an upper pay, probably the Bowers. Will you kindly correct said letter to read "Byers" pay rather than Bowers.

Thanking you, I am,

Yours very truly,

  
Glenn Staley

GS:M

cc: Gulf

## LEA COUNTY OPERATORS COMMITTEE

HOBBS, NEW MEXICO

December 28, 1942

Hon. Carl Livingston  
Oil Conservation Commission,  
Santa Fe, N.M.

Dear Carl:

Enclosed herewith is a copy of a letter from the Gulf Oil Corporation in which they request that permission be given the Shell Pipe Line to run 650 barrels of condensate from the Gulf W. Grimes No. 4 Unit C Sec. 32-18-38. This unit is producing oil from the Big Lime pay and the gas is coming from an upper pay, probably the Bowers. This 650 barrels of condensate would be under present Commission orders, in addition to the allowable on the proration schedule.

In my opinion, the upper pay will have to be treated as another field in order to allow this condensate to be marketed. Please give me your opinion.

Yours very truly,

  
Glenn Staley

GS:M

cc: Gulf

Hobbs, N. Mexico  
December 26, 1942

Mr. Glenn Staley  
Preparation Office  
Hobbs, N. Mexico

Dear Sir:

May we have authority for the Shell Pipe  
Line Company to run 650 barrels of condensate from  
the Gulf Oil Corporation West Grimes No. 4, Unit  
C-52-18-38. This amount of condensate was produced  
with gas during the month of December.

Yours very truly,

Gulf Oil Corporation

  
Superintendent

WD/hl

PRODUCTION DEPARTMENT

PRODUCTION ENGINEERING DIVISION

MEMORANDUM

West Grimes No. 4

West Grimes No. 4 was completed during 1930 and, although it had a reasonable gas-oil ratio initially, due to the spread of the gas cap, it developed a rather high ratio by 1932. In the early part of 1933 a canvas packer was set which successfully reduced the gas-oil ratio. The packer failed, however, after only a few months of operation, and attempts to unseat it were unsuccessful. The well was shut in as a producer in October 1934 and the production for the unit has since been obtained from Well No. 7 which is the south offset to Well No. 4 on the same 40-acre unit. There is attached, Exhibit A, a copy of the well record which summarizes the various operations at the well.

The well was plugged back on August 15, 1940 after setting cement retainer at a depth of 3909', squeezing 70 sacks of 4% Aquagel cement below the retainer, and leaving 5 sacks of cement on top of the retainer. The plugged back total depth was 3884'. After satisfactory test for shut off, the well was perforated from 3630' to 3700', after which the well's potential was 23,750,000 cubic feet of gas per day.

West Grimes No. 4 was plugged back for a gas well for the purpose of furnishing gas to gas lift wells No. 3 and No. 4 on the North Grimes lease which is approximately  $1\frac{1}{2}$  miles north and east. These wells had begun producing water and ceased flowing. At that time very little was known of the producing characteristics of the Byers gas sand except that it had fairly large volumes and had an initial rock pressure of 1,625 psi. Early tests as reported in the Lea County engineering reports indicated the gas had low Btu content of between 350 and 400, and would be unsatisfactory to use for fuel purposes.

Since the gas from the Byers sand appeared to have no commercial value for fuel, it appeared its best utilization would be that for gas lift of wells producing from the Hobbs dolomite. Consequently New Mexico Oil Conservation Commission Form C-102 was submitted and approved to convert West Grimes No. 4 to a gas well, it being stated in this form that the gas would be used for gas lift purposes. Exhibit B, attached, is a copy of Form C-102 as submitted.

Accordingly, upon completion of the well as a gas well, lines were laid to connect it to the North Grimes lease. At the same time samples of gas were submitted for analysis and it was determined that the gas was actually sweet and had a Btu content in excess of 1,100. Since gas of such quality was highly desirable as domestic fuel, it was decided that in the best interests of conservation such gas should not be used for gas lift purposes. Accordingly, Mr. Sanderson in his letter of September 17, 1940 instructed Mr. Cummings to discontinue the use of the sweet gas from West Grimes No. 4 for gas lifting wells on the North Grimes lease, a copy of this letter is attached and marked Exhibit C. The well was shut in except for small amounts of gas which were used for local domestic fuel.

During the period the gas was used for local domestic fuel, only insignificant amounts of condensate was produced with the gas. However, there was a tendency for the well to load up with condensate making it necessary to blow it about once every three months.

During 1942 the Lea County Water Company made connections with the well as a purchaser of gas. It is our understanding that this gas is used in the City of Hobbs and for the local Army Air Training Station and to other connections which the Lea County Water Company have made with the lines serving the Artesia-Roswell area.

As a result of the increased rate of withdrawals after this connection was made, the well began producing substantial quantities of condensate, ranging as high as 45 barrels per day, but averaging substantially less. Production of oil and gas during the last six months of 1942 and for January 1943 is as follows:

West Grimes Well No. 4

	<u>Gross Production</u>	
	<u>Oil</u>	<u>Gas</u>
	<u>Bbl</u>	<u>MCF</u>
<u>1942</u>		
July	0	2,137
Aug.	0	3,593
Sept.	0	6,018
Oct.	0	1,701
Nov.	0	21,807
Dec.	776	74,786
<u>1943</u>		
Jan.	378	Not available

In order to handle the condensate production, a high pressure separator was installed and on December 24 Certificate of Compliance and Authorization to Transport Oil Form C-110 was submitted to the Commission by the Hobbs district office. A copy of this form together with Mr. Anderson's accompanying letter is attached and marked Exhibit D. At about the same time a request was made to the Shell Pipe Line Company to run 650 barrels of the accumulated condensate. This was a rather unusual situation so far as New Mexico operations were concerned, and Mr. Staley did not want to take jurisdiction until the matter had been passed upon by the Commission. He, therefore, referred the matter to the Commission by letter of December 28, a copy of which is attached and marked Exhibit E.

Since this was the first time condensate in sufficient quantities to require an allowable had been produced in the State, Mr. Carl B. Livingstone, attorney for the Commission, requested an analysis of the condensate. The analysis was made by Mr. D. C. Sears on January 14, 1943 and transmitted to Mr. Livingstone together with affidavit as shown in the attached Exhibit F. The condensate was water white having an A.P.I. gravity of 72.2 and on distillation test exhibited qualities of gasoline rather than that of crude oil.

No decision was reached in the matter, however, and during the latter part of January Mr. John Kelly, State Geologist, stated that there was no precedent in the handling of a situation such as this, and requested that Gulf submit a more detailed and definite request on which to base an opinion.

The purpose of this memorandum is merely to bring together the significant actions which have been taken regarding this well in order to eliminate the need for referring to the numerous files involved.

L. L. Gray

LLG:LD

Att'd.

February 17, 1943

# WELL RECORD

Exhibit A

WELL NO. 4 LEASE J. D. Grimes COMPANY Gypsy Oil Company AUTH. M-15

DATE—Drilling Began 7-16-30 Well Completed 9-21-30 First Production 9-21-30

SHOT—Date Not shot With Quarts—From To By

SAND RECORD Terry Line 3975' to 4153'. TOTAL DEPTH - 4153'.

INITIAL PRODUCTION\* "F" Thru tubing & casing one hour, 324.00 bbls, or rate of 7776.00 bbls in 24 hours. Gas estimated at 11,000,000 cubic feet.

### CASING RECORD

Size	Wt.	Thd.	Class	Make	Run	Sacks Cement	Pounds Cal. Chlo.	Pulled	Left In
15 1/2"	70	8	SH	Lapweld	220'	200	200	C	220'
9-5/8"	36	10	New	Seamless	2742'	600	400	C	2742'
6-5/8"	24	10	New	Seamless	3931'	400	400	C	3931'

S-32 T-183 R-38E



County, New Mexico.

(\* Best Day; "F", Flowing Naturally; "L", Air-Gas Lift; "S", Swabbing; "P", Pumping.

Elevation - 3640'

**PRODUCTION RECORD:**

FLOWER (WITH STUDDER): 1-12-33 To 1-12-33

PRODUCTION (12 HOURS THRU 50/64" CHOKE): "F" 174 Bbls. (25,120 Gas-Oil Ratio) - "F" 270 Bbls. (1,685 Gas-Oil Ratio)

PRODUCTION (24 HOURS - CHOKE OPEN): "F" 345 Bbls. (28,800 Gas-Oil Ratio) - "F" 306 Bbls. (2,040 Gas-Oil Ratio.)

ACID: 2/15/34 it. 1000 gallons of 50% acid solution  
 PRODUCTION: Before, 400 bbls., 15myn. CF Gas - after, 430 bbls., 20myn. CF Gas

PLUG BACK & TEST: 8-15-40 to 8-27-40 AFE #5071  
 DEPTH: Set Retainer at 3300' with 5 sacks cement on top; plugged back to 3884' TD  
 CASING: 7" Perforated from 3700' to 3630'  
 PRODUCTION: Before: None - shut in  
 After: 23,750,000 cu. ft. gas. S.I. Casing Pressure 1625\*

ILLEGIBLE

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

Exhibit B

MISCELLANEOUS NOTICES

Submit this notice in triplicate to the Oil Commission or its proper agent before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commissioner or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of notice by checking below:

NOTICE OF INTENTION TO TEST CASING SHUT-OFF	NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL
NOTICE OF INTENTION TO CHANGE PLANS	NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING
NOTICE OF INTENTION TO REPAIR WELL	
NOTICE OF INTENTION TO DEEPEN WELL	NOTICE OF INTENTION TO PLUG WELL <input checked="" type="checkbox"/>

Perforate csg to produce big gas  Hobbs, New Mex. June 21, 1940

OIL CONSERVATION COMMISSION, Santa Fe, New Mexico.

Gentlemen:

Following is a notice of intention to do certain work as described below at the Gulf Oil Corporation - Gypsy Prodn. Division, East Grimes, Well No. 4 in Lea NE 1/4 of Sec. 32, T. 18S, R. 36E, N.M.P.M., Hobbs, Lea County, Field.

FULL DETAILS OF PROPOSED PLAN OF WORK FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

Authority is requested to plug with cement from total depth to casing seat and perforate casing between 3630' and 3700', or into Eyers "big gas" zone. This gas is to be used to gas-lift other wells in Hobbs Pool (Immediate need at North Grimes Nos. 3 and 4 in Sec. 21-18S-38E).

This well now has a canvas packer set at 4035' and one unsuccessful attempt was made in 1934 to remove it. Should it be impossible to remove the packer now the tubing will be cut off immediately above the packer and a Baker Cement Retainer set near the bottom of the casing. Heavy fiber-quartz mud will then be pumped through the cement retainer to plug the lower producing section. Then 30' of cement will be placed on top of the retainer to insure successful shut off. With the lower section properly plugged the casing will then be perforated as described above.

Approved \_\_\_\_\_, 19 \_\_\_\_\_ except as follows:

Gulf Oil Corporation - Gypsy Prodn. Div. Company or Operator

By \_\_\_\_\_

Position District Superintendent

Send communications regarding well to

OIL CONSERVATION COMMISSION,

Name S. E. Cummings

By \_\_\_\_\_ Address Hobbs, New Mexico.

Title \_\_\_\_\_

ILLEGIBLE

11

Tulsa, Oklahoma  
September 17, 1940

Mr. C. C. Cummings  
Hobbs, New Mexico

Dear Sir:

You recently plugged back West Grimes No. 4 and perforated the casing opposite the Byers gas sand. After perforation, the well tested 32,000 M cubic feet. The gas analysis indicates that this gas is sweet and that the fuel value is 1,140 BTU. It was planned to use this gas to flow the North Grimes Nos. 3 and 4; however, when this work was planned and authorized it was everyone's thought that the gas had very low fuel value. I am advised by Mr. Gray that the Byers gas sand varies from 30 feet to 100 feet in thickness. Based upon the information we have, there is a very large reserve of sweet gas of high fuel value at high pressure in this Byers sand. After careful consideration we have concluded that in the interest of conservation and public welfare, this gas should not be used for gas lift purposes but should be conserved for fuel for the camps and towns in New Mexico and Texas. Therefore, you will please immediately, in accordance with my wire of today, discontinue using Byers gas from the West Grimes No. 4 for gas lifting the oil from the North Grimes wells. You will please immediately submit authorization for pumping equipment for North Grimes Nos. 3 and 4.

The Humble Oil & Refining Company has advised that they would like to purchase gas from our West Grimes No. 4 for gas lift purposes on their Federal Bowers "B" lease. Mr. Gray will advise the Humble Oil & Refining Company that we have concluded that gas should not be used for gas lift purposes, that we have discontinued its use for such purposes on the North Grimes lease, and that we do not wish to sell them gas for gas lift purposes.

Very truly yours,

ORIGINAL SIGNED BY  
S. G. SANDERSON

SGS:SG

cc - Mr. A. K. Bell, Jr.  
Mr. R. L. Clarke  
Mr. H. F. Brindel  
Mr. H. R. Auerwald  
Mr. D. O. Barrett  
Mr. L. L. Gray

16005 7  
**ILLEGIBLE**

Hobbs, New Mexico  
December 24, 1942

Carl B. Livingston  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Dear Sir:

On August 26, 1940, Gulf Oil Corporation's West Grimes No. 4, in NE NE 1/4 Sec. 32-18S-38E, was plugged back and perforated for completion as a gas well in the "Big Gas" sand as authorized and reported in the attached approved copies of forms C-102 and C-103.

Gas from this well has been used primarily for domestic purposes. Increased distribution this summer, occasioned by connection to the Lea County Water Company's system, precipitated the need for continuous removal of condensate from the produced gas. On November 23, a high pressure separator was placed in service.

Condensate production from the well varies over a comparatively wide range dependant on rate of takes, atmospheric conditions, etc. West Grimes No. 4 is located on the same producing unit, G 32-18S-38E, with West Grimes No. 7, a Hobbs Dolomite producer. Therefore, we wish to be granted permission to produce and transport the condensate produced with the gas from the No. 4 well.

Executed copies of C-110 are attached for your approval.

Yours very truly,

GULF OIL CORPORATION  
GYPSY PRODUCTION DIVISION

*W. Anderson*  
Division Superintendent

WDM/rk

CC - Sanderson - 12  
Sanderson - 13



ILLEGIBLE

OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

Certificate of Compliance and Authorization to Transport Oil

Company or Operator **Gulf Oil Corporation** Lease **Best Grines**  
 Address **Hobbs, New Mexico** **Tulsa, Okla**  
 Well No. **4** Sec. **38** T. **18N** R. **33E** **Hobbs** County **New Mexico.**  
 Kind of Lease **Partially owned** Location of Tanks **On lease.**  
 Transporter **Shell Pipe Line Co** Address of Transporter **Hobbs, New Mexico.**  
 (Principal Place of Business) **Houston, Tex** Percent of oil to be transported **100** Other transporters authorized to transport oil from this unit are **00** %

REMARKS:  
 Refer to Mr. J. M. Anderson's letter attached.

The undersigned certifies that the rules and regulations of the Oil Conservation Commission have been complied with except as noted above and that gathering agent is authorized to transport the percentage of oil produced from the above described property and that this authorization will be valid until further notice to the transporter named herein or until cancelled by the Oil Conservation Commission of New Mexico.

Executed this the 26 day of December, 194 8.  
**Gulf Oil Corp**  
 (Company or Operator)

By \_\_\_\_\_  
 Title District Supt.

State of New Mexico.  
 County of Lea )  
 ) ss.

Before me, the undersigned authority, on this day personally appeared Lester L. Turner known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states that he is authorized to make this report and has knowledge of the facts stated herein and that said report is true and correct.

Subscribed and sworn to before me, this the 26 day of December, 194 8

Notary Public in and for Lea County, New Mexico.  
 My com. expires Feb 25-1948.

Approved: \_\_\_\_\_ 194\_\_\_\_  
 OIL CONSERVATION COMMISSION

By \_\_\_\_\_

**ILLEGIBLE**

Exhibit E

December 28, 1942

Hon. Carl Livingston  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Carl:

Enclosed herewith is a copy of a letter from the Gulf Oil Corporation in which they request that permission be given the Shell Pipe Line to run 650 barrels of condensate from the Gulf W. Grimes No. 4 Unit C, Sec. 32-13-38. This unit is producing oil from the Big Lime pay and the gas is coming from an upper pay, probably the Bowers. This 650 barrels of condensate would be under present Commission orders, in addition to the allowable on the proration schedule.

In my opinion, the upper pay will have to be treated as another field in order to allow this condensate to be marketed. Please give me your opinion.

Yours very truly,

---

Glenn Staley

LSH

cc: HLF

**ILLEGIBLE**





