

Hobbs, New Mexico
March 29, 1949

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

The Gulf Oil Corporation's West Grimes No. 15 is located 990 feet from the south line and 2310 feet from the west line of Section 32, Township 18S, Range 38E, Lea County, New Mexico. Two States Drilling Company rotary tools were rigged up and drilling operations commenced on December 19, 1948. The 13-3/8" O.D., 48#, H-40, S.S. casing was set at 328 feet and cemented with 325 sacks of cement which was circulated to the surface. The Byers sand was encountered at 3655 feet and the entire section was cored with the Byers section extending to 3730 feet. The section from 3653 feet to 3731 feet was drill stem tested using the Halliburton testing tool and 1,072 M.C.F. of gas was gauged at the surface with 625 psi bottom hole flowing pressure. The well was then drilled to a depth of 4094 feet in the Livingston sand member and 7" O.D., 23#, J-55, S.S. casing was set at 4094 feet and cemented with 825 sacks of cement. The cement top behind the 7" casing was found at 2150 feet as per temperature survey. The 7" casing was then perforated with one 1/2" hole at 2100 feet and re-cemented with 500 sacks of cement and the cement top behind the 7" casing was found at 1450 feet as per temperature survey which is above the salt section. The Hobbs lime pay section was then penetrated to a total depth of 4105 feet and a Lane Wells radio activity log was obtained and three copies of the log are submitted to the Commission for their information. After running tubing and treating the Hobbs lime with 500 gallons of acid, the well flowed 552 barrels of oil in 24 hours with a G.O.R. of 1343. After 24 hour shut-in period, the static bottom hole pressure was observed as 1161 psi.

Thirty barrels of oil base mud was spotted from total depth to above the Byers formation and the casing was filled to the surface with salt water mud. The 7" casing was the perforated opposite the Byers section from 3650 - 75 feet, 3685 - 3700 feet, and 3715 - 3730 feet with 4 jet holes per foot. The tubing string was run in the well from bottom up as follows:

- (1) Std. 2-3/8" O.D. x 6' nipple w/top 2' perforated
- (2) 7" x 2" Lane Wells type BOC hookwall packer set at 4059'
- (3) 2-3/8" O.D. Baker safety joint
- (4) One 6' tubing nipple
- (5) 2-3/8" Otis type "L" landing nipple (side door choke)
- (6) 2-3/8" O.D., EUE, 4.7#, S.S. tubing to surface

The mud was then displaced with 195 barrels of oil and an Otis check valve and side door choke was run and set in landing nipple which shut-off the bottom formation, Hobbs lime. Swabbed load oil from tubing and casing and well flowed through the tubing from the Byers section to clean up. After shutting-in casing and tubing in order to reach maximum pressure, the Otis check valve and side door choke was pulled and, prior to this operation, the static bottom hole pressure of the Byers section after 99 hours shut-in was observed to be 702 psi. The side door choke was then re-run with upper and lower packing elements and the perforations in the side door choke shut-off. This enables the Byers gas to be flowed through the casing and the Hobbs lime oil to be flowed through the tubing without commingling of the fluids. The attached schematic drawing shows the producing equipment installed in West Grimes No. 15.

Attempts were made to obtain segregation tests but, after ten days testing, it was determined that segregation of the two above described zones was not complete. It is now planned to pull the tubing and packer and re-run dual completion equipment from bottom up as follows:

- (1) Std. 2-3/8" O.D. x 6' nipple w/top 2' perforated
- (2) 7" x 2" Lane Wells type BOC hookwall packer set at approximately 4059'
- (3) 2-3/8" O.D. Baker safety joint
- (4) 2-3/8" Otis type "L" landing nipple (Side door choke)
- (5) 3-1/2" O.D., 7.7#, EUE, S.S. tubing to surface

The Hobbs lime section will be blanked off with Otis side door choke and the Byers gas section will be swabbed to induce flow. After the Byers section has flowed sufficiently to clean up, the Otis side door choke will be pulled and re-run blanking off the casing from the tubing and opening up the Hobbs lime section to the tubing. Then segregation tests will be taken in the following manner:

- (1) The casing and tubing will be shut-in until both zones have reached a maximum pressure; then the tubing will be opened and the Hobbs lime section produced. A dual pressure recorder will be installed so that both the tubing and casing pressures can be recorded on the same chart. Also, the oil and gas will be measured for a 24 hour period.
- (2) Then the tubing will be shut-in and allowed to build-up to maximum pressure. The casing will be opened and the Byers gas section tested in the manner described above.
- (3) The results of these tests will be reported to the Oil Conservation Commission and these tests will be repeated at periodic intervals in accordance with previous orders of the Commission in order to assure that communication between the two zones does not exist.

The oil obtained from the Hobbs lime section will be stored on the lease and sold to the Shell Pipe Line Company. The available gas produced against 400 psi surface pressure will be utilized in the Gulf Hobbs gas lift system to produce the Bowers crude oil on the West Grimes Lease and the Hobbs lime crude oil on the North Grimes and Hardin Leases. Also, the well will provide gas for house consumption at the Gulf camp and Cities Service camp in Hobbs. There is no doubt that the two above described zones are definite and distinct reservoirs. The gas produced from the Byers section is classified as "sweet gas" and is non-corrosive while the oil produced from the Hobbs lime is sour and is slightly corrosive.

The Commission will recall that the Gulf obtained permission on July 16, 1947, to dually complete their West Grimes No. 4 in the Hobbs Pool. The Bowers oil zone is produced through the casing and the Byers gas zone is produced through the tubing. The same type of equipment was utilized in this completion as has been utilized in dually completing West Grimes No. 15. Subsequent segregation tests on West Grimes No. 4 have proven that to date an effective seal has been maintained between the tubing and casing.

The reasons that the Gulf Oil Corporation proceeded to dually complete this well without specific authority from the New Mexico Oil Conservation Commission are as follows:

- (1) At the time this well was staked and drilling operations commenced, it was not definitely known that the Byers gas section would be productive on this 40 acre tract. Therefore, it was believed advisable and prudent to determine the productivity of this zone before requesting permission to dually complete West Grimes No. 15.
- (2) By the time the gas productivity of the Byers zone was determined, the New Mexico Legislature was in session and it was not planned to hold an Oil Conservation Commission hearing until March, 1949. Delaying the mechanics of dual completion at the time the rotary rig was in place until official approval was obtained would have entailed considerable extra expense. It is my estimate that the delay would have cost the Gulf Oil Corporation approximately \$7,500 in rig time and mud cost.
- (3) Due to the low productivity of the Byers gas section, it would not be economical to drill a separate well to this strata nor is it economical to delay operations so that completion expense will be increased.

Very truly yours,

Paul C. Evans
District Engineer
Gulf Oil Corporation

PCE:lfr

Hobbs, New Mexico
March 29, 1949

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

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Very truly yours,

Paul C. Evans
District Engineer
Gulf Oil Corporation

PCG:lfr



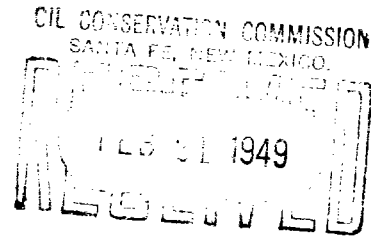
PETROLEUM AND ITS PRODUCTS

GULF OIL CORPORATION

P. O. BOX 661 · TULSA 2, OKLAHOMA

GYPSY
DIVISION

February 18, 1949



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

Dear Sir:

Please find attached three copies of an application which we wish to file in regard to dually completing Gulf-West Grimes No. 15, located 990' from south line and 2310' from west line, Section 32-18S-38E, Lea County, New Mexico. Our proposed plan is to produce the Byers gas sand through annular space between tubing and casing, and the Hobbs lime section through tubing by means of packer control.

Yours very truly,

S. G. Sanderson
Manager of Production

ACG:JHR

Att. (3)

March 1, 1949

Mr. S. G. Sanderson
Manager of Production
Gulf Oil Corporation
P. O. Box 661
Tulsa 2, Oklahoma

Dear Mr. Sanderson:

We have received your application for dual completion on your West Grimes lease.

Tentatively, we have in mind March 24th as a date for our next hearing which will include your application. We will advise you definitely as soon as the date is set.

Very truly yours,

R. R. Spurrier
Secretary and Director

RRSFbw

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea

I, Robert L. Sumner
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 7 weeks.

beginning with the issue dated March 17, 1949

and ending with the issue dated March 17, 1949

Robert L. Sumner
Publisher.

Sworn and subscribed to before me

this 11 day of March, 1949.

Betty Beal
Notary Public.

My commission expires January 15, 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.

March 17, 1949
LEGAL NOTICE

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following public hearings to be held March 31, 1949, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in the Senate Chambers.

STATE OF NEW MEXICO TO:
All named parties in the following cases, and notice to the public:

Case 175—

In the matter of the application of Gulf Oil Corporation for an order to dually complete and produce from the Hobbs lime section and the Byers sand section from a single well bore in the West Grimes No. 15, located 990 feet north of the south line and 2310 feet east from the west line of section 32, Township 18S, Range 38E, Lea County, New Mexico.

Case 176—

In the matter of the application of the Oil Conservation Commission upon its own motion to amend Paragraph 2 of Order No. 788, issued in Case No. 146, deleting therefrom the words at the end of the section to-wit: "Provided that a supplemental order is issued authorizing such production," and making said Paragraph 2 of said Order 788 read as follows:

"Paragraph 2. That any common purchaser is authorized to purchase 100 per cent of the allowable from all units classified as marginal units on the monthly operation order. A marginal unit is a unit that is

incapable of producing the state top unit allowable for that particular month. Any amount of crude petroleum up to and including the top unit allowable for that particular month may be purchased from a marginal unit."

Case 177—

In the matter of the application of the Oil Conservation Commission upon its own motion to rescind, revise, change or amend Order No. 573, which became effective as of June 1, 1944, and generally known as the "Bonus Discovery Allowable Order."

Case 178—

In the matter of the application of the Oil Conservation Commission upon its own motion upon recommendation of the Nomenclature Committee for an ~~order deleting~~ from the Arrowhead pool ~~the~~ ~~land~~ ~~previously~~ ~~established~~ the following described lands: SW $\frac{1}{4}$ of section 11, and the W $\frac{1}{2}$ of section 14, T. 22S, R. 36E, N.M.P.M. ~~County, New Mexico. This deletion from the Arrowhead pool is necessary because of the extension of the South Eunice pool to include gas production in the west part of above described section.~~

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on March 15, 1949.

STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION (Seal)
R. R. SPURRIER, Secretary.

NEW MEXICO CLIPPING BUREAU
Albuquerque, N. M.

MAR 17 1949

Hobbs News Sun

March 17, 1949
LEGAL NOTICE

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

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following public hearings to be held March 31, 1949, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in the Senate Chambers.

STATE OF NEW MEXICO TO:
All named parties in the following cases, and notice to the public:

Case 175—

In the matter of the application of Gulf Oil Corporation for an order to dually complete and produce from the Hobbs lime section and the Byers sand section from a single well bore in the West Grimes No. 15, located 990 feet north of the south line and 2310 feet east from the west line of section 32, Township 18S, Range 38E, Lea County, New Mexico.

Case 176—

In the matter of the application of the Oil Conservation Commission upon its own motion to amend Paragraph 2 of Order No. 788, issued in Case No. 146, deleting therefrom the words at the end of the section to-wit: "Provided that a supplemental order is issued authorizing such production," and making said Paragraph 2 of said Order 788 read as follows:

"Paragraph 2. That any common purchaser is authorized to purchase 100 per cent of the allowable from all units classified as marginal units on the monthly proration order. A marginal unit is a unit that is

incapable of producing the state top unit allowable for that particular month. Any amount of crude petroleum up to and including the top unit allowable for that particular month may be purchased from a marginal unit."

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Case 178—

In the matter of the application of the Oil Conservation Commission upon its own motion upon recommendation of the Nomenclature Committee for an order deleting from the Arrowhead pool as heretofore established, the following described lands: SW $\frac{1}{4}$ of section 11, and the W $\frac{1}{2}$ of section 14, T. 22S, R. 36E, N.M.P.M., Lea County, New Mexico. This deletion from the Arrowhead pool is necessary because of the extension of the South Eunice pool to include gas production in the west part of above described section.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on March 15, 1949.

**STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION (Seal)
R. R. SPURRIER, Secretary.**

March 15, 1949

HOBBS NEWS SUN
Hobbs, New Mexico

RE: Cases 175-176-177-178

Gentlemen:

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

PLEASE PROOF READ AND UPON COMPLETION OF THE PUBLICATION SEND PUBLISHER'S AFFIDAVIT IN DUPLICATE.

For payment please submit statement in duplicate, accompanied by voucher executed in duplicate. The necessary blanks are enclosed.

Very truly yours,

Secretary and Director

RRS:bw