### BEFORE THE

#### OIL CONSERVATION COMMISSION

#### STATE OF NEW MEXICO

The following proceedings before the Oil Conservation Commission, State of New Mexico, came on pursuant to legal notice of publication, and at the time and place as set out below.

### 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 173

In the matter of the application of Transcontinental Oil Co., Inc. for an order granting permission to drill its Coyote Dome No. 1, Cabra Springs Ranch well, in an unorthodox location in the center of the northeast quarter of section 1, in T. 13N, R.21E, San Miguel County, New Mexico.

# Case 174

In the matter of the application of Southern Union Production Company for an order granting an exception to section 1 (c) of Order No. 748 to permit location of a well 200 ft. west of the boundaries specified in section 1 (c) because of the nature of the terrain. The drilling unit containing 160 acres substantially in the shape of a square, embraces the SE‡ of Section 29, T. 28N, R. 10W, in San Juan County, New Mexico.

# <u>Case 175</u>

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 #15, located 990 ft. north of the south line and 2310 ft. east from the west line of section 32, T. 18S, R. 38E, Lea County, New Mexico.

# <u>Case 176</u>

In the matter of the application of the Oil Conservation Com-

mission 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% 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".

## 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 as heretofore established, the following described lands. SW2 of section 11, and the W2 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

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

SEAL

NOTICE OF PUBBICATION 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 hearing 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 case, and notice to the public;

#### Case 179

In the matter of the application of Franklin, Aston and Fair for approval of an unorthodox well location 1270 ft. south of the north line and 1370 ft. east of the west line (SW NEZ NWZ) in section 7, F.18S, R.30E., NMPM, in the Loco Hills pool, Eddy County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on March 18, 1949.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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

SEAL

BEFORE: Hon. Guy Shepard, Chairman

Hon. R. R. Spurrier, Secretary and Member

#### REGISTER:

Frank, C. Barnes, Santa Fe, N.M., for the Oil Conservation Commission.

Chuck Aston, for Franklin Aston and Fair, Artesia, N.M.

B. Woodworth, Santa Fe, N.M., for the Oil Conservation Commission.

George A. Graham, Santa Fe, N.M., for the Oil Conservation Commission.

Glenn Staley, Hobbs, N.M., for Lea County Operators.

R. L. Denton, Midland, Tex., for Magnolia Petroleum Co.

W. B. Hamilton, Amarillo, Tex., for Phillips Petroleum Company.

M. T. Smith, Midland, Tex., for Sheel Oil Co., Inc.

E. J. Henry, Jr., Dallas, Tex., for The Atlantic Refining Co.

Sid W. Binion, Midland, Tex., for Atlantic P.L. Co.

Wm. E. Bates, Midland, Tex., for The Texas Co.

F. C. Brown, Houston, Tex., for Shell Ph. Corp.

Frank R. Lovering, Hobbs, N.M., for Shell Oil Co., Inc.

Richard L. Hughston, Midland, Tex., for Shell Oil Co., Inc.

F. C. Brunner, Midland, Tex., for Shell Oil Co., Inc.

E. J. Gallagher, Hobbs, N.M., for Gulf Oil Corp.

H. A. Hirschfield, for Transcontinental Oil Co. - ?
Paul C. Evans, Hobbs, N.M., for Gulf Oil Corp.

Manuel A. Sanchez, Santa Fe., N.M., for S.U. Gas Co.

R. E. Canfield, Roswell, N.M., for U.S.G.S.

W. B. Macey, Artesia, N.M., for American Republics Corp.

G. H. Gray, Midland, Tex., for Repollo Oil Co.

Burton Atkinson, Midland, Tex., for Humble Oil & Refg. Co. Amos Harper, Seminole, Texas.

G. L. Standfield, Seminole, Texas.

George C. Burke, Seminole, Texas.

Al Greer, Aztec, N.M., for Oil Conservation Commission.

Roy D. Varbrough, Hobbs, N.M., for Oil Conservation Com

Roy D. Yarbrough, Hobbs, N.M., for Oil Conservation Commission.

E. E. Kinney, Artesia, N.M., for StateBureau of Mines. Art McQuiddy, Roswell, N.M., for U.M. Oil & Gas Assn. Don McCormick, Santa Fe, N.M., for Oil Conservation Commission.

COMMISSIONER SHEPARD: The meeting will come to order. Mr. Graham, will you read the first case?

(Reads the notice of publication in Case No. 173.)

COMMISSIONER SHEPARD: Is the Transcontinental present or represented? Will you come forward, please? State your name for the reporter.

(H. A. Hirschfield, Jr., Vice President, Transcontinental Oil Company, was sworn and testified as follows):

COMMISSIONER SHEPARD: You may just go ahead and state your case.

MR. HIRSCHFIELD: Well, our property over there is one lease for land, comprising 34,128 acres, with one well application for the entire lease, perpetual; no further lease or drilling operations. We have not bothered to off-set the cross faulting until we wanted to drill. Then where this location is, there

is a cross faulting, a short faulting. We are in there on the down faulting, in a "V" of this faulting, and our land is checkerboarded in the ranch in 160 acre tracts, and we were not familiar that 40 acres was considered as a unit.

And we are drilling right in the "V" of this faulting, and if we move the rig one way or the other, it would be on the slope of the fault, rather than in the "V". And if we move east, we will have to climb about a 300 foot mesa. So it's rather a difficult problem. I don't believe it will affect anybody else, inasmuch as our entire acreage is in one township and we are probably eight miles each way from the boundary line of the property.

COMMISSIONER SHEPARD: Why? Is this location on a grant?

MR. HIRSCHFIELD: Yes, it is on Cabra Springs Ranch. You can see by the map where we are drilling. There is a mesa, you see, right in there. (Indicating). And of course, there are boulders around the edge of that. It would be quite a job to move up there. And if we move over here (indicating), we are defeating our purpose by getting out of the fault.

COMMISSIONER SHEPARD: Does anybody have any questions?

MR. GRAHAM: Did you drill in the exact center of that 160 acres, is that right?

MR. HIRSCHFIELD: Yes, sir. It is set out in a 160 acre drill site.

MR. GRAHAM: Would it be objectionable to you if you move a foot or two, one way or the other, so as not to interfere?

MR. HIRSCHFIELD: No.

MR. GRAHAM: It would be identical.

MR. HIRSCHFIELD: In that cross fault, you see, the bable -- it would be pretty hard to see whether the location was sur-

veyed by the Tucumcari Engineering Company.

SECRETARY SPURRIER: What was the location?

MR. HIRSCHFIELD: It was the exact center of the northeast quarter of Section 1, 13 North, 21 East.

COMMISSIONER SHEPARD: If there are no further questions, you may be dismissed. It will be granted.

MR. HIRSCHFIELD: O.K. Fine. Thank you very much.

COMMISSIONER SHEPARD: Will you read the next case, Mr. Graham? (Reads the notice of publication in case No. 174).

Van Thompson, having been first duly sworn, testified as follows:

#### DIRECT EXAMINATION BY MR. SANCHEZ

Q Mr. Thompson, I hand you a blank marked Exhibit "A", which is a map of Section 29, Township 28, North, Range 10 West, where the proposed well is to be located. Will you tell the Commission the necessity of permission for locating the well outside of the 330 foot limit from the center of the section? A As stated in the application, it was originally planned to locate this well 1680 feet from the -- 1650 feet, I believe it is -- from the north and west boundaries; but when the location was actually surveyed, we found that it came down in the bottom of a deep ravine. So the District Engineer for the U.S.G.S. came out and looked at it and suggested that we move it 208 feet west, to save considerable expense in rigging up and making the location. The real purpose of this application was to -- when the 160 acre spacing was put into effect, a well was eliminated from all approval if it was within 990 feet of the outside boundary line; and this location will be 790 feet from the outside boundary line.

Q From the west boundary of the unit?

- A Yes, from the west boundary of the unit.
- Q The Southeast Quarter of Section 29 is the unit?
- A That's right.
- Q And agreement has been entered for the communitization and operation of this Southeast Quarter as a unit?

A That's right. The only people who could possibly be affected in this is the southern boundary production of Stanolin, of Verb (?) Frost, and Western Natural Gas Company, and they also own the Southwest Quarter of Section 29. So I don't see how there could possibly be any objection to it from anyone. COMMISSIONER SHEPARD: Does anybody have any questions?

MR. McCORMICK: How close are you to the producing well?

MR. THOMPSON: About half a mile. Here's a plat. Here (indicating) is where the Whitfield, and the well closest to the producing well is, right here. We are actually moving west, further west of the producing well. The next closest wells are these two up here. (Indicating).

MR. SPURRIER: Off the record.

(Discussion off the record).

COMMISSIONER SHEPARD: Any further questions? Well, there are no objections and the order will be granted.

MR. SANCHEZ: I had an order prepared, which I will leave with the Commission if you care to sign it.

COMMISSIONER SHEPARD: All right.

MR. GRAHAM: The U.S.G.S. has approved it?

MR. THOMPSON: Mr. Frost approved the moving of the location of the well.

MR. SANCHEZ: If there is nothing further, may be excused? COMMISSIONER SHEPARD: Yes. The next case.

(Reads the notice of publication in Case No. 175).

PAUL C. EVANS, was sworn and testified as follows:

MR. EVANS: My name is Paul C. Evans, District Engineer, Gulf
Oil Company. I have properly qualified before the Commission,
and if they so desire I shall be glad to repeat the qualifications.

SECRETARY SPURRIER: That's not necessary.

MR. EVANS: All right. In order to follow the testimony, I have a statement here that possibly some of the Commission would like to follow; also some drawings.

COMMISSIONER SHEPARD: The Dual Completion Equipment drawing may be marked Gulf's Exhibit No. "A", Case 175; the Lane Wells log may be marked Gulf's Exhibit "B", Case 175.

(Mr. Evans read the following statement into the record):

Hobbs, New Mexico March 29, 1949

New Mexico Oil Conservation Commission Santa Fe, New Mexico

Gentlemen:

The Gulf Cil 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 188, 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 Lovington 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 2190 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 then 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:

(By the drawings, the Commission will see the equipment originally run in the well).

- Std. 2-3/8" 0.D. x 6' nipple w/top 2' perforated
- 7" x 2" Lane Wells type BOC hookwall packer set at 4059'
- 2-3/8" O.D. Baker safety joint

- One 6' tubing nipple 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 shuttingin 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 shutoff. This enables the Byers gas to be flowed through the casing and the Hobbs lime oil to be flowed through the tubing without comingling 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:

- Std. 2-3/8" O.D. x 6' nipple w/top 2' perforated 7" x 2" Land Wells type BOC hookwall packer set at approximately 4059' 2-3/8" O.D. Baker safety joint

- 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,

/s/ Faul C. Evans
Paul C. Evans
District Engineer
Gulf Oil Corporation

PCE:lfr

MR. EVANS: And that completes our portion of the testimony.

If there are any questions --

COMMISSIONER SHEPARD (Interrupting): Any questions? SECRETARY SPURRIER: No.

MR. GRAHAM: Do you recall Case No. 92, and the fact that in the order issued in that case, the Commission doubted that the packers were sufficiently efficient to insure segregation of the zones?

MR. EVANS: That's right.

MR. GRAHAM: The order was issued as an experimental proposition, the other cases of the Gulf being dismissed?

MR. EVANS: That is correct.

MR. GRAHAM: Do you figure it is the prerogative of the Commission to continue to desire information as to the efficiency of these packers?

MR. EVANS: That is correct.

MR. GRAHAM: For that reason, that is what you did?

MR. EVANS: That is correct.

MR. GRAHAM: You start out with a Baker packer?

MR. EVANS: That's right.

MR. GRAHAM: In that original No. 4?

MR. EVANS: That's right.

FR. GRAHAM: What happened in that original No. 4?

MR. EVANS: In that original well, we ran the Baker equipment production type packer and in the operation we had definite difficulty in making a seal with the Baker type packer. Therefore, we changed the type of installation from the Baker type to the regular Lane Wells hookwall packer and set it immediately above.

MR. GRAHAM: Along in 1948, the Company made a report under that order, covering the period of about a year?

MR. EVANS: That's right.

MR. GRAHAM: And it was satisfactory. The result of that study showed it was a seal and there wasn't any communication?

MR. EVANS: That's right. That is correct. In that case, tests were taken in the same manner as here. In the original completion with the Baker packer, we were not able to ever complete the well at all so that we could satisfactorily segregate the tests, but we did after putting the Wells packer in it; and those tests were submitted to the Commission on similar type case, with dual recording on casing and tubes.

MR. GRAHAM: Our information seems to be that was the report of a year. What is the present situation?

MR. EVANS: The present situation on that particular well is that in the last three or four months, we have not taken any segregation tests, due to the fact that in the upper zone or the Byers' zone, it has failed to flow; but we do know that we haven't any communication between the two, due to the fact that in the Byers' zone the gas is producing now at 400 pounds pressure, it is producing daily 428 thousand cubic feet of gas

alone, no oil in it, and the casing pressure stands at 250 pounds on the casing and stays constant at that.

MR. GRAHAM: The upper zone at the time of the last report read that it was making 44 barrels of oil?

MR. EVANS: That is correct. But during the winter months is when the well died in that section, and we had no gas for Hobbs, or the camp, or City Service, and so consequently we have not attempted a re-conditioning method to induce flow back through the channels.

MR. GRAHAM: What is your opinion as to the experiment on No.

MR. EVANS: Well, my opinion of the experiment is the fact that with mechanical equipment, it is possible and capable of segregating the two zones.

MR. GRAHAM: In the Hobbs Pool, you mean?

MR. EVANS: In this particular well, the fact that the mechanical equipment which was run was efficient and can satisfactorily separate the two zones.

MR. GRAHAM: And the experiment would have been a success if the well had not --

MR. EVANS (Interrupting): Mechanically, it was successful.

Now, whether economically and otherwise, it would be successful, is above my audit, but mechanically and engineeringly, it can be done satisfactoriky.

MR. GRAHAM: At that time, there was considerable objection to the dual completion idea.

MR. EVANS: That is correct.

MR. GRAHAM: Do you have any comments from others, or inquiries from others, other people so concerned?

MR. EVANS: We have had no official comment from anyone on the

case. There has been considerably more experiment taken in Texas and other areas, and more dual completions have been done in New Mexico since the original time.

MR. GRAHAM: With respect to the gas, the sour gas and corrosive gas, that is still an element in your opinion, in the dual completion?

MR. EVANS: Corrosiveness is always an element in dual completion, or single completion.

MR. GRAHAM: But it was encountered in the Hobbs Pool in the Byers zone?

MR. EVANS: That is correct. There has been some difficulty over a long period of time in the Hobbs Pool with corrosiveness in casing and tubing in the Hobbs Pool. Some companies have gone through an extensive program of repairing, in which they have gone in and found some casing leaks, just in single completions. In fact, we have had one that we know of. It has not been extremely difficult in nature as in some areas, but it is a problem, and it is corrosive in Hobbs to some extent.

MR. GRAHAM: In your opinion, a general dual completion program over the oil-producing areas and different pools, is that advisable? What is your view on that?

MR. EVANS: From an engineering standpoint, and mechanically, I would say that it is mechanically satisfactory, and you can engineeringly, satisfactorily segregate the two zones. There is going to be in any dual completion, or single completion, there are considerable difficulties that might be expected, and you may have them on those. Whether it is economically advisable, and so forth, I am not in a position to say. But I can say, it can be done mechanically and engineeringly, and

that it did work in this one case mechanically and engineeringly, as far as segregating the two zones and preventing comingling of the two fluids.

COMMISSIONER SHEPARD: Does anybody else have anything to say?

Mr. Staley, do you have anything?

MR. STALEY: No.

COMMISSIONER SHEPARD: I guess that's all, Mr. Evans. It will be granted. Read the next case, Mr. Graham, please.

(Reads the notice of publication in Case No. 176.)

COMMISSIONER SHEPARD: Is there any objection? Does anyone want to appear against this?

MR. BURTON ATKINSON: I have a statement to read.

(Statement read by Mr. Atkinson into the record, as follows):

HUMBLE OIL & REFINING COMPANY
Post Office Box 2180
Houston 1, Texas
March 25, 1949

File 6-1 New Mexico Pipe Line Transportation

Re: Hearing set for 3/31/49 to amend Par. 2 of Order 788 (Case 176)

New Mexico Oil Conservation Commission Santa Fe, New Mexico

Gentlemen:

We have received notice of a hearing to be held on March 31, styled Case 176, relative to the amendment of Paragraph 2 of Order 788. According to the notice, it is proposed to eliminate from Paragraph 2 the following clause: "\*\*\*provided that a supplemental order is issued authorizing such production."

From the transporter's standpoint, we believe it is highly desirable that this provision be maintained in Paragraph 2, or that Paragraph 2 be amended. The provision was included in Order 788 as a result of the difficulties encountered by purchasers in determining the amount of oil which could be lawfully run from marginal units.

It is our understanding of the New Mexico Conservation Statute that a pipe line is authorized to transport any oil which has been legally authorized to be produced in the State of New Mexico, and that after the Commission has fixed the allowable production, no further authorization is needed insofar as the transportation and purchase of such oil is concerned.

We feel further that a pipe line cannot be authorized to transport any oil unless the Commission has first authorized the production of the oil, and it was for this reason that we supported the inclusion of a provision which would require the Commission to issue supplemental schedules granting increases in the allowable to marginal wells in all cases where the wells were capable of producing more oil than the amount shown on the original proration schedules. We still think that is necessary, unless the remaining portion of Paragraph 2 is to be amended.

The proposed Paragraph 2 as quoted in the notice does not authorize the production of any oil from marginal wells in excess of that shown on the proration schedule, nor does it authorize the transportation of such oil. It merely authorizes the purchase of such oil.

If the Commission feels that the issuing of supplements to the proration schedules is burdensome, and it is felt that a rule should be adopted which would allow these marginal units to produce up to the top allowable, then we would suggest that, in lieu of the present Paragraph 2, the following be substituted:

"The owner or operator of any marginal unit is authorized to produce from such marginal unit any amount of crude petroleum that such unit is capable of producing, up to and including, the top unit allowable as fixed by the Commission for the field in which such unit is located, provided that the owner or operator of such marginal unit shall notify the Commission and the transporter transporting the oil from such unit, in writing, the amount of crude petroleum which will be produced from such unit in excess of the allowable production as shown on the proration schedule. The marginal unit is a unit that is incapable of producing the state top unit allowable for the field in which such unit is located."

Very truly yours,

/s/ W. E. Hubbard W. E. Hubbard

WEH-AS

COMMISSIONER SHEPARD: Does anybody else have anything to offer? Mr. Staley, would you have anything on this?

MR. STALEY: In the state, most of us are familiar with what the Commission had in mind in making this suggestion, this

change. All marginal wells are placed on the proration schedule with the amount of oil that the operator feels the well is capable of producing. This amount will vary from month to month, and in a great number of cases, we will find that wells are producing oil in small -- more or less small-- amounts, in addition to the amount that appears on the proration schedule.

At the present time it is necessary that an order, supplementary order be given the pipe line to purchase that additional oil. It is in relation to the amount of oil involved. It places a tremendous burden on the administration of making up the proration schedules and issuing these orders out to the pipe line. And just recently we found that within a period of ten days, 70 letters were written, one carbon copy going to the Federal Board, another to the pipe line, a copy to the Oil Conservation Commission, and one being retained by the writer. And it is felt by the Commission that some simpler method of handling this oil production by the marginal wells in excess of the amount of the original proration schedule, could be worked out.

It is suggested here, since coming to Santa Fe, by some of the operators, that the Commission might adopt the system of not requiring -- that is, that the pipe lines should not require an additional order for wells, the marginal wells in pools where there are no top allowable wells; that is, an addition could be made to the order, exempting from the issuance of special order for those poole in which there are no top allowable wells. We have a number of those fields in Eddy County, and a few in Lea County. That is just a suggestion.

MR. McCORMICK: How would that solve the problem, Mr.

Staley?

MR. STALEY: It would solve the problem to this extent: It wouldn't be necessary for the proration office to issue orders to the pipe lines where the operators wish to sell marginal oil in those fields which have no top allowable wells, that is, all wells in the pool. The pipe lines could purchase in that pool any oil produced up to the top allowable. But, of course, that would not apply in the fields having top allowable wells.

MR. McCORMICH: Why would you make the distinction between the two types of fields?

MR. STALEY: Because all the wells at the present time, and presumably all the wells in that pool, are producing to capacity; and there would be no opportunity for an operator to produce additional oil from the top allowable well to take care of another well.

COMMISSIONER SHEPARD: Anybody else have anything to say?

MR. BRUNNER: I would like to make a short statement in regard to Shell Oil Company. We feel very much that the proration has been set up as a form of control to set certain allowables for certain wells; and if we do away with the ordering of supplemental orders to be issued, you are practically taking away your control, in effect. You are giving a lease allowable and not a well allowable. Any lease, with two or more wells, with a portion of marginal wells and a portion of top allowables, that lease immediately has what I would say is a lease allowable, because there is no control on the operator at all. So that, he could just, by a mere statement to the pipe line say, "Well, this well is now producing so much." He would be immediately allowed to produce. And actually, it is, in effect, taking the control away which is set up by law.

SECRETARY SEURRIER: May I interrupt?

MR. BRUNNER: Surely. I'm just voicing an opinion here, probably the minority, but still, an opinion.

SECRETARY SPURRIER: Well, I'm strictly in the minority.

What keeps them from doing that now, Mr. Brunner?

MR. BRUNNER: Nothing, except the fact that they have to put it in writing that they are doing something there that they are not doing. That way, you actually remove that restriction, that they have to put themselves on record. I admit, I know what you have in mind. The practice probably goes on to a certain extent; but still, it is true back there that I have to sign, as Superintendent of the Field, that this well is capable of making so much oil, when I know it does not make it. But the other way, by which you tell the pipe line people that you are now producing 40 barrels over last month, or you are now producing 10 barrles over last month, it is all in the record you have.

SECRETARY SPURRIER: What about the C-115?

MR. BRUNNER: That's right. They make an affidavit there. You have some control there, too, of course.

SECRETARY SPURRIER: It's a question of before or after, you might say.

MR. BRUNNER: I don't think it is. I'll admit that in our previous discussion, and in discussions probably going on now by the operators, some of them wanted to do it, but most of the operators don't want to do it. It's a question of hurting the reservoirs, because you might over-produce by ten or fifteen. But wells are not going to over-produce by fifty or sixty, because you might be depleting the field to do that. But you are making it much easier when you take

that Mr. Staley prepared, I think would answer the purpose, because it would limit to a great extent these numerous wells that you could limit in all of the marginal fields, any wells in those sections that are marginal, and it would slow those wells down slightly. That's one reason I didn't want to go on record here. Well, that's all I have. It's just an opinion.

SEORETARY SPURRIER: Well, we appreciate your comments, Mr. Brunner.

MR. BRUNNER: I think I would like to add one last thought, and that is that actually we haven't had a chance to really study that thing much. I think the pipe line companies are concerned much more about it than we are, because they are worried about it on the legal side of the question in running legal oil. They want to be sure they have the legal right and justification in their files for running oil. They want to be sure they have the right, legally, to run that oil. SECRETARY SPURRIER: Well, the Oil Conservation Commission is the one that legalizes oil in the State.

MR. BRUNNER: That's right, but they like to have something in the file that they can take out and say, "Here are our orders," and let them talk for them.

MR. McCORMICK: How about this fourth paragraph here, the purchase of allowables?

SECRETARY SPURRIER: Well, gentlemen, I have a letter here, dated March 28, 1949, addressed to me, which I will read, as follows:

(Secretary Spurrier read into the record, the following letter):

Shell Pipe Line Corporation Shell Building Houston 2, Texas March 28, 1949

IN RE: Case No. 176, set for public hearing March 31, 1949, at Santa Fe, New Mexico

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

Dear Mr. Spurrier:

Receipt is acknowledged of Notice of Hearing in the above styled Case.

May we suggest that Paragraph 2 of Order No. 788 be re-written as follows:

"Paragraph 2. That any producer named in the monthly proration order is authorized to produce 100 percent of the top field allowable from all units classified as marginal on the monthly proration order and any common purchaser is authorized to purchase and any transporter may transport such production from such marginal units. A marginal unit is a unit that is incapable of producing the established top unit allowable for that particular month from the pool in which the unit is located."

We should also like to make the following observation on Paragraph 4 of Order No. 788, which authorizes 'the purchase of shortages,' (which in the 'rder appear to be synonymous with back allowables). Could not the production from marginal units in excess of scheduled allowables be considered in this same category (without the ten barrel per day limitation), published in the monthly proration order or supplements thereto, and authorize the production, purchase and transportation thereof?

We wish to suggest that the Commission through its accounting processes show on its monthly proration schedule in the previous 60 day allowable column for marginal units, the adjusted allowable based on actual production for the given month. This in our opinion would result in no overages (unless production is in excess of the top unit allowable for that pool); and in the case of shortages, enable pipe line companies to keep in check with the Commission on such current shortages as are made up the month following that in which they occur, in accordance with Paragraph 4, of Order No. 788.

As a further alternative, based on the Commission's study of past production performances on marginal units, we suggest the monthly proration schedule under current allowable show the maximum daily allowable figure commensurate with

the average daily production for a period, such as the preceding ninety days, or for whatever period is felt would be equitable and applicable.

These suggestions are respectfully submitted to your Commission for its kind and studied consideration, with the thought that all concerned in your State, Conservation Authorities and Industry alike, may best be served.

Yours very truly,

SHELL PIPE LINE CORPORATION

By /s/ F. CHAS. NICHOLSON

FCB:nb

SECRETARY SPURRIER: What is "E" for? "FCB", "F. Charles"-VOICES: That is Arthur Nicholson.

SECRETARY SPURRIER: That's right. Now, I hope you can understand it better than I can. I don't understand the reference to a certain paragraph.

MR. McCORMICK: I don't understand any of the discussion on that 60-day previous allowables.

MR. GRAHAM: Mr. Chairman?

COMMISSIONER SHEPARD: Yes, sir.

MR. GRAHAM: The reference to the limited notice, I wondered if the Commission could consider anything other than to leave out those words, or leave them in? If we are going to amend the Order, I wonder if we have sufficient notice in there, to bring up these newer thoughts in regard to the amendment? What do you think, Don? What do you think, if we said we wanted to leave out those words?

COMMISSIONER SHEPARD: I think we will just continue this case until the next hearing, and at that time, I hope we will get further information; and in the meantime, the Commission can make further study.

MR. GRAHAM: And amend the notice to re-advertise it and open

these suggestions.

MR. STALEY: For the information of the Commission in regard to the Shell letter, I would like to point out that it is impossible for the current shortage to be shown on the proration schedule in the month following, in which the shortage occurred, due to the fact that the C-115 monthly report of operations production is not received in the Commission office until the 25th day of the month following the month in which the oil was run.

COMMISSIONER SHEPARD: Well, let's take the next case. Will you read it, Mr. Graham, please?

(Reads the notice of publication in Case No. 177).

MR. STALEY: If the Commission please, due to the fact that this is a question that is of vital importance to all operators, not only in Lea County but all operators in the State; and due to the fact that the Lea County Operators Annual Meeting will be held on the 4th day of May in Santa Fe and we expect a large number of operators to be present, the Lea County Operators would appreciate it very much if the Commission would continue the hearing of that case until some time about the time that this group of Operators will all be in Santa Fe.

It would just save two trips for a large number of people, who, I know, would like to be present at the time that case is heard. COMMISSIONER SHEPARD: We will be glad to extend the case until the next meeting, following your Lea County Operators Annual Meeting.

MR. STALEY: That will probably be May 5? SECRETARY SPURRIER: That will be May 5.

MR. GRAHAM: Do you think it is advisable to re-advertise that, or work on the mailing list?

MR. STALEY: I will be glad -- I am notifying all Operators of the Lea County Operators Meeting --

MR. GRAHAM (Interrupting): And that will be --

MR. STALEY (Interrupting): And we will include -- I will be glad also to send the same notice to all other Operators on our mailing list in Eddy County.

MR. GRAHAM: You don't think it is necessary to re-advertise?
MR. STALEY: I don't think so.

COMMISSIONER SHEPARD: Case No. 178, read it, please, Mr. Graham.

(Reads the notice of publication in Case No. 178).

SECRETARY SPURRIER: Gentlemen, I think you are all familiar by now with the fact that the Commission must hold an open hearing on the deletion of any part of any pool -- and for the sake of brevity, I will ask you now if any of you here have any objection to this proposal? If not, the Commission assumes that the action is justified.

COMMISSIONER SHEPARD: Does anyone have anything to say about it? (No response). Well, the order will be granted.

Case No. 179. Mr. Graham, will you read it please?

(Reads the notice of publication in Case No. 179).

COMMISSIONER SHEPARD: Will you come forward and be sworn?

MR. CHUCK ASTON was duly sworn and testified as follows:

MR. ASTON: I am chuck Aston, Consulting Geologist of Artesia,
representing Franklin, Aston, and Fair in the above-entitled
case, which is an application for an unorthodox well location,
same to be located 1270 feet south of the north line, and 1370
line
feet east of the west/of Section 7-18-30, in the Loco Hills
Pool, Eddy County, New Mexico.

The reason for this request is the proximity of water

-oil contact in the Loco Hills Field in this location, and this same contact eliminates a normal 10 acres or 330 feet from the common intersection of the 40 acre location.

Exhibit A, you will find a map of Section 7-18-30, showing the location of the producing wells, dry holes, and the proposed unorthodox location, with a dashed line indicating the location of the water-oil contact as determined from the sub-surface geological information, as Exhibit B, because this acreage, all acreage in consideration in this case is under lease from the United States Government. As Exhibit B which we have filed with you, is a letter from the Department of the Interior of the United States Geological Survey, stating that they have no contest insofar as this unorthodox location is concerned.

If there are any questions, I will be glad to try to answer them.

MR. McCORMICK: Who owns the adjoining leases?

MR. ASTON: Franklin, Aston and Fair owns all the leases.

There is no lease within 1270 feet within the proposed unorthodox location.

MR. McCORMICK: You have a lease on the entire West Half of Section 7?

MR. ASTON: Yes, sir.

MR. McCORMICK: Is it one lease?

MR. ASTON: Yes, sir, it is all the same, all "A" lease, Federal "A" lease.

MR. McCORMICK: How about over-writing royalty?

MR. ASTON: The royalty set-up on that, I am not too familiar with, but it would all be the same, because it is all operated

as one unit lease.

MR. McCORMICK: Uniform throughout the West Half of 7?

MR. ASTON: Yes, sir. For your information, the exact location is 50 feet from the common intersection of the 40. The measure I gave was from the outside lines of the section.

COMMISSIONER SHEPARD: Any further questions? Does anybody have any objections?

MR. ASTON: If I might interject one point for the record -we are setting Case 147 as heard before the Commission and
granted, as a precedent for making this application.
SECRETARY SPURRIER: You have been qualified before the Com-

MR. ASTON: Yes, sir.

mission?

COMMISSIONER SHEPARD: If there are no objections from anyone, it will be granted.

MR. ASTON: Thank you.

COMMISSIONER SHEPARD: Would any of the pipe line companies like to make a statement on the case we continued, No. 176?

MR. ROUSTON:: I would like to know whether it is continued to May 5? Is that when it will be called up again?

COMMISSIONER SHEPARD: It will be called up at the next meeting. Is that May 5?

MR. McCORMICK: When is the Operators' meeting?

MR. STALEY: May 3 and 4.

COMMISSIONER SHEPARD: It will be continued to May 5.

Mr. Spurrier, do you have something you would like to add?

SECRETARY SPURRIER: Yes. Off the record.

(Discussion off the record).

COMMISSIONER SHEPARD: Does anybody else have anything? Mr.

Lovering.

MR. LOVERING: Frank Lovering, with Shell. While some of the pipe line representatives are still here, I would like to go back to Case 176 and call your attention to the alternate suggestion by Mr. Staley, which I think will overcome most of the objections to the present procedure on the part of all operators and the Lea County operators committee itself.

It appears to me that by not only designating fields but by designating any unit in which all production from marginal wells will be corraled into one tank battery, not comingled with wells that produced top allowables, that in the month before, that these units are tentative and that those units would actually be allowed to produce up to the top allowable, and the pipe lines could take the production from these units. That could be easily done and at the same time it would enable the Commission and the Lea County operators' committee in arriving at their nominations could take those units and, based on the current production proration estimate, a very close allowable figure could be reached, which they could actually produce, and at the same time allow them to distribute excess production over top allowable wells.

I would like to hear from any pipe line representatives here as to whether or not that would cure the present ills we have in this proposed change.

COMMISSIONER SHEPARD: Would anybody else like to add something to that?

Well, if there are no further questions, we will stand adjourned.

(Whereupon, the meeting adjourned at 11:10 A.M.)