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

CASE No. 2014 Order No. R-1744-A

APPLICATION OF JAL OII, COMPANY AND OLSEN OILS, INC. FOR A REVISION OF THE JALMAT GAS POOL RULES TO CREATE A CATEGORY OF "DISTRESS" WELLS WHICH WOULD BE EXEMPT FROM GAS PROPRATION.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for reconsideration upon the patition of Jal Oil Company and Olsen Oils, Inc. for a rehearing in Case No. 2014, Order No. R-1744, heretofore entered by the Commission on the 4th day of August, 1960.

NOW, on this <u>31st</u> day of August, 1960, the Dil Conservation Commission, a quorum being present, having considered the potition for rehearing,

#### FIEDS:

- (1) That the petition for rehearing does not allege that the applicant has any new or additional evidence to present in this case.
- (2) That in view of the fact that the Commission has twice considered generally the issues in question, further consideration would be repetitious and would serve no useful purpose.
- (3) That accordingly the petition for rehearing should be denied.

#### IT IS THEREFORE ORDERED:

for Laring in Case No. 201, Order No. P-1714, by and the sub is hareby decied.

DOWE at Santa Fe, New Mex to, in the day and year hereinabove designated.

> STITE OF MEW MEXICO OF COMSERVATION COUNTSSION

JOHN BURROUGHS, Chairman

MUNICAY E. MORGAE, Monday

A. L. FURTER, Jr., Budbor & Secuetar:

W. D. GIRAND

GIRAND & STOUT
LAWYERS

LAWYERS
HORRS, NEW MEXICO 1960 AUS 24 AM 0: 39 ugust 22, 1960

IXPRESS 3-9116

Santa Fe, New Mexico

Oil Conservation Commission State Capitol Building Post Office Box 871

Attention: Mr. A. L. Porter, Jr.

Secretary-Director

Re: Case No. 2014, Order No. R-1744 Application of Jal Oil Company

and Olsen Oils, Inc.

#### Gentlemen:

Enclosed you will find Motion for Reconsideration in Case No. 2014, Order No. R-1744.

Please advise the Commission's action on this matter.

Very truly yours,

GIRAND & STOUT

G/bb Encls.

cc: Olsen Oils, Inc. 2808 Liberty Bank Building Oklahoma City 2, Oklahoma

> Jal Oil Company Post Office Box 1744 Midland, Texas

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#### BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

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

CASE NO. 2014 Order No. R-1744

APPLICATION OF JAL OIL COMPANY AND OLSEN OILS, INC., FOR A REVISION OF THE JALMAT GAS FOOL RULES TO CREATE A CATEGORY OF "DISTRESS" WELLS WHICH WOULD BE EXEMPT FROM GAS PRORATION.

#### MOTION FOR RECONSIDERATION

COMES NOW the Jal Oil Company and Olsen Oils, Inc., and file this their Application for the Commission to reconsider Case No. 2014, wherein the Commission issued their Order No. R-1744 denying the Application filed by Applicants proposing certain Rules which would prevent premature abandonment of gas wells in the Jalmat Gas Pool, Lea County, New Mexico, and for cause would show:

- 1. That the Order entered by the Commission is contrary to the evidence introduced at the hearing thereon and is not supported by any substantial evidence, only conjectures and opinions, and is not based on any material facts from which support can be given to the findings.
- 2. Applicants particularly except to the last sentence in Finding (4), for the reason that the proposed Rules did " t provide for unrestricted production of gas, nor is it feasible for the Commission to determine that gas wells classified as "listress wells," under the proposed Rules, could actually drain a larger area than that dedicated to the well.

- 3. Applicants especially cx to the last sentence appearing in Finding (5) and state that the record is silent as to any evidence which would support such a ringing.
- 4. Applicants except to the last sentence in Finding (6), wherein the Commission found:

"But particularly where, as in the Jalmat Gas Pool, the drilling density has been on units considerably smaller in size than the area that one gas well can efficiently drain, all or most of such otherwise producible gas, if my there be, will be produced from ther wells in the pool." (Underscoring added)

for the reason that the evidence is clear and convincing that at the time the subject wells were shut-in under Order No. 967, now Order No. R-1670, they were shut-in for the reason of overproduction, and after being shut-in for prolonged periods were incapable of being brought back to their prior production level.

5. Applicants particularly except to Finding (7), for the reason that same is not supported by any evidence introduced at the hearing and for the further reason that the uncontroverted testimony of the witnesses appearing at the hearing was to the effect that the Commission could control the production of oil and gas under its powers and the failure to adopt the Rule leaves the Commission powerless to prevent the finding they made in the last sentence, wherein they said:

"Economic realities dictate that at some point every well must be abandoned, even though from the standpoint of physical factors considerable amounts of oil or gas are left under the tract dedicated to the well, this despite any action that the Coumission might or might not take." (Underscoring added)

6. Applicants except to Finding (8) for the reason that in said finding the Commission recognizer that the gas remaining under the tract dedicated to the well shut-in would be produced by offsetting wells, if the well with the water problem is plugged and abandoned or if remedial work on it proves to be unsuccessful. This finding, in itself, recognizes an unwarranted and unauthorized drainage of reserves under an operator's tract by offsetting operators, due to the Commission failing to adopt Rules and Regulations which would guarantee unto each operator the right to produce the reserve underlying his tract. In this connection, it was definitely established that the subject wells, due to their age, method of completion, and condition, were not suitable for exploratory remedial work and that the chance of successful remedial work was very slight. The Commission, in making this finding, 'as overlooked the fact that the producing intervals in a well, or wells within the Jalmat Gas Pool, have vertical limits from the top of the Tensill Formation to a point one hundred feet above the base of the Seven Rivers Formation, including all of the Yates Formation. The reworking and recompleting of a well requires the operator to abandon the particular producing interval in which the well is being produced and seek production in some other producing interval within the vertical limits of the pool. When this is done, the gas remaining in the interval in which the well had been completed, due to work-over or recompletion, becomes entirely comented off or lost, and this factor has been entirely ignored by the Commission in adopting this finding.

7. Applicants especially except to Finding (9), for the reason that said finding, in the first place, is inconsistent in its orm statement and in the second place. finds that this Commission cannot control the production of gas, except through the shutting in of gas wells making water in such amounts as cannot be equitably prorated under the present proration rule requiring deliverability tests.

WHEREFORE, Applicants pray that this Commission take and reconsider the Application for the adoption of the proposed Rules, in light of true conservation and the protection of reserves, prevention of premature abandonment of wells, and unwarranted waste of natural resources.

Respectfully submitted,

GIRAND & STOUT

Hobbs, New Mexico

(Attorneys for Applicants)

GOVERNOR JOHN BURROUGHS

# State of New Mexico Oil Conservation Commission

LAND COMMISSIONER MURRAY E. MORGAN MEMBER



STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY DIRECTOR

P. O. BOX 87 SANTA FE

August 31, 1960

Mr. W. D. Girand Attorney at Law P. O. Now 1445

: Case No. 2014

Order No. R-1744-A

Applicant:

Jal Oil Company & Olsen Oils, Inc.

Doar Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC # Artesia OCC Astec OCC

Other Mr. Ause Bellabia

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

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF WEW MEYTON FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2014 Order No. R-1744

APPLICATION OF JAL OIL COMPANY AND OLSEN OILD, INC., FOR A REVISION OF THE JALMAT GAS POOL RULES TO CREATE A CATEGORY OF "DISTRESS" WELLS WHICH WOULD BE EXEMPT FROM GAS PROPATION.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 13, 1960, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 4th day of Amgust, 1960, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

#### PIMDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicants, Jal Oil Company and Olsen Oils, Inc., operators in the Jalmat Gas Pool, Lea County, New Mexico, sook a revision of the Special Rules and Regulations for said Pool by creating a category of wells to be known as "distress" wells, which wells would be except from \$\psi\_s\$ provation.
- (3) That under the proposed rule as presented by the applicants and El Paso Matural Gas Company, a well would be eligible for classification as a "Listress" well when the following conditions have been met:
  - (a) The operator shows that he has emergized due diligence and used all feasible means to mintain the well is a producible condition and the well is producing through extificial means with a fractionary pieces of your jack, or face other mechanisms means, and the well is mixing water in such manuals as after a 72-hour shot-in partial the well because legged-off and is mable.

CASE No. 2014 Order No. R-1744

to be restored to production after being swabbed for not less than 24 hours, or the operator shows that it is uneconomically feasible to utilize mechanical aids to maintain the well on production;

- (b) That all acreage belonging to the operator capable of being assigned to said well has been dedicated;
- (c) The operator must furnish to the Commission a report giving in detail all pertinent data with respect to the method employed by the operator in producing the well sought to be classified as a distress well, and such other and further information as the Commission may desire from time to time:
- (d) The applicant presents written consent in the form of waivers from all operators offsetting agreage dedicated to the proposed distress well;
- (e) In lieu of paragraph (d) of this Rule, the applicant may furnish proof of the fact that said offset operators were notified by registered mail and furnished the same information as was furnished in their application to the Commission with respect to the proposed distress well. The Secretary-Director of the Commission may classify the well as a distress well if, after a period of twenty days following the mailing of said notice, no operator has made objection to the classification of the proposed distress well. If a protest is received, the matter shall be set for hearing.
- (4) That a standard gas proration unit in the Jalmat Gas is 640 screet, the Commission having long since found after proper notice and hearing that one gas well in said Pool can efficiently and economically drain that amount of acreage. However, the Pool has, over the course of the years, been developed on a density averaging approximately one gas well per 160 acres. Consequently, to permit any gas well to produce at an unrestricted rate while limiting the production of offset gas wells to an allowable based on the provation formula for the Pool would allow the well producing at an unrestricted rate to drain gas from an area larger than that dedicated to the well, thereby impairing correlative rights.
- (5) That possitting some que wells in a common source of supply in production of contract rates while at the some time limiting the production of other wells to contain preception production state does violence to the basic precept and principle of

-3-CASE No. 2014 Order No. R-1744

gas prorationing. The Principle of gas prosettioning is to enable conformer in a pool to produce his just and equitable share of the gas underlying his property and to utilize his fair share of the reservoir energy. In endeavoring to accomplish this goal, the Commission makes every effort to afford each operator the opportunity, insofar as is practicable and insofar as it can be done without causing waste, to produce an amount of gas substantially in the proportion that the quantity of recoverable gas under his property bears to the total recoverable gas in the pool. Adoption of the proposed rule change would violate this legislative mandate and would necessarily cause a severe impairment of the correlative rights of the operators in the Jalmat Gas Pool.

- (5) That the applicant takes the position that unless a classification of "distress wells" is created for wells with severe water problems, and unless such wells are permitted to produce at unrestricted rates, they will have to be abandoned, thereby resulting in otherwise producible gas being left in the reservoir. But particularly where, as in the Jalmat Gas Pool, the drilling density has been on units considerably smaller in size than the area that one gas well can efficiently drain, all or most of such otherwise producible gas, if any there be, will be produced from other wells in the pool.
- (7) That the risk that a well will produce excessive amounts of water due to structural position or other geological factors is like the risk of drilling a dry hole, simply a hazard inherent in the oil and gas business. Economic realities dictate that at some point every well must be abandoned, even though from the standpoint of physical factors considerable amounts of oil or gas are left under the tract dedicated to the well, this despite any action that the Commission might or might not take.
- (8) That if an operator believes that significant amounts of gas gould be produced from a well if the water could be shutoff, prudent business judgment will distate that proper remedial work, such as squeeze-comenting, will be undertaken to alleviate the problem of undue water encroschment. While the applicants have taken no such action on most of their wells with water problems, the evidence establishes that other operators in the Jalmat Gas Pool who have wells in the same general area which are located in a structurally similar position have been successful in rilizing such remedial techniques where the recoverable reserves justified such action. And if the otherwise removerable reserves do not justify such remedial work on the operator's own initiative, then the amount of gas remaining under that tract dedicated to the well must, in the operator's opinion, be relatively insignificant. Purther, most, if not all, of such gas will be produced by offsetting wells if the well with the water problem is plugged and abundoned or if remedial work on it proves to be unsurcessful.

-4-CASE No. 2014 Order No. R-1744

- (9) That adoption of the proposed rule change would, as the testimony presented by Continental Oil Company indicates, most probably encourage imprudent operations by operators whose wells make considerable amounts of water. The oil and gas business being highly competitive, it is only reasonable to presume that if the proposed rule change were adopted, such operators would at least delay remedial activities while attempting to get a "distress well" classification. Such a delay might well result in both underground and surface waste as defined in Section 65-3-3, NMSA, 1953 Comp. If successful in getting a well so classified, the operator would never attempt remedial work; if unsuccessful in getting a well so classified, the delay would tend to result in such remedial work being started too late to be physically effective or ne longer justified from an economic standpoint.
- (10) That for the reasons set forth above the application should be denied.

#### IT IS THEREFORE ORDERED:

That the application of Jal Oil Company and Olsen Oils, Inc. for a change in the Special Rules and Regulations 107 the Jalmat Gas Pool, Lea County, New Maxico, to create a category of wells to be exempt from gas provation be and the same is hereby denied.

DOMF at Santa Pe, New Mexico, on the day and year herein-

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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MURRAY E. MORGAN, Member

A. L. PORTER, Jr., Homber & Segretary

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GOVERNOR JOHN BURROUGHS CHAIRMAN

### State of New Wexico Oil Conservation Commission

LAND COMMISSIONER MURRAY E. MORGAN



STATE GEOLOGIST A. L. PORTER, JR.

P. O. BOX 871 SANTA FE

August & 2000

Mr. W. D. Girand Box 1445 Hobbs, New Mexico

> Re: Case No. Order No.

Applicant:

Dear Sir:

and Olser, Oils, Inc.

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

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Carbon copy of order also sent to:

Hebbs occ Artesia occ Aztec OCC

CLASS OF SERVICE

### WESTERN UNION

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W. P. MARSHALL, PRESIDENT

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NO 2014, TO BE HEARD JULY 13, 1960. GULF IS OPPOSED TO
THE APPLICATION AS PRESENTED SINCE WE FEEL THAT
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IN A PRORATED GAS POOL AREOSEXEMPT FROM PRORATION.
WE DO NOT OBJECT TO A DISTRESS WELL CLASSIFICATION
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- GULF CIL CORPORATION W A SHELLSHEAR DISTRICT \_\_\_\_

CLASS OF SERVICE

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### WESTERN UNION

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NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE NMEX

= REFERENCE CASE 2014 APPLICATION RAL OIL COMPANY AND OLSEN OILS INC. PHILLIPS PETROLEUM COMPANY AGREES IN PRINCIPLE WITH PRACTICE OF EXEMPTING WELLS FROM PRORATION WHERE IT IS CLEARLY ESTABLISHED THAT SUCH EXEMPTION IS REASONABLY NECESSARY TO PREVENT WASTE. WE DO NOSIBBLWEVE, THAT ANY RULE CAN BE PROMULGATED WHICH WILL ACCOMPLISH SHIS OBJECTIVE BY ADDINISTRATIVE APPROVAL WITH ANY SE OF THE PRINCIPLE OF GRANTING RELIEF FOR PREVENTION OF WASTE ONLY . RECOMMEND RULES

CLASS OF SERVICE

## WESTERN UNION

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### WESTERN UNION

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RE: CASE NO 2014 TEXACO INC, AS AN OPERATOR IN THE JALMAT ( GAS POOL, IS OPPOSED TO THE PROPOSAL OF JAL OIL COMPANY AND OLSEN OIL COMPANY TO CREATE A CATEGORY OF WELLS TO BE KNOWN AS DISTRESS WELLS, WHICH WELLS WOULD BE EXEMPT FROM GAS PRORATION. THE APPLICANTS HAVE REQUESTED THAT A WELL BE CLASSIF, ED AS A DESTRESS WELL IF PRODUCING THROUGH ARTIFICIAL MEANS WITHOUT MAKING ANY ATTEMPT TO LOCATE THE POINT OF STANDED TO ALLEVIATE THE WATER PROBLEM. THE COMMISSION HAS ALWAYS GRANTED AN APPLICANT THE OPPORTUNITY TO HEAR HARDSHIP CASES AFTER PROPER NOTICE.

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# ESTERN UNION

TELEGRAM

TEXACO IS OPPOSED TO THIS PROPOSED RULE CHANGE WITHOUT GIVING AN OPERATOR AT A COMMISSION HEARING THE OPPORTUNITY TO PROTECT ITS CURRELATIVE RIGHTS WHEN OFFSET BY THESE SO-CALLED DISTRESS WELLS: THEREFORE WE RESPECTFULLY REQUEST THE APPLICATION BE DENIED=

TEXACO INC J H MARKLEY DIVISION MANAER ==

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STATE CAPITOL BLDG SANTA FE NMEX-

RE CASE NO 2014, JULY 13 HEARING. THE OHIO OIL COMPANY OPPOSES ANY CHANGE IN THE JALMAT CAS POOL RULES AT THIS TIME WHICH WOULD REQUIRE THE COMMISSION TO EXEMPT ANY WELE FROM EITHER GAS PRORATION OR FROM THE ANNUAL DELINERABILITY TEST SOLELY ON THE GROUND THAT A WELL HAS WET STATED CONDITIONS SUCH AS ARE SET OUT IN THE RULE ROLOSED BY APPLICANTS AND HERETOFORE CIRCULATED BY THE COMMISSION . HOWEVER, THE OHIO RECOGNIZES THAT THE CALMPTS ON FROM THE DELIVERABILITY TEST AND FROM THE REGULAR ALLOWABLE LIMITATIONS MAY BE JUSTIFIED FOR CERTAIN WELLS IN THIS POOL NOW OR IN THE FUTURE. THE OHIOTS POSITION CONCERNING SUCH EXEMPTIONS IS RESPECTFULLY STATED AS FOLLOWS: IF EXEMPTION FROM TITE DELIVERERABILITIEST IS GRANTED FOR A WELL A REASONABLE AND FATR SUBSTITUTE SHOULD BE PROVIDED THERE SHOULD BE NO COMPLETE EXEMPTION FROM PRORATION EXCEPT FOR MARGINAL WELLS. ANY SPECIAL ALLOWABLE FOR ANY OTHER WELL SHOULD BE LIMITED TO THE MINIMUM VOLUME NECESSARY TO MAINTAIN THE WELL ON PRODUCTION BUT SHOULD NOT EXCEED THE CURRENT ALLOWABLE ASSIGNED TO A NON-MARGINAL WELL HAVING THE SAME AMOUNT OF DEDICATED ACREAGE IN THE POOL. NO SUCH RELIEF

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCLENING ITS SERVICE

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### WESTERN UNION

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APPLICATION WITH A COPY TO EACH OFFSET OPERATOR
SETTING OUT ALL PERTINENT DATA INCLUDING EFFORTS MADE
TO REWORK THE WELL. A HEARING SHOULD BE REQUIRED ON
ANY SUCH APPLICATION EITHER ON THE COMMISSION. OWN
MOTION OR UPON REQUEST OF ANY OPERATION IN THE POOL=
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THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PAPEO AS CONCESSIONS ITS SERVIN

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Carly all

W. Prentisi By M. J. McCain, Egent 7-7-1960

R. OLSEN

C. H. Legena de. By M. F. Melain, agent, 7-7-1960

> DEGENVEID M JUL 11 1960 R. OLOLN

New Mexico Oil Conservation Commission Post Office Box 871 Santa Fe, New Mexico

Gentlemen:

The undersigned, being an owner and operator of gas wells in the Jalmat Gas Pool in Lea County, New Mexico, favors and recommends the adoption and approval of the application of Olsen Cils, Inc. and the Jal Oli Company to amend and change Order R-967 of your Commission insofar as said Order covers the gas pool rules of the Jalmat Gas Pool.

It is our understanding that such application is set for hearing on July 13, 1960.

Yours truly,

Albert Cackle

Pate: June 24, 1960

Men Mexico Oil Conservation Commission Post Office Box 871 Sania Pe, New Mexico

Contlemen:

The undersigned, being an owner and operator of gas wells in the Jalmat Gas Pool in Lea County, New Mexico, favors and recommends the adeption and the Jal Oil Company to amend and change Order the gas pool rules of the Jalmat Gas Pool.

It is our understanding that such appli-cation is set for hearing on July 13, 1960.

Yours truly,

MESTATES PETROLEUM COMPANY

Date: 6/29/1960

New Mexico Oil Conservation Commission Post Office Box 871 Santa Fe, New Mexico Gentlemen:

operator of gas wells in the Jalmat Gas Pool in The undersigned, being an owner and Lea County, New Mexico his no objection to the application of Olsen Oils Inc. and the Jal Oil Company to amend and change Order R-967 of your Commission insofar as said Order covers the gas pool rules of the Jalmat Gas Pool.

application is set for hearing on July 13, 1960. It is our understanding that such

Yours truly

ANDERSON-PRICHARD OIL CORPORATION

R. W. Brauchli Vice President Enveration and Production

Date: June 24, 1960

Now Mexico Oil Concervation Commission Post Office Box 871 Santa Pe, New Mexico

Gontlemen:

The undersigned, being an owner and operator of gas wells in the Jahret Cas Pool in Lea County, New Mexico, favors and recommends the adoption and approval of the application of Olsen Oils, Inc. and the Jal Oil Company to smend and change Order R-967 of your Commission insofar as said Order covers the gas pool rules of the Jahret Gas Pool.

It is our understanding that such appli-cution is set for hearing on July 13, 1960.

A. fours truly,

Date: June 27, 1960

New Mexico Odl Conservation Commission Post Office Box 871 Santa Fe, New Mexico

Gentlemen:

The undersigned, being an owner and operator of gas wells in the Jaimat Gas Pool in Lea County, New Mexico, favors and recommends the adoption and approval of the application of Olsen Oils, Inc. and the Jal Oil Company to amend and change Order the gas pool rules of the Jaimai Gas Pool.

cation is set for hearing on July 13, 1960.

Yours truly,

HUSKY GIL COMPANY

By M. J. Wisifall

Date: 6/29/60

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arsa kan kan sanggara Tabba panggaranggaran

W. D. GIRAND

New Mexico Oil Conservation Commission
Mabry Hall
Santa Fe, New Mexico

Attention: Mr. A. L. Porter
Secretary

Par Mr. Porter:

This will acknowledge receipt of volume in the party with copies to the Jal Oil ceiving a copy of ce May. 16th addressed to the Jal Oil Company and Olsen Oil Company with copies to the officials and individuals receiving a copy of this letter.

The writer has considered the respective proration orders pertaining to the Jalmat Gos Pool and it is my present belief that with the following changes to Order R-967 the relief made for dry gas wells producing water such as the subject wells of the Jal Oil Company and Olsen Oils, Inc. will be obtained. We propose the following suggested changes:

Rule 6 of Order R-967 should be amended by the addition of the following paragraph preceding the second paragraph under paragraph (b): "A distress well, as hereinafter defined, shall be allowed to produce the amount of gas that it is capable of producing under production methods approved by the Commission."

The third paragraph, subparagraph (b), should be amended by adding, following the word "marginal" in the second line:

Subparagraph (c) of Rule 6 should be amended by inserting the following after the word "wells" on the first line: "except

Subparagraph (d) under Rule 6 should be amended by adding after the word "well": "except a well classified as a

New Mexico Oil Conservation Commission Page 2 June 7, 1960

Rule 8, paragraph 3, following the word "ability" at the end of the second sentence should be added: "except wells classified as distress wells."

The fifth paragraph of Rule 8 should be amended to read as follows: "The director may reclassify a distress well, a marginal well or non-marginal well at any time the well's production data, deliverability data, or other evidence as to the well's producing ability, justifies such reclassification."

The tenth paragraph should be rewritten as follows: "All wells not classified as marginal wells or distress wells shall be classified as non-marginal wells."

The following paragraph should be added to Rule 8: "A well shall be classified as a distress well when the following conditions exist: (1) The well is connected to a low pressure dry gas line; (2) The well is producing through artificial means, either a free floating piston or pumpjack, or the well is making water in such amounts as after a 72-hour shut-in period the well becomes logged off and is unable to be restored to producing pressure after being swabbed for not less than 24 hours; (3) That all acreage belonging to the operator capable of being assigned to said well has been assigned; (4) The operator must furnish to the Commission a report detailing the method employed by the operator in producing the well sought to be classified as a distress well, giving the operating interval employed in using the free floating piston, or the operating interval used in the operation of the pumpjack, as the case may be, and such other and further information as the Commission may desire from time to time."

Rule 10 should be amended by adding the following paragraph: 'Wells classified as discress wells shall be exempt from the provisions of this rule."

We respectfully request any suggestions or observations you would care to make. We believe that with the amendments, gas wells making water can be protected against premature

New Mexico Oil Conservation Commission Page 3 June 7, 1960

abandonment and will protect the correlative rights of all operators.

On or before the 24th of June, the Jal Oil Company and Oisen Oils, Inc. will file an application proposing the adoption of the above proposed amendments and additions.

Respectfully submitted,

GIRAND & STOUT

BY:

G/jb

cc: Governor John Burroughs
State Capitol
Santa Fe, New Mexico

State Land Commissioner Murray E. Morgan Mabry Hall Santa Fe, New Mexico

New Mexico Oil Conservation Commission P., O. Box 2045 Hobbs, New Mexico Attention: Mr. Joe Ramey

El Paso Natural Gas Company El Paso Natural Gas Building El Paso, Texas Attention: Mr. Norman Woodruff GIRAND & STOUT

LAWYERS

W. D. GIRAND

W. D. GIRAND

LOWELL STOUT

June 16, 1960

June 16, 1960

TELEPHONE: EXPRESS 3-9116 POST OFFICE BOX 1/45

New Mexico Oil Conservation Commission Mabry Hall Santa Fe, New Mexico

Attention: Mr. A. L. Porter Secretary

Re: Proposed Rule Change of Jalmat Gas Pool Rule,

Order R-967

Dear Mr. Porter:

We are inclosing original and three copies of the Application of Jal Oil Company and Olsen Oils, Inc., requesting certain changes in Order R-967, insofar as said Order covers the Jalmat Gas Pool.

It is our understanding that the Commission proposes to hear this matter on July 13, 1960, at its regular meeting.

Please file this formal Application.

Respectfully submitted,

GIRAND & STOUT

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G/bb Encls.

cc: Olsen Oils, Inc.

2808-14 Liberty Bank Building Cklahoma City 2, Oklahoma

Jal Oil Company Post Office Box 1744 Midland, Texas

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### BEFORE THE OIL CONSERVATION COMMISSION?

OF THE STATE OF NEW MEXICO

APPLICATION OF OLSEN OILS, INC.	)	
AND THE JAL OIL COMPANY TO AMEND	)	<i>*</i>
AND CHANGE ORDER R-967 OF THIS	)	
COMMISSION, INSOFAR AS SAID ORDER	)	CASE NO.
COVERS THE GAS POOL RULES OF THE	)	
JALMAT GAS POOL.	<b>)</b>	

COMES NOW Olsen Oils, Inc., a corporation, and Jal Oil Company, a corporation, and files this its Application requesting changes and amendments in Order R-967, insofar as said Order pertains to the Pool Rules of the Jalmat Gas Pool, and for cause would show:

- 1. Applicants are the owners and producers of gas wells located in the Jalmat Cas Pool connected to low pressure dry gas lines and being produced by mechanical methods, due to the encroachment of water.
- 2. That many of applicants' wells have been shut~in because of overproduction and applicants have sought relief from the Commission in consolidated Case No. 1779 and applicant Jal Oil Company sought relief in its Case No. 1941, both cases resulting in an Order of the commission allowing applicants to make up their overproduction by producing their

wells at seventy-five per cent of the well's current allowable.

- 3. That gas wells belonging to applicants, making water and being mechanically produced, cannot be operated and produced under Order R-967, or under the exceptions granted in Case No. 1779 and Case No. 1941.
- 4. That unless relief is granted to operators in the Jalmat Gas Pool having gas wells connected to low pressure dry gas lines, making water and being produced by mechanical means, large reserves of natural gas will be wasted and the correlative rights of operators of such wells will be destroyed.
- 5 Applicants would further show that the Commission has repeatedly held that it was bound by Order R-967, covering the Gas Pool Rules of the Jalmat Gas Pool, and that no greater relief can be given the applicants herein, or others, than as has heretofore been afforded in Case No. 1779 and Case No. 1941, under the existing Order R-967.
- 6. Applicants would show that in light of the Commission's rule, it is necessary for the Commission to amend its Order R-967 in such manner as to afford relief to owners and operators of gas wells connected to low pressure dry gas lines producing water and being produced through mechanical means,

and applicants believe that the following amendments, changes and additions to Order R-967 will afford such relief to the operators and to the Commission and will result in a great saving of natural gas reserves in the Jalmat Gas Pool.

We respectfully submit the following changes:

Rule 6 of Order R-967 should be amended by the addition of the following paragraph preceding the second paragraph under paragraph (b): "A distress well, as hereinafter defined, shall be allowed to produce the amount of gas that it is capable of producing under production methods approved by the Commission."

The third paragraph, subparagraph (b), should be amended by adding, following the word "marginal" in the second line: "and distress".

Subparagraph (c) of Rule 6 should be amended by inserting the following after the word "wells" on the first line: "except distress wells, . . ."

Subparagraph (d) under Rule 6 should be amended by adding, after the word "well": "except a well classified as a distress well, . . ."

Rule 8, paragraph 3, following the word "ability" at the end of the second sentence, should be added: "except wells classified as distress wells."

The fifth paragraph of Rule 8 should be amended to read as follows: "The director may reclassify a distress well, a marginal well or non-marginal well at any time the well's production data, deliverability data, or other evidence as to the well's producing ability, justifies such reclassification."

The tenth paragraph should be rewritten as follows: "All wells not classified as marginal wells or distress

wells shall be classified as non-marginal wells."

The following paragraph should be added to kule 8: "A well shall be classified as a distress well when the following conditions exist: (1) The well is connected to a low pressure dry gas line; (2) The well is producing through artificial means, either a free floating piston or pumpjack, or the well is making water in such amounts as after a 72-hour shut-in period the well becomes logged off and is unable to be restored to producing pressure after being swabbed for not less than 24 hours; (3) That all acreage belonging to the operator capable of being assigned to said well has been assigned; (4) The operator must furnish to the Commission a report detailing the method employed by the operator in producing the well sought to be classified as a distress well, giving the operating interval employed in using the free floating piston, or the operating interval used in the operation of the pumpjack, as the case may be, and such other and further information as the Commission may desire from time to time."

Rule 10 should be amended by adding the following paragraph: 'Wells classified as distress wells shall be exempt from the provisions of this rule."

WHEREFORE, applicants pray that after notice and hearing the Commission issue its appropriate Order changing, amending and adding to Order R-967 the above proposed changes and additions, and for such other relief as the Commission deems fit in the premises.

GIRAND & STOUT

Post Office Box 1445 Hobbs, New Mexico

(Attorneys for Applicants)

G/bb



T E X A S

## TIDEWATER OIL COMPANY

PROPATION & UNITIZATION

J. B. HOLLOWAY, DIVISION SUPERVISOR
JOHN S. CAMERON, JR., PROBATION ENGINEER

July 8, 1960

Oil Conservation Commission State of New Mexico Hobbs, New Mexico

Attention: Mr. A. L. Porter, Jr., Member and Secretary

Re: Case No. 2014, Application of Jal Oil Company and Olsen Oils, Inc. for a Revision of the Jalmat Gas Pool Rules by Creating a Category of Wells Known as "Distress Wells".

Gentlemen:

This is to advise that Tidewater Oil Company objects to the creation of a class of wells in New Mexico to be designated as "distress wells", and classified as such by the determination as set out in the notice of hearing.

Our objection is based primarily on the precedent that it would establish and the administrative difficulties the Commission would encounter if such a rule became prevalent in the State of New Mexico.

Yours very truly,

JBH:vh

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PAN AMERICAN PERECOUM CORP. IS OPPOSSED TO

PLUY CHANGE IN THE VALOR POOL RULES AT THIS

TIME. IT IS DUR DAMION THAT PRESENT RULES

É POCIUSES DE THE CONSERVATION PRESENT RULES

PROVIDE REVICE FOR THE TUPE WELLS DETINED

AS "DISTRESS WELLS" IN THIS CASE, PAN AMERICAN

RECOMENDS, THE APPLICATION BE DENIED.

Guy Boen

(5)

BEFORE THE OIL CONSERVATION COMMISSION MABRY HALL Santa Fe, New Mexico July 13, 1960

### REGULAR HEARING

#### IN THE MATTER OF:

Application of Jal Oil Company and Olsen Oils. Inc., for a revision of the Jalmat Gas Pool rules as set forth in Order No. R-1670. Applicant, in the above-st, led cause, seeks an order revising the special rules and regulations governing gas wells in the Jalmat Gas Pool, Lea County, New Mexico, by creating a category of wells known as distress wells, which wells would be exempt from gas proration.) A well would be classified as a distress well when the following conditions exist:

Case No. : 2014

- (1) the well is connected to a low pressure dry gas line;
- (2) the well is producing through artificial means, either a free floating piston or pumpjack, or the well is making water in such amounts that after a 72-hour shut in period the well becomes logged off and is unable to be restored to producing pressure after being swabbed for not less than 24 hours;
- (3) that all acreage belonging to the operator capable of being assigned to said well has been) assigned;
- (4) the operator must furnish to the Commission a report detailing the method employed in producing the well and such other pertinent information as the Commission may desire from time to time.



### BEFORE:

A. L. Porter, Secretary Director Murray Morgan, Lord Commissioner

# TRANSCRIPT OF HEARING

MR. PORTER: I would like to call for appearances in Case 2014.

MR. GIRAND: W. D. Girand, Box 1445, Hobbs, New Mexico, and I am appearing on behalf of the applicants Jal Oil Company and Olsen Oil, Incorporated.

MR. RAINEY: El Paso will make an appearance and Mr. Girand will conduct the interrogation.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe, appearing for Continental Oil and Amerada Petroleum Corporation.

MR. HINKLE: Clarence Hinkle, Roswell, New Mexico, appearing for Humble.

MR. SETH: Oliver Seth for Shell.

MR. TOMIENSON: Phil Tomlenson, appearing on behalf of Atlantic.

MR. PORTER: Would anyone like to make a statement? MR. GIRAND: If the Commission please, the applicant would like to make a short statement at the commencement of the proceedings. The case was heard by the Commission involving approximately four wells on April the 14th, and as a result of that hearing the Commission held adversely to our position in part to the extent that we asked for another hearing to which the



Commission refused. However, in refusing it, the Commission did on May the 16th address a letter to the applicants in reference to the subject well and in reference located in the Jalmat Pool, in which they required certain information or suggested that we furnish certain information pertaining to the production habits and characteristics of those wells during the period from the date of the letter. I assume or assumed thereafter that we could put the well into operation until August 1, 1960 and to report to the Commission in regard to the production habits or proceedings of the well. Following this letter and in light of the position of the Commission on a previous hearing which we have had, we had a hearing in October, 1959, which was the result of the Commission's reclassifying the well of the two applicants in July of 1959 and assigning to those wells the allowable dating back to June of 1958. the allowable the well had produced during the one year to which they were charged. The wells were under produced, the monthly allowable as shown by the monthly allowable schedule. The well had been marginal well up until this time of reclassification and then they were reclassified, they were six times over in many instances. At that time we made two applications, one on behalf of Jal Oil Company and one on behalf of Olsen Oils, Incorporated, No 1778 and 1779 and for convenience were consolidated and tried for before an Examiner. The result of that hearing of course was expressed in the order entered, basing on which the Commission allowed the Applicants to make up their over production on the basis of 75% of

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the current allowable so that the wells would not be unnecessarily shut in. This procedure was fooled around with until the spring of 1960, when it was determined by the operator, that the well produced in the winter in which they were being produced would not be kept alive and produced on the 75% of the allowable because of certain factors. One of the factors being, the allowable was figured on the basis of a shut-in of 72 hours and then the testing period. The wells being shut-in for 72 hours and due to the encroachment of the water into the well we were unable to bring the wells in in time for any deliverability factor to be added to our wells. The wells were then allocated to an acreage factor in determining the allowable gas to be produced. So as a result of continued shut-in, our wells, due to the encroachment of water, we again filed an application on behalf of the Jal Oil Company covering some three wells and that case was heard at Hobbs on the 13th of April. The result of that hearing was practically the same as the previous result; they allowed the wells to be produced and to make up overaverage for 75% of the assigned allowable, but we are still smothered with that minimum allowable because of our small acreage factor and no deliverability. Now, we feel that in the cases 1778 and 1779 as consolidated and the case heard on April the 13th, 1960, at Hobbs, Case 1941, that all of the technical data pertaining to the wells, their operations, the troubles the operators found in connection with those wells, has been offered to this Commission and in light of that fact in order to expedite this hearing and let



some of these Gentlemen see the Democratic convention by T. V., we now move that we be allowed to adopt the record in the cases 1778 and 1779 consolidated and 1941 as a part of the record in this

MR. PORTER: Is there any objection to counsel's motion for incorporation of the previous evidence in this case?

MR. PAYNE: I think the case you had was 10,94.

MR. GIRAND: Well, the copy I have, the order I have says Case 19/1.

MR. PAYNE: All right, sir.

MR. PORTER: The record in the previous cases will be included in this one, sir.

MR. GIRAND: All right, sir. If the Commission, please, at this time I might state that we are out in the sticks over there on the east side and Order No. 1670 was entered by the Commission without much knowledge on the part of counsel. I had stood on my feet for some four or five hours in Hobbs and when they took up the consideration of the change of rules, I left. My application refers to amendments to order 967. However, the notice that the Commission gave in regard to that hearing did refer to order 1670 and it dealt on the gas pools involved and I feel that no one would be misled within the intended purpose of this application and we would like at this time that the application as filed a shown to go to Order No. 1670, without reference to amendments to any particular sestion but as to the subject matter to



be contained therein.

MR. PORTER: Your application will be amended to your application to that effect, it will be accepted.

MR. GIRAND: I think the record should show the complete Commission file, which shows that a special notice was sent out on the proposed rule change before the calling of this case and then again readvertised at the time of the calling of this case and assignment of number. I would like to call Mr. Rainey to the stand, please.

(Witness sworn.)

### DAVID H. RAINEY

called as a witness, having been first fully sworn on oath, testi-

#### DIRECT EXAMINATION

#### BY MR. GIRAND:

Q Will you state your name, position and the company by whom you are employed?

A David H. Rainey, administrative assistant in the proration department, El Paso Natural Gus Company.

Q Mr. Rainey, you are connected with the El Paso Natural Gas Company and are working in conjunction with Mr. Norman Woodruff do you not?

A Yes.

(Whereupon, Exhibit 1 was marked for identification.)

Q I hand you what has been marked as Applicant's Exhibit



No. 1 and ask you whether or not you have seen a copy of that letter?

- Yes, sir, I have. A
- Now, in conjuncture and with receipt of that letter, did you receive a letter from, over my signature, from Girand proposing amendments, suggested amendments, to Order Number 9673
- Yes, sir, insofar as it pertained to the Jalmat Gas Pool. MR. GIRAND: If the Commission please, I would like to introduce Exhibit Number 1, a copy of it, and keep the original of I may, sir?
- Exhibit Number 1 is a letter addressed to the Commission pertaining to the finding and order on the well which they sought application for relief, under a certain provision they were asking for.
- As a result of the receipt of the letter addressed to the Oil Conservation Commission over the signature of myself, did you and your department check into the proposed rules and changes?
  - Yes, sir.
- After making a clear check of the proposed rule changes, did you or your company come forth with a proposed amendment to Order Number 1670?
  - Yes, sir, we did.
  - Do you have a copy of that order in front of you, sir?
  - Yes, sir.
  - May we have it passed out and officially identified, sir?



What was the number of that?

El Paso Natural Gas Exhibit Number 1. In this case, after receipt of the letter from Mr. Girand, we checked the proposal that he outlined and El Paso come up with certain suggested amendments to his proposal which will be amended to the specific policy rules of the Jal Gas Pool in the southeast portion of Order R-1670 on which is consolidated the gas pool rule of the State of New Mexico.

Mr. Rainey, may I interrupt just a moment. Being the primary purchaser within the Jalmat Gas Pool and familiar with the production characteristics of this territory, is it the opinion of your company that some relief needs to be afforded the operators of wells making water and being produced in a secondary manner?

- Yes, sir.
- What is your opinion?

El Paso is of the opinion and based on my knowledge of certain wells in that pool, I might point out that I have no specific knowledge of the Jal Oil Company and Olsen Oil Company other than in a general way, El Paso is of the opinion due to waste of the water encroachment in certain areas of the Jal Pool, there may be wells that could and should be classed as to what Mr. Girand has termed and El Paso has used the term also as "distress Wells" and certain special provisions be made for production in regard to those wells.

Mr. Rainey, would you direct your



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Exhibit Number 1 and go over the proposed changes to Order R-1670 as proposed by the El Paso Natural Gas Company?

Yes, sir. To take care of the situation I can read these over fairly rapidly. It shows the places I found in checking over 1670 that it appeared these were necessary amendments. All these rules would have to be included as special pool rules or I believe it is designated special rules and regulations for the Jalmat Gas Pool in Order R-1670. Rule 8(A)1: The pool allowable remaining after deducting the total allowable assigned to marginal well; and distressed wells shall be allocated among the non-marginal wells in the Pool as follows: It would be necessary if you have a classification of distress wells to add after marginal wells the words and "distress wells" to take care of these situations because they should have the allowable assigned to those subject non-marginal wells.

Rule 8(A)1: No well except a distress well, this rule as it is now provides no well should be assigned an allowable until a deliverability test has been filed with the Commission and approved. Since these rules which definition would be incapable of being tested, it would be necessary, we feel, to add no well except a distress well. Now, there is provision in some of the rules in the Jalmat Pool, or I believe it is the memorandum provided for deliver ability tests in the Jalmat Pool that provides that the shut-in pressure of offsat vells or wells in the immediate area be submitted for the shut-in pressure of wells which are not subject to



being shut-in, they load up with fluid too rapidly, if that wants to be applied to this distress well situation also this 8(A)4 is not absolutely necessary.

Rule 10(A): A marginal well shall be assigned an allowable equal to its maximum production during any month of the preceding gas proration period. That is the existing rule, it appears to us it is going to be necessary to add a sentence to that. A distress well, as hereinafter defined, shall be allowed to produce the amount of gas necessary to maintain production under production methods approved by the Commission.

Rule 10(B): The Pool Allowable remaining after deducting the total allowable assigned to marginal wells and distress wells. shall be allocated among the non-marginal wells entitled to an allowable in the Jalmat Gas Pool.

Rule 15(A): A well classified as a distress well shall be exempt from the provisions of General Rule 15(A).

My recollection of 15A, I don't have a copy of 1670. I believe that is the rule that provides that deliverability tests must be taken.

Rule 20: All wells not classified as marginal wells or distress wells shall be classified as non-marginal wells.

Now, to the main portion of our position which is the designation of distress wells, and the provision that should be compiled as that of El Paso's position as stated a moment ago, that it may be necessary in some instances to make special provisions



for wells of that type. It is our feeling there should be some stringent and rigid requirements put on it. Thus I don't think it ought to be a matter that can just be granted freely on an application or even after a hearing. So we have set some fairly rigid requirements to that. On the other hand, I think that any well that thoroughly is a distress well, can undoubtedly meet these requirements.

This should be special Rule 16(C): The Secretary-Director of the Commission may classify a well as a distress well without notice and hearing where application has been filed in due form and where the following facts exist and the following provisions are complied with:

- 1) The operator shows that he has exercised due diligence and used all feasable means to maintain the well in a producible condition and:
- a) The well is producing through artificial means with a free floating piston or pump jack, or from other mechanical means, and the well is making water in such amounts as after a 72-hour shut-in period the well becomes logged off and is unable to be restored to production after being swabbed for not less than 24 hours or:
- b) The operator shows that it is uneconomically feasible to utilize mechanical aids to maintain the well on production.
- That all acreage belonging to the operator capable of being to said well has been dedicated; this,



effort to give the well as much allowable as possible to be permitted to maintain its production.

- 3) The operator must furnish to the Commission a report giving in detail all pertinent data with respect to the method employed by the operator in producing the well sought to be classified as a distress well, and such other and further information as the Commission may desire from time to time;
- h) The applicant presents written consent in the form of waivers from all operators offsetting acreage dedicated to the proposed distressed well;
- In lieu of 4) of this Rule, the applicant may furnish proof of the fact that said offset operators were notified by registered mail and furnished the same information as was furnished in their application to the Commission with respect to the proposed distress well. The Secretary-Director of the Commission may classify the well as a distress well if, after a period of twenty days following the mailing of said notice, no operator has made objection to the classification of the proposed distress well.

I think there should be a phrase added to that paragraph five, that if a protest is received, the matter should be set for hearing.

Now, that is El Paso's alternate proposal to the one that was sent out by Mr. Girand to us by letter and advertised by the Commission by memo. I might point out Mr. Girand had proposed in his original application, that an additional requirement be put in here ad number 1, that the well be connected to the low-pressure



gas line. El Paso is of the opinion that the term "low-pressure gas line" is subject to too vague a definition to a low-pressure gas line. One pipe line may differ markedly from a low-pressure line of another company. Further, a low-pressure pipe line in one company is quite different from the low-pressure gas pipe line from another area because it would be, of course, economically unfeasable to construct a low-pressure gas line so we connected a few distress rules that we are recommending be left out, and these other suggested changes be used.

Q In your opinion, Mr. Rainey, do you believe that the proposed changes will afford relief for a well that is designated as a distress well?

- A Teg, sir.
- Q We pass the witness for cross-examination.

## CROSS-EXAMINATION

## BY MR. PAYNE:

- Q Mr. Rainey, you testified previously that you had set up some rather rigid conditions here under which a well could be classified as a discress well?
  - A Yes, sir.
- Q I notice there is nothing in this classification that relates to remedial work?
  - A Well, we will discuss -- go ahead.
  - Q I was wondering why.
  - A We discussed that matter in our preparation of these rules



and we felt that it should be up to the discretion of the Commission and showing by the order it is une conomical, that the Commission could use its discretion as to whether or not to grant it. We felt it was covered in subject rule one of our rule 160 in which case he has exercised due diligence and all feasable means to maintain the well in a producible condition.

- In other words, you feel that more general proration would allow the Commission to determine whether one, the water was occurring because of channeling or whether, two, it was further present throughout the pay zone?
  - Yes.
  - And could be shut off by squeezing?
- The operators are required to furnish the Commission such information as they request and with regard to this, and we feel this whole proposition is a discretionary matter for the Commission It is something that may not be proper through administrative means in this particular case, but the Commission has the privilege of setting the matter for hearing.
- This would merely afford some means of administrative approval where there is none?
  - If the well was not in a distress condition.
- In paragraph 16(C) I notice it says being provided through artificial means, either a free floating piston or pump jack or from other mechanical means, would you explain what is meant?
  - That other mechanical means?



Yes, sir.

I don't know to be perfectly honest, Mr. Payne, the other methods. The only way I know to remedy this type situation is a free floating piston or pump jack, there might be some other mechanical means that could be used that I am not aware of. I will put this in again, as I say, its a discretionary matter. If the Commission is not satisfied, it has sufficient means to justify the granting of this classification, they can set it for hearing or deny it.

You did not just mean any well producing, all with some Q kind of mechanical means?

Well, sure, that was put in there because as I say, the only two methods I know of to unload a well are the two specifically enumerated, there may be other means that are just as feasable, I don't know.

- In regard to this provision relative to stabbing --
- Yes, sir.
- Do you have anything in mind there as to what size the swabbing unit should be?
- No, and when you come down to the matter or practicality, the pump jack, as far as swabbing for the thing, there is a provision in there, if I can't pump it within 72 hours, the classification would be granted also.
  - Of course, small pump jacks and small swabbing units too?
  - That is right.



You do not actually unload to achieve the result within 24 hours?

That is correct. I say again this is a discretionary matter for the Commission. There is nothing mandatory about our proposal here, it is the director of the hearing who may classify a well.

A well in the Jalmat Pool, Mr. Rainey, where severe water problems have been encountered, have operators been successful in squeezing it off?

I know that has happened. I couldn't set any specific well right at the moment.

MR. PAYNE: Thank you, that is all.

#### CROSS-EXAMINATION

### BY MR. NUTTER:

Mr. Rainey, what would you think of the idea here under 160 to rephrase that one to "operator shows he has exercised due diligence and used all feasable means to maintain or restore the well to a producible condition."

I think that will be of no more effect, it is expanding the rule a little, I don't think El Paso would have any objection to that wording.

- I think I see a loop hole in subject paragraph B.
- It is discretionary, Mr. Nutter.
- Under condition A, the wells can. It doesn't say it has be making water under condition B. What would you think of

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rephrasing A to say that well -- go on from the first paragraph there, maintain, restore the well in a producible condition and if the well is making water in sufficient amounts after a 72 hour period, it can be swabbed down and the well is producing through artificial means, but from other means, or the operator shows that it is une conomically feasable to utilize mechanical aids to maintain the well on production.

- The arrangement of that wording would be more appropriate.
- The first condition then would be making large amounts of water?
- I could conceive no case in which a well, "distress well" was not making water and it couldn't unload itself, in the other case the well would be simply then a marginal well, I see no difference in your phraseology than mine. However, I have no objection to your wording rather than mine.
- Do you think that an adoption of a rule such as this, Mr. Rainey, would encourage sloppy operations?
- No, sir, I do not. There again, as I mentioned several times, this is a discretionary matter and our rule one was intended to discourage that proration, that the operator shows that he has exercised due diligence and used all feasable means to maintain, and in your words, or restore the well to the producible condition.

MR. PORTER: Anyone else have a question of the witness? You may be excused.



#### REDIRECT EXAMINATION

### BY MR. GIRAND:

Q Mr. Rainey, do you say it is feasable for an operator to call out a small swabbing unit that would do the job, pay that expense to get it?

A It doesn't appear that he ultimately is going to have some part of the mechanical means on the well sufficient to maintain and to keep the well unloaded, so as I say it is somewhat unnecessary to call on a little better one.

Q That would call for the installation of a pump jack, would it not?

A I think so.

Q Practically changes the engineering figure, would it not?

A That is right.

#### CROSS-EXAMINATION

### BY MR. KELLAHIN:

Q Mr. Rainey, one of your conditions is that all of it be assigned to do the well. Do you mean by that spacing 640 acres, assuming other wells in the unit were shut-in and 640 dedicated?

A No, sir, all available undedicated acreage, if they got a 480 unit an effort would be made to return this well to production by getting it a sufficient allowable. They might elect to get 160-640. I don't propose they should dedicate all the acreage they own, deeded is not deeded so only one well would be feasable, dedicated to this well.



DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

MR. PORTER: Anyone else have a question of Mr. Rainey? You may be excused.

(Witness excused.)

(Whereupon, Jal Oil Company Exhibits 1 through 7 were marked for identification.)

### ED HARDWICK

called as a witness, having been first duly sworn on cath, testified as follows:

### DIRECT EXAMINATION

### BY MR. GIRAND:

- Will you state your name, please?
- Ed Hardwick.
- Are you the same Ed Hardwick who appeared on behalf of the Jal Oil Company in Cases 1778 and 1779, consolidated in October of 1959?
  - I am.
- You are the same Ed Hardwick that appeared on behalf of Jal Oil Company on April the 14th, 1960, in case 1941?
  - I am.
  - On behalf of Jal Oil Company?
  - Yes.
  - What is your office in the Jal Oil Company?
  - Repeat that please?
  - What is your office, your position with Jal Oil?



Mr. Hardwick, you have received notification or a copy of notification from the Conservation Commission respecting the obtaining of certain production information in regard to the wells the subject matter of our hearing in October and again in April, October of 1959 and April, 1960, did you not?

Yes, sir.

In response to that letter did you prepare a memo showing the information requested by the Commission in regard to the subject well?

I either prepared it or it was prepared under my supervision.

That information was obtained by you from the field Q office of Jal Oil Company, was it not?

That is correct.

That purports to be a daily record of the wells, subject wells?

Yes.

Directing your attention to your Exhibit Number 2 which is an instrument containing four pages and entitled "Legal Number

Five pages.

Let the record show it is five pages. Is that the information that you obtained from your local field office?

That is correct.

and does that cover the information sought from you



under their letter of May 16, 1960?

- We felt it did.
- We would like to offer Exhibit Number 2.

MR. PORTER: Mr. Girand, will you withhold all the Exhibits and offer them all at once?

MR. GIRAND: All right, sir.

- (By Mr. Girand) I hand you what has been marked Exhibit Number 3, with the title of "Eva Owen #1", containing two pages, and ask you whether or not that instrument was prepared from information furnished to you by the local office of the Jal Oil Company in Jal, New Mexico?
  - That is correct.
- And that does contain the information under the requirements of May the 16th, 1960?
  - That is correct.
- I hand you what has been marked for identification as our Exhibit Number 4 and has a heading of "Jenkins #1", containing four pages, and ask you whether or not that is a detailed report, daily record of the operation of the Jenkins Number 1 and furnishes the information that is under the requirements of the letter to the Commission on the date, 1960?
- That is correct. That is from the time we were able to get the wells, or from the time we started getting the wells back on after we received the notice, which was not as of the date of



- From the time you were able to put in force the request of the Commission, you done so, that is the report by days in that report?
  - That is correct.
  - That is true of Exhibits 2 and 3 also, is it not?
  - That is correct.
- I hand you what has been marked for identification as Applicant's Number 5 and entitled "Watkins #2", and ask you whether or not that report was prepared from information furnished to you by the Jal office? It contains two pages, does it not?
  - That is correct.
- That is the information furnished to you by the local Office?
  - That is correct.
- Is that the information that you understand the Commission desired in their letter of May the 16th, 1960?
  - It is.
- And it covers the period of time which you were able to comply with the full operation of the well?
  - That is right.
- And I hand you what has been marked Jal, Applicant's Exhibit Number 6, "Dyer #3", and containing five pages, and ask you whether or not that is a detailed report on the operation of the Over #3, furnishing the information that was requested by the Oil enservation Commission in their letter of May the 16th, 1960?



- A It is.
- I ask you this, Mr. Hardwick, in Case Number 1941, was Q similar information furnished the Commission?
  - Yes, it was.
  - It dealt with an 8 day period rather than a daily record?
  - That is correct.
- It was based entirely on the production charts as furnished you by the purchaser of the gas?
  - That is correct.
- Now, Mr. Hardwick, I hand you what has been marked as Apllicant's Exhibit Number 7 for identification and ask you to please refer to that exhibit and state into the record what that exhibit purports to show?
- This is just merely information compiled from our records which we kept which pertains to various wells, all of which have already been exhibits, and it indicates the monthly allowable taken from the gas allowable book. And also shows the production by months which the well produced. And this covered a period from 1959 down through June, 1960.
- Directing your attention to the Exhibit, the right hand column, beg your pardon, the left hand column of the exhibit, are the months and years, and the years covered are 158 and 159 and part of \*60, is that correct?
  - That is correct.
  - Your first column, the figures deal with the allocation



or the allowable as fixed by the Commission for the period shown?

- Yes, that was the monthly allowable.
- And then your second column there deals with the production of the particular well?
  - That is correct.
- And you have the two columns for each of the subject wells, the Dyer #3, and Jenkins #1, Legal #2, and the Eva Owens #1, and the Watkins #2?
  - That is correct.
- Now, about the middle of the page of the exhibit it shows a July allowable on the Dyer #1 at 10,192 and those of production of 6,412; the month of August shows the allowable of this well at 3,305, is that correct?
  - That is correct.
- And production for 4,710. How do you account for the considerable drop in the allowable for the Dyer #3 during the month of, June to August?
  - Tou speaking of the year 159?
  - 159, yes, sir.
- The drop in the allowable was, came about because the wells were reclassified from marginal wells to non-marginal wells.
- In each of the cases of the wells covered by the exhibit. I will ask you whether or not adding the total allowables allocated to the wells as determined by the Commission, equals the production of any of the subject wells through, well, June, 1960?



A You mean total?

Q Yes, sir.

A I think not.

A They did not true as to totals through the year 1959?

A They did not equal the allowable which was assigned in the monthly allocation.

I direct your attention to the two wells and ask you to refer back to the exhibit in the five month period, 1960, and I direct your attention to the Legal #2 and the Watkins #2, and ask you if that would be the true statement there if the production was less than the allowable assigned?

A Well, the production was more in 1960 on the Legal #2, the production was more than the allocation and the same thing was true on the Watkins #2. My statement prior to that, I thought you was up in the year 1959.

That is correct, for the year 1959. Now, have the wells exceeded the assigned allowable to those wells?

A I don't believe so, not according to my figures here.

Then it was due entirely to the reclassification of the wells in June of 1959 that brought about the over-production factor, is that correct?

A That is correct.

Q We would like at this time to offer Exhibits, Applicant:

Ma. PORTER: Without objection, the exhibits will be



admitted into the record.

(By Mr. Girand) Now, Mr. Hardwick, you are familiar with the proposed rule change offered by the Jal Oil Company and Olsen Oils in this application, generally?

I am.

- You have familiarized yourself with the recommendations as offered by the El Paso Natural Gas Company, is that correct?
  - That is correct.
- Speaking on behalf of the Jal Oil Company, do you know any reason why the proposed rules as submitted by the El Paso Natural Gas Company cannot be workable and usable, insofar as you are concerned as operator in the Jalmat Pool?
  - I see no reason why they couldn't be worked.
- And if the Commission should adopt such rules, would those rules be satisfactory to your company?
  - They would.

MR. GIRAND: We pass the witness.

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### BY MR. PAYNE:

Mr. Hardwick, I don't quite follow you on this Exhibit 7. Let's take 1960, inasmuch as the wells are not producing the allowable assigned, why do you need any relief?

MR. GIRAND: If Mr. Payne would check the exhibits 2 through 3 he would find out why they are not producing.

(By Mr. Payne) Why don't you produce them at least up



to the allowable?

MR. GIRAND: They have been put down, Mr. Payne, we don't produce against that water, three quarters, I only said that about a hundred times before this Commission.

MR. PAYNE: Are you doing anything about remedial work on the wells?

- I can't answer that.
- Do you want someone else to testify to that?
- That is correct.

### BY MR. UTZ:

- Mr. Hardwick, referring to Exhibit 7, particularly Dyer #3 --
  - Yes, sir.
- -- you will note that you have listed as allocation for the months of May '58 through June of '59 the 15,119, is that the marginal allowable that you listed here?
  - That is correct. That is still quoted in the allocation.
- Q And do you understand our method of allocating marginal allowables?
- Yes, sir, I do. I merely took this from the monthly allocations.
- Is that allowable higher than the non-marginal allowable of like size and acreage?
  - At that time I do not know whether it was or not.
  - Do you have the supplement of recirculated oil when you



## reclassified this well?

- I believe they have, though at this time I do not.
- Is that figure, that allowable is considerably less than 15,119?
- I might merely make the statement that the allocation for this well was shown to be 15,119 in the monthly schedule.
- What was shown on the supplement when you reclassified this well to the non-marginal well?
- That came out quite sometime after these were published here.
- You understand that marginal allowable is assigned to a well and a schedule is merely a shot in the dark to try to give a well a certain allowable, it is not an actual allowable?
- I believe it is allowable on the schedules for the month following after it was issued.
- This would probably appear to be what the well produced, am I correct on that?
  - That is right.
- Till such time that the well is producing more than a non-marginal allowable?
  - That is correct.
- Actually in showing the allowable during that period expressed on the Jenkins #1, Dyer #3, the Legal #2, those are not the actual allowables, are they?
  - They were merely the ones published prior to the month,



for the production for the well during that month. They would not be the same as re-allocated as after they came back.

- Not the same as non-marginal allowables?
- This is a come back and re-allocated, no.
- I think the point which I might bring out, I believe on July \*59 on the Dyer #3, did you testify that was a marginal or non-marginal allowable?
- I believe that is a non-marginal because they reallocated there.
- Then the decrease from 10,192 in July to 3,305 in August was not due to reclassification but due to the market demand for the pool?
  - That is correct. If I made that statement it was wrong. MR. PORTER: Anyone else?

### BY MR. NUTTER:

Mr. Hardwick, referring to these various exhibits which show your production rates and work overs or swabbing efforts on these various wells, when the wells were finally swabbed in and put on production were they producing in that capacity?

A I think when the well first, that is probably an engineers question on that and we probably should let Mr. Watson answer that. I think when you first swab on it it would not be at its capacity, it would still be unloading some fluid.

For instance, we can take this Dyer #3, and it appears when it got on the line it had an average anywhere from 2 to 3



hundred MCF, particularly in the latter part of June there and hasn't been shut-in for two or three weeks? Would that be the capacity of the well to produce?

- I think probably that might be -- we will check that with someone more qualified.
  - Well, I will wait till Mr. Watson testifies.

MR. PORTER: Anyone else have a question of this witness You may be excused.

(Witness excused.)

### DEWEY WATSON

called as a witness, having been first duly sworn, testified as follows:

### DIRECT EXAMINATION

### BY MR. GIRAND:

- State your name, please.
- Dewey Watson.
- By whom are you employed, Mr. Watson?
- Olsen Oil, Incorporated.
- Mr. Watson, you have appeared previously before the Commission and testified in cases number 1778 and 1779 consolidated?
  - Yes, sir, I have.
- You also appeared in April, 1960, in case number 1941 before this Commission, testified in regard to some of the wells involved here?



- Have you previously been employed by the Jal Oil Company?
- A Yes, sir.
- And by whom are you presently employed? Q
- Olsen Oils, Incorporated. A
- Are you familiar with the Jal Oil Company and Jalmat Q Gas Pool?
  - A Yes, sir.
- You are also familiar with the wells in the Olsen-Q Jalmat Gas Pool?
  - Yes, sir.
- Mr. Watson, I hand you what has been marked as Applicant's Exhibit Number 8 and ask you whether or not you can identify that instrument?
- Yes, sir. This is a summary of the Olsen Oil SR Cooper #1 well from the first of June through the 8th of July.
  - Now, have you checked that exhibit?
  - Yes, sir.
- Does it contain the information as you interpreted the letter of the Commission dated May the 16th, 1960, as to the information they desired?
  - Yes, sir, it does.
- I hand you here what has been marked Applicant's Exhibit Number 9 and ask you what that exhibit purports to show?
- This is a summary of the Winningham #3 Olsen Oils, Inc., and shows the production from the first of June through the 8th



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of July.

- In connection with what well does that cover? Q
- A Winningham #3.
- Exhibit Number 8 is SR Cooper #1? Q
- A Yes, sir.
- In connection with those two wells, the Winningham and SR Cooper, what date were the wells produced on the basis of three quarters of their allowables?
  - Up through June 30th.
- And then from that time were the wells on basically a 24 hour a day operation?
  - Yes, sir.
  - Without regard to the allowable?
  - That is riset.
- That was the instruction authorized by the Commission in their letter of May 16, 1960?
  - Yes, sir.
- Mr. Watson, in connection with this application are you familiar with the proposed rules as prepared and submitted by the El Paso Natural Gas Company?
  - Yes, sir.
  - In your Exhibit Number 1 --
  - Yes, sir.
- -- are you familiar with the problems of the Olsen Oil, Inc., and the Jal Oil Company in regard to the certain wells which



in our opinion are distress wells and which in all probability applications will be filed having so classified if an order is opposing such a classification? Do you feel with your knowledge of our wells, of the wells involved, that the rule is a workable rule for the operators in the Jal Gas Pool?

- Yes, sir, I do.
- Do you feel that if the Commission should adopt such a rule that an operator owning such a well would be afforded a right to protect his reservoir in the pool?
  - Yes, sir.
  - We pass the witness.

MR. FORTER: Any questions?

### BY MR. PAYNE:

Mr. Watson, do you agree with Mr. Rainey, it is applied in this rule that the operators either attempt more remedial work or would show in purpose?

MR. GIRAND: I object if you are going to this line of questioning on this ground. We are only seeking the revision of the special rules and anyone who figures they have a distress well can come into this Commission and file their application and talk about that well. I think it is improper at this time for the Commission to even consider a hypothetical question about one well in a general place as against another well because the Commission is going to be called to pass on each well on its own four feet and not on the hypothetical question about remedial work as a



general proposition.

MR. PAYNE: This was the proposal of El Paso Natural Gas Company which Mr. Rainey testified, he said, that it was his understanding that remedial work was being covered in the paragraph where he read and said, the operator shows he has exercised due diligence and all feasable means to maintain the condition.

I am asking if he agrees with Mr. Rainey in the producible determination of this proposed rule.

MR. GIRAND: It is just to present this matter that we come before this Commission. The witness has testified that the rules as submitted by El Paso Natural Gas are satisfactory. We think we can live under them. When we come, we did not come to hear what this Commission may go in to in regard to any subject well, we are seeking to get classified as a distress well, this is another matter, but as a general proposition or to try to spell out that the operator must do remedial work before he is eligible to come into this Commission is entirely wrong at this hearing.

MR. PAYNE: I am just trying to find out what the rule actually provides. I didn't phrase it, he did, to try, I said, I asked him if he implied to what Mr. Rainey said, either they had to do remedial work or show by some means or other cross-section or some kind of evidence it would be of no value. We got to know what your rule provides.

MR. GIRAND: Mr. Payne, I don't want to be disrespectful, but if the Commission adopts the rules they will know what it means



MR. PAYNE: I am trying to find out what your witness thinks it means.

MR. GIRAND: I think the operator under the present test testified what he thinks he ought to do or shouldn't do. If the Commission had determined that you have to do anything in regard to the particular well to determine whether or not that well would be eligible for the relief granted by this rule, that is another matter. And if the rule is passed, we will have your interpretation of our rule.

MR. PAYNE: Mr. Girand, if it comes to that, and you get into all these hassles what the rule actually provides, it seems to me it is to everybodys advantage to knew ahead of time what the rule covers and what conditions you have to meet before being eligible.

MR. GIRAND: I submit I don't think the rule is ambiguous to that extent. I don't know that you got too much jurisdiction in here, that we primarily agree on any particular engineering problem as to the proper solution.

MR. PAYNE: It doesn't matter to me if it is or not. I am trying to find out what the rule meant to him.

MR. GIRAND: Rephrase it and see how it sounds the second time.

(By Mr. Payne) Mr. Watson, do you agree with Mr. Rainey that it is implied in paragraph 1 of rule 160 that an operator should show either that he has attempted to do remedial work and



that it is feasable that remedial work would be of no value or that remedial work would cost so much it would make the well uneconomical to operate?

Yes, sir, I think I agree with that interpretation. MR. PAYNE: Thank you.

MR. MORGAN: You understand we are providing a yard stick for the determination of a distress well, that is all it amounts to.

That is all it amounts to, that is right.

MR. PORTER: Mr. Nutter.

#### CROSS-EXAMINATION

### BY MR. NUTTER:

Mr. Watson, we have several exhibits here. It appears that this Watkins #2 never was restored to production, is that right?

I didn't hear you.

From this exhibit on the Watkins #2, it would appear it wasn't restored to production?

No, sir, it was not.

Your Jenkins #1 was swabbed and restored to production and since being placed on production has averaged from 40 to 50 MCF per day, is that the capacity of that well to produce?

Yes, sir, it is, under the present conditions in that, if you will turn back to Exhibit Number 7 it gives you a pretty good picture of what happens to these wells when an attempt is made to



curtail your production because the production in the last five months in 1960 and the last five months of 159, nowhere compares to production in 1958 or first six months of 159. To me that shows what we have been talking about all the time. A well is curtailed more than what they have been, you are going to lose production on them. It is not a temporary thing, it is permanent.

- You feel that this rate of production after this well was put back on is top capacity?
  - Yes, sir, that is my opinion.
- In your Legal #2 after being swabbed it has listed 250,300 MCF, is that the capacity of that well?
  - A Yes, sir, it is.
- Your Eva Owens has never been put back on production, correct?
- That was put in for one year and when we attempted to put it back on production we were unable to get it to produce any substantial amount of gas, and again Exhibit Number 7 shows what it made the first four months of 1958 before it was shut-in.
- You swabbed it in the middle of June and fooled around with it until the 20th of June and never did get any production from it?
- No, sir, that is the same condition as far as the Jenkins is concerned. It is either pumping or abandoned.
- The Dyer #3 was swabbed or something, it has a pump jack, was put in operation, the well was restored to operation and since



then has offered maybe 250 MCF per day, is that the capacity of that well with its existing pump jack?

Yes, sir.

Mr. Watson, how many of these wells that you have these exhibits on, how many of these five wells that we have these exhibits on would in your opinion be eligible for classification as distressed wells?

MR. GIRAND: Will all the figures be bound by this?

(By Mr. Nutter) In your opinion, would you classify the Watkins #2 as a distress well?

I think the Watkins is so far distressed it is through, there is no question about it.

- How about the Jenkins #1?
- Jenkins #1, yes.
- The Legal #2?
- Not at this time, it is getting close to it.
- I see. The Eva Owen #1?
- Yes. sir.
- The Dyer #3?
- Since the pump jack, the Dyer #3 could get back the way it was, with pump jack installation.
- How about this SR Cooper #1 well, is there any particular problem involved with this well?
- Well, the only problem of that well at the present time is the fact that at any time it is shut-in for a week or ten days



you might have to blow it to the air or to get it to kick off, but so far we have not found too much wrong with the well. I mean it

Well, it was shut-in from the first of June until the 16th of June, then you just opened it it started pumping 259 MCF per day. Did that involve some sort of working to establish the production that is not mentioned on this production?

- Not at this time.
- Just opened the float?
- That is right.
- The Winningham #3 was shut-in on the first and second of June and opened up on the third of June, it was also shut-in from the 11th to the 30th of June and then opened up on the 30th. Does that involve just opening the well up and it flows?
  - That well is on pump jack.
  - So you just go turn on the pump jack?
  - In order to get it to flow.
  - After you turn the pump jack off will it keep flowing?
- No, sir, it will produce approximately four hours after you shut the pump jack down.
  - Do you regard the Winningham #3 as a distress well?
  - Not under the present conditions, no, sir.
- If the word restore was placed in paragraph one of that rule, would it be possible for you to qualify any of these wells as to distress wells? In other words, the thing would read, "The operator shows he has exercised due diligence and used all feasable



means to maintain the well under or restore it to condition."

Yes, sir, to restore any of these wells to a producing condition. Let me give you a little history on the Winningham or the SR Cooper #1 both, they were reworked, the Winningham #3 was reworked sometime in \*54 or \*55 and made a gas well and as far as I can see it is in the same situation as the Dyer #3, the Legal #2 and the Jenkins #1, maybe not quite as far along but is following the same pattern. It doesn't seem to me that it would be advisable to spend the money to setule in those other offset wells close to the vicinity.

- You have reworked the Winningham #3?
- Tes, sir. It was worked in 1954 or 155.
- Well, it is one of the wells you said wouldn't be a distress well, so maybe the work-over kept it from being distressed?
- It's a matter of time till it will be. To me there is a cycle, those wells they flow and flow on the free piston and then on the pump jack, and eventually there will be plenty of water.

MR. NUTTER: I believe that is all.

MR. PORTER: Any further questions?

CROSS-EXAMINATION

# BY MR. PAYNE:

Mr. Watson, you have utilized the partial relief, that was to use the shut-in portion of an adjacent well so you would have a deliverability in the calculation of your allowable?

Oh, you are speaking of the Olsen Oil wells now.



with the shut-in pressure for 72-hours on our particular wells,

I don't know whether that was a case from the Jal Oil Company or

not. Something else I don't know, there are certain cases, when

you take a high shut-in pressure on those cases you are going to

reduce your deliverability by taking a higher shut-in pressure than
the lower one.

- Q You are going to have some deliverability to the well, however, which you don't have? I was wondering if you go through this proceeding so you can get the allowable up on these wells by taking a high shut-in pressure on an adjacent well which does not have a water problem?
  - A Why not take the lowest pressure?
  - Q That would give an undue advantage to the operator?
- A You are fighting a loss. For example, production, we are not making enough oil to run the pump the way it is.
- Q That again is the problem of interpretation, Mr. Girand shows under 1b of 16C, the operator shows it is uneconomically feasable to utilize mechanical aids to maintain the well on production. Where would you show this in regard to reserve or as opposed to the monies that have to be spent to put in this mechanical aid to recover reserves?
- A Not necessarily, I have to take the allowable that you were receiving currently and figure out how many months, years or whatever it would take in order to pay hack the cost of the pump



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jack installation.

- And also take into consideration how long the well would produce after putting in the installation?
  - Yes, sir.
  - Thank you.

### CROSS-EXAMINATION

# BY MR. UTZ:

- Mr. Dewey, at this time on these seven wells that you have given us exhibits, are there deliverability tests?
- Again I speak for Olsen Oil Company, not on the SR Cooper or Winningham #3, I am not qualified to say on Jal Oil Company, I don't know.
  - Which are Olsen and which are Jal?
  - SR Cooper #1. Winningham are Olsen oil wells.
  - You are speaking for Olsen Oil?
  - I hope I am.
  - Do either of these wells have deliverability tests? MR. GIRAND: If the Commission --
  - Not to my knowledge.

MR. GIRAND: What effect does this hearing have as to whether or not deliverability is paying our pool checks. This is a hearing on rules, not to whether --

MR. UTZ: I submit that it makes a lot of difference in allowables.

We are seeking a rule



MR. PAYNE: If you got the allowable up on these rules by increases in deliverability, then perhaps they wouldn't have to be classified as distress wells.

MR. GIRAND: Get the allowables up on these wells, we have knocked on these doors twice. You never would let us unite on adjacent wells to get a deliverability. You said open them up and let's see what happens, that looked better than shutting them in and running a 24-hour test on top of them. Well now if you want us to do right then, we are kind of interested in seeing whether or not if the Commission wants to set up a rule, regulation by where operators as well consider yourself to be producing in and having wells of our kind and will have a large amount of trouble, they can go too and ask for a relief, and where the Commission will have the background to grant it.

MR. MORGAN: All we are after is giving these a dry run to see what the effects are. If the rules are applied as they are proposed, at least lets wait and see.

MR. GIRAND: Mr. Commissioner, I don't intend to be disrespectful and I apologize. The only thing I am considering is I came up here to support a rule regardless of our wells, our exhibits here, primarily two through seven, were in response to the letter from this Commission asking certain information.

MR. PORTER: Granting certain relief?

IR. GIRAND: During a limited period of time I tried to tie it in with the regard we made in the previous case to try to



have a full picture before this Commission, to what we are doing. The Commission had the chance to look at our operations over a period of better than a year now and they are hearing all we wanted to do, and all we came frankly prepared to do was say here to the Commission we think that it is a good limit to our amendment to our present rule, the operators can live on it. The Commission has to face it soon or lose a lot of reserves, and we think under the present rule and that wells making water, gas wells making water, that to shut them in brings back unwanted and unnecessary waste and we think our exhibit number 7 clearly shows that as well as the other exhibits that we have offered. If my clients have failed in filing something or haven't taken some tests, I see no need to single us out against the other operators in New Mexico.

MR. MORGAN: The wells are not on trial, the results are on trial.

MR. GIRAND: The deliverability as such is not a part of these rules.

MR. PORTER: Mr. Girand, the Commission will sustain your objection to the question just asked by Mr. Utz about the deliverability. Do you have any further questions? BY MR. UTZ:

Mr. Watson, are you familiar with the operation of Q these rules?



Do you know if any other operators, offset operators and operators in the near vicinity have these rules and have water problems such as yours?

- Yes, sir. A
- Have they been able to do anything about it?
- Well, at the present time I mean the things are affected, have a free piston.

MR. PORTER: We will adjourn until 9:00 A.M. tomorrow. (Whereupon the hearing was adjourned until 9:00 A.M. on July 14, 1960.)



DEARNLEY-MEIER REPORTING SERVICE, Inc.

BEFORE THE OIL CONSERVATION COMMISSION MABRY HALL Santa Fe, New Mexico July 14, 1960 SECOND DAY HEARING

# REGULAR HEARING

MR. PORTER: The hearing will come to order, please. The Commission will continue with case 2014. I believe Mr. Watson was on the stand, Mr. Dewey as Mr. Utz calls him. Mr. Utz, I believe you were questioning Mr. Watson at the end of the session yesterday.

MR. UTZ: Yes, sir, I was.

# BY MR. UTZ:

- Mr. Dewey, I believe just before we adjourned yesterday Q we touched on the fact you were quite familiar with the activities in this immediate area of wells you have water problems on, is that correct?
  - Yes, sir.
- Do you know of any other operators in this immediate area that has water problems such as yours?
- Well, they don't seem to be quite as serious as ours. The offset operators on the Winningham lease and the Jenkins, they are operating on the free piston, and that was testified to in case one at the same time that 1778 and 1779 were taken and they testified to the fact they were having water problems in the area.



Do you know of any of these operators in this area that Q have been able to take care of their water problems by reworking, been able to produce the wells without free pistons, pump jacks and so forth?

I don't believe there has been any rework on the wells offsetting the wells right in the Jal area, around the town site of Jal where most of these wells are. Shell reworked a well in the vicinity of the Watkins #2.

Did Jal's rework in this vicinity take care of their water problems?

I am not sure about the Humble well, I believe it was in a little farther north from the area where we are speaking of.

The Commission's records show that some of the operators have been able to take care of their remedial work. You would not disagree with the Commission's records, would you?

No, sir.

MR. UTZ: I believe that is all.

MR. PORTER: Any further questions? Mr. Payne.

# BI MR. PAYNE:

Mr. Watson, as I understand your proposed rule, it wouldn't actually be to exempt the wells from proration as such, rather it would be to allow the wells to produce whatever they had to produce to keep the water?

That is correct.

On the wells that you feel are now distressed wells, in



answer to Mr. Nutter's questions vesterday, do you have any figures as to how much production would be necessary to accomplish this?

- No, sir, not at the present time.
- Do you have any kind of range, an estimate?
- You mean by figures, the amount of gas that would be produced?
- Q The amount of gas that would have to be produced to keep the water unloaded from the wells.
- In this area the amount of gas as we have shown it, has to be at a maximum rate of production to keep the water off of these particular wells.
- It is maximum rate of production in a sense. does it some to, have you figured that out?
  - No, sir.
  - I see.
  - You mean dollar-wise or --
  - MCF of gas to --

MR. PORTER: Would that be shown on Exhibit 7?

MR. PAYNE: You worked that seven showing the total production during the months shown as to allowable you got to the Winningham?

Yes, sir. If I understand your question correctly here on the Olsen Oil Winningham #3 and SR Cooper #1, I took the last six months of 1959 and totaled the allowable for these particular wells for that six months period.



The first eight days of July we operated those two wells continuously and obtained an average daily rate of flow which on the Winningnam #3 it was 518.5 MCF per day and the SR Cooper #2 was 213 MCF per day. And those wells were stable during that period of time so that is the maximum production that we can expect from those wells. Now, in order to establish the comparison we just assumed that the proration period from July to December 1959 would be similar to the proration period of July to December, 1960, and I took the daily production times, the 18% day proration period and come up with 95,404 MCF, it would be an estimate of the production for this six months in 1960 if the well was allowed to produce continuously. And the 1959 allowable for a comparable six months period was 24,980, this is on the Winningham #3, that is allowing the well to produce at its maximum rate. On the SR Cooper the same periods are involved and taking a 213 MCF of an average per day times the 184 times the proration period, the production would be 39,192 MCF and the allowable for the '59 period, July to December was 32,369, which would be an over-production of 6,823 MCF. So this particular well is getting close to the border line, I mean if it is left on continuously there would be very little over-production as far as the well is concerned.

Q Now, assuming that each of these wells of which you are having water problems has a deliverability factor as high as any comparable size unit in the pool, would your allowable then be



adequate to take care of your water problems, use the acreage factor, you assign a deliverability factor which is as high as any such deliverability factors of comparable size units in the pool?

- Now, do you mean take deliverability --
- You have a 40-acre, I think it is the Watkins?
- Yes.
- Take the highest deliverability on a 40-acre in the Jal Pool and use your same acreage factor. Would that allowable be sufficient to allow these wells to keep the water down?
- I don't have the figures before me, but as far as the top for 40-acres in the Jal Pool is concerned, if it were high enough I assume it probably would.
  - Well --

MR. PORTER: What does the size of the units have to do with deliverability?

MR. UTZ: Knowing and using the acreage factor you got now.

MR. PORTER: Deliverability for the highest one?

- (By Mr. Utz) So that no well would be producing more than a non-marginal well of like size.
- The only way I can answer that is to go through the proration to see what the deliverability for 40-acres would be.
  - So you would have a hazard on the 160 acre unit?
- Well, some of those deliverabilities in there, seven such figures as that that would if through deliverability



factors, and I am sure it would take care of it.

That is what I was perhaps assuming, that if the Commission sees fit to adopt a rule along these lines whether it Would be feasable to have a provision in there that no distress well would produce more than a non-marginal well with the same amount of acreage dedicated to it?

- Are you talking about a maximum production for 160?
- Yes, sir, whatever is dedicated to the well. In other words, you assign a false deliverability?
  - Yes, sir.
  - Your working on straight acreage?

Well, at the present time I would see no objection to that along those lines, and I assume that it would take care of the situation because these wells are just, none of them are making much, very little more than what the allowable a day is, so if you increased the deliverability even say to 1 million a day the allowable would be enough to take care of the production, leave them on continuous.

1 am trying to explore all aspects of this problem, thank you.

> MR. PORTER: Anyone else have a question?

MR. GIRAND: May I ask Mr. Payne a question, please?

MR. PORTER: Do you want to put him under oath?

MR. GIRAND: Yes, sir.



ü

Mr. Payne, your last question of Mr. Watson and dealing with deliverability, you were meaning to deal with total volume of gas production?

That is correct, sir?

Regardless of how you arrived at deliverability or otherwise?

I was wondering if it would be feasable assuming the Commission went to some rule like this to have a provision in there that a distressed well would not produce more than a nonmarginal well with the same acreage dedicated to it.

MR. GIRAND: That is what I thought you were driving at. I wasn't quite sure the witness was clear on it or I was either. MR. PORTER: The witness may be excused.

# REDIRECT EXAMINATION

# BY MR. GIRAND:

Mr. Watson, you testified yesterday afternoon to the extent that the SR Cooper well and the Winningham well were at the present time partially controllable due to the manner in which they were being produced. I will ask you what, if anything, has happened in regard to the encroachment of water into these two wells since they were shut down by the Commission order back last year?

There has been a definite increase in the water production as far as these two wells are concerned since the approximate nine months period since they were all shut down.



A Basing your answer to your knowledge of the Jalmat Pool and particularly of the wells where the water is encroaching on the gas wells within the pool and after having reviewed the proposed amendments offered by the El Paso Natural Gas Company to rule 1670, is it your opinion that the rule is workable and will be beneficial to the operators to prevent waste?

A Yes, sir.

MR. GIRAND: That is all.

MR. PORTER: Mr. Watson, in your testimony your attention was called to several wells on more than one occasion, I believe you said were watered out completely in succeeding weeks, have any of these wells been restored to production, they probably show on the exhibits?

MR. GIRAND: Exhibit 7 shows, but the Watkins #2 is definitely finished, that is the possibilities there were explored and it only obtained an increase in water so far as production is concerned.

- The Watkins was not restored to production?
- A No. sir.
- Q The Apola?
- A The Apola has not been restored and the Eva Owens at the present time is unable to produce.
  - Q But you haven't given up on it?
- A No, sir. And the Jenkins #1 is in pretty sad state right now.



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MM. PORTER: No further questions.

# BY MR. NUTTER:

Mr. Watson, several times along the line of this case and in previous times on other cases similar to this that have been heard, I heard it mentioned several times that during the period these wells were shut-in by the Commission they accumulated a volume of water that prohibited them from producing because of the water, to that it is also true that some wells that have not been shut-in by the Commission have increasing volumes of water production?

I am sure that is true. There is some encroachment throughout the area.

While the area well is shut-in or producing. MR. PORTER: Any other questions? The witness may be excused.

(Witness excused.)

MR. GIRAND: At this time we would like to offer Applicant's Exhibits 8 and 9.

MR. PORTER: Without objection Exhibits 8 and 9 will be admitted.

MR. GIRAND: If the Commission please, in connection with this application copies of the proposed rule as covered by the application of the Applicant were circulated by the Commission, also by the application to certain operators and at this time we would like to offer also the names expressing approval of the



proposed change on behalf of the Husky Oil Company, helph Lowe, Pritchard Oil Company, Western States Petroleum Company, Albert Cackle, C. H. Limbs, and W. P. Prentiss.

If the Commission please, on the evidence given by Mr. Rainey yesterday he made a reference that the proposed change on rule 15A dealt with the deliverability. I believe in checking the order 1670 I find that 15A deals with over production. As along that one, I would like to make that correction for the record at this time. If the Commission please, the Applicants recommend that this Commission consider the proposed rule changes as submitted by the El Paso Natural Gas Company in their exhibit las amended by Mr. Rainey on the stand to authorize a hearing in the event a proposal was filed as well as the submitted rules on the part of the Applicants. The rules are practically identical with the exception of a few minor changes.

MR. PORTER: Does that conclude your testimony? anyone else wish to present testimony in this case?

MR. KELLAHIN: Jason Kellahin, Continental Oil Company, we have one witness, Mr. V. T. Lyon.

(Witness sworn.)

VICTOR T. LYON

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR.



- Would you state your name, please?
- A Victor T. Lyon.
- By whom are you employed and what position, Mr. Lyon? Q
- By Continental Oil Company as District Engineer, located in Eunice, New Mexico.
- Now, in your district in New Mexico, do you have jurisdiction as district engineer over the Jalmat Gas Pool?
  - ïes, sir.
  - Are you familiar with the Jalmat Gas Pool? Q
  - A Yes, sir.
- Have you previously testified before this Commission as Petroleum Engineer and had your qualifications received?
  - Yes, sir. A
  - Are the witness; qualifications acceptable? MR. PORTER: Yes, sir.
- (By Mr. Kellahin) Mr. Lyon, have you made a study of Q the proposed rule change which has been submitted in case 2014?
  - Yes, I have.
- And subsequent to the commancement of this hearing have you made a study of the proposed rule as submitted by a witness for El Paso Natural Gas Company?
- I have studied to some extent, but not to the same extent that I had the original proposed rules.
- In connection with that study did you reach a conclusion as to the effect of the proposed rule change?



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A Yes, sir.

Q Would you state what conclusions you were able to draw from your study?

Well, in the first place I believe that the proposed rules are contrary to good conservation practice. I think that good conservation practice calls for the treatment of wells in the fair and equitable manner and I believe that the proposed rules will give an advantage to certain wells and I believe this is improper. In my opinion no well should be given a greater allowable than its neighbor. And the only time that a well should be exempted from the standard pool wide rule is when the well is unable to produce the allowable, in which case the allowable is ineffective anyway. I do not mean to imply that under extenuating circumstances a well may not be given time to be explored on the temporary basis, but I do believe that any time such unusual treatment is granted there should be provisions in the order for a directive of the Commission whereby the well would be restored to a balance with its neighbors. In regard to the requirements for classification of distressed wells I would like to make some comments. The first requirement of the original proposal is that the well should be driving into the low-pressure dry gas line. As Mr. Rainey pointed out, it is unfortunate that these low-pressure gas lines are not immediately available to all wells which might otherwise qualify for distress wells classification. Consequently all wells would be not able to qualify for this classification.



The second requirement is that the well must go through some artificial means or make water in some manner, for example it becomes logged off within 72-hours if it is shut-in, such that it requires swabbing to retain production. In my opinion such wells probably need remedial work done on them and this proposal is encouraging operators to delay remedial work which should be performed. The rules also provide the operator a double benefit by delaying such remedial work. First he doesn't spend the money that is required to perform the remedial work and in the second place he is completely exempted from allowables. And when one of the staff members asked Mr. Rainey yesterday if the proposals would not encourage sloppy operations and he said, "that it would not", in my opinion it encourages just as sloppy operations as the Commission will stand for. The third requirement is that all available acreage has been dedicated to the well and this is probably a good idea whether there is a single well in the large track, it is even better for a single well on the small tract. Where there is several wells on the general lease, I am a little bit confused as to how the thing would operate. It could be that the operator would be required to reallocate acreage to the weak well from wells which have a higher deliverability, such that the allowable for the lease would be reduced and thus would jeopardize the operator's competitive position. On the other hand, the operator may be able to allocate additional acreage to wells with larger deliverability, reducing the agreage to the weak well, which



enhances its needs for distress well requirements and then it is given exemption from allowable so that the operator again benefits from this distressed well classification. I note that the Applicant's Watkins #2 is a h0-acre tract, and under these rules it would receive the same allowable which is capacity as a well on the 640 acre lease. So we have completely eliminated every factor from allocating other than deliverability, and I just cannot see that that is protecting his correlative rights. Now, the fourth requirement calls for furnishing the Oil Commission with certain information, and I think that the Commission is entitled to this information, but I do believe it should be presented at a public hearing after due notice so that the other operators near the pool will have an opportunity to voice their opinion on the matter. I also note that the proposal calls for exemption from testing, sometimes these situations have a way of curing themselves, but unless there are tests performed I don't know how the Commission will ever know whether or not a well needs to continue in this very favorable classification as a distressed well. At the regular hearing in Hobbs on April 13th, the Applicant presented testimony and my recollection of the reserves which had been calculated for three of their wells is as following, if I am incorrect I would appreciate it if you would correct me. The Dyer #3 is supposed to have as of January 1, 1960 1,466,000 in MCF. The Owen #1, 1,897,003 MCF and the Watkins #2, 2,871,421 MCF I would like to make a comment on those reserve figures, if they



are correct. One is that if those reserves are there, then the expense of performing remedied work is certainly justified, and 2, I just don't believe that any large proportion of these reserves will be recovered unless that water is shut off or at least effectively curtailed.

You state in your opinion remedial work would be beneficial to all of you. Has there been any remedial work in the area of other wells?

Some remedial work has already been performed of Applicants wells.

> (Whereupon, Continental's Exhibit 1 was marked for identification.)

Referring you to what has been marked as Exhibit Number 1, would you state what that is designed to show, Mr. Lyon?

Exhibit 1 is a cross section showing 4 wells, the Phillips Petroleum Company, Woolworth #12, Jal Oil Company, Shell Oil, State #1, and Humble Harrison #1. That is reading the wells from left to right. The exhibit shows a trace of the logs on these wells, the completion data and some of the work that has been done on the wells. Before I proceed further, I might mention that on the Jal Oil Company's Watkins #2 the information we had as of the time it was made up showed that it was perforated only 2940 to 2952 and we have subsequently learned there is additional perforation in this well, and I do not have the exact perforations, there are additional perforations. On the left hand side of the Exhibit



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the Phillips Petroleum Woolworth #12 is shown, it was originally completed in 1935 at a depth of 3490, a 7 inch casing was set at 3461 and it was completed as an oil well. In 1939 it was perforated at 3321 to 24 as advertised and it was recompleted as a gas well. In 1947 additional perforations were made in the Yates and the well is producing today at small gas volumes, but so far as we can determine, little or no water. The next well is the Jal Oil Company Watkins #2, as it is stated the information is incomplete on the cross section but as I understand it is a serious water producer. The next well is Shell Oil State #1, which was originally completed in 1953, through open hole intervals from 2636 to 2942. It was plugged back to 2844 to eliminate water. The well was fracked in April of this year with 20,000 gallons and its succeeded in eliminating the water and increasing the deliverability considerably. The deliverability was increased from 510 to 7,900, and the well is producing virtually water free. The next well is the Humble Harrison #1 which was originally completed in 1935 as an oil well, was recompleted for gas in 1943 by perforating 3140 to 3230, and has had remedial work done on it at successive times, one in 1944, one in 1948 and again in 1956. And the operators were successful in shutting off water and completing the well as a commercial gas well, but we do not intend to the Commission or Jal Oil Company what should be done with their wells. All we intend -- other operators have been succeeding in shutting off water by performing remedial work, which I think it is



entirely reasonable and the Applicant can do the same thing.

Mr. Lyon, in referring to the exhibit again, do those wells compare structurally in the area involved in this application?

The Humble Harrison #1 is structurally comparable to Jal Oil Watkins #1, and Shell Oil Well is about 100 feet higher than the Phillips Well, it is considerably lower.

- Would you have prepared another cross section?
- Yes, sir.
- Would you have the Reporter mark it as Continental Exhibit Number 2 for identification?

(Whereupon, the cross section was marked Continental's Exhibit No. 2 for identification.)

Referring to what has been marked as Exhibit No. 2, would you discuss that exhibit, please?

Yes, sir. Exhibit No. 2 is a cross section showing two wells, the well on the left the Jal Oil Company Dyer #3 and the well on the Gulf the Arnott Ramsey. I believe it was number 1, these wells are at comparable structural locations. The Jal Dyer #3 was completed open hole with the casing set at 2792, total depth is 2977. The Gulf well has the casing set at 3194, the well has been plugged back into the casing so that the entire producing interval is producing through perforations in the casing. This well is producing within the same interval and some additional interval too from which the Jal well is producing and it is



producing virtually water free. We think the reason it is water free is because it is producing through selected perforated intervals.

Q Have you made a study of the wells which are operated by Continental Oil Company in the Jal Pool?

A Yes, sir.

Q Taking into consideration the possible effect upon these wells of the proposed rule?

Yes, sir. I thought it might be interesting for the Commission to see the possible magnitude of this thing, and after making a study of the wells operated by Continental, which is about 15% of the pool, I came to the conclusion that approximately 25% of them would be eligible for distress well classification within the next five years. On assuming that other operators from the pool would have approximately the same experience as Continental, and it isn't inconceivable that 25% of the wells in the Jal Pool would be eligible for distressed well classification. I have also made a comparison of the allowable that Jal and Olsen Oil wells would receive and their deliverability at 100 pounds, since that is approximately the allowable that they would receive as distressed wells, the amount of gas they could deliver into a 100 pound line. The Jal Oil Company Dyer #3 has, I might mention here too that these allowables are calculated on the basis of the pool allowable for the past year and determining average factors into which the acreage and deliverability have been inserted to



X K

arrive at the average allowable over a yearly period, the Dyer #3 would have an allowable of 180 MCF a day and deliverability of 304. The Legal #2 would have an allowable of 233 and deliverability of 938. The Watkins #2 an allowable of 46 and deliverability at 100 pounds at 439. The Olsen Cooper #1 an allowable of 174 and a deliverability of 1,438. The Cooper B2 an allowable of 275, a deliverability of 1,029. The Winningham #3 an allowable of 328 and deliverability of 654. Adding up the allowables and comparing them to the sum of the deliverability it appears that these wells would be producing at approximately four times the allowable rate. Now. if 25% of the pool were given an allowable four times their allowable. it is obvious they are going to take a large percentage of the market and the non-marginal wells would be squeezed out.

Would you summarize your conclusions, Mr. Lyon, as to the effect of this proposed rule change?

Yes, sir. I believe that the proposed rules encourages operators to delay repairs needed on gas wells. It also allows them to profit by such delay. We believe this is contrary to good conservation practices and would cause rather than prevent waste. The effect of the proposal to eliminate acre reserves, every other factor, is the factor in the allocation formula, for it would permit producing rates without regard to recoverable gas in place and consequently would violate correlative rights. And also the proposal would very likely result in such a large proration from gas takes from distressed wells that the non-marginal wells would



squeezed out of the market, which would in effect destroy gas proration in the pool altogether.

Do you have any recommendations to make in regard to the proposed rule?

Yes, sir. In the interest of preventing waste, protecting correlative rights, and preserving orderly gas proration in the Jal Pool, we strongly recommend this proposal be denied.

Mr. Lyon, Were Exhibits 1 and 2 prepared by you or under your direct supervision?

Yes, sir.

At this time we would like to offer Exhibits 1 and 2.

MR. PORTER: Without objection 1 and 2 will be received.

MR. GIRAND: We would like to hold the introduction of the exhibits until after cross-examination.

MR. KELLAHIN: We have no objection to that.

MR. PORTER: Mr. Kellahin, would you offer your exhibits after cross examination?

MR. KELLAHIN: They have been offered, the Commission can then make its ruling.

MR. PORTER: Mr. Girand.

### CROSS-EXAMINATION

## BY MR. GIRAND:

Mr. Lyon, in October the Continental Oil Company had some help in regard as requested relief from some wells for the method of production, did they not?



At that time it was possible they needed some relief.

And some help from shut-in wells?

Yes, sir.

What is the relief Continental Oil asked for in regard to the encroachment of water on those wells?

We asked and were permitted to make up over production A at producing rates equal to 50% of the current allowable.

Didn't Continental Oil at that time take the position if their wells were required to be shut-in they would suffer material loss?

Yes, sir.

Now, in connection with those wells what rework or remedial work has Continental done since that time?

I don't recall right now the exact wells involved, there may have some tubing run in some.

You don't know? Q

Not right now.

And at the present time what is the position of Continental Oil Company in regard to remedial work on any of the wells they have making water in the Jal Pool?

When the water is serious enough we normally recommend that the water be shut off.

All right. Now, in that connection, what have you done?

Well, I am not sure. I will have to check my records.

Now. Mr. Lyon, is it your opinion remedial work in every



instance is a success?

- A Unfortunately it isn't.
- Q And it is more or less in the same nature just like drilling another hole, isn't it?
  - A That is right.
- Q Directing your attention to your Exhibit Number 1, Mr. Lyons --
  - A Yes, sir.
- q -- you have cross sections in regard to three wells, do you not, the Phillips Petroleum Oil, The Jal Watkins #2, Shell State #1, and the Humble Harrison #1.
  - A Four wells.
- Q Four wells. Now, the Shell State which you testified to is a much higher well structurally than the Watkins #2 or the Humble Harrison #1?
  - A Approximately 100 feet higher.
- And in directing your attention to the Humble Oil
  Harrison #1, I note you have in your notes there that the potential
  is 203 with 20. Did you calculate just BS&W and that amounted to
  barrel-wise?
- A The information that we have received since this was prepared, this was the initial completion, and since that time the water has almost ceased entirely.
  - Q But you don't know that of your own knowledge?
  - No. it isn't our well.



- Then the information shown here is the information that you testified to as being correct information in preparing this exhibit?
  - Yes, sir.
- Getting back to my question, can you give the Commission some idea as to the volume of water represented by 20% of BS&W on that type of production?
- I don't know exactly what this 20% involves, except that I presume they were producing fluid with the gas, 20% of which was BS&W and that the fluid they were producing was primarily load oil. So I have nothing to compare it with.
- Ordinarily you don't classify load oil as BS&W do you, Mr. Lyon?
  - No.
  - It stains?
- That is true, given on here as to what the total fluid was.
- Except it was 20% of it, whatever it produced out of the hole?
  - It might have been one barrel.
- Mr. Lyon, you have testified that you are familiar with the Jalmat Pool area, generally speaking, and you know of your own knowledge any number of wells that are making water at this time, is that correct?



- Isn't that a problem that will continually grow and become more severe?
  - Yes, sir.
  - Before the pool is completed?
  - Yes, sir.
- Assume that the Commission does adopt a rule giving some relief to distressed wells over making such a determination, it is not your position that the Commission will allow abuses such as you fear in your testimony?
- There is nothing in your proposed rules that would prevent it.
- There is nothing in any rule that I know that will actually prevent it, it will only penalize for breaking.
- Well, in the normal course of events as under the present rules, the well is given an allowable when it is six times over produced, the Commission requires it be shut-in.
- Mr. Lyon, connected with Continental Oil and by appearing here before the Commission whenever an abuse or irregularity come to the attention of the Commission in regard to any operator, hasn't this Commission taken steps to correct such abuse?
  - I think they should.
- Couldn't that Commission still perform under a rule or any rule and protect the offset operators?
- That is true. I think they exercise better judgment if they didn't adout one which would permit such a thing.



In other words, it is just your theory that if the well is making water to such an extent that in order to relieve it of the water you would bring it about by over production, that then the operator would either have to spend large sums of money to plug the well?

I think that an operator would do so.

Is that your testimony, and will that be the position of Continental Oil Company on their well?

So far as I think each well is an individual problem, and I think that these things could be handled as individual problems, rather than in the general classification.

Let's assume just for the purpose of your testimony here that the Commission has taken a position they have no rule, background to afford interval relief of wells that are making large volumes of water, and in order to keep the water off -- the water has to be artificially lifted somewhat, either by free piston, pump jack, in order to keep it where it can buck a line. The well then produces more than the allowable that has been given because it fails to meet a deliverability test. Assuming that the Commission doesn't have that authority under the present rules, then it is your opinion that the Commission should not even have any order to fall back on where the applicant could come in and show, assuming that he could show what he asked for, and the well and how it could be handled under a distress basis, or do you want the Commission to say we have no rule, we can take no action.



If the Commission doesn't have any rule I am not sure what the situation would be, Mr. Girand, if you have a problem, I am sure the Commission will listen to you.

Let's take this Commission by statute to prevent waste, Now, I will take a well performing, just for instance that it was performing, in such a manner that during that 12 month period, determination of the Order 976 and the deliverability that the wells were capable then of producing, more than the marginal allowable, it was producing enough gas during that period of time that it is classified to be changed. Now, the well shut-in causes it to become over produced due to the re-allocating of the allowable, then when it was opened up it was incapable of making anywhere near the same amount of gas that it made immediately before it was shut-in. Now, as a practical matter, the gas that was underlying that practical well has migrated somewhere else, hasn't it?

- I don't know.
- It is not there any more?
- Eventually it can't get into the well bore.
- Just what favorable position do you think a distressed well had, well operator would have, you missed by reason of this order?
  - By being allowed to produce at capacity.
- Have you made any calculations, you heard the testimony in regard to the Cooper and the Winningham at what they were able to produce on the full open hole operation, did you not?



I looked at your deliverability tests and calculated what the rate was and then calculated what your wells could produce.

- Q. What do your deliverability tests show, Mr. Lyon?
- On which wells?
- Say on the Winningham.
- Showed a deliverability of 654 MCF.
- Was that taken from that particular well?
- It was taken from the deliverability test filed for that well.
- What did SR Cooper show, the deliverability? Q SR Cooper #1.
- All I have here is Cooper, I don't know if it's SR or don't --
  - You know there is SR and Cooper #1, don't you?
  - You just told me.
- Well now, Mr. Lyon, in making this exhibit here and in furnishing your testimony, you want to be fair with this Commission, don't you?
  - Yes, sir.
- And in looking over our property and our wells you noticed the application we were talking about, the SR Cooper #1, did you not?
- The Cooper that was listed on the letter from the Commission dated May 16th.



- That is the SR Cooper. Q
- A That is the one, that is the one this is.
- What does the deliverability test show on that? Q
- The deliverability of 1,438 MCF a day, that is at 100 pounds.
- And when was that deliverability test, what was the date of that deliverability test, do you know?
- I didn't take that information down, it was the one taken this year.
- You are familiar with the New Mexico Oil Conservation Q Commission's southeast gas proration schedule, are you not?
  - Yes, sir.
- I direct your attention to page number 32 and where the SR Cooper is shown, and ask you what is the deliverability test shown on the proration test?
- Is this SR Cooper in Section 23 or SR Cooper #1 in Section 11?
  - That is, state, where the SR Cooper is there.
  - There is two number ones.
- Is that SR Cooper involved in this here (indicating), this one is number one, unit FF, H unit on eleven, as far as I know, they are Cooper #1.
  - Will you tell me which well you are referring to?
  - You just give the deliverability of both of them. Q
  - The one, Section 23 has a deliverability of 131 at 80% of



shut-in pressure. The one in Section II has a deliverability of 587 at 80% of shut-in pressure, the deliverability are 100 pounds.

MR. PAYNE: I think in order to clear up the record we ought to state the SR Cooper well #1, which is involved in this hearing, the SR Cooper which is in Section 23.

- Thank you.
- (By Mr. Girand) That is the well that slow 131 deliverability?
  - That was.
- Mr. Lyon, when did you learn that the Watkins #2 had some remedial work done on that?
  - This morning.
- You have made no check to the Conservation Office at Q Hobbs to see what had been done, what work?
  - No, sir.
  - At the time you made this Exhibit No. 1?
  - A No, sir.
- Just one further question, is it your testimony in the Q opinion of the Continental Oil Company that an order authorizing relief of any operator regardless of who it may be that they are not capable of granting an exception without entirely destroying the industry?
  - No, sir.
- Then if a rule were adopted, whether it is one proposed dr Q not which would give this Commission what it considers jurisdiction



for treatment with wells making water, that is gas wells making water, and where anyone had a right to object and put on their particular proof, whatever it may be as to the feasability of granting the application or not, don't you feel that all operators would be safeguarded against any malfeasance of the Commission?

I am sure the Commission is not going to destroy gas proration in this pool.

I ask the Commission that the answer be stricken. your opinion this Commission cannot in an orderly manner handle the proration of gas?

I think the Commission is doing so now.

If the Commission adopts a rule or any rule, hasn't it been your opinion in the past they have been able to operate under it either uniformly, fairly -

MR. HELLAHIN: I object to this line of questioning as being argumentative and calling for a conclusion. Well, his voluntary statement couldn't be anything else but a closing argument, that is testified to.

MR. GIRAND: I pass the witness.

MR. PAYNE: I don't.

CROSS EXAMINATION

## BY-MR.-PAYNE:

Mr. Lyon, do you believe in a distress well classification under any circumstances?

Well, it doesn't make any difference what you call



I think there are probably times when a well because of its condition deserves some special consideration for a particular problem, as I stated before, I think it should be of a temporary nature and there should be provisions where the well would have to make up any advantage that it received.

Well, I take it then what you are saying is in order to protect correlative rights you couldn't let one well with a similar deliverability acreage dedication produce more than another?

The Commission has established an allocating formula which is supposed to divert gas in a fair and equitable manner. I think that formula should be applied to all wells.

What if in the specific case the formula is such that it would require the particular well to be abandoned?

Well, there are cases, as I say, where I think that a special provision is, can be given of a temporary nature.

Now, Mr. Lyon, do you feel that if a gas well in the Jalmat Gas Pool is abandoned due to water problems, however, they might be created, that ultimate gas from the pool will be lost or will it only be lost to the particular well?

I think there could very easily be, in instances.

If the gas in the reservoir is lost it could also be lost, Mr. Payne, by imprudent, where remedial work should be done, where it is not done.

So you feel perhaps that in the general principle



least, the gas that would be lost, like failure to perform remedial work, might offset the gas that will be lost by abandonment of the well due to water encroachment?

- I don't follow you.
- Let's look at it this way. Obviously when you take a well with the same deliverability and dedication, more gas allowable than another one, you have automatically impaired correlative rights to a certain degree you have injured the preventation of waste, now if you wore to meet head on which I can conceive of a situation where they would, do you feel that the prevention of waste should be paramount?
  - I don't know if I am qualified to answer that question.
- What is the general principle in these water problem cases whether the two do meet head on, for this reason I am trying to find out if the gas that would be lost due to water encroachment would be offset or likely to be offset by the amount of gas, but would be lost due to the -- either the failure or delay in performing remedial work?
- Well, borrowing a phrase from Mr. Rainey, I think it is a discretionary question of the Commission and a matter of degree. I believe that the Commission must in its discretion, must decide what is more important in each individual case.
- Let's assume an applicant shows possibility that it is not economically feasable to rework a well due to the lower reserves or something of that nature, do you believe that well should



te exempt from proration, at least to the degree in order to allow it to produce whatever more gas it can?

I think that could be reasonably done, yes, sir.

MR. PAYNE: I believe that is all, thank you.

MR. PORTER: Anyone else have a question of Mr. Lyon? Mr. Utz.

# CROSS EXAMINATION

## BY MR. UTZ:

- Mr. Lyon, have you made any study of the Olsen and Jal wells as to the nature of their remedial work, if any?
  - Very little. A
- Then you would have no opinion as to whether or not they would have exercised due diligence in trying to shut off the water in the wells?
  - No, sir.
- But you do know of other wells under very similar circumstances that have performed remedial work and successfully shut off the water?
  - Yes, sir.
- Now, as a matter of policy with Continental, what do you accomplish in regard to your water problems?
- Well, I don't know. There is no specific answer to that, when we in the district become aware there is a problem we begin the study necessary to determine the solution and prepare the necessary paper and requests for authority to perform the work



sometimes it is a rather time consuming process.

- If you have a well that say logs up a 72-hour shut-in?
- We have to swab it in.
- Do you try to take remedial action on that well? Q
- Yes, sir.
- And have you done so in some instances where you have that problem?
- We have done so in some instances, we have some that need to be done soon.
- In those instances where we have a problem such as this, were you able to prevent the well, in other words, to shut off the water so it didn't log up for 72-hours?
- Yes, sir, we have been successful in shutting off water. Sometimes we were successful in shutting off the gas too.
  - You shut off all the gas?
- No. We have been able to restore production but very often not to the extent that it was before the water encroached. Of course, you wouldn't normally expect it to have the same production at this time if you had to squeeze your producing zones.
- Even though you did entail some of the wells productivity at this time, you got the well in such a condition you were able to feel, to produce the balance of your reserve?
  - They are able to perform under the Commission's formula. MR. UTZ: I believe that is all.



Mr. Lyon, could you give the number of wells that Continental has worked over in the Jal Oil Pool?

- No, sir, I sure couldn't. A
- Can you name one of the wells? Q
- We have worked over?
- Yes.
- Yes, sir.
- What well is that?
- Lockhart B31 #6.
- What brought about the work-over on the Lockhart?
- It became logged with water.
- All right. What remedial work did you do?
- We swabbed it on two occasions and were unable to lower the fluid level or reduce the pressure on the casing. It was evident that the water encroachment was just as fast as we were unloading the water out of the well, and we then cut the producing intervals and perforated higher in the formation, in the Yates.
  - Do you know of any other well you worked over? Q
  - Yes, sir, State #-17 #5.
  - I didn't get that.
  - Number 4, excuse me. State #-17 #4.
- All right. What brought about the work over on that particular well?
  - It became loaded with water.
  - What did you do in the nature of rework?



- We discussed the 7-Rivers and perforated the Yates.
- The 7-Rivers is left there, is that right? Q
- Yes, sir.
- Isn't that from another horizon?
- That is right. Of course, if there is any gas there it A would be likely to be produced where the wells are obstructed.
  - Do you know, isn't that true of the Lockhart?
  - Yes, sir.
- So the amount of gas you left down in the 7-Rivers is there also?
  - Assuming there was some gas still there, yes, sir.
- There was up until the well was overloaded in water, wasn't there?
- Well, it was producing gas up until it ceased to produce yes, sir.
- Now, Mr. Lyon, say you have a well that when it is shutin for 72-hours it becomes loaded still with water and say within 24 hours you are unable to unload the fluid to any extent, doesn't that have a great affect on the deliverability of the particular well?
- If you can't produce any gas at all it has a terrific impact on it.
- It also has a terrific affect on the allowable assigned to that well?
  - Of course, you don't need one if you can't produce.



You can produce by pump jack or floating piston to keep that water off the well too, wouldn't that lead you to believe there was gas in place underneath the well bore?

If you can produce gas there must be gas coming in from the well bore from the formation.

MR. PORTER: Mr. Payne.

## BY MR. PAYNE:

Mr. Lyon, to the point the operator abandoned any well there is generally some oil or gas left in the formation, is there not?

True. It is just a question of how little you can produce and still continue to operate economically.

MR. PAYNE: Thank you.

## BY MR. RAMEY:

Mr. Lyon, I note Continental squeezes their perforations when they have water coming in, is that correct?

Yes, sir.

Would you say that if that bridge plug was placed above the given set of perforations it would in all cases adequately shut off the water?

In my opinion if you got a water problem it would be foolish to try to shut it off, other than squeeze cementing.

MR. PORTER: Any questions.

## BY MR. UTZ:

In answer to Mr. Payne's question, I believe you stated



that at some point the Well does become une conomical to operate, therefore you recommend plugging?

- Or recompletion.
- Pardon?
- Or recompletion.
- After recompletion if you are not able to improve the well, at what point do you believe that you have to recommend plugging these wells? In other words, what minimum volume of gas can you produce and still pay to operate the well?
- Well, at that point when the revenue from the gas sales are less than the expense of operating the well.
- Q Well, do you have a figure on what the expense of operating the well is?
  - Well, it depends on several things. A

MR. GIRAND: I doubt seriously if Mr. Lyon is qualified to make a cost study of wells of Continental Oil Company.

MR. PORTER: You are objecting to the questions?

MR. GIRAND: I am questioning. I don't think he is qualified to answer.

# BY MR. PAYNE:

Do you think you are qualified to answer? What did you say to making a cost analysis, to determine the well.

That is very definitely my response, I don't know how qualified I am.

PORTER: Would you answer the question then?



Well, it depends on the factors that go into your operating cost, for instance if you have a pump jack on the well it is more expense than to a well that flows naturally.

# BY MR. UTZ:

- I am talking about gas wells. Q
- They have -- you mean pump jacks on their wells?
- Yes, they do. On your wells, you have no pump jacks?
- No, sir.
- What I am trying to do is get in the ball park, the volume of gas you think you would have to recommend to plug the well, it being we have a premature abandonment closure in your statutes and in your rules and I am trying to find out, if I can, about how much gas that should be allowed to prevent premature abandonment.

MR. GIRAND: I think we are going protty far afield as to the matters we have brought to the attention of the Commission, in event the order is approved or order is disapproved, dealing with the particular well involved. I am sure there is no major oil company, I mean I know of none of the 9 independent that want to be governed by the rule stick or major oil stick on the cost of operations.

MR. PAYNE: I think that is correct. It is going to vary from company to company and from pool to pool how the well is produced.

The Commission will sustain the objection.



# DEARNLEY-MEIER REPORTING SERVICE, Inc.

### BY MR. PORTER:

Mr. Lyon, you said there that you thought the determination would govern probably to the point when the expenses begin to exceed the revenues?

No. sir. I believe I said, that the point at which the well is abandoned would be determined by that.

I thought you were dealing with remedial work, I misunderstood the question.

MR. PORTER: Anyone clee have a question.

# BY MR. GIRAND:

In connection with your last answer, Mr. Lyon, the two wells that you did remedial work on were wells that were logged off after a 72-hour shut-in?

They had been shut in considerably longer than that. MR. GIRAND: That is all.

MR. KELLAHIN: I would like to renew my offer of Continental Exhibits 1 and 2.

MR. GIRAND: I have no objection. I think they are incomplete.

MR. PORTER: Continental Exhibits 1 and 2 will be admitted into the record. Anyone else have any further testimony, any statements?

MR. HINKLE: Humble Oil would like to go on record as being opposed to the application in this case of Jal Oil Company and Olsen Oil, Inc.; as a matter of principle the Humble Company is



opposed to any exemption from proration, ordinarily we would favor administrative rules of procedure, in this case we think that where there is going to be an exemption to proration, it should be after a hearing before the Commission and each individual case should be treated on its merits.

MR. TOMLENSON: Atlantic opposes the application of Jal and Olsen Oil for revision of Jal Gas Pool rules as set forth in Order R-1670. An adoption of the proposed provision would exempt some wells from any provision, any prevention whatsoever with possible damage to correlative rights. In addition the applicants have not established here that any need exists in the distress well category, other operators have been able to operate without such relief. Applicants have presented no evidence that work-over possibilities do not exist in their wells. In addition, waste might be caused by encouragement given to, not to work wells so as to qualify those wells to distress well classification.

MR. SETH: Shell Oil. Mr. Girand said yesterday he was seeking a haven for the shelter of particular operators. We think he is applying for a heaven instead of a haven. Shell Oil Company operators are opposed to this operation in this case. application is obviously attempting to exempt part of the wells in the field from proration while seeking to put the rest of the wells on proration. If it is granted the correlative rights of other operators generally will be affected in that. We think the fact the well cannot be produced under proration does not justify



exempting it from proration and giving it license to drain the property of offset operators of their water production while they prorate it -- excessive production, proration units on which they are located are too small for them to have an adequate allowable. The proposed exemptions will inevitably result in a serious breaking off of the property of others and in violation of the correlative rights of others and will ultimately lead to a breakdown of proration. Not only correlative rights of operators are violated by granting the proposed exemption here requested but there would also be waste that results from the unnecessary voidage of space in the reservoir from production of large amounts of water and rather advantage the waste of the reservoir. That will so result it seems to me, water to the neighbors, to abandon the records to be other wells and those cases where the water producing wells cannot be made economic by remedial work but all the while subject to proration rules.

MR. KELLAHIN: On behalf of Continental Oil Company and Amerada Petroleum Company, we are opposed to the proposed rule. We do not see at the present time any need for a special classification as a distress well. We feel that our testimony has clearly pointed up to the possible dangers which would be incurred by adopting such a rule. The primary objection we have to it is based on the fact that it would abandon proration as to these distress wells. The ability of the well to produce is the sole factor which would affect the productions in that well without any



regard to the size of the tract on which the well is located or the reserves underlying that tract. Those are factors which must be considered by the Commission in any proration formula and it would create an anomalous situation in a pool where part of the wells are prorated and part of the wells are not prorated. well located on the small tract, for example, could conceivably, and in some instances quite possibly would produce far in excess of the reserves underlying the acreage dedicated to that well. There are a large number of wells in the Jal Pool located on 40acres as the Commission well knows. To allow those wells to produce at their capacity would impair the correlative rights of the offsetting operators. Now, the other factor which the Commission must of course consider is the possibility of waste and certainly there is a factor that must receive serious consideration by this Commission. The waste involved here, as we see it, would induce premature abandonment. There has been no showing on the part of the applicant here, as any remedial work, the wells which they submit as examples showing the need for this special rule. Our evidence on the others shows where remedial work in the same area on wells structurally located on a comparable structure has been quite effective in shutting off water. We feel that in the first instance remedial work is the answer and in the second instance of the question of water encroachment is going to result in the premature abandonment and ultimate loss of gas in the reservoir that is gas that could not be produced by some other wall



Certainly the Commission has the jurisdiction under our to give consideration to that fact and the hearing on that one individual well. Our statutes so provide that a minimum allowable can be assigned to prevent premature abandonment and if an individual operator has a case which needs consideration this Commission is always open on a special application for relief if the situation is of that kind. Normally as we see it, such relief would be of a temporary basis until the acreage would be reassigned to the well which is not making water or remedial work attempted or some other method followed in order to relieve the situation. We don't see any need for a permanent order recreating distress wells which in turn under the proposed rules would never be subject to another test unless the Commission so ordered any special order. Therefore, we would never know whether they needed that classification any longer or not. We are opposed to the application.

MR. GIRAND: If the Commission please, the statements of the representative companies in opposition to it leave me a little bit confused in this manner. It would seem at this time they are attempting to pretrial the wells of my clients, Jal Oil Company and Olsen Oil Company, when they are really not at issue. We brought into this Commission what we consider knowledge of existing facts in the Jalmat Gas Pool. The water or fluids will be increasing from time to time as the pool is depleted. Some relief, some help has to be given to operators who own wells that are making water



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at this time. Each well, if the Commission adopts the rule, each well has the applications filed for this particular classification The operator will have to show this Commission and convince this Commission that all these counts that they have dug up in this statement and scaring this Commission of what is going to happen to the gas in the Jalmat Pool really didn't exist at all. This Commission is armed with the authority to control the production of gas and oil in the State of New Mexico. Any observation, any further examination that the Commission might want to make on the well that was classified as a distress well at one time can be made at anytime. The Commission can enter any order to show cause why the certain wells shouldn't be done this way or that way, and the operator would have to furnish this Commission with whatever information they want to, in addition to the normal monthly reports that you require. You are not going to declare under this order a well, a distress well, and then go in and tuck it in the closet and forget all about it. This is something that is new in your field or relatively new, and it will be something that will be reoccurring throughout the other fields. It is time this Commission adopt some rules to see whether they are workable or not, if they are not workable, the Commission who adopts the rules to the well, it can revoke it. The Commission can amend their order as they have any number of times. What we have suggested to this Commission is not fair to all people. We don't want it that way either, because we are part of those people. We have offered you what we



thought was a workable rule. If it is not workable time will tell. but I don't mean by that years and years and years. I think it would be discovered in a short time, and I say that since the Commission has more or less taken the attitude that under your 967 as amended by 1670 that they cannot go beyond the allowable assigned to the well, that since they have taken that position we need then to have a classification to see just what these distressed wells can do, what they are doing and what effect it has on the position, as a pool within a given field. We submit that the Jalmat Gas Pool rules should be changed to afford some relief to operators producing or making water with their gas rather than to take the risk of the waste that could result from not taking such action.

MR. PORTER: Anyone else have anything further to offer in this case 2014?

MR. PAYNE: We have received a number of comminications from various companies. They vary considerably in their approach so perhaps I should read them all.

MR. PORTER: Would you read them into the record?

MR. PAYNE: "Gulf Oil Corporation is an interested operator in Case No. 2014, to be heard July 13, 1960. Gulf is opposed to the application as presented since we feel that correlative rights cannot be protected if certain wells in a prorated gas pool are exempt from proration. We do not object to a distress well classification providing a limitation is placed on



the amount of gas the well can produce." Gulf Oil Corporation, W. A. Shellshear, District Manager.

"Reference Case 2011 Application Jal Oil Company and Olsen Oils, Inc., Phillips Petroleum Company agrees in principle with practice of exempting wells from proration where it is clearly established that such exemption is reasonably necessary to prevent waste. We do not believe that any rule can be promulgated which will accomplish this objection by administrative approval without abuse of the principle of granting relief for prevention of waste only. Recommend rules be amended to provide for exemption of wells from proration only after notice and hearing." Phillips Petroleum Co., L. E. Fitzjarrald,

Case No. 2016, Texaco, Inc., as an operator in the Jalmat Gas Pool is opposed to the proposal of Jal Oil Company and Olsen Oil Company to create a category of wells to be known as distress wells, which wells would be exempt from gas proration. The Applicants have requested that a well be classified as a distress well if producing through artificial means without making any attempt to locate the point of matter entry or alleviate the water problem. The Commission has always granted an applicant the opportunity to hear hardship cases after proper notice. Texaco is opposed to this proposed rule change without giving an operator at a commission hearing the opportunity to protect its correlative rights when offset by these so-called distress wells; therefore fully request the application be denied. Texaco Inc.



J. H. Markley, Division Manager.

"RE: Case No. 201/, July 13 hearing. The Ohio Oil Company opposes any change in the Jalmat Gas Pool rules at this time which would require the Commission to exempt any well from either gas proration or from the annual deliverability test solely on the ground that a well has met stated conditions such as are set out in the rule proposed by applicants and heretofore circulated by the Commission. However, the Ohio recognizes that an exemption from the deliverability test and from the regular allowable limitations may be justified for certain wells in this pool now or in the future. The Ohio's position concerning such exemptions is respectfully stated as follows: If exemption from the deliverability test is granted for a well a reasonable and fair substitute should be provided, there should be no complete exemption from proration except for marginal wells. Any special allowable for any other wells should be limited to the minimum volume necessary to maintain the well on production but should not exceed the current allowable assigned to a non-marginal well having the same amount of dedicated acreage in the pool. No such relief should be obtainable unless the operator establishes such relief is necessary for a designated well in order to prevent waste or to protect correlative rights. No such relief should be granted except upon a written application with a copy to each offset operator setting out all pertinent data including efforts made to rework the well. A hearing should be required on any such application either on the



ALBUQUERQUE, NEW MEXICO

Commission's own motion or upon request of any operation in the Pool." The Ohio Oil Co., I. G. Burrell, Asst. Division Mgr., J. O. Terrell Couch.

Pan American is opposed to any change in the Jalmat Gas Pool at this time. It is our opinion that previous rules and policies of the Conservation Commission adequately provide relief for the type wells defined as distress wells in this case. Pan American recommends the application be denied. This is to advise that Tidewater opposes the creation of a class to be designated as distressed wells as such by the term as set out in the notice of hearing. Our objection was based primarily on the precedent, it would stimulate administrative difficulties that they would encounter as such if a rule became prevalent.

MR. PAYNE: That concludes the communications that we have received.

MR. PORTER: Anyone else have any comments in this Case 201/1? The Commission will take the case under advisement.



STATE OF NEW MEXICO COUNTY OF BERNALILLO

I, LEW NELSON, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype, and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

Dated this 15th of August, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

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COVERNOR

JOHN BURROUGHS CHAIRMAN

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO EXHIBIT No.\_ CASE 20/

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

LAND COMMISSIONER NURRAY E. HORGAN MENERE

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY DIRECTOR

P. O. BOX 871 SANTA FE

May 16, 1960

Jal Oil Company and Olsen Oil Company 9/0 Mr. W. D. Girand, Attorney at Law P. O. Box 1445 Hobbs, New Maxico

# Gentlemen:

It is our understanding that you are now in the process of drafting a proposed rule change for the Jalmet Gas Pool which would, under certain limited conditions, exempt wells with severe water problems from prerationing. As we understand your request, it is that cartain Olsen and Jal Qil Company wells be permitted to produce at an unrestricton rate pending the hearing of your case on the proposed rule change, incomech as two Jal Oil Company wells have allegedly been lost sikes Case No. 1941 was heard on April 13, 1960.

It is with considerable reluctance that the Commission has decided to allow Olsen and Jal to produce the nine wells listed below at an unrestricted rate until August 1, 1960, without regard to their more than six-times overproduced status:

Olsen Gooper B Well Mo. 2, ME/A wal/A of Section 14, Younship 24 South, Range 36 East.

Olsen Hyers B Well No. 1, SE/4 NH/4 of Section 13, Township 24 South, Range 36 East.

Olsra S. R. Cooper Hell No. 1, SE/4 HE/4 of Section 23, Township 24 South, Ronge 36 East. Olsen Winningham Well No. 3, NE/4 SE/4 of Section 30, Township 25 South, Range 37 East.

Jal Legal Well No. 2, NE/4 SE/4 of Section 21, Township 25 South, Range 37 East.

Jal Dyer Well No. 3, SE/4 ME/4 of Section 31, Township 25 South, Range 37 East.

Jal Jenkins Well No. 1, &W/4 SW/4 of Section 29, Township 25 Scuth, Range 37 East.

Jal Watkins Well Mo. 2, SE/4 ME/4 of Section 35, Township 24 South, Range 36 East.

Jal Owens Well No. 1, SW/4 SW/4 of Section 21, Township 25 South, Range 37 East.

The primary reason that we have decided to grant this temperary exception is to see if any of the above-described wells which are not now producing can be brought back to a producing status.

The Commission will expect you to file your application for a rule change in the near future and certainly no later than June 24th, 1960, so that the case can be heard July 13, 1960. If the application is filed in the near future, it can be circulated to other Jalmat operators prior to the July hearing, thus lessening the chances that an operator may ask for a continuance in order to study the proposed rule. But in any event, this temperary administrative exception will not be extended beyond August 1, 1960.

During the period from the present until July 10, 1960, you are directed to make every effort to restore any of the subject wells to production which are now or may become incapable of producing due to water eneroschment. Twenty-four hours prior to attempting to restore any such well to production, you are directed to notify the Nobbs District Office of the Oil Conservation Commission of your plans so that a Commission representative may be present to witness such operations.

y 16, 1960

The Commission wishes to make it perfectly clear that this temporary exception to shut-in for overproduction is in no way to be construed as an indication that the Commission will adopt any proposed rule change. In fact, on the basis of the information presently available, there is a very strong feeling among our entire engineering and geological staff that no well in the Jalmet Gas Pool should be exempt from prorationing at the present time. The majority feeling is that no well should ever be exempt until remedial work has proved to be unsuccessful and the installation of a bottom-hole pump has proved to be ineffective.

In the event your proposed rule change is not adopted, the Jalmat proration rules will, of course, continue to apply to these wells. Any production in excess of allowable production, including production between now and August 1 will have to be compensated for by curtailed production or complete sbut-in commencing August 1, 1960.

Inasmuch as Case No. 1941, heard on April 13, 1960, dealt with only three wells, two of which you say have now gene dead, a rehearing of this case would serve no useful purpose - particularly since you do not allege that you have any new evidence. Accordingly, your request for a rehearing of Case No. 1941 will be denied.

If you are dissatisfied with the Commission decision in your rule change case, you can always appeal that decision, and thus receive a judicial determination of essentially the same matters.

Very truly yours.

A. L. POIZER, Jr. Segretary-Director

ALP/OEP/ir

ce: Governor John Burroughs Coumissioner Morgan Joe Ramey - Mobbe, H. Mex. Mr. Hernan Woodruff - El Paso, Texas

# PROPOSED SPECIAL POOL RULES FOR JALMAT GAS POOL TO PROVIDE FOR CLASSIFICATION OF DISTRESSED WELLS

(All rules below will be added as amondments or additions to the Special Rules and Regulations for the Jaimat Gas Pool in Order R-1670.)

Rule 8 (A) 1:

The Fool Allowable remaining after deducting the total allowable assigned to marginal wells and distressed wells chall be ellocated among the non-marginal wells in the Fool as follows:

Existing Rule 8 (A) 1 (a).

Rule 8 (A) 4:

No well except a distroce well shall be assigned an allowable until a deliverability test has been filed with the Commission and approved.

Rule 10 (A):

A marginal well shall be assigned an allowable equal to its maximum production during any menth of the proceding gas provetion period. A distress well, as bereinsfler defined, shall be allowed to produce the amount of gas necessary to maintain production under production methods approved by the Commission.

Rule 10 (M)

The Peel Allowshie remaining after deducting the total allowshie assigned to marginal wells and distress wells, shall be allocated among the non-marginal wells extitled to an ellowshie in the Jalmat Gas Peel.

Rule 15 (Ak

A well classified as a distress well shall be exampt from the provisions of General Rule 15 (A),

Rule 20:

All wells not classified as marginal wells or distress wells shall be classified as non-marginal wells.

Rule 16 (C):

The Secretary-Director of the Commission may closely a well as a distress well without notice and hearing where application has been filed in due form and where the following force exist and the following provident are coupled with

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

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Proposed Special Fool Rules for jaluat Cas Pool to Provide for Classification of Distressed Wells Page 2.

- 1) The operator shows that he has exercised due diligence and used all feasable means to maintain the well in a producible condition and
  - The well is producing through artificial means with a five Howing piston or pump jack, or from other mechanical means, and the well is making water in such amounts as after a 72-hour shut-in period the well becomes logged off unit is unable to be restored to production after being swabbed for not less than 24 hours, or;
  - The operator shows that it is uneconomically feasible to utilize mechanical side to maintain the well on production;
- 2) That all acroage belonging to the operator capable of being assigned to said well has been dedicated;
- The operator must farmish to the Commission a report giving in detail all pertinent data with respect to the method employed by the operator in producing the well sought to be classified as a distress well, and such other and further information as the Commission may desire from time to time;
- 4) The applicant presents written compone in the form of weivers from all operators effecting acrosps deficated to the proposed eletromed well;
- 5) In New of 4) of this Rule, the applicant may furnish proof of the fact that said offset operators were notified by registered small and furnished the same information as was furnished in their application to the Commission with respect to the proposed distracts well. The Secretary-Director of the Commission may closely the well as a distract well if, after a period of twenty days following the mailing of said notice, an operator has made objection to the classification of the proposed distract well. If a profest

is received the matter sholl be set for hearing

OIL CONS
SARIJA I LAHRINI NO 2
CASE 20 14

HEGAL #2 NE SE 31-258-37E Lea County, New Mexico

The Legal #2 is a Jalmat gas well produced with a free piston installed in March, 1958. This well was produced as a marginal well until the middle of 1959 when it was then reclassioned as a non-marginal retroactive to July, 1958, and assessed with an over produced status of 77,037 mcs. This well's production was more difficult to get it back on production.

This well, prior to the installation of the free piston, was averaging approx. 13,563 mcf per month. The latter month the production was dropping and the water encroachment was increasing, so the piston was installed. From March, 1958 to July, 1959 the well averaged 10,899 mcf. This average is lower than the approx. 9 months average prior to the piston installation because of the increasing water condition and pressure drop. From July, 1959, the well's production was restricted some, trying to determine a rate of flow in which the well would not log off, and its monthly average was 10,242 mcf.

In May, 1960, the well produced 2,784 mcf. 2,343 mcf's were produced from May 1st through 12th. The well was then shutin and same logged off. Approx. Hay 18, 1960, the well was allowed to produce unrestricted. The following is a daily summary of the well's activity.

- 5-23-60 Well was logged off. There was no production from May 12 to this date. The Oil Conservation Commission was notified of our plans to swab this well in.
- 5-24-60 Swab unit rigged up, fished piston and swabbed three hours. Free piston was allowed to run several times to air to unload fluid. Produced approx. 4 bbls. oil and 12 bbls. water. Piston setting was approx. 45 minuted on and 90 minutes off. Well produced approx. 97 mcf. Mr. L. A. Clements with the Oil Conservation Commission witnessed the above procedure. After the above swabbing, the unit was released and the well died approx. 3 times this day and was blown in each time. A continuous watch was kept on this well to see that same was not logged off for any period of time to avoid having to cell a such unit back. El Paso line pressure was approx.

- 5-25-60 Well produced approx. 6 mcf. El Paso's line pressure was approx. 2222. The well was blown in approx. three times but would not take the line and unload the fluid.
- 5-26-60 Well produced approx. 75 mcf. Well was blown in twice and took the line for only a short period of time before it logged off. El Paso's line pressure was approx. 205f. Platon setting was set for 30 minutes off. Tubing pressure 220f.
- 5-27-60 Well produced approx. 20 mcf. Casing pressure was 250%, El Paso line pressure was approx. 118%. Approx. 14 bbls. fluid were produced, same being approx. 12 bbls. water and 2 bbls. oil. Well was logged off most of this day. Well was blown in twice unloading above fluid but would not take the line.
- 5-28-60 Well produced approx. 193 mcf gas with approx. 15 bbls. fluid (12 bbls. vater and 3 bbls. oil). El Paso's line pressure was approx. 205#. Gas flow was weak and logged, at 3:30 p. m. well was blown in.
- 5-29-60 Well produced approx. 35 mcf gas, approx. 1 bbl. oil and 6 bbls. water. Well was blown in twice as piston was not running, but well would not take El Paso's line for any length of time. El laso's line pressure was approx. 212#.
- 5-30-60 Well produced approx. 7 mcf gas, approx. 1 bbl. oil and approx. 10 bbls. water. Casing pressure 250%, tubing pressure 200% and El Paso's line pressure approx. 243%. Well was blown in to relieve fluid from formation but well would not take El Paso's line.
- 5-31-60 Well produced approx. 8 mcf, piston setting still approx.
  30 minutes on, 30 minutes off. Well was blown in for 1 hour and 45 minutes to unload fluid. Shutin for 2 hours to build pressure, then turned into El Paso's line. Well would not buck El Paso's line pressure of approx. 2124.
- From May 24, 1960 to June 1, 1960, well produced 441 mcf gas.

## Page Three, Legal #2

- 6-1-60 Well produced approx. 29 mcf gas, approx. 2 bbls. oil and approx. 12 bbls. water. El Paso's line pressure approx. 1924. Free piston was not running, caught same and checked, found okay. Well too weak to take line, casing pressure 2504, well was blown in twice this day.
- 6-2-60 Well produced approx. 20 mcf. Well was blown in and produced approx. 1 bbl. oil and 6 bbls. water. El Paso's line pressure was approx. 205# average.
- 6-3-60 Well produced approx. 242 mcf with approx. 3 bbls. oil and 20 bbls. water. Well started out taking the line but was weak. El Paso's line pressure was approx. 179#. Well then started producing all right.
- 6-4-60 Well produced approx. 232 mcf. Water was not estimated. Well doing okay. El Paso's line pressure approx. 167#, casing pressure 250#.
- 6-5-60 Well produced approx. 260 mef with approx. 3 bbls. cil and 20 bbls. water. Casing pressure 250#, El Paso line pressure approx. 158#.
- 6-6-60 Well produced approx. 265 mcf, approx. 3 bbls. oil and 20 bbls. water. Casing pressure 260%, El Paso's line pressure approx. 161%.
- 6-7-60 Well produced approx. 275 mcf, approx. 3 bbls. oil and 12 bbls. water. Casing pressure 260%, El Paso line pressure approx. 136%.
- 6-8-60 Well produced approx. 275 mcf with approx. 3 bbls. oil and 12 bbls. water. Casing pressure 260%, El Paso line pressure approx. 133%.
- From June 1, 1960 to June 9, 1960, well produced 1,598 mef gas.
- 6-9-60 Well produced approx. 313 mcf with approx. 3 bbls. oil and 18 bbls. water. Casing pressure 250f, El Paso line pressure approx. 144f. Well still set approx. 30 minutes on and 30 minutes off.

# Page Four, Legal #2

- 6-10-60 Well produced approx. 261 mcf with approx. 2 bbls. oil and 12 bbls. water. Casing pressure 240#, El Paso line pressure approx. 167#.
- 6-11-60 Well produced approx. 261 mcf with approx. 3 bbls. oil and 12 bbls. water. Gasing pressure 200#, R1 Paso line pressure approx. 167#.
- 6-12-60 Well produced approx. 56 mcf with approx. 3 bbls. oil and 12 bbls. water. Casing pressure 200#. Blew well in twice but it would not take the line. El Paso's line pressure approx. 212#.
- 6-13-60 Well produced approx. 284 mcf. Casing pressure 220#. El Paso's line pressure approx. 176#.
- 6-14-60 Well produced approx. 309 mcf. Casing pressure 220#. El Paso's line pressure approx. 173#.
- 6-15-60 Well produced approx. 296 mcf with approx. 3 bbls. oil and 18 bbls. water. Casing pressure 230#. El Paso's line pressure approx. 176#.
- 6-16-60 Well produced approx. 292 mcf with approx. 2 bbls. oil and 12 bbls. water. Casing pressure 250#. El Paso's line pressure approx. 179#.
- From June 9th to June 17, 1960, well produced 2,074 mcf.
- 6-17-60 Well produced approx. 292 mcf. El Paso line pressure approx. 185#.
- 6-18-60 Well produced approx. 293 mcf, approx. 2 bbls. oil and 14 bbls. water. Casing pressure 250f. Blew well in one time to catch piston and check same. El Paso line pressure approx. 165f.
- 6-19-60 Well produced approx. 280 mcf, approx. 2 bbls. oil and 16 bbls. water. Casing pressure 250#. El Paso line pressure approx. 192#.

# Page Five, Legal \$2

- 6-20-60 Well produced approx. 257 mcf., approx. 2 bbls. oil and 18 bbls. water. Casing pressure 250%. El Paso line pressure approx. 185%. Well was blown in twice this day.
- 6-21-60 Well produced approx. 193 mos, approx. 2 bbls. oil and 14 bbls. vacer. Gasing pressure 250%.
- 6-22-60 Well produced approx. 286 mcg. Casing pressure 250g. El Paso line pressure approx. 176g. Gas Chart removed this date.
- From June 17th to June 23, 1960, well produced 1601 mcf.
- 6-23-60 Well produced approx. 270 mcf, approx. 1 bbl. oil and 12 bbls. water. Casing pressure 250#, El Paso line pressure approx. 176#.
- 6-24-60 Well produced approx. 274 mcf. Blew well in as it was flowing weak. El Paso line pressure approx. 173#.
- 6-25-60 Well produced approx. 277 mcf, approx. 2 bbls. oil and 18 bbls. water. El Paso line pressure approx. 158#.
- 6-26-60 Well produced approx. 278 mcf, approx. 2 bbls. oil and 16 bbls. water. Blew well in once El Paso line pressure approx. 161#.
- 6-27-60 Well produced approx, 100 mcf. El Paso line pressure approx. 231#.
- 6-28-60 Well produced approx. 110 mcf, approx. 1 bbl. oil and 16 bbls. water. Blew well in twice. El Paso line pressure approx. 225#.
- 6-29-60 Well produced approx. 241 mcf, approx. 1 bbl. oil and 16 bbls. water. El Paso line pressure approx. 185#. Line pressure dropped to approx. 155# allowing production to increase.
- 6-30-60 Well produced approx. 263 mcf. approx. 3 bbls. cil and 20 bbls. water. Casing pressure 250#. El Paso line pressure approx. 167#.
- From June 23 to July 1, 1960, well produced 1,813 mcf.

Ja/ CASE\_2014

EVA OWEN #1 SW SW 21-258-37E Lea County, New Mexico

The Eva Owen \$1 is a Jalmat gos well operated by a free piston installation installed in November, 1956. This installation was necessary to keep the well on a producing status as the water problem was too great for the well to flow naturally.

The first quarter of 1950 the well averaged 15,483 mcf per month. It averaged 11,080 mcf for the first half of 1958 at which time it was shutin by the Oil Conservation Commission for over production and was shutin until October, 1959. The well at this time was in balance and a considerable amount of time and expense was devoted to trying to bring the well back to a producing status. The water encroachment problem had become so great during its shutin period that the well has not been restored to a producing status with the installation of the piston. In October, 1959, the well produced 43 mcf. In November, 1959, 852 mcf. In December, 1959, 3,338 In March, 1960, 910 mcf. April, 1960, 89 mcf and in May, 1960, production was -0-.

Approximately June 15, 1960, an extended effort was begun to bring the well to a producing status and the following is a summary of activity for this well. Prior to June 15, 1960, the well was blown in several times to see if same would take El Paso's line, but it would not do so.

- 6-15-60 The Oil Conservation Commission was notified and Mr. Clements witnessed the following work. Rigged up swab unit, fished piston, ran swab 3 times and flowed well to air for approx. I hour and well died. Pulled swab 1 time and well flowed approx. 45 minutes and died. Ran swab twice to kick well off. Well producing sulphur water, amount undatermined at this time. Casing pressure at 2:00 p. m. 280f.
- 6-16-60 Well producing approx. 40 bbls. water but unable to buck El Paso line. Casing pressure 500%, tubing pressure 300%. Intermitter set 1 hour on and 2 hours off. Well was blown at 8:30 s. m. and 4:30 p. m.
- 6-17-60 Well was blown in one time and vented to air to unload water but well logged off. Well produced approx. 40 bbls. water. Casing pressure 500#.

Page Two, Eve Owen #1

6-18-60 Well logged off and master valve shut in to build up pressure to blow well in. Casing pressure 500#.

6-19-60 Tried to blow well in but it did not respond.

6-20-60 Well logged off and will not respond to blowing in.

6-21-60 to 7-1-60 Well logged off.

BEFORE THE
OIL CONSERVE TO BE FORM
SANTA FE, NEW HILAGO TO
A EXHIBIT NO. 7
CASE 22 14

#### JENKINS #1 SW SW 29-25S-37E Lea County, New Mexico

The Jenkins \$1 is a Jalmat gas well produced by a free piston installation installed October, 1956. This installation was necessary due to a water encroachment problem which would not allow the well to flow if it had been shut down for a short period of time. This well was producing under a marginal well allowable until June, 1959, when it was reclassified as a non-marginal retroactive to July, 1958, and assessed with an over produced status of 82,897 mcf.

This well produced in 1958 and to June 1959 an average of 12,387 mcf per month. The last half of 1959 the well's production was cut back and averaged 5,142 mcf per month. The water encroachment problem and cut back on production has caused the well's ability to produce to drop almost to zero. For the first five months of 1960 the well has produced an average of 181 mcf's per month.

Approximately May 18, 1960, the well was allowed to produce unrestracted and the following is a daily summary of the well's activity.

- 5-23 to 6-2-50 well was logged off. Several attempts were made to restore it to a producing status but were unsuccessful.
- 6-2-60 Fulled 2" tubing to sand pump and cleaned out well.

  Mr. Joe D. Ramey was notified and witnessed the above.
- 6-3 to 6-7-60 Sand pumping well.
- 6-7-60 Ran 2" tubing and swabbed well.
- 6-8-60 Swabbing well.
- 6-9-60 Swabbed well hooked up to intermitter and ran free piston several times. Well produced approx. 108 mcf, and a light show of oil with intermitter set approx. 30 minutes on and 30 minutes off. El Paso line pressure approx. 133#.
- 6-10-60 Well produced approx. 71 mcf gas, approx. 2 bbls. oil and 10 bbls. water. El Paso's line pressure approx. 150#, casing pressure 250#.

### Page Two, Jenkins #1.

- 6-11-60 Well produced approx. 51 mcf gas, approx. 3 bbls. oil and 12 bbls. water. El Paso's line pressure approx. 155#. Free piston was caught and checked as well, appeared weak against line pressure. Casing pressure 225#.
- 6-12-60 Well produced approx. 32 mcf gas, approx. 2 bbls. oil and 16 bbls. water. Well was blown in for 1 hour to unload water as piston was not running. El Paso's line pressure approx. 199#. Casing pressure 250#.
- 6-13-60 Well produced approx. 57 mcf gas, approx. 2 bbls. cil and 12 bbls. water. El Paso's line pressure approx. 155f. Well was blown in twice as well was weak. Casing pressure 200f.
- 6-14-60 Well produced approx. 46 mcf. gas, approx. 1 bbl. oil and 12 bbls. water. Well was blown in twice to keep from logging off. El Paso's line pressure approx. 161\*, casing pressure 225\*.
- 6-15-60 Well produced approx. 46 mcf gas with trace of cil and approx. 18 bbls. water. El Paso's line pressure approx. 161#. Mr. Clements with the Oil Conservation Commission was on location today. Blew well to air piston, came in with estimated 2 bbls. fluid, same being muddy with a trace of cil.
- 6-16-60 Well produced approx. 48 mcf gas, approx. 1 bbl. cil and 18 bbls. water. El Paso line pressure approx. 167#. Well was blown in once this day, casing pressure 250#.
- From June 9 to June 17 well produced 459 mcf.
- 6-17-60 Well produced approx. 44 mcf, approx. 1 bbl. oil and 16 bbls. water. Well was blown in once. Casing pressure 250#. El Paso's line pressure approx. 173#.
- 6-18-60 Well produced approx. 42 mcf, piston not running, blew in to unload fluid. Casing pressure 250#. El Paso's line pressure approx. 173#.

#### Page Three, Jenkins fl

- 6-19-60 Well produced approx. 52 mcf. approx. 1 bbl. oil and 16 bbls. water. Casing pressure 240%. El Paco's line pressure approx. 179%.
- 6-20-60 Well produced approx. 48 mcf with a trace of oil and 18 bbls. water. Casing pressure 250%. El Paso's line pressure approx. 173%. Piston not running so well was blown in to unload fluid.
- 6-21-60 Well produced approx. 48 mcf., approx. 1 bbl. oil and 12 bbls. water. El Paso line pressure approx. 173#.
- 6-22-60 Well produced approx. 46 mcf with a trace of oil. El Paso's line pressure approx. 161# and 8 day chert was pulled this day.
- Gas produced from 6-17-60 to 6-23-60 280 mcf.
- 6-23-60 Well produced approx. 56 mcf, approx. 1 bbl. oil and 16 bbls. water. El Paso line pressure approx. 167#. Casing pressure 250#.
- 6-24-60 Well produced approx. 18 mcf. El Paso line pressure ranged from approx. 144% to 167%.
- 6-25-60 Well produced about 10 mcf. El Paso line pressure approx.
  150#. Shut in by El Paso choke valve leaking in meter run.
- 6-26-60 Well produced approx. 7 mcf. El Paso line pressure approx. 138f. Shut in by El Paso checking for leak in meter run.
- 6-27-60 Well produced 6 mcf. El Paso line pressure approx. 225#. Choke closed by El Paso for text.
- 6-28-60 Well produced 23 mcf. El Paso line pressure approx. 198#.
  El Paso opened choke. Well heavily loaded with water. Ran
  piston several times to unload fluid.
- 6-29-60 Well produced approx. 49 mcf., approx. 1 bbl. oil and 15 bbls. water. Casing pressure 400%. El Paso line pressure ranged from approx. 143 # to 222#.

Page Four, Jenkins #1

6-30-60 Well produced approx. 62 mof. El Paso line pressure approx. 155%.

From June 23 to July 1, 1960, well produced 231 mcf.

OIL CONSERVATION THE SANTA FE, NAME EXHIBIT NO. 5

#### WATKINS #2 SE NE 35-248-36E Lea County, New Mexico

The Watkins #2 is a Jalmat gas well completed in August, 1958, spaced on a 40 acre spacing. Well was connected to El Paso line November 7, 1958. For the balance of November and December, 1958 the well produced 21,876 mcf. Due to the low allowable, this well was shut in most of 1959, producing only a few days each month. The well averaged producing 1,911 mcf per month. During 1959 the water encroachment problem became so great the well would not unload the fluid naturally. The latter part of 1959 the well was producing approximately 200 to 250 barrels of water per producing day and had to be swabbed in each time it was shutin for any period of time.

Considerable study was given to this well to determine a minimum rate of flow at which the well would unload the fluid and not log off. On March 7, 1960, El Paso wrote two letters to Mr. Girand setting out various facts surrounding this well and that a minimum flow of 325 mcf per day would be required to keep the well from logging off. The casing pressure had dropped to 360f on March 31, 1960 where it had been 900f some months prior.

The wells production from January through May, 1960 ranged from 9,642 mcf in January to -0- in May. The latter part of May the Oil Conservation Commission was notified this well would be reworked to bring it back to a producing status. The following is a summary of this wells activity from May 23, 1960.

- 5-24-60 Set Baker plug at 2930° and perforated 3 sections.
- 5-26-60 Ran 2½" tubing with packer.
- 5-27-60 Set Halliburton packer at 2884, sand fracked with 3,000 gal., well sanded up, unable to swab.
- 5-28-60 Freed swab, reverse circulated to bottom and rigged up to swab.
- 5-29-60 Swabbed well in, well started to flow.
- 5-30-60 Flowed well in test tank, fluid 6 bbls. per hour, est. 957 water.
- 5-31-60 Well flowing in test tank 5 bbls. per hour, est. 98% water.

#### Page Two, Watkins #2

- 6-1-60 Well flowed an estimated 2 bbls. oil and 100 bbls. water in test tank turned well into El Paso line.
- 6-2-60 to 6-14-60 Hell logged off.
- 6-15-60 Rigged up swab unit. Found fluid in well 700' from top.
  Ran swab two times. Well flowing weak with large heads
  of water. Ran swab several more times and then started
  pulling tubing. This was witnessed by Mr. Clements with
  the Oil Conservation Commission.
- 6-16-60 Zulling tubing.
- 6-17-60 Tried to run Halliburton plug on line. Same would not go. Ran back in hole on tubing.
- 6-18-50 Set plug. Ram Halliburton R-3 packer for treating zone from 2850 to 2870.
- 6-19-60 Stand by to treat well.
- 6-20-60 Swab tested zone from 2850' to 2870'.
- 6-21-60 Ran swab and recovered 300' sulphur water. Rig down unit.
- 6-22-60 Pulled tubing and packer to test zone 2810' to 2820'.
- 6-23-60 Plugged off bottom and swab tested zone 2810' to 2820'.
- 6-24-60 Swab tested. No gas.
- 6-25-60 Rigged down and moved swab unit.
- 6-26-60 to 7-1-60
  Shut in pending additional rework.

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO EXHIBIT NO. 6

DYER #3 SE NW 31-25S-37E Lea Co. New Mexico

The Byer #3 is a Jalmat gas well produced by a pump jack installed January 21, 1960. Prior to January 21st this well produced with a free piston installation which was installed in December 1956. This gas well had a water encroachment problem so great in 1956 that it was unable to produce naturally, consequently the free piston was installed. This procedure of producing worked satisfactorily for a long period of time. The well was reclassified in 1939 retroactive to July 1958 from a marginal well to a nonmarginal well and assessed with an over produced status of 63,666 mef. Due to cut back in production the last half of 1959 the water encroachment became too great for the free piston, so the pump jack was installed to relieve the formation of the water and allow the gas to penetrate the well bore.

In 1958 and the first 6 months of 1959 this well averaged 10,052 mcf per month, after the cut back in July 1959 the well averaged 3,611 mcf per month for the last 6 months of 1959, dropping so badly in December 1959 it only produced 151 mcf. The pump jack was installed January 1960 and for the 4 months thereafter it averaged 3,957 mcf per month.

In May 1960 the well produced 3,751 mcf, 2,477 mcf up to May 11th when the well was shut down. The well was then allowed to produce unrestricted approximately May 18, 1960 and the following is a daily summary from the time the well was placed back on production.

- 5-23-60 The pump jack has been running and chart showed first production today. Well produced 89 mcf. El Paso line pressure approx. 164#.
- 5-24-60 Well produced approx. 185 mcf gas with a trace of oil and water was not gauged. Fump jack was running and producing water through tubing. Mr. L. A. Clements with Oil Conservation Commission took a look at this well on this date. El Paso line pressure approx. 159#.
- 5-25-60 Well produced approx. 140 mcf. El Paso line pressure up to approx. 227# average, line pressure was off the 250# chart for a short period and gas production dropped to -0-.

- Page 2 Dyer #3
- 5-26-60 Well produced approx. 210 mcf. gas and approx. 12 bbls water, pump jack was shut down part of this day. El Paso line pressure was approx. 199#.
- 5-27-60 Well produced approx. 190 mcf. gas, water amount not shown. El Paso line pressure approx. 194#.
- 5-28-60 Well produced approx. 140 mcf. gas, water amount not shown. El Paso line pressure approx. 199#.
- 5-29-60 Well produced approx. 110 mcf gas, pump jack was down and was started. El Paso line pressure approx. 208#.
- 5-30-60 Well produced approx. 30 mcf gas and 6 bbls water, pump jack pumped approx. 1/2 day. El Paso line pressure approx. 237# causing drop in production.
- 5-31-60 Well produced approx. 180 mcf gas and 12 bbls water. El Paso line pressure approx. 210#.
- From May 23 through May 31 well produced 1,274 mcf.
- 6-1-60 Well produced approx. 212 mcf. gas and 12 bbls water and small amount of oil. Pump jack was shut down part of this day as pump had pumped off. El Paso line pressure approx. 185#.
- 6-2-60 Well produced approx. 175 mcf., well down approx. 4 hrs. due to El Paso line repair, pump jack down also. Line pressure up to approx. 237# for approx. 16 hours. then dropped to approx. 181#. Well showed increased production when line pressure dropped.
- 6-3-60 Well produced approx. 185 mcf. pump jack shut down. El Paso line pressure approx. 176#.
- 6-4-60 Well produced approx. 174 mcf., pump jack shut down. El Paso line pressure approx. 159#.
- 6-5-60 Well produced approx. 160 mcf. El Paso line pressure 151#.
- 6-6-60 Well produced approx. 106 mcf. El Paso line pressure approx. 159#.

- Page 3 Dyer #3
- 6-7-60 Well produced 300 mcf., pump jack running and El Paso line pressure approx. 132%.
- 6-8-60 Well produced approx. 308 mcf. El Paso line pressure approx. 130%. Pump jack shut down.
- For the period June 1 to June 9, 1960 the well produced 1,620 mcf gas.
- 6-9-60 Well produced approx. 313 mcf, 2 bbls oil and 15 bbls. water. Casing pressure 125#. El Paso's line pressure was approx. 135#.
- 6-10-60 Well produced approx. 23D mer. Casing pressure 210#, El Paso's line pressure approx. 155#. Line pressure caused drop in production.
- 6-11-60 Well produced approx. 192 mcf. Casing pressure 220#, El Paso's line pressure approx. 159#.
- 6-12-60 Well produced approx. 37 mcf, 2 bbls oil and 12 bbls water. Casing pressure 250%, ki Paso's line pressure approx. 199%. Well would not buck line pressure most of this day. Pump jack was started.
- 6-13-60 Well produced approx. 158 mcf gas, 1 bbl cil and 6 bbls water. Casing pressure 220#. Pump jack found dead and started same. El Paso's line pressure approx. 155#.
- 6-14-60 Well produced approx. 288 mcf gas, approx. 2 bbls oil and 12 bbls water. Casing pressure 220#, El Paso's line pressure approx. 168#. Pump jack died about 2:00 p. m.
- 6-15-60 Well produced approx. 296 mcf gas. Casing pressure 225#. El Paso's line pressure approx. 168#.
- 6-16-60 Well produced approx. 272 mcf with approx 2 bbls oil and 12 bbls water. Casing pressure 230#. El Paso's line pressure approx. 159#.
- From June 9 to June 17, 1960 well produced 1,786 mcf gas.
- 6-17-60 Well produced approx. 205 mcf, approx. 2 bbls oil and 12 bbls water. Casing pressure 230#. El Paso line pressure approx. 176#.

- Page 4 Dyer #3
- 6-13-60 Well produced approx. 261 mcf with a trace of oil and 12 bbls water. Casing pressure 250#, El Paso's line pressure approx. 176#. Pump jack running.
- 6-19-60 Well produced approx. 242 mcf, approx. 1 bbl oil and 12 bbls water. Casing pressure 240#, El Paso's line pressure approx. 181#.
- 6-20-60 Well produced approx. 238 mcf, approx. 1 bbl oil and 18 bbls water. Casing pressure 250#, El Paso's line pressure approx. 176#. Fump jack down, repairing stuffing box.
- 6-21-60 Well produced approx. 203 mcf, Casing pressure 240#. El Paso's line pressure approx. 176#.
- 6-22-60 Well produced approx. 257 mcf. El Paso line pressure approx. 165#. Pump jack running. The 8 day gas chart was removed today.
- From June 17 to June 23 well produced 1,406 mcf.
- 6-23-60 Well produced approx. 248 mcf, approx. 2 bbls oil and 12 bbls water. Pump jack running. Casing pressure 250#. El Paso's line pressure approx. 168#.
- 6-24-60 Well produced approx. 242 mcf, No estimate on water. Pump jack shut down. Casing pressure 250#. El Paso's line pressure ranged from approx. 151# to 199#.
- 6-25-60 Well produced approx. 267 mcf. Approx 1 bbl oil and 12 bbls water. Pump jack shut down and repaired stuffing box. El Paso's line pressure approx. 149#.
- 6-26-60 Well produced approx. 257 mcf. Pump jack was started. El Paso's line pressure approx. 153#.
- 6-27-60 Well produced approx. 127 mcf. El Paso's line pressure approx. 227#. Pump jack running.
- 6-28-60 Well produced approx 141 mcf. Pump jack started. Casing pressure 250#. El Paso's line pressure approx. 217#.
- 6-29-60 Well produced approx. 226 mcf. Pump jack died during night. Casing pressure 250#. El Paso's line pressure approx. 181#. The line pressure varied this day dropping to approx 147# for part of the day.

Page 5 - Dyer #3

6-30-60 Well produced approx. 246 mcf. El Paso's line pressure approx. 159#. Pump jack not running.

Well produced 1,754 mcf from June 23 to July 1, 1960.

# SUMMARY OF MONTHLY ALLUCATION AND PRODUCTION FROM JAN. 1, 58 THRU JUNE 1960

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69,354	35, 163	75,652	130,816	318,314	420,273	248,450	392,242	226,402	356, 357		
24,546	9,950	3,572	15,222	43,859	37,451	1,876	35,568	23,793	27,178		
•	1,249	Ō	1,912	. •	4,702	970	U	ι 'υ	1		June
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•	1,572	1,034	2,405	<b>-</b>	4	501	•	ı W	112	1,960	とおう
22,932	25,213	5,597	33,838	126,518	162,239	93,312	149,867	75,060	130,684	1 1959	Total
6,501	3,098	3,338	4,742	14,201	11,652	70 1-4	11,387	15.	100		
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1,866	1,209	5	1,851	•	4,549	ຸດ ເ	4, 44	4.5	(a)		Aug.
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S. R. COOPER #1
Su SE MS Section 23-24-368
Lea County, New Mexico

The S. R. Cooper #1 is a Jalmat gas well produced by free piston installed in the spring of 1958. Prior to this installation the well was re-completed in January 1955 by plugging back to 3127 feet, with a 4½ inch liner set from 3132 to 2733 feet. The well was perforated in the Yates from 3020 to 3104 and completed as a Jalmat gas well. The well was originally completed at 3160, being plugged from total depth of 3600. The 1955 recompletion was done in

Prom September, 1958, through June, 1959, this well everaged 5,268 mef per month. (For the period July, 1959, through April, 1960, after the cutbenk the well averaged 3,529 mef per month.) During the same period it produced an average of 16 barrels of water the well was required to be shut in much of the last 10 months after in the to an average of 25 barrels per day. In May, 1960, the made no gas the entire month, being shut in during said period.

In June, 1960, the well produced approximately as follows:

6/ 1/60: No production.

6/ 2/60: No production.

6/ 3/60: No production.

6/4/60: No production.

6/ 5/60: No production.

6/ 4/60: No production.

6/ 7/60: No production.

6/ 8/60: No production.

6/ 9/68: No production.

6/10/60: He production.

4/11/60: No production.

6/12/60: No production.

6/13/60: No production,

6/14/60: No production.

6/15/60: No production.

6/16/60: Produced approx. 259 mcf gas, 16 barrels water, 1.000 orifice. Line pressure 169#. On approx. 22 hours.

6/17/60: Produced approx. 215 mcf gas, 25 barrels water, 1.000 orifice. Line pressure 169#. On 22 hours.

6/18/60: Produced approx. 201 mef gas, 25 barrels water, 1.000 orifice. Line pressure 165#. Hours not shown.

6/19/60: Produced approx. 193 mef gas, 16 barrels water, 1.000 orifice. Line pressure 115%. On approx. 22 hours.

6/20/60: Produced approx. 204 mcf gas, 25 barrels water, 1.000 orifice. Line pressure 112#. Hours not shown.

6/21/60: No production,

6/22/60: No production,

6/23/60: No production.

6/24/60: No production.

6/25/60: No production.

4/26/60: No production,

6/27/60: No production.

6/28/60: No production

6/29/60: No production.

6/30/60: No production.

El Paso shows this well produced 1,076 mof gas during this period.

Since we do not have access at this time to the integrated charts of R1 Paso for the period subsequent to July 1, we must rely on the field reports, as follows:

- 7/1/60: Field shows 195 mcf gas, 25 barrels water, 1.000 orifice, 116# line pressure. Hours not shown.
- 7/2/60: Field shows 207 mcf gas, 23 barrels water, 1.000 orifice, 122# line pressure. Hours not shown.
- 7/3/60: Field shows 205 mcf gas, 17 barrels water, 1.000 orifice, 122# line pressure, produced approx. 20 hrs.
- 7/4/60: Field shows 205 mef gas, 23 barrels water, 1.000 crifice, 120# line pressure, prod. approx. 22 hrs.
- 7/5/60: Field shows 137 mcf gas, 23 barrels mater, 1.000 orifice, 107# line pressure, prod. approx. 22 hrs.
- 7/6/60: Field shows 196 mef gas, 16 berrels water, 1.000 orifice, 112# line pressure, prod. approx. 19 hrs.
- 7/7/60: Field shows 215 mef gas, 25 barrels water, 1.000 orifice, 114# line pressure, prod. approx. 22 hrs.
- 7/8/60: Field shows 197 mc? gas, 17 barrels water, 1,990 orifice, 116# line pressure, prod. approx. 22 hrs.
- El Paso shows total 7/1/60 to 7/8/60 as 1,597 mcf.

OIL CONSTRUCTION COMMUNICATION SANTA FE, HEW 19 MAJE

CASE 30 / 4

WINNINGHAM #3
NE SR Section 30-258-378
Lea County, New Mexico

The Winningham #3 is a Jaluat gas well produced by pump jack installed September 23, 1959. Prior to this installation this well, due to the encroachment of water, produced with a free piston installation, installed subsequent to the time it was plugged back and recompleted in the Yates some in September, 1954. Prior to plugging back, the well was completed, according to records in our files, through open hole from the bottom of liner at 3050 to 3075 feet.

The free piston installation was unsatisfactory for the reason it could not handle the volume of water necessary to be lifted to allow the gas to feed into El Paso's line. Therefore, the pump jack was installed in an effort to keep the well producing.

From September, 1958, through June, 1959, this well averaged 11,231 mef per month. For the period July, 1959, through April, 1960 after the cuthack the well averaged 5,798 mcf per month. Buring the same period, it produced an average of 7.5 barrels of water per day for the first 10 months but, during the last 10 months after the well was required to be shut in much of the time, it increased in water to an average of 30 barrels per day. In May the well made 1,295 mcf of gas for the entire month while producing 30 barrels of water per day or a total for the month of approximately 930 barrels.

Attached is the daily production record of the well,

In June 1960 the well produced approximately as follows: 6/1/60: No production. 6/ 2/60: No production. 6/ 3/60: Produced 478 mcf (approximately) of gas, 30 barrels water, 1.250 orifice. Line pressure 170#. 6/4/50: Produced approx. 500 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 116#. 6/5/601 Produced approx. 505 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 116#. 6/6/60: Produced approx. 466 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 117#. 6/ 7/60: Produced approximately 562 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 114#. 6/8/60: Produced approx. 573 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 114#. Produced approx. 534 mcf gas, 23 barrels water, 1.250 orifice. Line pressure 114#. 6/ 9/60: 6/10/60: Produced approx. 506 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 115#. 6/11/60: No production. 6/13/60: No production. 6/14/60: No production. 6/15/60: No production. 6/16/60: No production. 6/17/60: No production.

6/18/60:

No production.

6/19/60: No production. 5/20/60: No production. 6/21/60: No production. 6/22/60: No production. 6/23/60: No production. 6/24/60: No production. 6/25/60: No production. 6/26/60: No production. 6/27/60: No preduction. 6/25/60: No production. 6/29/60: No production.

6/30/60: Produced apprex. 469 mcf gas, 26 barrels water, 1.250 orifice. Line pressure 114#.

7/ 1/60: Produced approx. 354 mcf gas, 30 barrels water, 1.250 erifice. Line pressure 116#.

El Pasc shows this well produced 5027 mcf gas during this period.

ascertain the amounts produced from El Paso's integrated charts, reperts from the field (being field calculations) as set out below:

7/2/60: Pield shows 784 mcf gas, 30 barrels water, 1.250 erifice, line pressure 134#.

7/8/60: Field some 735 mof gas, 30 barrels water, 1.250 orifice,

7/4/60: Field shows 725 mcf gas, 30 barrels water, orifice 1.250, line pressure 134#.

7/5/60: Wield shows 667 mcf gas, 30 barrels water, 1.250 orifice, line pressure 138#.

7/6/60: Field shows 462 mcf gas, 30 barrels water, 1.250 orifice, line pressure not shown.

7/7/60: Field shows 481 mcf gas, 30 barrels water, 1.250 orifice, line pressure 158#.

7/8/60: Field shows 490 mcf gas, 30 barrels water, 1,250 orifice. lime pressure 138#.

7/9/60: Field shows 707 mcf gas, 50 barrels water, 1.250 orifice, line pressure 149#.

El Paso shows total 7/2/60 to 7/9/60 as 4.148 mcf.

GOVERNOR
JOHN BURROUGHS

# State of New Mexico Oil Conservation Commission

LAND COMMISSIONER MURRAY E. MORGAN MEMBER



STATE GEOLOGIST

A. L. PORTER, JR.

HERBYTANY DIRECTOR

P. O. BOX 2041

July 12, 1960

Mr. D. S. Nutter, Chief Engineer Oil Conservation Commission Post Office Pox 871 Santa Fe, New Mexico

Dear Mr. Nutter:

This letter concerns a study of the eight wells which Jal Oil Company and Olsen Oils, Inc. are asking exception to deliverability along with changes in the Jalmat Gas Pool Rules under Case No. 2014. Following are the findings of this study:

- A. Primarily, the area in which these wells are located is within a premature reservoir depletion stage.
- B. The area involved has been wastefully depleted by the flaring of millions of cubic feet of gas.
- C. This area lies adjacent to the <u>Delaware Basin</u> which is the apparent water source encroaching into the Jalmat Pool.
- D. From a study of the attached crossections A-A' and B-B', it is evident that water is advancing into the Jalmat Pool through numerous porosity zones and that the presence or absence of water is directly related to (a) the number of wells completed within each zone or zones, and (b) the rate that these zones have been produced.
- E. These crossections indicate that a careful study of an immediate area of a specific well will yield the conditions under which the water occurs in said well. For example, (a) channeling, (b) what zone is carrying water, and (c) whether or not the well can be reworked to eliminate water.

-2-Mr. D. S. Nutter-July 12, 1960

As a result of this study, the following is a well by well recommendation for the elimination of water for each of the eight wells involved:

#### CROSSECTION A-A'

- 1. Olsen Oils, Inc. Cooper B Well No. 2, Unit M, Section 11-T24S-R26E Water could be eliminated by squeezing off bottom 30 feet of open hole.
- 2. Olsen Oils, Inc. Cooper Well No. 1, Unit H, Section 23-1248-R36R Appears to have channeling and could be squeezed off below lower perforations.
- 3. Jal Oil Company Watkins Well No. 2, Unit H, Section 35-T24S-R36E

  This well also appears to have a possible channel and could be squeezed below lower perforations.

#### CROSSECTION B-B'

All indications are that the topmost porosity zone in the Yates formation carries water for this specific area.

- 4. Jal Oil Company Eva Owens Well No. 1, Unit M, Section 21-T25S-R37E Could be opened into top zone of Yates, then squeeze off zone.
- 5. Olsen Oils, Inc. Winningham Well No. 3, Unit I, Section 30-T25S-R37E Could be opened into top zone of Yates, then squeeze off zone.
- 6. Jal Oil Company Jenkins Well No. 1, Unit M, Section 29, T25S-R37E Could be opened into top zone of Yates, then squeeze off zone.
- 7. Jal Cil Company Dyer Well No. 3, Unit H, Section 31-T25S-R37E Could be opened into top zone of Yates, then squeeze off zone.
- 8. Jal Oil Company Legal Well No. 2, Unit K, Section 31-T25S-R37E Could be opened into top zone of Yates, then squeeze off zone.

To insure proper water cutoff and to prevent future and present water channeling, these zones carrying water should be squeezed with cement. Liners or bridge plugs alone do not appear to be intirely successful. Wells which have been squeezed to shut off water have had the highest success as shown on the crossections.

-3-Mr. D. S. Nutter July 12, 1960

It is my belief that most of the wells could be worked over and be made water free. Also, the crossections show that Jal Oil Company and Olsen Oils, Inc. have not exercised the best completion methods.

The locations and number of water zones shown on the two crossections are based on the information available at the present time. It is possible that there are water carrying zones which were not found.

Very truly yours,

OIL CONSERVATION COMPISSION

John W. Runyan Geologist, District I

JWR:mg Attachments

### SUPPLEMENTAL DOCKET: REGULAR HEARING APRIL 13, 1960

Oil Conservation Commission 9 a.m., HOBBS AUDITORIUM, 1300 EAST SCHARBAUER, HOBBS, NEW MEXICO

#### CASE 1941:

Application of Jal Oil Company for exceptions to various provisions of Orders R-520, R-967, and R-1092-A for 5 wells in the Jalmat Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order cancelling the overproduction incurred by the following-described wells in the Jalmat Gas Pool:

Legal Well No. 2, NE/4 SE/4, Section 31
Dyer Well No. 3, SE/4 NE/4, Section 31
Jenkins Well No. 1, SW/4 SW/4, Section 29
Owens Well No. 1, SW/4 SW/4, Section 21
all in Township 25 South, Range 37 East, and the

Watkins Well No. 2, SE/4 NE/4, Section 35, Township 24 South, Range 36 East.

Applicant further seeks an exception to the deliverability test requirements of said Orders for each of the above-described wells and also seeks an exemption from provationing as required by the Special Rules and Regulations for the Jalmat Gas Pool.

R. Ulsen cas @ - Julant Winning ban#3 Unit I 30.25-39 Clas. 3017 TO 3/14 PB 3085 workson open lab 3050-3015 April 1, 1950 purf: 2730 -38 375 3010 2766-78, 2782-2808, 2819-42, 2848-60, 2866-12, 2876-96, 2906-20, 2944-52 2956-66 2969-79 10,100 get santing - 11,000 # 5d. 1,400,000 CFPD cement pluj is air serling of oil Zone.

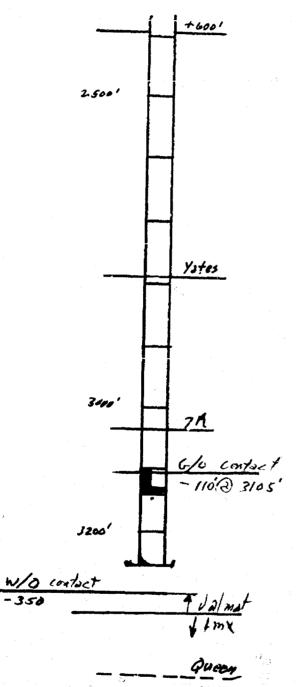
gas (\*) - Johnst R. -0/50n Cooper B#2 Unit C 14-24-36 Elev. -T.D. 3185 T Pay 3023 Cfs. 2982 8 macfld 15 5000 work are 10-16-57 Cleaned ant well from \$ 3078-3120 10,000 sd & 20,000, vil before worther 234 404/4

after " " 884 meted

No 420 Reported

R. 1/sen Cooper sty Unit H 23-24-36 Elev. 3346 TD 3600 3160 Work wer 1-10-55 3025 PB 3/32 open lole 2017-2937-3/60 shot Liner set from 3137-2733 192 300 2937 Parf 3020 - 3104 -20000 Non 1,525 might 10,000 gal Grav 350 APT 412,000 CFPD No fluid Kep. No Fluid Rep.

Legal No. 1 - Unit P Section 31-T25S-R37E Jalmat - OIL April Allowable - 8 barrels



Elevation	29941
TD	32541
PB	31291
T/P	3120
Formation	7-Rivers

Perforations 3120-3128\* 3105-3110\* 3114-3122\*

Completed 8/10/51

### Original Production

110	ROPD
204	BWPD
1.2	MCFPD
Gravity	29 degrees
COR	~> 4081 369

# February 1960 Production

4	BOPD )	
27	BWPD )	Average
6.3	MCFPD)	v oz ag
GOR	MEERIN 2	530
Pumped 2	9 davs	.,,,,

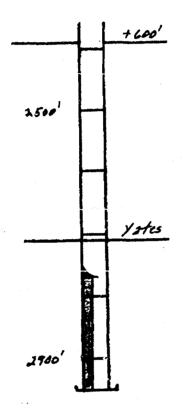
# OCC Formation Tops (Log)

Yates	27881	
7-Rivers	30381	
Queen	34331	est.

Well reclassified from Cooper Jal to Jalmat September 1, 1955.

#### JAL OIL COMPANY

Legal No. 2 - Unit I Section 31-T25S-R37E Jalmat Gas



29891 Elevation 29527 TD T/P PB 27781 None Formation Yates Casing Shoe 27711

Open Hole 2771-2996

Completed 9/29/51

#### 6. Iginal Production

BOPD NR BWPD MCFPD 7000 30 degrees Gravity

GOR

#### February 1960 Production

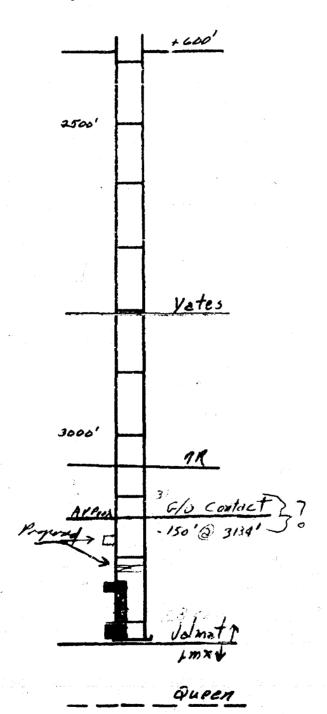
NR BOPD NR 550.6 BWPD MCFPD GOR

Produced 20 days

January 11, 1952 Fraced from 2771-2996 \* 3000 MCFPD Workover

OCC Formation Tops
Yates 2810'
7-Rivers 3064' 3419' est. Queen

Legal No. 3 - Unit M A Section 31-T25S-R37E Jelmat - Oil April Allowable - 7 barrels



29841
33361
32401
None
7-Rivers

3240-32501 3250-30001 3355 4633 Perforations

Completed

11/6/51

#### Original Production

40	BOPD	
227	BWPD	
NR	MCFPD	
Gravity	29 degrees	
GOR	NR	

#### February 1960 Production

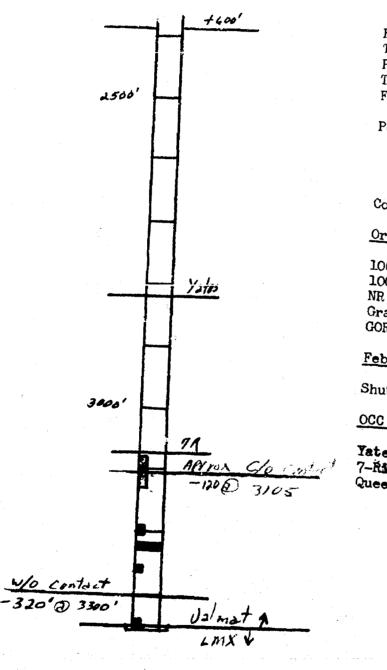
3.5	BOPD )	
25.7	BWPD )	Average
6.3	MCFPD)	
GOR	1676	
Produced	29 days	

#### OCC Formation Tons

Yates	28051	
7-Rivers	30501	
Queen	34351 es	at.

Well reclassified from Cooper Jal to Jalmat September 1, 1955.

Legal No. 4 - Unit J Section 31-T25S-R37E Langlie Mattix - OIL



 Elevation
 2989\*

 TD
 3365\*

 PB
 3223\*

 T/P
 3050\*

 Formation
 Queen

Perforations

3347-3350°)-Q. 3263-3269° 3194-3202° 3080-3130°

Completed

1/8/52

# Original Production

100 BOPD
100 BWPD
NR MCFPD
Gravity 29 degrees
GOR NR

# February 1960 Production

Shutin all month.

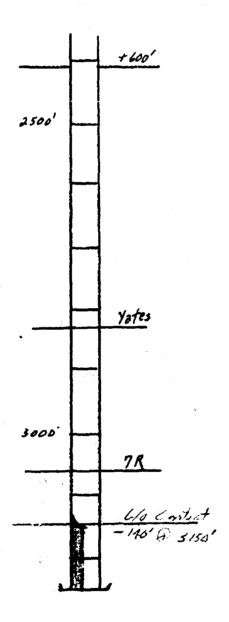
# OCC Formation Tops (Log)

Yates 28221 7-Rivers 30711 Queen 34561 est.

\_\_\_ Queen

classified as Langlie Mattix
Should be reclassified to

Dyer No. 1 - Unit B Section 31-T25S-R37E Jalmat (OIL)



W/o contact	1. W. 1
-340'	Udlmat 1
	LMX +
·	Queen

Elevation	31101
TD	3251*
PB	None
T/P	?
Casing Shoe	31541
Formation	7-Rivers
Open Hole	3154-3251

19/2/50

Original Production

Completed

91 BOPD
10 BWPD
NR MCFPD
Gravity 30 degrees

#### February 1960 P roduction

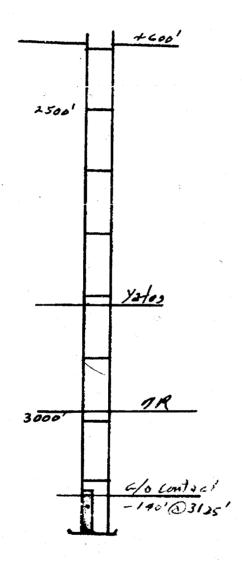
Well Shutin during February

#### OCC Formation Tops (Log)

Yates 2830<sup>†</sup> 7-Rivers 3068<sup>†</sup> Queen 3463<sup>†</sup> est.

Well reclassified from Cooper Jal to Jalmat October 1, 1955.

Dyer No. 2 - Unit A Section 31-T25S-R37E Jalmat (OIL) Allowable - April 8 barrels



W/O Conte	eat .	
-340		Jalmot 1
		TWX

\_\_\_ Queen

Elevation	2993*
TD	31.71 *
PB	None
T/P	3113*
Formation	7-Rivers

### Present Completion Perforations

Dec. 8, 1954 3115-3170\*

# Original Completion Perforations

January 3, 1953 3113-3171.

## Production December 8, 1954

40 BOPD

#### Original Production

72 BOPD
NR BWPD
NR MCFPD
Gravity 29 degrees
GOR

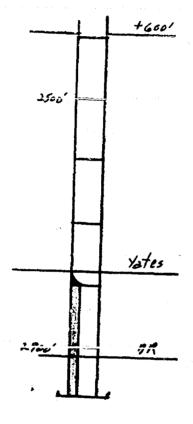
### February 1960 Production

17.8 BOPD
2.4 EWPD
277.5 MCFPD
GOR 8575
Pumped 5 days

### OCC Formation Tops(Corr.)

Yates 2810\*
7-Rivers 2984\*
Queen 3469\*

Well reclassified from Langlie Mattix to Jalmat October 1, 1955 - Pumping. Dyer No. 3 - Unit H Section 31-T25S-R37E Jalmat Gas



Elevation 2998'
TD 2977'
PB None
T/P 2998'
Formations Yates 7=Rivers
Casing Shoe 2800'

esing Shoe 2800!

Open Hole 2800-2977\*

Completed 7/11/54

# Original Production

NR BOPD

NR BWPD

2400 MCFPD

Gravity 29 degrees

GOR

# February 1960 Production

NR BOPD
NE BWPD
150 MCFPD

Produced for 25 days

# OCC Formation Tops (Log)

Yates 2778\* 7-Rivers 2912\* est.

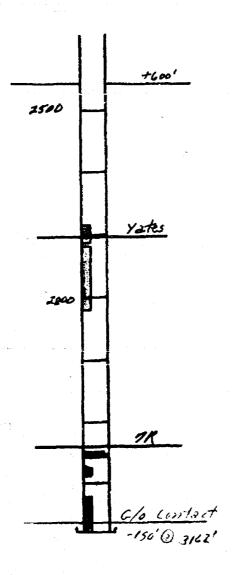
-140 @ 5134'

We Contact



#### JAL OIL COMPANY

Jenkins No. 1 - Unit M Section 29-T25S-R37E Jalmat Gas Pool



Elev. 3012 \* RT TD 31731 PB 30521 T/P 27401 Yates-7 Rivers 2715-28201 Form. Porfe. 6121-3172 072-30821 dige sech 2686-27101

Shot from 2715-28301

Completed 6/10/52

Original Production 5 BOPD 1171 MCFPD

NR BWPD Gravity 28.5 degrees GOR 232,200/1

February 1960 Production NR BOPD

NR BNPD 11 MCFPD

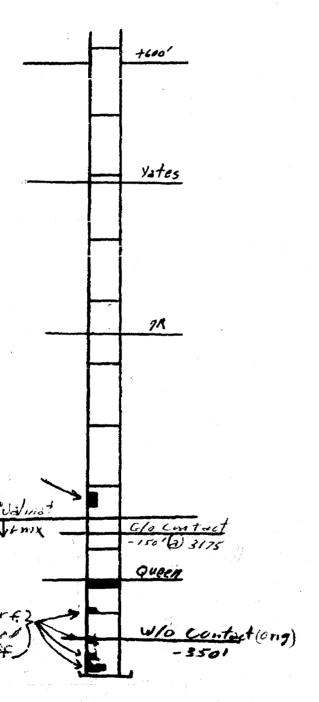
Produced one day only GOR \_

OCC Formation Tops Yates 2703 Seven Rivers 2943 est.

Wo contact (orig)

JAL OIL COMPANY

Jenkins No. 2 - Unit K Section 29-T25S-R37E Langlie Mattix Gas This well reclassives



Elevation	3021 *
TD	34031
PB	3250 •
T/P	3112
Formations	Yates & 7-Rivers
Casing Shoe	3393*
Perforations	3112-31321*
	3296-33000

P.B \( \begin{array}{c} 3345-3351 \\ 3373-3379 \\ 3382-3389 \end{array}

Completed

12/10/51

#### Original Production

30 BOPD
NR BWPD
NR MCFPD
Gravity 29 degrees
GOR

#### February 1960 Production

NR BOPD )
NR BWPD ) Average
272 MCFPD)
GOR
Producted 29 days

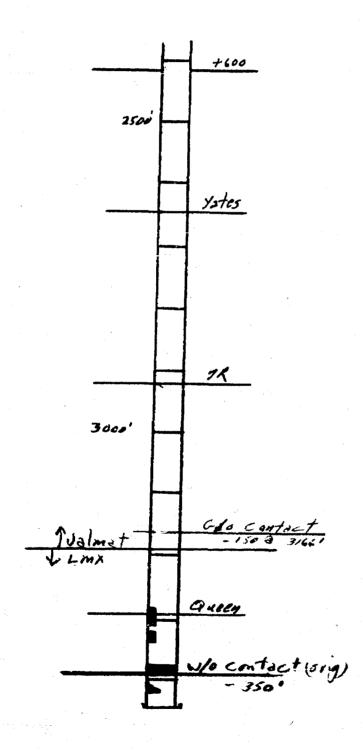
#### OCC Formation Tops (Log)

Yates 2610\*
7-Rivers 2955\*
Queen 3250\*

\*Upper set of perforations (3112-321) is in the Jalmat Pool

Apparently all lower perforations are plugged off - only apparent prod. set are in the Jalmat Gas zone.

Jenkins No. 3 - Unit N Section 29-T258-R37E Langlie Mattix (OIL) Daily Allowable - 7 Parrels - April



Elevation	30161
TD	3446+
TB -	33761
T/P	33841
Formation	
Casing Shoe	Queen
cannia ollos	34171

Perforations

3284-3309**1** 3318-3335**1** 

Completed

4/24/52

### Original Production

12 BOPD 8. BWPD NR MCFPD Gravity 29 degrees GOR

#### February 1960 Production

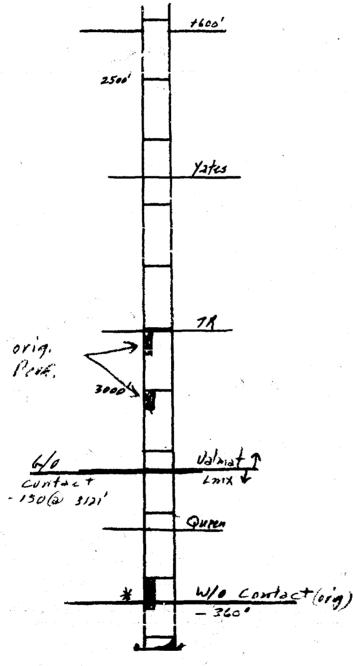
2.8 BOPD )
8.8 BWPD ) Average
37.7 MCFPD)
GOR
Produced 29 days

# OCC Formation Tops (Logs)

Tates 2649\* ?--Rivers 2920\* Queen 3292\*

Well freced August 26, 1955 - 80 BO in 14 hours 137 BOPD

Jenkins No. 4 - Unit L Section 29-T25S-R37E Jalmat (OIL)



\* This well should be reclassified back to Langlie matter oil

Elevation 3021\*
TD 3420\*
FB None
T/P 2905\*
Formation Queen

Perforations(present) 3300-33501

Completed

1/14/52

#### Original Production

60 BOPD 40 BWPD NR MCFPD Gravity 29 degrees GOR NR

#### February 1960 Production

17.6 BOPD 24.3 BWPD 218 MCFPD GOR 4140 Pumped for 29 days

#### OCC Formation Tops

Yates 2638\*
7-Rivers 2902\*
Queen 3256\*

#### Original Langlie Mattix Completion

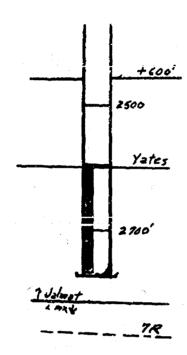
Perforations 3000-3028† 2905-2938†

Original Langlie Mattix Production
47 BOPD
403 BWPD

Gravity 29 degrees

Well reclassified from Langlie Mattix 0:1 to Jalmat 0:1 January 14, 1952.

Eva Owens No. 1 - Unit M Section 21-T25S-R37E Jalmat Cas



6/0 Contact - 150'

Elevation 3051'
TD 2776'
PB None
T/P 2605
Formation Yates

Perforations 2605-27721

Completed 5/18/51

#### Original Production

7 BOPD
7 BWPD
9 MCFPD
Gravity 30 degrees
GOR

#### February 1960 Production

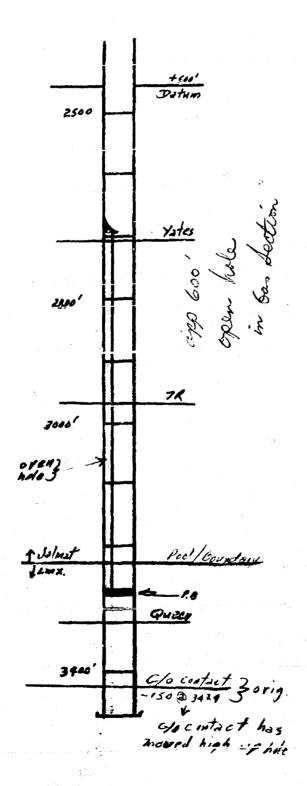
NR BOPD NR BWPD 118 MCFPD GOR Produced for 29 days

, , , , ,

### OCC Formation Tops (Log)

Yates 2605† 7-Rivers 2870† est. JAL OIL COMPANY

Eva Owens No. D-1 - Unit M Section 21-T25S-R37E Crosby-Devonian (OIL) Watkins No. 1 - Unit A Section 35-T24S-R36E Jaimat (OIL) Daily allowable - 37 barrels



Elevation	32741	
TD	3475	
PB	32751	
T/P	2700 *	
Formations	Yates-7-Rivers	Š
*	Queen	
Casing Shoe	2691	

Open Hole 2691-3275

Completed 8/6/51

#### Original Production

30 BOPD NR BWPD 3600 MCFPD Gravity GOR

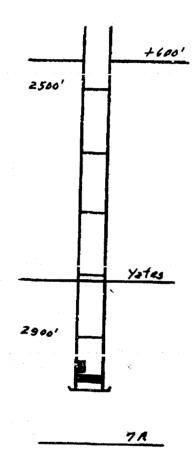
#### February 1960 Production

64.5 BOPD 89 BWPD 25.2 MCFPD Pumped for 17 days GOR 448

OCC Formation Tops (Logs)
Yates 2706
7-Rivers 2970
Queen 3323

Well reclassified from gas to oil March 12, 1957. No workover.

Watkins No. 2 - Unit H Section 25-T24S-R36E Jalmat Gas Pool



40 Contact

Elevation	3271
TD	29831 2987
PB	29681
T/P	29421
Formation	Yates
Casing Shoe	2983
Pa Paratiana	30010 00m

Pe. forations 2942-2954!

Completed 8/12/58

## Original Production

3325 MCFPD
168 EWPD
NR BOPD
Gravity - 30
GOR

# February 1960 Production

274 MCFPD )
174.4 BWPD ) Average
NR BOPD )
GOR
Produced 25 days

OCC Formation Tops
Yates 2810'
Seven Rivers 3075' est.