

CASE 3187: Application of Tom L.  
INGRAM for creation of new oil  
pool, Roosevelt County, N.M.

*Handwritten:*  
N.M.  
Roosevelt

CASE NO.

3187

Application,

TRANSCRIPTS,

SMALL Exhibits

ETC.

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

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

P. O. BOX 2088  
SANTA FE

March 1, 1966

Mr. John Russell  
Attorney at Law  
Post Office Drawer 640  
Roswell, New Mexico

Re: Case No. 3187  
Order No. R-2861-A  
Applicant:

TOM L. INGRAM

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

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC       

Aztec OCC       

Other

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. 3187  
Order No. R-2861-A

APPLICATION OF TOM L. INGRAM  
FOR SPECIAL POOL RULES FOR THE  
NORTH SAWYER-DEVONIAN POOL,  
ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 23, 1966, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 1st day of March, 1966, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(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 by Order No. R-2861, dated January 20, 1965, temporary Special Rules and Regulations were promulgated for the North Sawyer-Devonian Pool, Roosevelt County, New Mexico.

(3) That pursuant to the provisions of Order No. R-2861, this case was reopened to allow the operators in the subject pool to appear and show cause why the North Sawyer-Devonian Pool should not be developed on 40-acre spacing units.

(4) That the evidence establishes that one well in the North Sawyer-Devonian Pool can efficiently and economically drain and develop 80 acres.

CASE No. 3187  
Order No. R-2861-A

(5) That the Special Rules and Regulations promulgated by Order No. R-2861 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(6) That to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-2861 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the North Sawyer-Devonian Pool promulgated by Order No. R-2861 are hereby continued in full force and effect until further order of the Commission.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

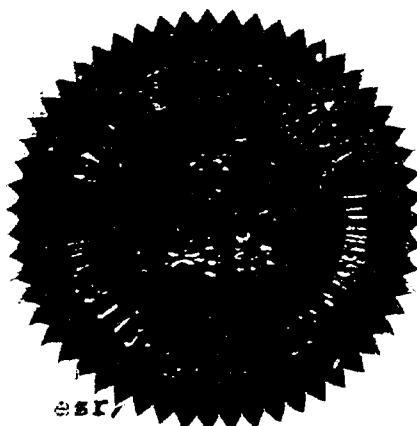
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Jack M. Campbell*  
JACK M. CAMPBELL, Chairman

*Guyton B. Hays*  
GUYTON B. HAYS, Member

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Member & Secretary



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. 3187  
Order No. R-2861

APPLICATION OF TOM L. INGRAM  
FOR SPECIAL POOL RULES FOR THE  
NORTH SAWYER-DEVONIAN POOL,  
ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 6, 1965, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 20th day of January, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(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 applicant, Tom L. Ingram, seeks the promulgation of temporary special rules and regulations for the North Sawyer-Devonian Pool in Township 6 South, Range 38 East, NMPM, Roosevelt County, New Mexico, including a provision for 80-acre spacing units.

(3) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the North Sawyer-Devonian Pool.

CASE No. 3187  
Order No. R-2861

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in February, 1966, at which time the operators in the subject pool should be prepared to appear and show cause why the North Sawyer-Devonian Pool should not be developed on 40-acre spacing units.

**IT IS THEREFORE ORDERED:**

That temporary Special Rules and Regulations for the North Sawyer-Devonian Pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE  
NORTH SAWYER-DEVONIAN POOL**

**RULE 1.** Each well completed or recompleted in the North Sawyer-Devonian Pool or in the Devonian formation within one mile thereof, and not nearer to or within the limits of another designated Devonian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

**RULE 2.** Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

**RULE 3.** The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished.

CASE No. 3187  
Order No. R-2861

The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 6.67 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That any well presently drilling to or completed in the North Sawyer-Devonian Pool or in the Devonian formation within one mile thereof that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before February 15, 1965.

(2) That each well presently drilling to or completed in the North Sawyer-Devonian Pool or in the Devonian formation within



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CASE No. 3187

Order No. R-2861

one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in February, 1966, at which time the operators in the subject pool may appear and show cause why the North Sawyer-Devonian Pool should not be developed on 40-acre spacing units.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



*Jack M. Campbell*

JACK M. CAMPBELL, Chairman

*Guyton B. Hays*

GUYTON B. HAYS, Member

*A. L. Porter, Jr.*

A. L. PORTER, Jr., Member & Secretary

Docket No. 6-66

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 23, 1966

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or  
Elvis A. Utz, Alternate Examiner:

- CASE 3377: Application of Socony-Mobil Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the of the West Henshaw Premier Unit Area comprising 2,400 acres of State and Federal lands in Township 16 South, Range 30 East, Eddy County, New Mexico.
- CASE 3378: Application of Socony-Mobil Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, authority to institute a waterflood project in its West Henshaw Premier Unit Area by the injection of water into the Premier formation through twenty-six wells in Sections 2, 3, 4, 5, 8, and 10, Township 16 South, Range 30 East, West Henshaw Grayburg Pool, Eddy County, New Mexico.
- CASE 3379: Application of Texaco Inc. for force-pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Justis-Paddock Gas Pool underlying the S/2 of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 3380: Application of Texaco Inc. for force-pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Justis-Paddock Gas Pool underlying the N/2 of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 3187 (Reopened):

In the matter of Case No. 3187 being reopened pursuant to the provisions of Order No. R-2861, which order established 80-acre spacing units for the North Sawyer-Devonian Pool, Roosevelt County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

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

P. O. BOX 2088  
SANTA FE

January 20, 1965

Mr. John F. Russell  
Attorney at Law  
Post Office Drawer 640  
Roswell, New Mexico

Re: Case No. 3187  
Order No. R-2861  
Applicant:  
TOM L. INGRAM

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

ir/

Carbon copy of order also sent to:

Hobbs OCC x  
Artesia OCC         
Aztec OCC         
OTHER Mr. Sim Christy

SOCKET MAILED

Date 2-11-66

*P*

LAW OFFICES OF  
JOHN F. RUSSELL  
SUITE 1010 SECURITY NATIONAL BANK BUILDING  
P O DRAWER 640  
ROSWELL, NEW MEXICO 88201

TELEPHONE 622-4641  
AREA CODE 505

December 3, 1964

Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

I transmit herewith an application of Tom L.  
Ingram, and request that this be set for hearing before  
an examiner in January.

Very truly yours,

*John F. Russell*  
John F. Russell

JFR:np

Enclosure

DOCKET MAILED

Date 12-21-64

Docket No. 1-65

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 6, 1965

9 A. M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Elvis A Utz, Alternate Examiner:

CASE 3187: Application of Tom L. Ingram for the creation of a new oil pool and for special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Devonian production for his State Well No. 1 located in Unit C of Section 32, Township 8 South, Range 38 East, Roosevelt County, New Mexico, and the promulgation of special rules for said pool, including a provision for 80-acre spacing.

CASE 3188: Application of Maleta Y. Brimhall and Barbara Burnham for force-pooling, San Juan County, New Mexico. Applicants, in the above-styled cause, seek an order force-pooling all mineral interests in the Basin Dakota Pool underlying the W/2 of Section 7, Township 30 North, Range 11 West, San Juan County, New Mexico.

CASE 3189: Application of Continental Oil Company for a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Jicarilla Apache 30 Well No. 2 located in Unit C of Section 28, Township 25 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to produce gas from the Chacra formation and oil from the Gallup formation through the casing-tubing annulus and tubing, respectively.

CASE 3190: Application of Continental Oil Company for a triple completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its Northeast Haynes Apache Well No. 1 located in Unit K of Section 9, Township 24 North, Range 5 West, Rio Arriba County, New Mexico, to produce gas from the Ballard-Fictured Cliffs Pool through 2 7/8-inch casing, and oil from the Otero-Gallup Pool and gas from the Basin-Dakota Pool through tubing installed in two separate 4 1/2-inch casing strings, all casing strings being cemented in a common wellbore.

CASE 2715: (Reopened)  
In the matter of Case No. 2715 being reopened pursuant to the provisions of Order No. R-2401, which order established temporary 320-acre gas proration units for the Custer-Ellenburger Pool, Lea County, New Mexico, for a period of two years. The Commission will consider indefinite extension of Order No. R-2401 in the absence of evidence to the contrary.

CASE 2720: (Reopened)  
In the matter of Case No. 2720 being reopened pursuant to the provisions of Order No. R-2397-A which continued the original order for an additional year, establishing special rules governing the production of oil and gas wells in the Double-X Delaware Pool, Lea County, New Mexico, including classification of wells as gas wells when the gas-liquid hydrocarbon ratio exceeds 30,000 to one.

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January 6, 1965 Examiner Hearing

CASE 2935: (Reopened)

In the matter of Case No. 2935 being reopened pursuant to the provisions of Order No. R-2612, which order established temporary 160-acre spacing for the South Waterflow Oil Pool, San Juan County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on either 80-acre or 40-acre spacing.

CASE 3158: (Continued from the November 24th examiner hearing).

Application of The Pure Oil Company for the creation of a new gas pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp gas pool for its Red Hills Unit Well No. 1 located 330 feet from the South line and 2310 feet from the East line of Section 32, Township 25 South, Range 33 East, Lea County, New Mexico, and the promulgation of special pool rules including a provision for 640-acre spacing.

CASE 3159: (Continued from the November 24th examiner hearing).

Application of The Pure Oil Company for the creation of a new gas pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian gas pool for its Red Hills Unit Well No. 1, located 330 feet from the South line and 2310 feet from the East line of Section 32, Township 25 South, Range 33 East, Lea County, New Mexico, and the promulgation of special pool rules including a provision for 640-acre spacing.

CASE 3173: (Continued from the December 15th examiner hearing).

Application of Pan American Petroleum Corporation for force-pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin Dakota Pool underlying the S/2 of Section 31, Township 30 North, Range 12 West, San Juan County, New Mexico.

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF )  
TOM L. INGRAM FOR AN ORDER CREATING )  
AND DESIGNATING A NEW OIL FIELD FOR )  
THE PRODUCTION OF OIL FROM THE )  
DEVONIAN FORMATION, SUCH FIELD TO )  
CONSIST OF THE S $\frac{1}{2}$  SECTION 29 AND THE )  
N $\frac{1}{2}$  SECTION 32 ALL IN TOWNSHIP 8 SOUTH, )  
RANGE 38 EAST, ROOSEVELT COUNTY, NEW )  
MEXICO, AND ESTABLISHING SPECIAL RULES )  
AND REGULATIONS FOR SAID FIELD, IN- )  
CLUDING 80 ACRE SPACING. )

No. 3157

APPLICATION

COMES NOW Applicant, Tom L. Ingram, by his attorney,  
John F. Russell, and states:

1. That Applicant completed his Tom L. Ingram No. 1  
State Well located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 32, Township 8 South,  
Range 38 East, N.M.P.M., Roosevelt County, New Mexico, on October  
28, 1964. Said well was completed in the Devonian Formation as a  
producer and is producing from the interval from 11,344 feet to  
11,360 feet.

2. That said well discovered a new common source of  
supply in this area.

3. That in conformity with the practices of the Commission,  
an oil field should be created, defined and classified, including  
such acreage as appears to cover the newly discovered source of  
supply located in Sections 29 and 32, Township 8 South, Range 38  
East, N.M.P.M., Roosevelt County, New Mexico.

4. That the probable areal extent of the common source of supply is limited and to prevent waste and to protect correlative rights, proration units of 80 acres should be established.

5. That one well will efficiently and economically drain at least 80 acres of the said common source of supply.

6. It is proposed that the name for the new field be "Shinnery".

WHEREFORE, Applicant requests the Commission to set this matter down for hearing before one of its examiners, to publish notice as required by law, and, after hearing, issue its order creating and designating a new oil field as prayed for herein, and to provide for the orderly development of the common source of supply, and to prevent waste, drilling units of 80 acres, well-spacing regulations, and a casing program for said common source of supply.

Respectfully submitted,

TOM L. INGRAM

By John D. Russell  
Attorney for Applicant

P. O. Box 640  
Roswell, New Mexico

DATED: November 16, 1964



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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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PAGE 1

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
January 6, 1965

EXAMINER      HEARING

IN THE MATTER OF:

APPLICATION OF TOM L. INGRAM FOR THE CREATION  
OF A NEW OIL POOL AND FOR SPECIAL POOL RULES,  
ROOSEVELT COUNTY, NEW MEXICO

Case No. 3187

BEFORE:

DANIEL S. NUTTER

TRANSCRIPT OF HEARING

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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MR. NUTTER: We will call the next case, Case Number 3187.

MR. DURRETT: Application of Tom L. Ingram for the creation of a new oil pool and for special pool rules, Roosevelt County, New Mexico.

MR. RUSSELL: John F. Russell, Roswell, New Mexico, appearing on behalf of Tom Ingram. I have one witness, Mr. Ralph Gray.

\* \* \*

R A L P H L. G R A Y, the witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RUSSELL:

Q Please state your name and address, and by whom you are employed.

A Ralph L. Gray, Artesia, New Mexico, representing Tom L. Ingram.

Q You have previously qualified to testify before this Commission and the Examiner?

A Yes, sir.

Q Are you familiar with the application filed in Case Number 3187?

A Yes, I am.

Q What does the applicant seek by that application?

A The applicant seeks to establish a new oil pool for Devonian production for his State Well Number 1 located in Unit C of Section 32, Township 8 South, Range 38 East, Roosevelt County, New Mexico. Also it is proposed to establish 80-acre proration units, such units to be any two contiguous regular quarter-quarter sections. It is recommended that spacing distance conform to State-wide rules.

Q Have you prepared any exhibits for use in this hearing?

A Yes.

Q Referring you to what has been marked Exhibit 1, I ask you to explain that exhibit.

A Exhibit 1 is a map showing the location of the new discovery. This is indicated by the arrow on the map. This map also shows in yellow the acreage held by Tom L. Ingram. I think also of interest is the Gulf Simmons Well Number 1, located in the southwest quarter of Section 7 in Township 9 South, Range 38 East. This well was originally completed in the Devonian and it is the closest Devonian production to the subject well. This well produced approximately 177,000 barrels of oil and was abandoned, and since that time it has been tested on four sides, four directions, and all of these have been found to be dry.

Q I now refer you to Applicant's Exhibit 2, and ask

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you to explain that exhibit.

A Exhibit 2 is a sheet showing pertinent well information on the State Number 1 well. The well was completed October 28, 1964, producing from the Devonian formation. The total depth was 11,455 feet and the plug-back total depth was 11,430 feet. The casing program is shown on Exhibit 2. The oil production string was 5½ casing feet at 11,455 with 400 sacks. Casing was perforated from 11,344 feet to 11,360 feet. Treatment was 250 gallons of acid. On initial potential the well flowed 303 barrels of oil in six hours in ¾ inch. Tubing pressure 150 pounds; gas-oil ratio, 66 cubic feet per barrel. Exhibit 2 also shows three drill stem tests taken in the Devonian formation; on the first test from 11,344 to 11,379. The tool was open three hours. Gas to the surface in seventeen minutes, and 142 barrels of oil were reversed out of drill pipe. The flow pressure was building up during the test and undoubtedly the well would have flowed had the tube been open a little longer period of time. The sixty-minute initial shut-in pressure was 4320 PSI and final sixty-minute shut-in pressure was 4298. This represents a very small pressure drop and is indicative of a high degree of permeability. Also it was noted on the drill stem test chart that the pressure build-up was immediate when the tool was shut in, rather than gradual, so this also indicates a very high de-

gree of permeability. The drill stem test from 11,381 feet to 11,428 feet indicated a very tight interval, and only sixty feet of oil and mud was recovered from this test. The third test was 11,407 to 11,449, and on this test 8100 feet of salt water was recovered. I think that's all of the pertinent information on Exhibit 2.

Q I refer you to what has been identified as Exhibit 3, and ask you if you will explain that exhibit.

A Exhibit 3 is a gamma-ray acoustical log, and this log indicates the top of the Devonian formation, and it shows where the 5½ casing was set, where the well was plugged back and shows the interval that is perforated. The oil produced is coming from the upper part of the Devonian formation, and the high degree of porosity indicated on the acoustical log in the very bottom part of the log represents the part that contributed salt water on the drill stem test. I believe that's the information on there of interest.

Q I refer you now to what has been marked Applicant's Exhibit 4, and ask you if you will explain what that exhibit shows.

A Exhibit 4 shows a core analysis on the interval that was cored from 11,379 feet to 11,405 feet. Unfortunately the productive part of the Devonian was not cored, and the interval that was cored was in a tight section, as indicated by

drill stem test, so the values that are shown there are really not--we don't feel are representative of the upper part of the Devonian formation from which the oil is coming; however, the core was taken and it was felt desirable to include all the information so that the Commission will have all the information available.

Q Mr. Gray, would you explain to the Examiner why, in your opinion, 80-acre spacing should be granted.

A Eighty-acre development will eliminate, or will certainly reduce the drilling of unnecessary wells, since it is indicated that the Devonian reservoir has a high degree of permeability. One well should drain at least 80 acres. The drill stem test that was taken is indicative of this degree of permeability. Very little treatment was necessary to complete the well, and it is known that other Devonian pools in this general area have characteristics which include this high degree of permeability. The reservoir usually has a vuggy type porosity, and is also characterized usually by a fracture system. Withdrawals from the reservoir will be at a slower rate under 80-acre proration than under 40-acre proration, and this should permit a slower rate of water encroachment and minimize water coning, thereby preventing waste. It is characteristic of the Devonian formation to have effective water drives, and one of the problems involved

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in producing the reservoir is water coning, and certainly the reduced rate of withdrawal will--should prevent waste by minimizing water coning effect. Also there is an economic consideration involved--it is very possible that 40-acre development may be unprofitable, so that 80-acre development would be a necessity for a profitable development of the pool. Finally, we might say that there are numerous Devonian pools in the area, and it has been found in other pools that 80 acres is a very satisfactory spacing program in general. Many of these Devonian pools are very small structures, and in many cases there is a very steep dip to the formations; and all of these factors dictate a cautious approach in developing the pools.

Q In your opinion, will the granting of 80-acre spacing prevent waste and protect correlative rights?

A Yes, I think so.

Q Do you have a suggested name for this new pool?

A The operator has filed a form with the Commission in which they suggested the name "Shinnery Devonian Pool." I understand there has been an advertisement in a future hearing in which they show "North Sawyer Devonian," so I'm not real certain just what the Commission's wish is in this regard. But at least the suggestion has been made, "Shinnery Devonian."

Q Do you have anything further you'd like to offer in

connection with this application?

A No, sir, I don't believe so.

MR. RUSSELL: That's all the questions I have.

MR. NUTTER: Are there any questions of this witness?

MR. IRBY: I have a question or two. Do you have a proposed set of rules--pool rules, to recommend, as to the location?

A Nothing except as stated in the testimony. Essentially what we're requesting is 80-acre proration units, without any particular way that these units are formed, except that there be two contiguous.

Q In other words, they could run east and west or north and south?

A Yes, sir, and in regard to the spacing, we don't suggest any particular spacing other than just regular State-wide rules.

Q Is this the only well in the pool so far?

A It is my understanding that it is the only completed well. However, Atlantic is drilling a well in the west half of the northwest quarter of Section 32, which is a diagonal offset to the subject well.

Q Another question--you may have testified to this and I missed it. What is the current rate of production of oil? Is it making its allowable for this depth?



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A Yes, sir, very definitely.

Q Which is, I believe, about 227 barrels?

A Well, I think the factor for this depth, for 40 acres, is 6.75, if I'm not mistaken, so--

Q What is that--between eleven and twelve?

A Yes, between eleven and twelve, and then if 80-acre proration is established I think the procedure is to add another unit allowable, so that proration factor would be 7.75.

Q It would be able to make this allowable, do you think--the 80-acre allowable?

A Yes, sir.

MR. IRBY: That's all I have at the moment.

MR. NUTTER: You stated that this well to the southwest is being currently drilled by Atlantic. Do you know the depth of that well at the present time?

A I understand they're drilling below 6,000 feet.

Q Now, the Gulf well about three miles southwest produced approximately 177,000 barrels, you stated?

A Yes, sir.

Q There were some Devonian holes drilled north of it. Would the nearest one to the Ingram well be the Devonian test in the southeast or southwest of Five?

A I'm not familiar with this well. However, the map

shows it's a dry hole which was drilled to total depth of 11,645, and it did penetrate the Devonian.

Q The well in Section 31 West of the Ingram well evidently did not go to the Devonian?

A I believe that's right. This is a Bough-C test, Pennsylvanian.

Q Do you know whether Mr. Ingram contemplates drilling another well in this area or not?

A The applicant anticipates that additional wells will be drilled.

Q And the area colored yellow on Exhibit 1 is the applicant's acreage, is that correct?

A That is correct.

Q Do you--have any estimates been made of the reserves in this area?

A No.--I say no; I personally have not made any. One thing is that I feel like it would be practically impossible to arrive at any kind of a figure that could be depended upon. One reason is that these structures generally are small and they have these high degree of dips, and we don't have enough information on the reservoir to have an idea on what productive volume might exist in the top of the Devonian above the water table. We also have the existence of a tight section, as indicated by drill stem testing between the upper part and

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the lower part, which is water, so I consider that we just really don't have enough information to make a very reliable estimate.

Q Have you made an estimate of what the net pay is?

A I think the net pay might be sort of controversial too. I would judge that we can say that we have probably about a minimum of fifteen feet, and then as to how much of this tidal section might contribute after treatment is highly questionable.

Q You do know in the Devonian you've got a productive area at the top, and then a tight section, and you also have water in the lowermost portion that was penetrated?

A Yes, sir.

Q So your net pay is subsequently reduced to at least the upper portion of the Devonian?

A That is the appearance of it at this time.

Q What is the applicant seeking--temporary rules for a period of one year, or what?

A The applicant would like to have permanent rules; if the Commission would see fit to grant permanent rules I'm sure the applicant would be satisfied. If the Commission thinks it more desirable to have temporary rules, of course we will go along with that.

Q Actually we have very little to base permanent rules

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on. We don't have well costs, we don't have reserve estimates.

A I can give you something on well costs. The well cost is approximately \$260,000.00 for a well and tank battery. The reason I say the applicant would be satisfied with permanent rules is that there have been a number of Devonian pools drilled in this area, and the characteristics are so similar from one pool to another that we feel we pretty well know what type of thing we have to deal with, and we feel that 80 acres is the only reasonable type of development plan.

MR. NUTTER: Are there any other questions of this witness?

MR. DURRETT: Mr. Gray, I understand that the applicant is requesting that the usual State-wide rules on well locations be applicable, is that correct?

A That is correct.

Q Would the applicant be objectionable to restrictive well locations in a certain quarter-quarter section, or would he just--

A Well, we know that generally these structures are very small in areal extent, and from a geological standpoint we think it is desirable to have a high degree of flexibility in this type of thing, in locating the well, so we prefer that there not be any specific location made for the wells--that the Commission grant enough flexibility so that the operator

can locate these wells in the position that he feels is most desirable.

Q So you would want to be able to drill in either quarter-quarter section of the unit?

A Yes, sir.

Q Is this discovery well located so that it would conform with 150-feet or 200 feet of the center of a quarter-quarter section, if the Commission should desire to put that type of restriction on it?

A The discovery well was drilled 660 feet from the lease lines, or from the 80-acre unit line--in other words, it's in the center of a regular quarter-quarter section.

Q So it would comply with either one of those restrictions, if the Commission should decide to put that on?

A Yes, sir.

Q Would Mr. Ingram be objectionable to that type of restriction?

A You mean rather than permitting a 330 location?

Q Yes.

A Yes. The well presently being drilled is a 330 location. It would be off pattern--I don't know that that would prohibit the setting up of rules for 660. Of course ~~I don't know that that would prohibit the setting up of rules for 660.~~ Of course it would automatically be an exception, if

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the rules were written in that manner.

MR. NUTTER: Are there any further questions of Mr. Gray? ... He may be excused. Do you have anything further, Mr. Russell?

MR. RUSSELL: Yes. I have a letter marked Exhibit 5 which I would like to read into the record, from Atlantic, addressed to myself. "We understand that you will represent Mr. Ingram in the processing of Case Number 3187. Atlantic Refining Company is in agreement with the proposed rules providing for 80-acre spacing proration unit running east and west or north and south, and wells located not closer than 330 feet to the lease line on either side. This letter is evidence supporting the application and may be submitted to the Oil Conservation Commission as part of the official record. Please call on us if we can furnish additional assistance."

At this time I would like to introduce in evidence, Applicant's Exhibits 1 through 5, inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 5 will be admitted into evidence.

MR. RUSSELL: I have nothing further.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 3187?

MR. CHRISTY: If the Examiner please, Sim Christy for Tenneco. Tenneco is the owner of a working interest in

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some 1400 acres lying immediately north and east of the area in question--the ownership in Sections 19, 20, 28, 29 and 33. We would like to support the application of Mr. Ingram for 80-acre spacing and flexible proration units, either north and south or east and west. We would have no objection to locating the well within 150 or 200 feet as mentioned by Mr. Durrett.

MR. NUTTER: Thank you. Is there anything further?  
We will take Case Number 3187 under advisement.

\* \* \*

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) ss

I, Elizabeth K. Hale, Notary Public and Court Reporter, do hereby certify that proceedings in Case Number 3187 were taken and transcribed by me, and that the foregoing is a true and accurate transcript of proceedings to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, my hand and seal of office this 13th day of January, 1965.

*Elizabeth K. Hale*  
Notary Public

My commission expires  
May 23, 1968.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Executive hearing of Case No. 3187  
heard by me on 1-6, 1965.

*John M. ...* Examiner  
New Mexico Oil Conservation Commission

WELL DATA	BEFORE EXAMINER NUTTER	
	OIL CONSERVATION COMMISSION	
	<i>Alpen</i>	EXHIBIT NO. <u>2</u>
TOM L. INGRAM - STATE #1		CASE NO. <u>3187</u>

Location: 660' from North and 1980' from West Lines, Section 32-T8S-R38E, Roosevelt County, New Mexico.

Completed: October 28, 1964

Producing Formation: Devonian, Top at 11,346'.

Elevation: 3980 K.B.

Total Depth: 11,455', PB to 11,430'.

Casing: 13-3/8" at 403' with 400 sacks.  
 8-5/8" at 4210' with 500 sacks.  
 5-1/2" at 11,455' with 400 sacks.  
 2-3/8" tubing at 11,362', Packer at 11,263'.

Perforations: 11,344-11,360'

Treatment: Acidized with 250 gallons.

Initial Potential: Flowed 303 barrels of oil in 6 hours on 3/4" choke,  
 Tubing Pressure 150 psi., Gas-Oil Ratio - 66 cu.ft./bbl.

#### DRILL STEM TESTS

- Drill Stem Test #7: 11,344-11,379. 940' water blanket. Open with good blow increasing 5 mins., then shut-in 60 mins., re-opened, GTS 17 mins., open 3 hrs., reversed out 142 barrels (43<sup>0</sup> gravity) oil, recovered 180' Oil Cut Mud below sub. Hydrostatic in 6061, 60 min. ISIP 4320, FP 565-3836, 60 min. FSIP 4298, Hydrostatic out 5976, 5/8" choke.
- Drill Stem Test #8: 11,381-11,428. 940' water blanket. Open 15 mins., very weak blow, recovered water blanket plus 60' oil and oil and gas cut mud. Hydrostatic in 6200, IF 560, FF 560, 30 min. FSIP 3380 still increasing, Hydrostatic out 6125.
- Drill Stem Test #9: 11,407-449. Open 4 hours strong blow gradually decreasing. Recovered 940' water blanket, 8100' salt water. Hydrostatic in 6025, 60 min. ISIP 4406, IF 1425, FF 4150, 60 min. FSIP 4375, Hydrostatic out 6000.



COMPANY TOM L. INGRAM		STATE # 1		OIL CONSERVATION COMMISSION	
WELL		WILDCAT		EXHIBIT NO. 3	
FIELD		WILDCAT		CASE NO. 3157	
COUNTY		ROOSEVELT		STATE NEW MEXICO	
Location		660' FNL 1980' FWL		Other Services:	
Sec. 32 Twp. 8-S Rge. 38-E				Guard FORXO FF-MSG	
Permanent Datum		Ground Level		Elev. 3967.9	
Elev. Measured from		K. B. 12		Elev. K.B. 3980	
Drilling Measured from		Kelly Bushing		D.F. 3979 G.L. 3967.9	
Date		10-23-64		10-23-64	
Run No.		- One -		- One -	
Type Log		Acoustic		G/R-Neutron	
Depth--Driller		11,449		11,449	
Depth--Welex		10,237		11,455	
Bottom Logged Interval		10,231		11,454	
Top Logged Interval		50		10,231	
Type Fluid in Hole		- Oil Base Mud -			
Salinity, PPM Cl					
Density		9.9		9.9	
Level		Full		Full	
Max. rec. temp. deg. F.		180		180	
Operating Rig Time					
Recorded by		B.A. Kithas		L. E. Pharo	
Witnessed by		Mr. Ingram		Mr. Ingram	
RUN		BORE-HOLE RECORD		CASING RECORD	
No.	Bit	From	To	Size	Wgt.
				8-5/8"	0
					4210

Fold Here

EQUIPMENT DATA					
GAMMA RAY			NEUTRON		
Run No.	- One -	- Two -	Run No.	- One -	
Tool Model No.	AVL	310	Log Type	Neutron-Neutron	
Diameter	3-5/8"	1-3/4"	Tool Model No.	310	
Detector Model No.	1E11	D3A	Diameter	1-3/4"	
Type	GM	GM	Detector Model No.	3G2	
Length	14"	27"	Type	PC	
Distance to N. Source	-	89.25"	Length	13"	
GENERAL			Source Model No.	5 CU	
Host Truck No.	3002	2020	Serial No.	N-22	
Instrument Truck No.	3003	613	Spacing	13"	
Tool Serial No.	11186	A14	Type	PaBe	
			Strength	8.5 x 10 <sup>5</sup>	Neutrons Sec.

LOGGING DATA										
GENERAL			GAMMA RAY				NEUTRON			
Run No.	Depth	Speed	T.C.	Sens.	Zero	API G.R. Units	T.C.	Sens.	Zero	API N. Units
	From To	Ft. Min.	Sec.	Settings	Div. L or R	per Log Div.	Sec.	Settings	Div. L or R	per Log Div.
1	50 10231		2	120	0	12		Acoustic Velocity Log		
	10231 11154	30	4	100	0	10	3	2000	271.	50

Reference Literature:

AVL Tool # 11172-98 (Tool Centralized)

Gamma Ray - Neutron Log run through 4-1/2" drill pipe.

Remarks:

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 23, 1966

EXAMINER      HEARING

IN THE MATTER OF:

In the matter of Case No. 3187 being  
reopened pursuant to the provisions of  
Order No. R-2861, which order estab-  
lished 80-acre spacing units for the  
North Sawyer-Devonian Pool, Roosevelt  
County, New Mexico, for a period of  
one year.

Case No. 3187

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 3187.

MR. DURRETT: In the matter of Case No. 3187 being reopened pursuant to the provisions of Order No. R-2861, which order established 80-acre spacing units for the North Sawyer-Devonian Pool, Roosevelt County, New Mexico, for a period of one year.

MR. RUSSELL: John F. Russell, Roswell, New Mexico, appearing on behalf of Tom L. Ingram, and I have one witness, Mr. Ralph Gray.

(Witness sworn.)

(Whereupon, Exhibits Nos. 1 through 4 were marked for identification.)

RALPH L. GRAY

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

DIRECT EXAMINATION

BY MR. RUSSELL:

Q Will you please state your name, address and by whom you are employed?

A Ralph L. Gray, Artesia, New Mexico. I am a consulting engineer representing Tom Ingram in this case.

Q And you have previously qualified to testify before this Commission, have you not?

A Yes, sir.

Q Mr. Gray, did you give or present the original testimony in Case No. 3187, which is being reopened today?

A Yes, sir.

MR. RUSSELL: Mr. Examiner, I would like to request that the testimony in 3187 as originally given be incorporated in this hearing.

MR. NUTTER: It will be, sir.

Q (By Mr. Russell) Are you familiar with this field since it was created and the rules established?

A Yes, sir.

Q Now I'll refer you to what you have marked as Exhibit No. 1 and ask you to explain what that represents and what has transpired here since the establishing of the original rules.

A Exhibit 1 is a map of this general area. The discovery well was the Tom L. Ingram State No. 1 well which was located in the Northeast Quarter of the Northwest Quarter of Section 32. This is in Township 8 South, Range 38 East. After this discovery well was completed, Tom Ingram drilled the Wilson No. 1 well which was located in the Southwest Quarter of the Southwest Quarter of Section 29, same township and range. This was completed as a dry hole.

A third well was drilled to the Devonian by the Atlantic Oil Company. This well was drilled in the Southwest Quarter

of the Northwest Quarter of Section 32, same township and range. The Atlantic was unable to complete this as a commercial well and it's our understanding that this well has been temporarily abandoned. To our knowledge there hasn't been any other wells drilled in this immediate vicinity here.

Q Then since the first hearing there have been no additional producing wells drilled that will give you any additional information?

A That's correct.

Q Now, I'll refer you to what has been marked as Exhibit 2 and ask you to explain what that represents.

A Exhibit 2 is a portion of the gamma ray neutron log on the Tom Ingram State No. 1 well. This log shows the top of the Devonian formation, drill stem test data through the Devonian is shown on the left portion of the log. Our interval in the Devonian is indicated on this log by the red portions on the log. Water was encountered on the last drill stem test taken and that's shown by the blue coloring on the log in the bottom portion of the log.

It will be noted from the drill stem test information that no shows of oil or gas were encountered below a depth of 11,407 feet on this log. According to our interpretation of the pay there's 22 feet of net pay in the Devonian.

Q Now, going to Exhibit No. 3, will you explain that



to the Examiner?

A Exhibit No. 3 is a tabulation of the oil and water production from the Tom Ingram State No. 1 well since it was originally completed, and this is through January 1966. It will be noted that in June 1965 the operator started producing water. It was at this time that pumping equipment was installed on the well. Most of the time this well has produced at near top allowable conditions, although within the last month or two it has shown some signs of declining, probably due to the increasing water content.

At the present time the well makes approximately one-third water. No water is shown for January 1966. This is simply because the operator didn't have a figure as of this time, although the well continues to produce water. As of February the 1st, 1966 this well has recovered 82,759 barrels of oil.

Q Now going to Exhibit No. 4, will you explain what those computations are?

A Exhibit No. 4 shows various parameters that we have used in calculating the ultimate recoverable oil from 80 acres. We're using a net pay thickness of 22 feet, an average porosity of five percent, an assumed formation volume factor of 1.05, assumed water saturation of 25 percent, recoverable oil factor of .35 of the oil in place. We're

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assuming that this well will drain 80 acres and it will be productive in 80 acres. Under those factors we have calculated that the ultimate recoverable oil from this well will be 97 barrels per acre foot or 170,703 barrels for the well and for 80 acres.

What this shows us is that if the well were only draining 40 acres, well, it should be essentially depleted at this time. However, the well is still producing at near top allowable conditions and it's indicated that it will recover a substantial additional amount of oil over what it has up to this time, so this indicates that this well is draining certainly more than 40 acres and probably is draining at least 80 acres based on the amount of oil that we predict will be recovered from the 40 acres.

Also we have shown the ultimate economics of drilling these wells. Assuming that the well will recover 170,703 barrels, the approximate amount of working interest oil is 136,000 barrels, and after deducting taxes and hauling charges and lifting costs, it is estimated that the net income to the working interest owner will amount to \$311,440. Against this income we have to deduct the cost of the well and lease equipment, which is approximately \$225,000. So assuming then that the well will drain 80 acres, the net profit is calculated to be \$86,440. So it's very evident that the economics





will not support a 40-acre development. If this were developed on 40 acres, why there would be no profit. Even under 80 acres the amount of the profit is very small.

Q And the only other wells that have been drilled have been dry holes?

A Yes, sir.

Q Which does not make this \$86,440-figure too attractive from a risk point of view in this area, is that correct?

A That's correct.

Q If it were on a 40-acre spacing, what in your opinion would happen with respect to Exhibit 3 in water production? Would it increase or be less?

A Well, I feel that if it were only draining 40 acres that the oil production wouldn't be nearly as high as it is at the present time and that the water production would have increased percentagewise substantially more than what it is at the present.

Q Then on the basis of your testimony and what has happened since the pool was created, is it your recommendation that the present rules as promulgated by the Commission remain in effect on 80-acre spacing and that the field rules remain unchanged?

A Yes, sir.

MR. RUSSELL: I would like to offer Exhibits 1



through 4.

MR. NUTTER: Exhibits 1 through 4 in Case 3187 reopened, will be admitted.

(Whereupon, Exhibits Nos. 1 through 4 were offered and admitted in evidence.)

MR. RUSSELL: I have no further questions.

MR. NUTTER: Does anyone have any further questions?

Mr. Durrett.

CROSS EXAMINATION

BY MR. DURRETT:

Q Mr. Gray, what is the current allowable for this well?

A I'm sorry, I don't have that exact figure.

Q It's not making top allowable at any rate?

A It has been essentially making top allowable up until, oh, the last two, well, it's indicated that during November and December of last year it failed to make the top allowable and also January 1966. However, the top allowable probably is roughly in the vicinity of 7,000 barrels a month, so it is slightly below top allowable.

Q Do you feel it's capable of making top allowable or will be in the future?

A Well, probably not with the present pumping equipment. Usually wells in this type of reservoir, the



production is kind of tied into the size of the pumping equipment, and conceivably you could install larger pumping equipment and maybe get it back to top allowable, but with the pumping equipment that is installed on the well, well, it's probable that the water will increase in the future and that it is doubtful that the operator will produce top allowable again.

Q Am I correct that this is the only well in the pool?

A That's right.

Q And I don't know whether you stated this or not, but let me ask you anyway. Do you anticipate any additional drilling in this area?

A As far as I know there isn't any contemplated. I couldn't state definitely that there won't be, but I don't have any knowledge of any anticipated. I do know that Mr. Ingram had planned to drill another well and he has abandoned the location. I think at one time he perhaps filed notice of intention to drill a well in the West Half of the Southeast Quarter of Section 29, but that location has been abandoned.

Q Well, as far as the ultimate economics for the field or this pool with no additional wells, then your economic projections would not be any different for 40-acre spacing than they are for 80-acre spacing, is that correct?

A Well, our analysis of the economics is that it

can't possibly be developed on 40 acres because it would never pay out.

Q It won't pay out on 80 acres either if there's no more wells.

A Well, it possibly will barely pay out on 80, but if not, the profit would be very small.

Q What would cause the difference in the figures, if there are no additional wells drilled, in the figures that you have on your Exhibit 4, what would be different?

A I'm not sure that I understand your question.

Q Assume that the pool reverted to 40 acre spacing. Then you have presented in your Exhibit 4 ultimate economics. Would these figures not be identical, assuming there are no more wells drilled?

A Well, assuming that there would be no more wells drilled, there would be no change in these figures.

MR. DURRETT: Thank you. I believe that's all I have.

REDIRECT EXAMINATION

BY MR. RUSSELL:

Q But there's more likelihood of additional wells if it is on 80 than if it is on 40, is that correct, the spacing?

A Would you restate that?

Q It is more likely that additional wells would be



drilled if the pool was on 80-acre spacing than there would be if it was on a 40-acre spacing?

A Oh, yes, I can't imagine anybody wanting to drill a well under any circumstances if 40 acres were adopted for the pool.

MR. RUSSELL: That's all.

RECROSS EXAMINATION

BY MR. NUTTER:

Q What was the matter with the Atlantic well, was it low structurally?

A Apparently so. Apparently they did get some kind of a show of oil but they were just never able to get any kind of a profitable completion.

Q Did they make a lot of water?

A I don't have the, all of the information on that.

MR. INGRAM: If I may answer.

MR. NUTTER: Mr. Ingram.

MR. INGRAM: The upper portion was very tight and then they made lots of water and they were unable to successfully shut the water off and produce any oil.

MR. NUTTER: I see.

Q (By Mr. Nutter) Now, Mr. Gray, on your figures here where you estimated 171,000 barrels of recoverable oil, then you came down here and you have 136,000 barrels of working



interest oil. I presume that that working interest oil is deducting the royalty plus possibly some overriding royalty, is that it?

A That's deducting the royalty, yes, sir.

Q What was the value of the oil that you used then for the 136,000 barrels prior to deducting all the taxes, hauling charges and lifting cost?

A \$3.01 a barrel.

Q Then what was your total estimate of taxes, hauling charges and lifting cost per barrel?

A We have assumed a lifting cost of forty cents per barrel. There's a hauling charge amounting to fourteen cents per barrel and we've calculated the taxes on the basis of eighteen cents per barrel.

Q And there's no prospect at this time for eliminating any of those, particularly the hauling charges? No pipeline?

A None that I know of.

MR. INGRAM: No.

Q So, then, you had a total deduction of seventy-two cents off of your \$3.01 and you multiplied that by your working interest oil?

A That's correct.

MR. NUTTER: Are there any further questions of Mr. Gray? He may be excused.

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(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Russell?

MR. RUSSELL: No.

MR. NUTTER: Does anyone have anything further they wish to offer in Case 3187? We will take the case under advisement and the hearing is adjourned.

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I N D E X

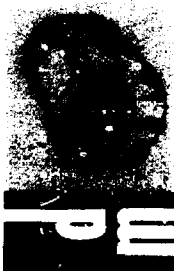
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 ) ss  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 24th day of February, 1966.

Ada Dearnley  
NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is  
a complete and correct transcript of  
the hearing held on 2/23/66 at 3187  
New Mexico Oil Conservation Commission