

CASE 3754: Appli. of CONTINENTAL  
for a non-standard gas proration  
unit, Lea County, New Mexico.

Case Number

3754

Application

Transcripts.

Small Exhibits

ETC.

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

P. O. BOX 2088  
SANTA FE

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

June 5, 1968

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: Case No. 3754  
Order No. R-3425  
Applicant:  
Continental Oil Company

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. 3754  
Order No. R-3425

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR A NON-STANDARD GAS PRORATION UNIT,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 24, 1968,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 5th day of June, 1968, 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, Continental Oil Company, is the  
co-owner and operator of the Stevens A-35 Lease consisting of the  
SW/4, W/2 SE/4, and SE/4 SE/4 of Section 35, Township 23 South,  
Range 36 East, NMPM, Jalmat Gas Pool, Lea County, New Mexico.

(3) That the W/2 SE/4 and SE/4 SE/4 of said Section 35 is  
presently dedicated to its Stevens A-35 Well No. 1, located in  
Unit J of said Section 35, and the SW/4 of said Section 35 is  
presently dedicated to its Stevens A-35 Well No. 2, located in  
Unit L of said Section 35.

(4) That the applicant now seeks the consolidation of the  
two existing non-standard gas proration units to form one 260-  
acre non-standard gas proration unit in the Jalmat Gas Pool  
comprising the SW/4, W/2 SE/4, and SE/4 SE/4 of said Section 35,  
to be simultaneously dedicated to the aforesaid Stevens A-35  
Wells Nos. 1 and 2.

-2-

CASE No. 3754

Order No. R-3425

(5) That applicant's Stevens A-35 Well No. 2 was reclassified as a marginal well on January 1, 1968, and its accumulated under-production cancelled as of said date.

(6) That remedial work of undeterminate effect was commenced February 3, 1968, on the subject well.

(7) That the subject application for consolidation was filed with the Commission March 18, 1968.

(8) That the proposed non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid Stevens A-35 Wells Nos. 1 and 2.

(9) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the Jalmat Gas Pool, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That effective as of April 1, 1968, a 280-acre non-standard gas proration unit in the Jalmat Gas Pool comprising the SW/4, W/2 SE/4, and SE/4 SE/4 of Section 35, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to the Continental Oil Company Stevens A-35 Well No. 1, located in Unit J of said Section 35, and the Continental Oil Company Stevens A-35 Well No. 2, located in Unit L of said Section 35.

(2) That the allowable assigned to the above-described non-standard gas proration unit shall be based upon the unit size of 280 acres; that the operator may produce the allowable assigned to the unit from the subject wells in any proportion; that the status of said consolidated unit shall be the combined status, as of April 1, 1968, of the two units being consolidated.

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

-3-

CASE No. 3754

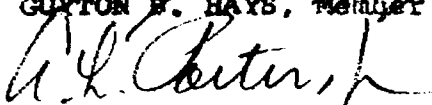
Order No. R-3425

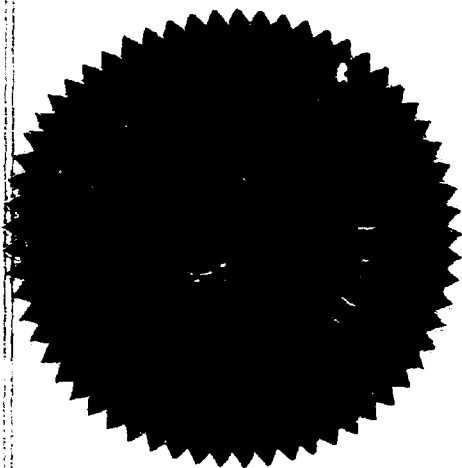
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
GUYTON B. HAYS, Member

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





# CONTINENTAL OIL COMPANY

P. O. Box 460  
HOBBS, NEW MEXICO 88240

PRODUCTION DEPARTMENT  
HOBBS DIVISION  
L. P. THOMPSON  
Division Manager  
G. C. JAMIESON  
Assistant Division Manager

1001 NORTH TURNER  
TELEPHONE 393-4141

*Case 3754*  
March 22, 1968

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

63 MAR 25 AM 8 23

Attention of Mr. A. L. Porter, Jr.  
Secretary-Director

Re: Application for 280-acre  
NSP Unit - Stevens A-35  
Lease - Lea County, New  
Mexico

Gentlemen:

Forwarded herewith in triplicate is our application for non-standard gas proration unit of 280 acres to be assigned jointly to Stevens A-35 Nos. 1 and 2 in the Jalmat Gas Pool as discussed by telephone with Mr. Nutter. Please set this matter for hearing on the April 24, 1968, examiner hearing docket.

This is the same application forwarded by letter dated March 11th, but which failed to reach you.

Yours very truly,

LPT-JS  
cc: Mr. F. N. Woodruff  
El Paso Natural Gas Co. - El Paso

Attach

*L. P. Thompson*  
RECEIVED  
Date 4-10-68

IN THE MATTER OF THE APPLICATION OF  
CONTINENTAL OIL COMPANY FOR APPROVAL  
OF A 280-ACRE NON-STANDARD GAS PRO-  
RATION UNIT IN THE JALMAT GAS POOL BY  
ENLARGING THE PRESENT UNIT ASSIGNED  
TO ITS STEVENS A-35 WELL NO. 1 TO  
INCLUDE THE ACREAGE ASSIGNED TO STEVENS  
A-35 NO. 2, SAID ENLARGED UNIT TO BE  
ASSIGNED JOINTLY TO SAID WELLS NOS.  
1 AND 2 LOCATED IN SECTION 35, TOWNSHIP  
23 SOUTH, RANGE 36 EAST, LEA COUNTY,  
NEW MEXICO; OR IN THE ALTERNATIVE, FOR  
THE ESTABLISHMENT OF ADMINISTRATIVE  
PROCEDURES FOR ALLOCATION OF ACREAGE  
TO THE SAID WELLS;

*Case 3754*

68 MAR 25 AM 8 23

#### A P P L I C A T I O N

COMES NOW, Continental Oil Company and respectfully petitions the Commission to approve a 280-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of SW/4, W/2 SE/4 and SE/4 SE/4, Section 35, T23S, R37E, Lea County, New Mexico, by enlarging the proration unit of its Stevens A-35 Well No. 1 to include the acreage assigned to its Stevens A-35 Well No. 2, and to assign the enlarged unit jointly to said Wells Nos. 1 and 2; or in the alternative, that administrative procedures be established for the allocation of said acreage to the said wells; and in support thereof would show:

1. Applicant is operator and co-owner of the Stevens A-35 Lease containing 280-acres consisting of SW/4, W/2 SE/4 and SE/4 SE/4 Section 35, T23S, R36E, Lea County, New Mexico.
2. Applicant has heretofor drilled and completed in the Jalmat Gas Pool its Stevens A-35 Well No. 1 located 1980 feet from the south line and 1980 feet from the east line of said Section 35; and its Stevens A-35 Well No. 2 located 1650 feet from the South line and 990 feet from the west line of said Section 35.

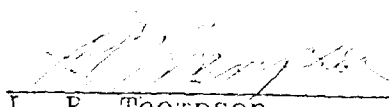


3. That its Stevens A-35 Well No. 2 has only recently become incapable of producing its assigned allowable and was re-classified as marginal on January 1, 1968.
4. That said Well No. 2 has been entered for the purpose of performing remedial work, the degree of success of which is presently in doubt.
5. That Stevens A-35 Well No. 1 presently has sufficient producing capacity to produce the allowable for the entire 280 acres but applicant desires to allocate acreage to Well No. 2 consistent with its ability to produce.
6. That, in order to avoid additional hearings as relative deliverability of the two wells changes, the acreage should either be assigned to the wells jointly or be re-allocated by administrative procedures.
7. That the granting of this application is in the interest of preventing waste and will not impair correlative rights.

WHEREFOR, Applicant respectfully prays that this matter be set for hearing before the Commission's duly appointed examiner and upon hearing, an order be entered allocating a 280-acre non-standard gas proration unit in the Jalmat Gas Pool jointly to the Stevens A-35 Wells Nos. 1 and 2 or, in the alternative, establishing administrative procedures for allocation of acreage between the two wells as described above.

Respectfully submitted,  
CONTINENTAL OIL COMPANY

LPT-JS

  
L. P. Thompson



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. 2524  
Order No. R-2240

APPLICATION OF CITIES SERVICE  
PETROLEUM COMPANY FOR A NON-  
STANDARD GAS PRORATION UNIT,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 11, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 11th day of May, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Cities Service Petroleum Company, seeks the establishment of a 320-acre non-standard gas proration unit in the Jalmat Gas Pool, comprising the E/2 of Section 19, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, applicant proposes to dedicate said unit to the Thomas Well No. 2 located at an unorthodox location 2310 feet from the North line and 2210 feet from the East line of said Section 19.

(3) That the SE/4 of said Section 19 heretofore has been dedicated to the Thomas Well No. 1 located in the SW/4 SE/4 of said Section 19, and the NE/4 of said Section 19 heretofore has been dedicated to the aforesaid Thomas Well No. 2.

(4) That the subject application should be approved, and the status of the Thomas Well No. 1 attributed to the status of the Thomas Well No. 2.

-2-

CASE No. 2524  
Order No. R-2240

IT IS THEREFORE ORDERED:

(1) That a 320-acre non-standard gas proration unit in the Jalmat Gas Pool is hereby established, effective June 1, 1962, comprising the E/2 of Section 19, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico. Said unit shall be dedicated to the Thomas Well No. 2 located 2310 feet from the North line and 2210 feet from the East line of said Section 19.

(2) That the status of the Thomas Well No. 1 located in the SW/4 SE/4 of said Section 19 shall be attributed to the status of the Thomas Well No. 2.

(3) 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 herein-above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

S E A L

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

esr/

Docket No. 13-68

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 1, 1968

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

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

CASE 3756: Application of Gulf Oil Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen-Grayburg formation in the interval 1773 feet to 2142 feet in its Eddy State "AN" Well No. 5 located 2310 feet from the South and East lines of Section 13, Township 19 South, Range 28 East, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

CASE 3002 (Reopened):

In the matter of Case No. 3002 being reopened pursuant to the provisions of Order No. R-2684-B, which order provided special rules and regulations for the Fowler-Lower Paddock Pool, Lea County, New Mexico. All interested parties may appear and show cause whether the special pool rules, as they relate to well spacing, well classification, and limiting gas-oil ratios, should remain in effect.

CASE 3559 (Reopened):

In the matter of Case No. 3559 being reopened pursuant to the provisions of Order No. R-3228, which order established 80-acre spacing units for the South Flying "M"-Pennsylvanian Pool, Lea 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.

ir/

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. 3314  
Order No. R-2981

APPLICATION OF SINCLAIR OIL & GAS  
COMPANY FOR A NON-STANDARD GAS PRO-  
PORTION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 6, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 13th day of October, 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 Order No. R-2040 established a 320-acre non-standard gas proration unit in the Jalmat Gas Pool comprising the SW/4 of Section 14 and the SE/4 of Section 15, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico, to be dedicated to the Western Natural Gas Company Matkins Well No. 1, located in Unit P of said Section 15.

(3) That the applicant, Sinclair Oil & Gas Company, successor in interest to Western Natural Gas Company, seeks amendment of Order No. R-2040 to authorize dedication of said 320-acre non-standard gas proration unit to its Matkins Well No. 4, located in Unit K of said Section 14, in addition to its Matkins Well No. 1.

-2-

CASE No. 3314

Order No. R-2981

(4) That the proposed non-standard gas proration unit can be efficiently and economically drained and developed by the Matkins Well No. 1 and the Matkins Well No. 4.

(5) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the pool, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That Order No. R-2040 establishing a 320-acre non-standard gas proration unit in the Jalmat Gas Pool comprising the SW/4 of Section 14 and the SE/4 of Section 15, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby amended to authorize the simultaneous dedication of said unit to the Sinclair Oil & Gas Company Matkins Well No. 1, located in Unit P of said Section 15, and the Matkins Well No. 4, located in Unit K of said Section 14.

(2) That the allowable assigned to the above-described non-standard gas proration unit shall be based upon the unit size of 320 acres and that the operator may produce the allowable assigned to the unit from the subject wells in any proportion.

(3) 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, Chairman

GUYTON B. HAYS, Member

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

S E A L

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 24, 1968

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

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

- CASE 3750: Application of Pan American Petroleum Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 104 C II to permit the drilling of its State "AZ" Well No. 4 at an unorthodox gas well location 990 feet from the North and East lines of Section 34, Township 12 South, Range 34 East, West Ranger Lake-Devonian Pool, Lea County, New Mexico. The E/2 of said Section 34 would be dedicated to said well.
- CASE 3751: Application of Pennzoil Company for a dual completion and tubing exception, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Hudson Federal 29 Well No. 1 located in Unit B of Section 29, Township 18 South, Range 33 East, South Corbin Field, Lea County, New Mexico, in such a manner as to produce oil from the Wolfcamp formation through 1.38-inch ID tubing and gas from the Morrow formation through 2-inch tubing. Further, applicant seeks an exception to the tubing requirements of Commission Rule 107 in that said 1.38-inch tubing would set more than 250 feet above the uppermost Wolfcamp perforation.
- CASE 3752: Application of Sunray DX Oil Company for a pilot waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project in the Chaveroo-San Andres Pool by the injection of water into the San Andres formation through its New Mexico "X" Federal Well No. 5 located in Unit G of Section 10, Township 8 South, Range 33 East, Chaves County, New Mexico.
- CASE 3753: Application of Amerada Petroleum Corporation for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Langlie Mattix Woolworth Waterflood Project by the injection of water into the Seven Rivers-Queen formation through an injection well to be drilled at an unorthodox location 75 feet from the North line and 2635 feet from the West line of Section 27, Township 24 South, Range 37 East, Langlie Mattix Pool, Lea County, New Mexico.
- CASE 3754: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing



Wednesday, April 24, 1968 Examiner Hearing

-2-

(Case 3754 continued)

non-standard gas proration units into one 280-acre unit comprising the SW/4, W/2 SE/4, and SE/4 SE/4 of Section 35, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its Stevens A-35 Wells Nos. 1 and 2 located in Units J and L, respectively, of said Section 35. Said Well No. 1 is presently dedicated to a 120-acre unit comprising the W/2 SE/4 and SE/4 SE/4 of said Section 35, and said Well No. 2 is presently dedicated to a 160-acre unit comprising the SW/4 of said Section 35.

CASE 3755: Application of Dugan Production Corporation for the creation for an oil pool and for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Shiprock-Dakota Oil Pool comprising the NE/4 of Section 14, Township 30 North, Range 18 West, San Juan County, New Mexico, and the establishment of special pool rules therefor providing for development on 2 1/2-acre spacing with a provision that each 40-acre tract be subject to a single Northwest New Mexico normal unit allowable.



# CONTINENTAL OIL COMPANY

P. O. Box 460  
HCBBS, New Mexico 88240

PRODUCTION DEPARTMENT  
HOBBS DIVISION  
L. P. THOMPSON  
Division Manager  
G. C. JAMIESON  
Assistant Division Manager

1001 NORTH TURNER  
TELEPHONE 393-4141

March 11, 1968

*Case 3754*

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

Attention of Mr. A. L. Porter, Jr.,  
Secretary-Director

Re: Application for 280-acre  
NSP Unit - Stevens A-35  
Lease - Lea County, New  
Mexico

Gentlemen:

Forwarded herewith in triplicate is our application for non-standard gas proration unit of 280 acres to be assigned jointly to Stevens A-35 Nos. 1 and 2 in the Jalmat Gas Pool. Please set this matter for hearing at the earliest examiner hearing.

Yours very truly,

LPT-JS  
cc: Mr. F. N. Woodruff  
El Paso Natural Gas Company  
El Paso, Texas

RLA JJB JWK  
Attach

69 MAR 18 AM 10 48

IN THE MATTER OF THE APPLICATION OF  
CONTINENTAL OIL COMPANY FOR APPROVAL  
OF A 280-ACRE NON-STANDARD GAS PRO-  
RATION UNIT IN THE JALMAT GAS POOL BY  
ENLARGING THE PRESENT UNIT ASSIGNED  
TO ITS STEVENS A-35 WELL NO. 1 TO  
INCLUDE THE ACREAGE ASSIGNED TO STEVENS  
A-35 NO. 2, SAID ENLARGED UNIT TO BE  
ASSIGNED JOINTLY TO SAID WELLS NOS.  
1 AND 2 LOCATED IN SECTION 35, TOWNSHIP  
23 SOUTH, RANGE 36 EAST, LEA COUNTY,  
NEW MEXICO; OR IN THE ALTERNATIVE, FOR  
THE ESTABLISHMENT OF ADMINISTRATIVE  
PROCEDURES FOR ALLOCATION OF ACREAGE  
TO THE SAID WELLS;

'69 MAR 18 AM 8 49

*Case 3754*

A P P L I C A T I O N

COMES NOW, Continental Oil Company and respect-  
fully petitions the Commission to approve a 280-acre non-  
standard gas proration unit in the Jalmat Gas Pool consist-  
ing of SW/4, W/2 SE/4 and SE/4 SE/4, Section 35, T23S, R37E,  
Lea County, New Mexico, by enlarging the proration unit of  
its Stevens A-35 Well No. 1 to include the acreage assigned  
to its Stevens A-35 Well No. 2, and to assign the enlarged  
unit jointly to said Wells Nos. 1 and 2; or in the alterna-  
tive, that administrative procedures be established for the  
allocation of said acreage to the said wells; and in support  
thereof would show:

1. Applicant is operator and co-owner of the  
Stevens A-35 Lease containing 280-acres  
consisting of SW/4, W/2 SE/4 and SE/4 SE/4  
Section 35, T23S, R36E, Lea County, New  
Mexico.
2. Applicant has heretofor drilled and completed  
in the Jalmat Gas Pool its Stevens A-35 Well  
No. 1 located 1980 feet from the south line  
and 1980 feet from the east line of said  
Section 35; and its Stevens A-35 Well No. 2  
located 1650 feet from the South line and  
990 feet from the west line of said Section  
35.

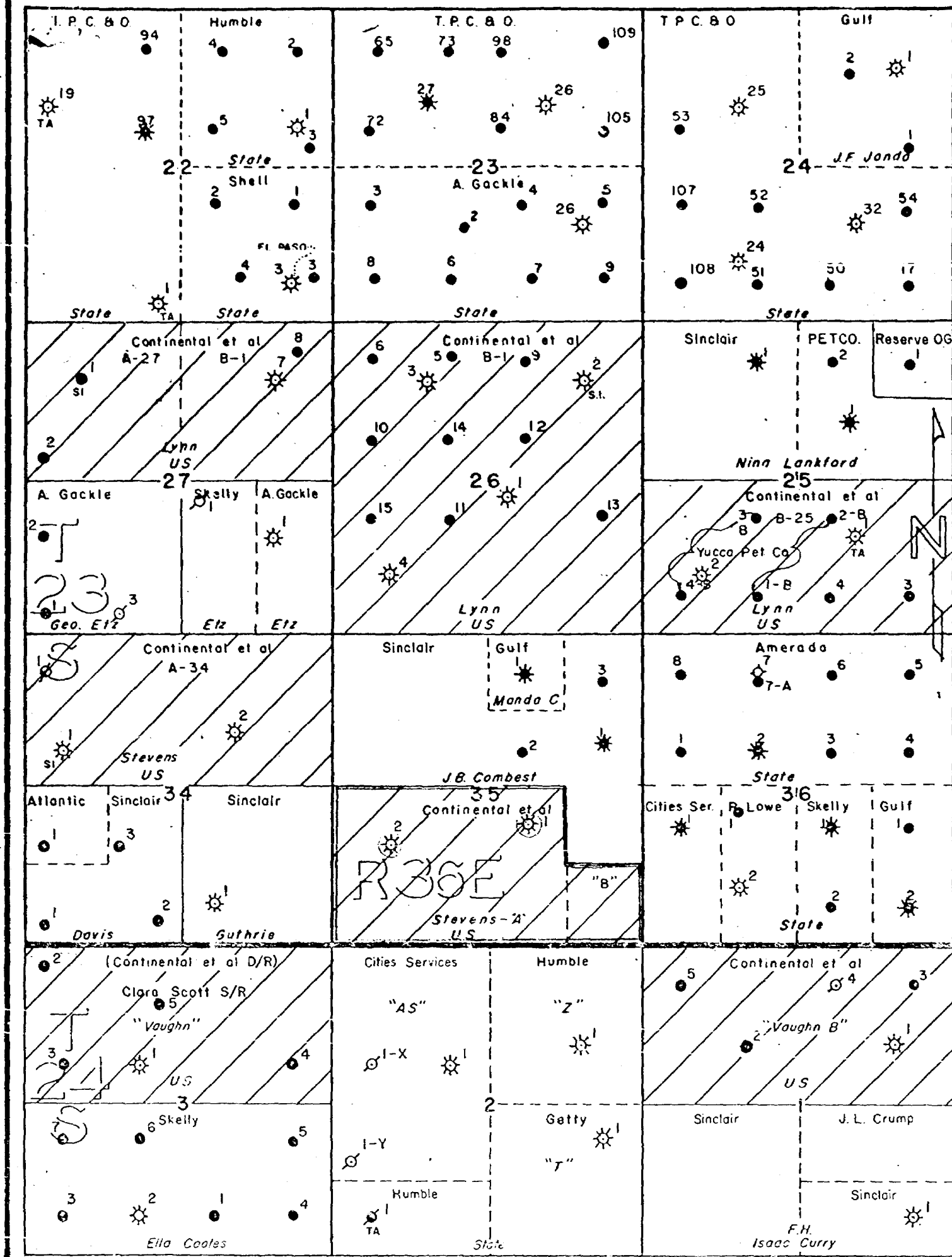
3. That its Stevens A-35 Well No. 2 has only recently become incapable of producing its assigned allowable and was re-classified as marginal on January 1, 1968.
4. That said Well No. 2 has been entered for the purpose of performing remedial work, the degree of success of which is presently in doubt.
5. That Stevens A-35 Well No. 1 presently has sufficient producing capacity to produce the allowable for the entire 280 acres but applicant desires to allocate acreage to Well No. 2 consistent with its ability to produce.
6. That, in order to avoid additional hearings as relative deliverability of the two wells changes, the acreage should either be assigned to the wells jointly or be re-allocated by administrative procedures.
7. That the granting of this application is in the interest of preventing waste and will not impair correlative rights.

WHEREFOR, Applicant respectfully prays that this matter be set for hearing before the Commission's duly appointed examiner and upon hearing, an order be entered allocating a 280-acre non-standard gas proration unit in the Jalmat Gas Pool jointly to the Stevens A-35 Wells Nos. 1 and 2 or, in the alternative, establishing administrative procedures for allocation of acreage between the two wells as described above.

Respectfully submitted,  
CONTINENTAL OIL COMPANY

LPT-JS

  
By: G. C. Jamieson



CONTINENTAL OIL COMPANY  
 PRODUCTION DEPARTMENT  
 HOBBS DISTRICT  
 NMFU LANGLEIE MATTIX POOL  
 Lea County, New Mexico

SCALE  
 0 1000 2000

6-22-3154

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
April 24, 1969  
EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil  
Company for a non-standard gas  
proration unit, Lea County,  
New Mexico.

Case 3754

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We'll call next Case 3754.

MR. HATCH: Case 3754. Application of Continental Oil Company for a nonstandard gas proration unit, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox Santa Fe, appearing on behalf of the Applicant. I have one witness, Mr. V.T. Lyon.

(Witness sworn)

(Whereupon, Applicant's Exhibits 1 through 8 marked for identification)

V.T. LYON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A V.T. Lyon.

Q By whom are you employed and in what position, Mr. Lyon?

A I'm employed by Continental Oil Company as Supervising Conservation Engineer in the Hobbs Division Office.

Q Have you testified before the Oil Conservation

Commission before and made your qualifications a matter of record?

A Yes, I have.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: They are.

Q What is proposed by Continental Oil Company in Case No. 3754?

A This is the application for Continental Oil Company for the consolidation of two existing nonstandard gas proration units into one nonstandard gas proration unit consisting of 280 acres described as the southwest quarter, the west half of the southeast quarter, southeast quarter of the southeast quarter, Section 35, Township 23 South, Range 36 East. This acreage we are requesting to be assigned jointly to two wells on the lease, the Stevens A-35, Wells Nos. 1 and 2.

Q Now, referring to what has been marked as Exhibit No. 1, would you identify that exhibit?

A Exhibit No. 1 is a plat showing the proposed gas proration unit which is outlined in red and shown as I just described. It shows also -- well I might mention that this is the same plat which we attached to



our application, but we have added additional information, the additional information being the outlines of existing approved gas proration units and the wells assigned to them. The proration units are outlined in green and the wells are circled in green. The two wells which we propose to -- to which this unit is to be dedicated are circled both in red and green. The units which are presently assigned to these wells are shown outlined in green, No. 2 has the southwest quarter of Section 35, No. 1 has the west half of the southeast quarter and the southeast quarter of the southeast quarter. No. 1 is located 1,980 feet from the south line, 1,980 feet from the east line of the section. No. 2 is located 990 feet from the west line and 1,650 feet from the south line of the section.

Q Now, according to the exhibit, there would be no acreage that is not dedicated to a well in the vicinity of this well, is that correct?

A That is correct.

Q The exhibit shows on the lease a letter "B", what is the significance of that?

A The letter "B" in the southeast quarter of the southeast quarter indicates that this is a portion of the

lease which was subdivided at an early date so that actually there are two leases involved in this proposed proration unit.

Q They came out of the same basic lease though, is that correct?

A Yes, sir.

Q Have you proposed to communitize the two leases --

A Yes, sir.

Q -- for forming this unit?

A We are initiating communitization proceedings.

Q Have you consulted with the U.S.G.S. in connection with this?

A Yes, I have.

Q These are all Federal leases, is that correct?

A Yes, sir.

Q Have they indicated any opposition to communitization?

A No, sir.

Q Now, in your opinion, is all of the acreage you propose to dedicate to these two wells as a single unit, productive of gas in the Jalmat pool?

A Yes, sir, the wells -- or the unit is completely surrounded by gas proration units, and of course, the consolidated unit consists of proration units which have

previously been approved by the Commission, I think unquestionably the acreage is productive of gas.

Q Now, referring to what has been marked as Exhibit No. 2, would you identify that exhibit?

A Exhibit No. 2 is a copy of a minimum contract test conducted by El Paso Natural Gas Company on Stevens A-35 No. 1. As shown on this test, it produced at a rate of 1,341 MCF per day, and showed a deliverability at 100 pounds of 1,475 MCF per day.

Q Now, is this rate sufficient to produce the allowable that would be assigned to a 280 acre unit?

A Yes, sir, the allowable in the Jalmat pool historically have run in the neighborhood of 400 MCF per day for 160 acre tract. The allowable to a 280 acre unit would be in the neighborhood of 700 MCF per day, and this well demonstrates that it can produce at double the rate for the acreage we are seeking to assign to the consolidated unit.

Q Now, referring to what has been marked as Exhibit No. 3, would you describe that exhibit?

A Exhibit No. 3 is a copy of a minimum contract test performed by El Paso Natural Gas Company on Stevens A-35 No. 2 in March of 1967. On this test the well

produced at a rate of 1,236 MCF per day and demonstrated a deliverability of 100 pounds of 1,104 MCF per day.

Q Again, does that indicate that this well would be able to produce the allowable to be assigned to a 280 acre unit?

A Yes, sir.

Q Referring to what has been marked Exhibit No. 4 would you identify that exhibit?

A Exhibit No. 4 is a minimum contract test performed by El Paso Natural Gas Company in September of 1967 on Stevens A-35 No. 2. On this test the well produced at a rate of 86 MCF per day and demonstrated a deliverability at 100 pounds of 113 MCF per day. You will note at the bottom of the form there is a notation, "This well will be retested as soon as possible." By comparing this exhibit with the previous exhibit, No. 3, there has been a considerable decline in deliverability.

Q To what do you account that decline?

A Well, at first we thought that there might be some problem as to the increase in back pressure. You will note that the casing pressure on Exhibit 4 is 141 pounds, whereas on Exhibit 3 the casing pressure was

49 pounds. It has been our experience that some wells in the Jalmat pool are extremely sensitive to the back pressure applied and consequently the well was retested.

Q This well was tested in September, you say it was retested?

A It was retested.

Q Referring to what has been marked as Exhibit No. 5, would you identify that?

A Exhibit No. 5 is a copy of a minimum contract test run by El Paso Natural Gas Company in October and running into November of 1967. This test shows that the well produced at a rate of 35 MCF per day and had a deliverability at 100 pounds of 37 MCF per day. You will note that, comparing this exhibit with Exhibit 4, that the back pressure has been reduced but the flow rate of the well is even lower.

Q Now, the Exhibits 3, 4, and 5 indicate that the tubing in the No. 2 well is closed, is that correct?

A That is correct. Actually, the casing tubing annulus in this well has been bridged for some time so that the production and pressure measurements, and so forth, have been conducted through the tubing for several years.

Q Would that have any effect on the results of these tests, in your opinion?

A No, it should not.

Q Now, referring to what has been marked as Exhibit No. 6, would you identify that exhibit?

A Exhibit No. 6 is a tabulation of the production beginning in July 1964 and continuing through the year 1967 on Stevens A-35 No. 2, you will note that the production from month to month varies a great deal, and this is not a reflection of the well's producing capacity. It is, instead, a reflection of El Paso Natural Gas's flow schedules. El Paso Natural uses the strong wells to fill in periods of high demand and these wells are produced heavily during high demand seasons and are shut in or severely curtailed during low demand seasons so that the lower deliverability wells can produce at the most favorable conditions.

Q Do you have any control over that manner of producing these wells under your contract?

A Very little.

Q I note that in 1965 there were six consecutive months, May through October, when the well was producing a very small amount. Do you have any comment about that?

A This is typical of the manner in which El Paso has produced this well and other strong wells in the area. There is also a period from April through September of 1966 when the production was practically nothing.

Q Now, has that had any effect on the assignment of allowable to this well and the ability of the well to produce it?

A No, it has no effect.

Q Has it resulted in a redistribution of allowables?

A No, but you will note that again in 1967 beginning in June the production from the well is considerably less and because of the earlier history that I have demonstrated, in 1966 and 1965, we were not concerned that the well's productivity or its production was reduced because this is typical of its producing history and it was not until we received the minimum contract test that we had any idea that the well was having difficulty. Now, I might point out also that at the end of the first balancing period of 1967 there was an extremely large redistribution of cancelled allowable and had it not been for the unusual size of this, this well would have entered the second balancing period in an overproduced status, but due to this unusually large redistribution of allowable, it went

into the balancing period about 5,500 MCF underproduced. At the end of the balancing period and evidently due to the fact that its production was considerably off the well was reclassified as marginal and accumulated allowable was cancelled in the amount of approximately 60,000,000 cubic feet.

Q Now, after the retest did you do any remedial work on the well?

A Well, as soon as we realized that the well was having difficulty we began to study the well and prepare the necessary forms to secure approval to work on the well; work on the well was begun in February of 1968.

Q Referring to what has been marked as Exhibit No. 7, would you identify that exhibit?

A Exhibit No. 7 is a diary of the remedial work beginning in February on February 3rd, 1968, continuing through February 29th, 1968. The well was killed, entered and cleaned out and it was found that there was considerable water in the well and when the rig was finally released it still had considerable water and the well was shut in for further study. Just during the past week we have entered the well again, have located a hole in the casing



at 690 feet and have run a packer and swabbed the well and it appears that the well is cleaning up and can be returned to production.

Q Will you take steps to repair the hole in the casing at 690 feet?

A Well, we are taking steps to isolate this fluid entry and I have not been advised exactly what their plans were for the well..

Q You haven't had a chance to study that situation as yet, is that correct?

A No, sir.

Q Now, referring to what has been marked as Exhibit No. 8, would you identify that exhibit?

A Exhibit No. 8 is a copy of the radioactivity log on the well. It shows the production casing set at about 2,882, which is just barely into the Tansill Formation. The well is completed open hole from that point to total depth at approximately 3,505, consequently it was quite an undertaking to attempt to establish the water entry in the well and it appeared that remedial work might be quite extensive since we've located the hole in the casing and this appears to be the point of water entry, this simplified the matter considerably.

Q Do you feel that Continental has had an adequate opportunity to produce the underproduction that accrued during that second balancing period in 1967?

A I do not.

Q Do you think that the underproduction could be restored in the event you are able to produce it?

A Yes, sir, we think that when No. 2 is returned to production that it will be able to make this up, but as I have tried to describe, it will be some time before this well is placed back on production, consequently, we would like to shift a part of this burden, all of it to begin with, to Well No. 1, which has adequate producing capacity so that this allowable can be restored.

Now, I have discussed this with the Gas Department of the Commission and have been assured that if the wells on this lease will overproduce to that extent that this allowable will be restored.

Q There is nothing to indicate that all of the reserves of the No. 2 Well have been produced, is there?

A No, sir, our studies indicate that it has considerable reserves remaining and we would like to have the opportunity to produce them.

Q What is the normal size unit in the Jalmat pool standard unit?

A Well, standard unit is 640 acres.

Q And you are asking to dedicate 280 acres?

A Yes, sir.

Q In effect, you want to produce the gas from either the No. 1 or the No. 2 Well, is that correct?

A That is correct.

Q Is there any precedent for dedicating a unit to two wells?

A Oh, yes, there are at least six such cases in the proration schedule at this time.

Q Is it your intention to do further remedial work on the No. 2 Well and have it produce its share of the allowable that's assigned to the unit?

A Yes, sir, it's our desire that No. 2 carry whatever share of the load of producing this allowable that it is able to do.

Q Now, in your opinion, will the granting of this application prevent waste and protect correlative rights?

A Yes, sir. The granting of this application will permit us to recover gas which is in place on the lease and if it is not permitted, then we feel that the lease will be subject to drainage from offset wells.

Q Were Exhibits 1 through 8 prepared by you or under your supervision?

A Exhibits 1, 6, 7 and 8 were prepared under my supervision, Exhibits 2, 3, 4, and 5 were prepared by El Paso Natural Gas Company and were copied under my supervision.

Q Exhibits 2, 3, 4, and 5 are records furnished to you by El Paso Natural Gas Company in the ordinary course of their operations, is that correct?

A That is correct.

MR. KELLAHIN: At this time I will offer in evidence Exhibits 1 through 8.

MR. NUTTER: Continental's Exhibits 1 through 8 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 8 were offered and admitted in evidence.)

MR. KELLAHIN: That's all I have on Direct Examination, Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lyon, in the course of the years, according to the tabulation on Exhibit No. 6, October has been frequently a month of low production, although in 1966

they did take 8,000 MCF from the well, but October was a typically low month in 1967, so if we disregard the fact that El Paso had sent you this test taken in September of 1967 which showed that the deliverability of the well was only 113, if we disregard that fact, you weren't aware of anything going wrong in October?

A That's right.

Q Because October previously had been a low month, but in every instance they've hit the well pretty good in November, haven't they?

A Right.

Q But they only took 540 so in November you were actually aware of the problems as far as the well was concerned?

A Right, but you must remember that the statements for November's production don't arrive at our office until about December 15th.

Q Okay. So by the middle of December you knew that November was a bad month as far as takes from the well are concerned, that there was something wrong. I'm assuming that you hadn't gotten your test?

A Right.

Q Yet the workover wasn't commenced until February?

A That's true.

Q And in the meantime, the well had come into a balancing period and had a lot of underage cancelled, is that correct?

A This is true.

Q You mentioned 5,500 MCF underproduced, that was at the end of the first period in 1967?

A Yes, sir, no, that was at the beginning of the second period.

Q At the end of the first period or in other words, it was July the 1st.

A Yes, before the redistribution it was overproduced but because of the large redistribution which took place at the end of the one or the beginning of the other balancing period, then it was underproduced at the beginning of the second one.

Q It was overproduced on 7/1/67, then with the redistribution it suddenly became 5,500 MCF underproduced?

A Yes, sir.

Q Now, you say they cancelled 60,000.000 at the end of 1967?

A Just under that.

Q Which was the amount of underproduction that it took into the period, plus the underproduction that it accrued during that period?

A Right.

Q And you feel that we should carry this 60,000,000 on into the future and allow it to be produced from this well in the event you can make a well out of this or if not, transfer it to the unit to be produced by the other well?

A I am confident that No. 1 by itself can produce this 60,000,000 cubic feet before the end of this balancing period in addition to its current allowable and as No. 2 begins to pick up strength, then it, of course, can help pick up the load also, but I do feel that we should have this balancing period to make up this underproduction.

Q Well, admittedly, we do have a mechanical problem with this well, is that correct?

A Right.

Q So in effect, what you are asking us to do is suspend the cancellation of the underproduction because of the mechanical problem in the well.

A Well, this is what I asked Mr. Utz to do, but

he assured me that if we would overproduce the well in the amount of the allowable that was cancelled that that allowable would be restored. Had he not assured me of this, I would have included in the application a request for restoration of the allowable.

Q You don't have that assurance in writing, do you?

A No, I've always considered Mr. Utz to be an honorable man.

Q And the application for this hearing was first filed by Continental Oil Company on March the 11, 1968, is that correct?

A Right.

Q When did you receive the tests from El Paso, Mr. Lyon, is it indicated?

A I'm sorry, I can't tell you that because they didn't stamp it in when we received it. I was curious about that myself as I was preparing these exhibits, but I have not been able to determine what date those were received.

Q But the test was taken in September of 1967, the first test that indicated the deliverability at 100 pounds of 113 MCF. What is the normal time that it takes you to receive a test from El Paso Natural after



the test has been completed?

A It has been some time since I have reviewed these personally. They do not come to my attention, but I would guess anywhere from two to four weeks.

Q So you feel, in all probability, you did receive this test by October 15th at the late ?

A Yes.

MR. NUTTER: I believe that's all, Mr. Lyon.

Does anyone have any further questions of Mr. Lyon?

He may be excused.

(Witness excused)

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

MR. KELLAHIN: No, that's all, Mr. Nutter.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3754? We'll take the case under advisement.

STATE OF NEW MEXICO    )  
                                   ) ss  
 COUNTY OF BERNALILLO    )

I, KAY EMBREE, 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 30th day of April, 1968.

Kay Embree  
 NOTARY PUBLIC

My Commission Expires:

November 19, 1971

I do hereby certify that the foregoing is a true and correct copy of the proceedings in the hearing of Case No. 8754 held by me on 4/24, 1968.

Heater, Director  
 New Mexico Oil Conservation Commission



MINIMUM CONTRACT TEST

Form 15-JOR (Rev. 3-59)

E73

Date of Test

9-1/9-8-67

Company Continental Oil Company					Lease Stevens A-35 No. 1				
Unit J	Sec. 35	Twp. 23	Rge. 36	County Lea	Pool Jalnat				
Type Well Single		Producing Thru		Tubing X	Casing	Top of Pay 2896	Bar. Pressure 13.2	Compressor None	
Date of Previous Minimum Contract Test 3-10-67				n <sub>1</sub> of Previous Back Pressure Test .966		Meter Sta. No. 60-184	Acre Factor .75		

FLOW DATA					TUBING	CASING	DURATION OF FLOW HOURS
Prover Line Size	Choke Orifice Size	Static Pressure Psig.	Diff. h <sub>w</sub>	Temp. °F	Pressure Psig	Pressure Psig	
		166			174	218	24

VOLUME CALCULATIONS

Gravity = .658

Coefficient (24 - Hour)	Meter Extension √hwpw	Pressure Psia.	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compressor Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 Psia.
		VOLUME INTEGRATED BY MAIN OFFICE				1,341

$$D_t = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right]^{N_T}$$

BE THE EXAMINER NOTTER

SHUT-IN DATA

DURATION	TUBING	CASING
24 Hour	473	473
48 Hour	482	482
72 Hour	487	487

	Pd @ 113.2 Psia.	Pd @ 613.2 Psia.	Pd @ 863.2 Psia.
P <sub>c</sub> <sup>2</sup> =	250.2		
P <sub>d</sub> <sup>2</sup> =	12.8		
P <sub>t</sub> <sup>2</sup> =	35.0		

- $n_t$  = Slope of Wellhead Deliverability Curve ( $P_c^2 - P_t^2$  vs  $Q$ )  
 $Q$  = Actual flow @ end of Flow Period at Wellhead Press.,  $P_t$ .  
 $P_c$  = Maximum Shut-in Pressure Observed in a 72 Hour Period  
 $P_t$  = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa), Psia  
 $P_d$  = Deliverability Pressure  
 $D_t$  = Wellhead Deliverability @ Deliverability Pressure ( $P_d$ ), MCF/Day

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = 1.103 = B$$

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = \quad = B$$

113.2 Psia	Log B .042576	X	$n_t$ .966	=	.041128	Antilog = $B^{n_t}$ 1.100
	Q 1,341	X	$B^{n_t}$ 1.100	=	$D_t$ 1,475	

613.2 Psia	Log B	X	$n_t$	=		Antilog = $B^{n_t}$
863.2 Psia	Q	X	$B^{n_t}$	=	$D_t$	

Witnessed By (Name) Ton E. Fay	Tested By Don Read
Company Continental Oil Company	Calculated By Don Read

EXHIBIT NO. 2

# Continental Oil Company MINIMUM CONTRACT TEST

Form 15-30R (Rev. 3-59)

Company  
Continental Oil Company

Unit L Sec. 35 Twp. 23 Rge. 36 County Lea

Type Well Single Producing Thru

Date of Previous Minimum Contract Test 12-6-57

Top of Pay 3015 Bar. Pressure 13.2 Meter Sta. No. 60-808

Pressure Psig 49

Pressure Psig 49

Pressure Psig 49

Pressure Psig 49

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Pressure Psig 49

EGS

Date of Test

3-6/3-10-67

Lease Stevens A-35 No. 2

Pool Jalmat

Top of Pay 3015

Bar. Pressure 13.2

Meter Sta. No. 60-808

Pressure Psig 49

Pressure Psig 49

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Compressor None

Acce Factor 1.00

Acce Factor 1.00

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BEFORE EXAMINER NUTTER

$$D_t = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right]^{n_t}$$

Pd @	613.2 Psia.	863.2 Psia.
Pc <sup>2</sup> =	87.1	
Pd <sup>2</sup> =	12.8	
Pt <sup>2</sup> =	3.9	

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = .8930 = B$$

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = = B$$

$$113.2 \text{ Psia} \times \frac{1.000}{.8930} = D_t = 1,10^4$$

$$613.2 \text{ Psia} \times \frac{1.000}{.8930} = D_t$$

DURATION	TUBING	CASING
24 Hour	Closed	260
48 Hour		275
72 Hour		282

- $n_t$  = Slope of Wellhead Deliverability Curve ( $P_c^2 - P_t^2$  vs  $Q$ )
- $Q$  = Actual flow @ end of Flow Period at Wellhead Press.,  $P_t$
- $P_c$  = Maximum Shut-in Pressure Observed in a 72 hour Period
- $P_t$  = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa),  $P_{sia}$
- $P_d$  = Deliverability Pressure
- $D_t$  = Wellhead Deliverability @ Deliverability Pressure ( $P_d$ ), MCF/Day

@ 100 psw

$$\text{Antilog} = B^{n_t} = .8930$$

$$\text{Antilog} = B^{n_t}$$

Witnessed By (Name)  
Tom Fay

Company  
Continental Oil Company

Tested By  
J. B. Murray

Calculated By  
J. B. Murray

EXHIBIT 3

# MINIMUM CONTRACT TEST

Form 15-30R (Rev. 3-59)

Company Continental Oil Company					Lease Stevens A-35 No. 2	Date of Test 9-19-67
Unit L	Sec. 35	Twp. 23	Rge. 36	County Lea	Pool Jalnat	
Type Well Single		Producing Thru	Tubing	Casing X	Top of Pay 3015	Bar. Pressure 13.2
Date of Previous Minimum Contract Test 3-10-67		n <sub>g</sub> of Previous Back Pressure Test 1.000			Meter Sta. No. 60-808	Compressor None
					Acre Factor 1.00	

FLOW DATA					TUBING	CASING	DURATION OF FLOW HOURS
Prover Line Size	x	Choke Orifice Size	Static Pressure Psig.	Diff. h <sub>w</sub>	Temp. °F	Pressure Psig	Pressure Psig
			140			Valve Closed	141
							24

## VOLUME CALCULATIONS

Gravity = .665

Coefficient (24 - Hour)	Meter Extension ✓ hwpw	Pressure Psia.	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compressor Factor F <sub>cp</sub>	Rate of Flow Q-MCFPD @ 15.025 Psia.
						86

VOLUME INTEGRATED BY MAIN OFFICE

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 4

CASE NO. 2754

$$D_t = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right]^{n_t}$$

	Pd @ 113.2 Psia.	Pd @ 613.2 Psia.	Pd @ 863.2 Psia.
P <sub>c</sub> <sup>2</sup> =	59.1		
P <sub>d</sub> <sup>2</sup> =	12.8		
P <sub>t</sub> <sup>2</sup> =	23.8		

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = \frac{1.312}{1.312} = B$$

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = \frac{1.312}{1.312} = B$$

## SHUT-IN DATA

DURATION	TUBING	CASING
24 Hour		222
48 Hour		227
72 Hour		230

- n<sub>t</sub> = Slope of Wellhead Deliverability Curve (P<sub>c</sub><sup>2</sup> - P<sub>t</sub><sup>2</sup> vs Q)
- Q = Actual flow @ end of Flow Period at Wellhead Press., P<sub>t</sub>
- P<sub>c</sub> = Maximum Shut-in Pressure Observed in a 72 Hour Period
- P<sub>t</sub> = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa), Psia
- P<sub>d</sub> = Deliverability Pressure
- D<sub>t</sub> = Wellhead Deliverability @ Deliverability Pressure (P<sub>d</sub>), MCF/Day

113.2 Psia	Log B	X	n <sub>t</sub> 1.000	=		Antilog = B <sup>n<sub>t</sub></sup> 1.312
	Q	X	B <sup>n<sub>t</sub></sup> 1.312	=	D <sub>t</sub> 113	
613.2 Psia	Log B	X	n <sub>t</sub>	=		Antilog = B <sup>n<sub>t</sub></sup>
863.2 Psia	Q	X	B <sup>n<sub>t</sub></sup>	=	D <sub>t</sub>	

NOTE: THIS WELL WILL BE RETESTED AS SOON AS POSSIBLE.

Witnessed By (Name) Tom E. Fay	Tested By Don Read
Company Continental Oil Company	Calculated By Don Read

EXHIBIT 4

El Paso Natural Gas Company  
MINIMUM CONTRACT TEST

Form 15-30R (Rev. 3-59)

EGS

Date of Test

10-27/11-3-67

Company Continental Oil Company					Lease Stevens A 35 No. 2			
Unit L	Sec. 35	Twp. 23	Rge. 36	County Lea	Pool Jalmat			
Type Well Single		Producing Thru		Tubing	Casing X	Ten of Pay 3015	Bar. Pressure 13.2	Compressor None
Date of Previous Minimum Contract Test 9-9-67				n <sub>t</sub> of Previous Back Pressure Test 1.000		Meter Sta. No. 60-808		Acre Factor 1.00

FLOW DATA					TUBING	CASING	DURATION OF FLOW HOURS
Prover Line Size	x	Choke Orifice Size	Static Pressure Psig.	Diff. h <sub>w</sub>	Temp. °F	Pressure Psig	Pressure Psig
			109			Valve Closed	110
							24

VOLUME CALCULATIONS

Gravity = .660

Coefficient (24 - Hour)	Meter Extension ✓ h <sub>w</sub> p <sub>w</sub>	Pressure Psia.	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compressor Factor F <sub>p</sub>	Rate of Flow Q-MCFPD @ 15.025 Psia.
						35

VOLUME INTEGRATED BY MAIN OFFICE

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 5

DATE NO. 3754

$$D_t = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right]^{n_t}$$

	Pd @ 113.2 Psia.	Pd @ 613.2 Psia.	Pd @ 863.2 Psia.
P <sub>c</sub> <sup>2</sup> =	55.8		
P <sub>d</sub> <sup>2</sup> =	12.8		
P <sub>t</sub> <sup>2</sup> =	15.2		

SHUT-IN DATA

DURATION	TUBING	CASING
24 Hour		216
48 Hour		220
72 Hour		223

- n<sub>t</sub> = Slope of Wellhead Deliverability Curve (P<sub>c</sub><sup>2</sup> - P<sub>t</sub><sup>2</sup> vs Q)
- Q = Actual flow @ end of Flow Period at Wellhead Press., P<sub>t</sub>
- P<sub>c</sub> = Maximum Shut-in Pressure Observed in a 72 Hour Period
- P<sub>t</sub> = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa), Psia
- P<sub>d</sub> = Deliverability Pressure
- D<sub>t</sub> = Wellhead Deliverability = Deliverability Pressure (P<sub>d</sub>), MCF/Day

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = 1.059 = B$$

$$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right] = \quad = B$$

113.2 Psia	Log B	X	n <sub>t</sub> 1.000	=		Antilog = B <sup>n<sub>t</sub></sup>
	Q 35	X	B <sup>n<sub>t</sub></sup> 1.059	=	D <sub>t</sub> 37	

613.2 Psia	Log B	X	n <sub>t</sub>	=		Antilog = B <sup>n<sub>t</sub></sup>
863.2 Psia	Q	X	B <sup>n<sub>t</sub></sup>	=	D <sub>t</sub>	

Witnessed By (Name) Tom Fay	Tested By Don Read
Company Continental Oil Company	Calculated By Don Read

EXHIBIT 5

TABULATION OF PRODUCTION  
Stevens A-35 No. 2

1964 July 20,516  
August 8,783  
September 1,886  
October -  
November 20,638 -  
December 32,409 -

1965 January 760 -  
February 15,868 -  
March 31,381 -  
April 24,948 -  
May 1,107  
June 3,509

July -  
August -  
September 5,253  
October -  
November 21,167 -  
December 30,424 -

1966 January 42,364 -  
February 30,902 -  
March 14,122 -  
April -  
May -  
June 5,238

July -  
August 3,607  
September 1,543  
October 8,296  
November 17,001 -  
December 18,598 -

1967 January 33,921 -  
February 8,640 -  
March 7,378 -  
April 18,057  
May 11,703  
June 2,494

July 2,097  
August 1,446  
September 1,625  
October 1,075  
November 540 -  
December 1,117 -

Jan  
Feb  
Mar  
April

*over prod 7/1/67  
5500 under prod*

*cancelled  
60 000 mcr*

BEFORE EXAMINER NUTTER

CLASSIFICATION REGION

EXHIBIT NO. 6

CASE NO. 2754



DIARY OF REMEDIAL WORK

STEVENS A-35 WELL NO. 2

Feb. 3 Rigged up service unit, installed blow-out preventers.

Feb. 4 Attempted to pull tubing, found tubing stuck, cut off tubing at 2706' and pulled.

Feb. 5 Ran overshot and jars and began jarring on tubing.

Feb. 6 Failed to jar tubing loose, released overshot and started out of hole. Well came in. Killed well and finished pulling tubing.

Feb. 7 Ran overshot, jars, failed to jar fish loose. Released overshot and pulled out of hole.

Feb. 8 Rig shut down.

Feb. 9 Ran wash pipe and washed over fish 2706-3227'. Pulled out of hole.

Feb. 10 Ran overshot and recovered 523' of fish.

Feb. 11 Re-ran wash pipe and overshot, washed out fill from 3077-3442. Pulled out of hole with 181' of fish (tubing).

Feb. 12 Ran 4 3/4" bit, cleaned out to 3507'.

Feb. 13 Pulled bit, ran 2 3/8" tubing to 3455'.

Feb. 14 Swabbed 109 barrels of water in 10 hours.

Feb. 15 Tubing and casing pressure - 300 pounds. 1800' fluid in hole. Swabbed 37 barrels water in 9 hours.

Feb. 16-20 No report.

Feb. 21 Flowed 100 MCF gas into 100 pound sales line.

Feb. 23 Shut in for pressure buildup. Fluid level 1300' from surface.

Feb. 24, 25, 26 Swabbed 315 barrels water in three days, 600' fluid in tubing.

Feb. 29 1000' fluid in tubing. Swabbed tubing dry

*reentered last week  
gown &  
Hole in Aug  
@ 690*

BEFORE EXAMINATION	
OIL	2
CASE NO.	

EXHIBIT NO. 7

5 1/2"

2900

3000

3100

3200

3300

3400

3500

(Tentative)

Top Yates

3261

3015

+346

PHONE EXAMINER NUMBER

EXHIBIT NO. 2

DATE 3-27-52

EXHIBIT NO. 8

R.D. 3905'