

CASE 2842: Application of COMPASS  
EXPLORATION for amendment of ORDER  
NO. R-2462, Rio Arriba County, N.M.

2001-10-00

2842

High, Transcript,  
C. B. H. Co.

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

# WESTERN UNION TELEGRAM

W. F. MARSHALL, PRESIDENT

SYMBOLS

DL = Day Letter  
NL = Night Letter  
LT = International Letter Telegram

1201 (4-00)

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NEW MEXICO OIL CONSERVATION COMMISSION=  
STATE LAND OFFICE BLDG SANTA FE NMEX=

ATTN MR A L PORTER JR SECRETARY & MEMBER

EL PASO NATURAL GAS COMPANY CONCURS IN CASE  
NO. 2842 AND URGES THAT APPLICATION OF COMPASS  
EXPLORATION INC FOR 320 ACRE GAS WELL SPACING AND AN  
INCREASE IN MAXIMUM ALLOWABLE FOR EACH SPACING UNIT  
FROM 500 TO 1000 MCF PER DAY BE GRANTED=

GARRETT C WHITWORTH ATTORNEY EL PASO NATURAL  
GAS CO=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

600 2842  
MAIN OFFICE 600

COMPASS EXPLORATION, INC.

101 UNIVERSITY BOULEVARD

DENVER 6, COLORADO

1963 MAY 27 AM 6:23

May 23, 1963

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

Re: Application for an  
Examiner Hearing concerning  
Spacing and Allowable of  
the Largo Gallup Gas Pool,  
Rio Arriba County, New Mexico

Gentlemen:

Compass Exploration, Inc., of 101 University Boulevard, Denver 6, Colorado, requests a hearing before an examiner of the New Mexico Oil Conservation Commission in Santa Fe, New Mexico, for the following purposes which would amend the Commission's Order No. R-2462 concerning the Largo Gallup Gas Pool:

1. Change of spacing from 160 acres to 320 acres.
2. Change of allowable from each spacing unit from 500 MCF per day to 1000 MCF per day.

The following is a list of parties interested in this application:

El Paso Natural Gas Company  
Post Office Post 990  
Farmington, New Mexico

Caulkins Oil Company  
1130 First National Building  
Denver 2, Colorado

El Paso Natural Gas Products Company  
Post Office Box 1560  
Farmington, New Mexico

DOCKET MAILED

Date 6/14/63

State of New Mexico  
Oil Conservation Commission  
May 23, 1963

Page 2

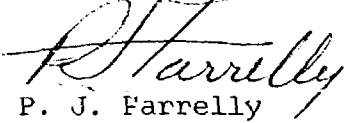
National Cooperative Refinery Association  
612 Patterson Building  
Denver 2, Colorado

International Oil & Gas Corporation  
825 Petroleum Club Building  
Denver, Colorado

Consolidated Oil and Gas Corporation  
4150 East Mexico Avenue - Suite 200  
Denver 22, Colorado

Respectfully submitted,

COMPASS EXPLORATION, INC.



P. J. Farrelly  
Manager, Exploration  
and Production

PJF/jm

No. 18-63

SUPPLEMENTAL DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 26, 1963

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

The following case: will be heard before Daniel S. Nutter, Examiner, or  
Elvis A. Utz, as alternate examiner:

CASE 2847:

Application of Neil H. Wills for certain unorthodox oil  
well locations, Eddy County, New Mexico. Applicant, in  
the above-styled cause, seeks approval of the non-standard  
location for several oil producing wells in his Russell  
Pool Waterflood Project, Russell Pool, Eddy County, New  
Mexico.

No. 18-63

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 26, 1963

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, as Alternate Examiner:

CASE 2821: (Continued from June 5, 1963 examiner hearing)

Application of D. W. Falls, Inc., for an extension of Order No. R-2213, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the extension of Order No. R-2213, which order assigned a temporary deliverability for allowable purposes to applicant's Federal Well No. 2-11, located in Unit O of Section 11, Township 28 North, Range 13 West, Basin-Dakota Gas Pool, San Juan County, New Mexico.

CASE 2833: Application of Tenneco Oil Company for approval of a unit agreement, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Central Cha Cha Unit Area comprising 674.05 acres, more or less, of Federal land located in Sections 30 and 31, Township 29 North, Range 13 West, San Juan County, New Mexico.

CASE 2834: Application of Tom Brown Drilling Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Runyan Ranch Unit Area comprising 10,890.12 acres of State and Federal lands in Township 19 South, Range 21 East, Eddy County, New Mexico.

CASE 2835: Application of Jake L. Hamon for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Southeast Bell Lake Unit Area comprising 9,597.09 acres of State, Federal and Fee lands in Townships 24 and 25 South, Ranges 34 and 35 East, Lea County, New Mexico.

CASE 2836: Application of Union Oil Company of California for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West McDonald Unit Area comprising 2,320 acres of State and Fee lands in Township 14 South, Range 35 East, Lea County, New Mexico.

CASE 2837: Application of Continental Oil Company for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Eastcap Queen Pool Unit Area

comprised 1480 acres of State and Fee lands, located in Township 14 South, Range 31 East, Chaves County, New Mexico.

- CASE 2838: Application of Continental Oil Company for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation, Caprock Queen Pool, through 17 wells located in Sections 22, 23, 27, 34, and 35, Township 14 South, Range 31 East, Chaves County, New Mexico.
- CASE 2839: Application of Amerada Petroleum Corporation for a multiple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an amendment of Order No. R-1750-A to permit the multiple completion (tubingless), of its Wimberley Well No. 13, located in Unit M of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, to permit the production of gas from the Langlie Mattix Pool, the production of oil from the Justis-Blinbry Oil Pool, and the disposal of salt water into the San Andres formation through parallel strings of casing cemented in a common well bore.
- CASE 2840: Application of Amerada Petroleum Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 120-acre non-standard gas proration unit comprising the S/2 NE/4 and NW/4 SE/4 of Section 19, Township 21 South, Range 37 East, Blinbry Gas Pool, Lea County, New Mexico, to be dedicated to its L. G. Warlick "A" Well No. 2 located in Unit J of said Section 19.
- CASE 2841: Application of Shell Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to drill its Middleton Federal Well No. B-1 at an unorthodox location 660 feet from the North and West lines of Section 31, Township 19 South, Range 32 East, Lusk-Morrow Gas Pool, Lea County, New Mexico.
- CASE 2842: Application of Compass Exploration, Inc. for an amendment of Commission Order No. R-2462, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an amendment of Order No. R-2462 concerning the Largo Gallup Gas Pool to provide 320-acre gas well spacing and an increase in the maximum allowable for each spacing unit from 500 to 1,000 MCF per day.



- CASE 2843: Application of Gulf Oil Corporation for a special gas well test, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce and flare approximately 3000 MCF of gas per day for a period of not less than 6 nor more than 9 days from its Hackberry Hills Unit Well No. 1, located in Unit O of Section 1, Township 22 South, Range 25 East, Eddy County, New Mexico, to determine if the gas reserves in place justify the expense of a pipeline to the nearest market outlet.
- CASE 2844: Application of Sinclair Oil & Gas Company for the creation of the Teas Pennsylvanian Gas Pool and for special temporary pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian Gas Pool for its Mahaffey-Federal (ARC) Well No. 1, located in Unit C of Section 14, Township 20 South, Range 33 East, Lea County, New Mexico, and for the establishment of temporary pool rules therefor, including a provision for 640 acre spacing units.
- CASE 2845: Application of Sinclair Oil & Gas Company for an exception to Order No. R-1670, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order permitting its Barber Gas Unit Well No. 1, located in Unit E of Section 8, Township 20 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to produce 600 MCF of gas per month in exception to the shut-in provisions of Rule 15(A) of Order No. R-1670, said gas to be utilized in the oil well gas-lift system on applicant's B. J. Barber Lease.
- CASE 2846: Application of Ralph Lowe to create a new pool for Upper Pennsylvanian gas production, and for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for Upper Pennsylvanian Gas production in Section 21, Township 21 South, Range 24 East, and the establishment of temporary pool rules therefor, including a provision for 640-acre spacing and a provision restricting well locations.

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
C. E. JOHNNY WALKER  
MEMBER

P. O. BOX 871  
SANTA FE

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

August 21, 1963

Mr. Ted Stockmar  
Holmes, Roberts, More, Owen and Stockmar  
Attorneys at Law  
1700 Broadway - 2112 Tower Building  
Denver 2, Colorado

Re: Case No. 2842  
Order No. R-2462-A  
Applicant:  
Compass Exploration, Inc.

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

ix/

Carbon copy of order also sent to:

Hobbs OCC \_\_\_\_\_

Artesia OCC \_\_\_\_\_

Astac OCC X

OTHER Mr. Booker Kelly  
Box 707, Santa Fe, N. Mex.

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

*State of New Mexico*  
**Oil Conservation Commission**



LAND COMMISSIONER  
E. S. JOHNNY WALKER  
MEMBER

P. O. BOX 571  
SANTA FE

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

August 21, 1963

Mr. Booker Kelly  
Gilbert, White & Gilbert  
Box 787  
Santa Fe, New Mexico

Re: Case No. 2842  
Order No. B-2462-A  
Applicant:  
Compass Exploration

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

ix/

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC       

Astec OCC X

OTHER

DRAFT

DSN/esr

August 19, 1963

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. 2842

Order No. R-2462-17

APPLICATION OF COMPASS EXPLORATION, INC.,  
FOR AN AMENDMENT OF COMMISSION ORDER  
NO. R-2462, RIO ARriba COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
June 26, 1963, 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 \_\_\_\_\_ day of August, 1963, 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 by Order No. R-2462 entered by the Commission on  
April 5, 1963, in Case No. 2761, the Commission created and desig-  
nated the Largo-Gallup Gas Pool comprising the following-described  
area:

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM  
Section 3: S/2  
Section 4: All

(3) That in said Order No. R-2462, the Commission found,  
"That in view of the history of the Gallup formation there is a  
reasonable probability that gas production from the Gallup forma-  
tion in Sections 3 and 4, Township 26 North, Range 7 West, NMPM,  
Rio Arriba County, New Mexico, is originating from a gas cap

overlying an undesignated Gallup oil pool; that withdrawals from the gas pool created by this order should therefore be restricted in order to prevent undue dissipation of gas which may be the drive mechanism for an oil pool and in order to assure the protection of correlative rights."

(4) That by Order No. R-2462, the Commission established 160-acre units for gas wells in said Largo-Gallup Gas Pool and established 500 MCF of gas per day as the maximum amount of gas which could be produced from any gas well in said pool.

(5) That the applicant in this case, Compass Exploration, Inc., seeks an amendment to said Order No. 2462 to provide 320-acre gas well spacing in said pool and an increase in the maximum daily rate of gas production from 500 MCF per day to 1000 MCF per day per 320-acre unit.

(6) That effective September 1, 1963, special rules and regulations establishing 320-acre gas spacing units should be promulgated for the subject pool in order to prevent the possibility of economic loss resulting from the drilling of unnecessary wells.

(7) That withdrawals from the subject pool should continue to be restricted in order to prevent ~~undue~~ *waste ~~and~~ resulting from the* dissipation of gas which may be the drive mechanism for an oil pool, and in order to assure the protection of correlative rights; daily withdrawals from any well to which 320 acres is dedicated should not exceed 1000 MCF of gas per day.

(8) That this case should be reopened upon further development of the <sup>Gallup</sup> formation in this area in order to determine whether the pool should remain classified as a gas pool or be reclassified as an oil pool.

~~(9)~~

*[Handwritten signature and initials in bottom left corner]*

IT IS THEREFORE ORDERED:

(1) That effective September 1, 1963, Paragraph (3) of Order No. R-2462 is hereby amended to read in its entirety as follows:

- (3) (a) ~~That~~ a standard gas unit in the Largo-Gallup Gas Pool shall comprise 320 acres, being the N/2, S/2, E/2, or W/2 of a single governmental section.
- (b) That the maximum daily gas production from a standard 320-acre spacing unit in the Largo-Gallup Gas Pool shall not exceed 1000 MCF of gas per day.
- (c) That any unit comprising other than 320-acres shall be permitted a maximum daily gas production obtained by multiplying 1000 MCF by a fraction, the numerator of which shall be the acreage assigned to the well and the denominator of which shall be 320.

(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 herein-above designated.

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. 2842  
Order No. R-2462-A

APPLICATION OF COMPASS EXPLORATION, INC.,  
FOR AN AMENDMENT OF COMMISSION ORDER  
NO. R-2462, RIO ARriba COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 26, 1963, 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 21<sup>st</sup> day of August, 1963, 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 by Order No. R-2462 entered by the Commission on April 5, 1963, in Case No. 2761, the Commission created and designated the Largo-Gallup Gas Pool comprising the following-described area:

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPH  
Section 3: S/2  
Section 4: All

(3) That in said Order No. R-2462, the Commission found, "That in view of the history of the Gallup formation there is a reasonable probability that gas production from the Gallup formation in sections 3 and 4, Township 26 North, Range 7 West, NMPH, Rio Arriba County, New Mexico, is originating from a gas cap overlying an undesignated Gallup oil pool; that withdrawals from the gas pool created by this order should therefore be restricted in order to prevent undue dissipation of gas which may be the

drive mechanism for an oil pool and in order to assure the protection of correlative rights."

(4) That by Order No. R-2462, the Commission established 160-acre units for gas wells in said Largo-Gallup Gas Pool and established 500 MCF of gas per day as the maximum amount of gas which could be produced from any gas well in said pool.

(5) That the applicant in this case, Compass Exploration, Inc., seeks an amendment to said Order No. R-2462 to provide 320-acre gas well spacing in said pool and an increase in the maximum daily rate of gas production from 500 MCF per day to 1000 MCF per day per 320-acre unit.

(6) That effective September 1, 1963, special rules and regulations establishing 320-acre gas spacing units should be promulgated for the subject pool in order to prevent the possibility of economic loss resulting from the drilling of unnecessary wells.

(7) That withdrawals from the subject pool should continue to be restricted in order to prevent waste resulting from the undue dissipation of gas which may be the drive mechanism for an oil pool, and in order to assure the protection of correlative rights; daily withdrawals from any well to which 320 acres is dedicated should not exceed 1000 MCF of gas per day.

(8) That this case should be reopened upon further development of the Gallup formation in this area in order to determine whether the pool should remain classified as a gas pool or be reclassified as an oil pool.

IT IS THEREFORE ORDERED:

(1) That effective September 1, 1963, Paragraph (3) of Order No. R-2462 is hereby amended to read in its entirety as follows:

- (3) (a) That a standard gas unit in the Largo-Gallup Gas Pool shall comprise 320 acres, being the N/2, S/2, E/2, or W/2 of a single governmental section.
- (b) That the maximum daily gas production from a standard 320-acre spacing unit in the Largo-Gallup Gas Pool shall not exceed 1000 MCF of gas per day.
- (c) That any unit comprising other than 320-acres shall be permitted a maximum daily gas production obtained by multiplying



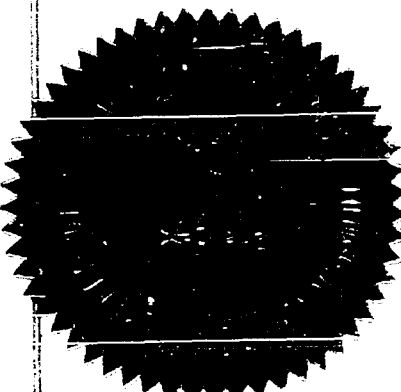
-3-  
CASE No. 2842  
Order No. R-2462-A

1000 MCF by a fraction, the numerator of which shall be the acreage assigned to the well and the denominator of which shall be 320.

(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

*E. S. Walker*  
E. S. WALKER, Member

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

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FAIRMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 245-6691

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
June 26, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Compass Exploration,  
Inc. for an amendment of Commission  
Order No. R-2462, Rio Arriba County,  
New Mexico. Applicant, in the above-  
styled cause, seeks an amendment of  
Order No. R-2462 concerning the Largo  
Gallup Gas Pool to provide 320-acre  
gas well spacing and an increase in  
the maximum allowable for each spacing  
unit from 500 to 1,000 MCF per day.

Case 2842

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2842.

MR. DURRETT: Application of Compass Exploration, Inc.  
for an amendment of Commission Order No. R-2462, Rio Arriba  
County, New Mexico.

MR. KELLY: Booker Kelly of Gilbert, White & Gilbert,  
appearing on behalf of Compass Exploration, Incorporated. I have  
Mr. Ted Stockmar of Colorado here and he will question the  
witness.

MR. STOCKMAR: Mr. Examiner, this is the application  
of Compass Exploration Company for an order to provide 320-acre



## DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182SANTA FE, N. M.  
PHONE 983-3971ALBUQUERQUE, N. M.  
PHONE 243-5691

gas well spacing for the Largo Gallup Gas Pool and for a relocation of the present allowable so that each committed well on 320-acre spacing basis will be allowed to produce 1,000 MCF per day. You'll recall, although you were not the Examiner in the matter, that this case is a follow-up of Case 2761, which resulted in Order R-2462. That order separated this field from the South Blanco Tocito Pool and established the Largo Gas Pool as a new gas pool.

At the March 20, 1963 hearing in Case 2761 it was clearly indicated in the record there that it was not the intent or within the scope of that hearing to set special spacing regulations for that pool, but that pending the separation of the two pools the statewide order would simply apply until a more appropriate time for this hearing. I make this comment for the record in view of certain recent litigation or case law here, and this is not basically a request for a change of an established special field rule, but simply a normal approach to a new gas pool.

To shorten the hearing, we do intend to incorporate certain testimony and exhibits from Case file 2761 by reference, to the extent that you permit this. Although we are prepared to reintroduce those exhibits if they're deemed necessary.

We have two witnesses, and I ask that they be sworn.



(Witnesses sworn.)

MR. NUTTER: Mr. Stockmar, are you making a motion at this time to incorporate by reference the record in Case 2761?

MR. STOCKMAR: Yes, sir, to the extent that it's relevant to this pool.

MR. NUTTER: Is there objection to incorporation of the record of Case 2761 into Case 2842 by reference? The record in that case will be incorporated.

PETER J. FARRELLY

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

DIRECT EXAMINATION

BY MR. STOCKMAR:

Q State your name, address and employment.

A Peter J. Farrelly, 101 University Boulevard, Denver, Colorado, employed as Manager of Exploration and Production for Compass Exploration, Incorporated.

Q Have you previously testified before this Commission?

A Yes, I have.

MR. STOCKMAR: Do you wish further --

MR. NUTTER: No, the witness is qualified.

Q Are you the same Peter J. Farrelly in Case 2761 which has been incorporated by reference in this case?

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 323-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

A Yes, I am.

Q You now confirm and hereby adopt by reference your prior testimony and exhibits in this case insofar as they are relevant to this matter?

A Yes, I do.

Q Notwithstanding that, will you for this Examiner describe the Largo Gallup Gas Pool and the geology?

A The Largo Gallup Gas Pool is a Gallup sand development sitting Northwest-Southeast along the structural strike of the basin. The pool itself appears to be geologically to be defined on its eastern, undefined on the western. There are presently three wells that have penetrated the Gallup in the pool. They are completed as Gallup-Dakota duals. There has been no other subsequent drilling since the last case or anything that would appreciably change the exhibits that were presented then.

Q Are these structural matters shown in Exhibit No. 1 which was introduced in the case, incorporated by reference?

A Yes, they are.

Q Is the geology here generally similar to other Gallup Gas Pools that have been located in the state?

A It is a stratigraphic entrapment, the reservoir is a stratigraphic entrapment of hydrocarbons. It is similar and analogous to other gas pools in the basin.



DEARNLEY-MEIER REPORTING SERVICE, Inc.

SAN ANTONIO, N. M.  
PHONE 325-1182

SAN ANTONIO, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6611

Q Have you made any determination of certain geologic characteristic pay thickness, continuity of the reservoir and so on?

A From the study of the electric logs we have no core information. From the study of the electric log available, a maximum average of ten feet of net pay is given across the block. Also, from a study of the electric logs, a maximum average of 11% porosity is given. A water saturation from the study of induction electric log of 35%.

Q Can the gross pay thicknesses be determined from Exhibit No. 2?

A Yes, they can.

Q In the Case 2761?

A Yes.

Q What is the depth of the production formation of the Gallup?

A Penetrated the Gallup at average 6675 feet.

Q What is your opinion as to whether this field does constitute a common reservoir or common source of supply and continuity of the sand within it?

A From the correlation of the electric log and its analogy to the other Gallup pools, I would say it's a common source of supply and contiguous reservoir.



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6391

Q In the other capacities or work that you perform for your company, are you familiar with the ownership pattern in the immediate vicinity of the field?

A Yes, I am.

Q Would you describe that?

A The South Half of Section 3 and all of Section 4, with the exception of the Southwest, Southwest is all one base Federal lease. Southwest, Southwest of Section 4 is owned by International Oil Company. We have already started preliminary negotiations with them in the event that 320-acre spacing is accepted by the Commission, and I'm quite sure that a satisfactory pooling arrangement can be worked out. In the immediate fringe area around the field and in the field itself there is no doubt in my mind that there will be any infringement on correlative rights.

Q Is Compass Exploration the owner of all the working interest in the pool except the 40 acres you described?

A Yes, it is.

MR. STOCKMAR: I think that's all we have of Mr. Farrelly. Are there any questions, Mr. Examiner?

MR. NUTTER: Are there any questions of Mr. Farrelly? You have another witness coming up?

MR. STOCKMAR: Yes, sir.



CROSS EXAMINATION

BY MR. NUTTER:

Q Does Compass at the present time have any plans for drilling any additional Gallup wells in this immediate area?

A No, it does not.

Q You feel as far as your present plans are concerned, these three wells with their 320-acre tracts would be complete development for the time being at least?

A Yes, sir.

Q And you own it all except for 40 acres which International owns and you are negotiating with them?

A Correct.

MR. NUTTER: No further questions.

MR. STOCKMAR: May I ask --

REDIRECT EXAMINATION

BY MR. STOCKMAR:

Q In your lands, is the royalty and overriding royalty burden constant throughout?

A Yes, it is.

MR. NUTTER: The witness may be excused.

(Witness excused.)

MR. STOCKMAR: I call Mr. Dugan.

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THOMAS A. DUGAN

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

DIRECT EXAMINATION

BY MR. STOCKMAR:

Q Will you please state your name, address and occupation for the record?

A Thomas A. Dugan, 1007 North Dustin, Farmington, New Mexico, Consulting Petroleum Engineer.

Q Have you previously testified before this Commission?

A Yes.

MR. STOCKMAR: Will Mr. Dugan's qualifications as an expert petroleum engineer be accepted?

MR. NUTTER: Yes, sir, they are.

Q Mr. Dugan, have you made a study of the Largo Gallup gas reservoir, and are you prepared to make recommendations relating to it?

A Yes, sir, I have. I've worked on the completion of all three of the Compass wells and have studied the logs, and the completion techniques.

Q Will you summarize the recommendations so that your later testimony will appear in the light of your recommendation?

A We are recommending 320-acre spacing and a thousand

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MCF per day allowable.

Q Will you identify the spacing areas that you are recommending?

A We are recommending that the South Half of 3 be dedicated to the 1-3 and the East Half of 4 to the 1-4, and the West Half of 4 to the 2-4.

Q Is it also your recommendation that the three existing wells be the permitted wells for each of the three proration units?

A Yes, it is.

Q Do you have an opinion, Mr. Dugan, as to whether the reservoir is a common source of supply with communication through out?

A I believe that it is a common source of supply by studying the logs and the potentials of the wells and the way that they perform.

Q Based on your studies, Mr. Dugan, what area will one well efficiently and economically drain without waste?

A 320 acres.

Q What reserve determinations have you made with respect to the reservoir, what conclusions have you reached?

A I have made a volumetric reserve calculation as to the amount of recoverable gas.



Q Will you state the results of these?

A Yes. Using average net pay of ten feet and porosity of 11%, water saturation of 35%, residual oil saturation of 10%, bottom hole pressure of 1925, bottom hole temperature of 150 degrees Fahrenheit, abandonment pressure of 250 psi, and gas specific gravity of 0.680, I estimate that one and a half billion cubic feet of gas can be recovered from 320 acres.

Q What abandonment pressure do you contemplate in that determination?

A 250 psi.

Q Have you made studies of well costs for this field, Mr. Dugan?

A Yes, I have. The average cost of a dual completion in the Gallup-Dakota zones is \$120,000. Estimated cost for a single completed Gallup well would be \$75,000.

Q Based on these studies and your determinations of future income, what is your opinion with respect to the economics of 160-acre spacing and 320-acre spacing?

A Using half of the cost of a dual completion for a 160-acre Gallup well, it would be just a break-even investment. You would lose money drilling a single completed Gallup well on 160 acres. You'd approximately double your money on 320-acre



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dedication.

Q Can any further dual completions be contemplated in this field?

A Well, all of the wells are dually completed and because of the 320-acre proration units for the Dakota formation there can be no other duals.

Q So any further development would be a single completion?

A On the present acreage, that's right.

Q Will, in your opinion, the establishment of 320-acre spacing prevent waste in this pool?

A Yes.

Q What is the basis for that statement? How will waste be prevented?

A Well, you will prevent waste, economic waste, by the elimination of extra drilling, of course, by eliminating the extra drilling will prevent any hazards involved in drilling the wells such as blowouts, fires or other mishaps that might cause waste of gas.

Q To relate this back to the statute a little clearer, may I ask you this question, will 320-acre spacing avoid the augmentation of risk arising from the drilling of other wells?

A Yes.



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Q Is this what you are speaking of when you are speaking of damage to the wells, blowouts?

A There's always the possibility if you are drilling twice as many wells, you have twice the risk.

Q Is it your opinion that wells on 160-acre spacing would cause the drilling of unnecessary wells?

A Yes. The other factors that could be, that would cause waste by having twice the number of wells, would be the added gas that is wasted in the completion processes and testing processes, the added gas that's necessary to fire the heaters and operate the controls of the additional wells.

Q Surface waste, generally?

A Yes.

Q This waste would be prevented by 320 acre?

A Yes, it would.

Q Will more or less gas be recovered from the reservoir on 320-acre spacing than if 160-acre spacing is ordered?

A I feel a reservoir of this type with good porosity and good permeabilities, it will be very little difference in the total amount of gas recovered between the two spacings.

Q If we assume that uneconomic wells will not be drilled, and according to your testimony single Gallup completions would be uneconomic, then would there be any difference in the recovery?



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A If the field was not developed because of the 160-acre spacing, there would be less recovery of gas really.

Q Are you speaking about the existing field or the extension of it?

A No, the possible extension of the field if it was deferred because of the 160-acre spacing, the over-all recovery would be less.

Q Then there is a possibility, or probability, that waste would be caused by 160-acre spacing order?

A That's my opinion.

Q Is there anything about the nature of dual wells which might have a bearing on prevention of waste?

A Well, since the wells are completed as duals, the operating cost is less and the wells will be produced to a lower abandonment pressure because of the less operating cost.

Q Lower than what?

A Lower than would be ordinary if they were single completions.

Q Mr. Dugan, do you have knowledge of other Gallup Gas Pools in the state and the spacing regulations and orders relating thereto?

A Yes, the Angel Peak - Gallup Pool and the **Escrito** -Gallup Pool, Devils Fork-Gallup Pool, all are associated pools with



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320-acre gas spacing.

Q Are these of comparable reservoir characteristics, depth and so forth?

A The Largo Gallup Pool is slightly deeper than the other pools.

Q What is the basis of your recommendation that the allowable be set at 1,000 MCF per day?

A Well, it is, excepting the present allowable with a double acreage factor and excepting the finding of the former hearing, the previous hearing.

Q Are you in a sense simply recommending that the permitted allowables for the 260 be combined?

A Yes.

Q To be produced through a single permitted well?

A That's right.

Q Will correlative rights be protected if 320-acre spacing is ordered and if this allowable is established?

A Yes.

MR. STOCKMAR: I have no further questions of this witness.

MR. NUTTER: Any questions of Mr. Dugan?

CROSS EXAMINATION

BY MR. NUTTER:



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Q You said at the beginning of your testimony that you felt that a well would **drain** 320 acres in here. What do you base that statement on?

A Well, on the porosities and permeabilities, and also we haven't had time to take interference tests, but in a sense the maximum pressures recorded on the third well drilled was less than the maximum pressures recorded on the first and second wells, so we feel that there has been some drainage.

Q You mentioned good permeability twice and haven't given the permeability. What is it?

A We really don't know what the permeability is.

Q How do you know it's good?

A Well, because of the way that the wells produce and the productivity of the wells.

Q What is the productivity of these three wells?

A They're capable of delivering three to five million MCF a day into the line against 500 pounds. Also, while we were completing the 1-4 perforating the Gallup zone, the well produced five million prior to fracturing.

Q Each of these wells is capable of delivering three to five million a day against 500-pound line pressure?

A Yes, sir.

Q Another thing, I notice that you mentioned these





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other pools like Angel Peak-Escrito and several of those others as being similar here and also stated that they were associated reservoirs. In your opinion is this an associated reservoir?

A It hasn't been proved that way yet. It possibly could be in the future. No oil wells yet.

MR. STOCKMAR: Mr. Examiner, may I call your attention to the existing order which does make a finding, that based on the last hearing there is a possibility or a probability that there may be a connected oil rim of some type.

Q But there's been no oil well drilled?

A That's right.

Q How about liquids from these wells, what kind of ratios do they have?

A About 100,000 to 1.

Q They are relatively dry wells then?

A Yes, sir.

Q Now, Mr. Dugan, the request for the allowable here is 1,000 MCF per day, which you stated is simply the present allowable multiplied by two, since you are asking twice the acreage be dedicated to the well?

A Yes, sir.

Q What would that be, 30 or 31,000 MCF per month allowable to the wells then?



A Yes.

Q How does this compare with a gas well's allowable in one of the declared gas pools of comparable depth in the San Juan Basin at the present time?

A Actually it would be less for wells with comparable deliverabilities.

Q What is the current present allowable, or I might even say the average allowable for a Dakota well with a deliverability in this range of three to five million?

A Well, I'm not sure.

Q Is it 30,000?

A It would be approximately a third of it. You'd be able to deliver approximately a third of your deliverability the way proration is going right now.

Q You mean that the allowable to a Dakota well under the present allocation formula and under the present rates of allowable that has a deliverability of three million would be receiving an allowable of one million per day?

A Yes.

Q Or 30,000 --

A Well, it might be 28%. I believe the last time I looked it up it was down around 28%, which is a little less, say the fourth of it.



MR. NUTTER: Are there any other questions of Mr. Dugan?

MR. STOCKMAR: May I ask one on this same track?

MR. NUTTER: Yes.

REDIRECT EXAMINATION

BY MR. STOCKMAR:

Q Have you made any calculations as to the relative level of this requested allowable versus other Gallup sand gas producers?

A Yes, sir. The allowable for gas wells in Angel Peak is 1542 per day, and in Escrito is 1360, I believe.

RECROSS EXAMINATION

BY MR. NUTTER:

Q Those are based on the GOR of an oil well?

A Yes, sir.

Q And an acreage factor?

A Right.

Q Multiplied times that GOR?

A Yes. Actually the depth, it would be the same as Angel Peak in this case, because the depth factor would be the same, 1552.

Q This is in a depth of six to seven thousand?

A Yes.

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BY MR. UTZ:

Q How does that compare with the allowables in Devils Fork?

A It's a little higher than Devils Fork.

MR. NUTTER: Any further questions?

MR. DURRETT: I have one question.

BY MR. DURRETT:

Q Mr. Dugan, it's not your opinion, is it, that if you leave oil or gas in the ground temporarily, that that constitutes waste? That's not what you were testifying to on direct examination?

A No, sir, I don't believe I said that.

Q You would feel, then, that in order to constitute waste that oil or gas would have to be lost to recovery and not just temporarily delayed?

A Yes.

MR. DURRETT: Thank you.

MR. NUTTER: Any further questions? The witness may be excused.

(Witness excused.)

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

MR. STOCKMAR: No. Thank you very much.

MR. NUTTER: Does anyone have anything to offer in



Case 2842? Mr. Durrett, do you have anything to offer in this case?

MR. DURRETT: I would like to state that we have a communication from El Paso Natural Gas Company stating that they concur with the applicant in this case. This telegram is, indicated that it came from Mr. Garrett C. Whitworth, attorney for El Paso Natural Gas Company.

MR. NUTTER: Thank you, Mr. Durrett.

MR. STOCKMAR: Will that be incorporated in the record?

MR. DURRETT: It will be in the official file and will be there for any person to read who would like to look at it. Would you like to move that be made an official part of the record?

MR. STOCKMAR: No, I would just like to find them agreeing with me.

MR. NUTTER: Does anyone have anything further to offer in Case 2842? We will take the case under advisement.

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I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 7th day of July, 1963.

*Ada Dearnley*  
Notary Public-Court Reporter

My commission expires:

June 19, 1967.

Notary hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2872 held by me on 6/26, 1963.  
Ada Dearnley, Examiner.  
New Mexico Oil Conservation Commission

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