

Case No.

796

Application, Transcript,
Small Exhibits, Etc.

GENERAL OFFICES
120 BROADWAY NEW YORK

AMERADA PETROLEUM CORPORATION

BEACON BUILDING

P. O. BOX 2040

TULSA 2, OKLA.

March 23, 1955

Oil Conservation Commission of New Mexico
P.O. Box 871
Santa Fe, New Mexico

Attention: Mr. W. B. Macey, Secretary-Director

Gentlemen:

We have received copies of Order No. R-592 and Order No. R-597. We wish to point out several errors, to-wit:

In Order No. R-592, Paragraph (4) on Page 2, the designated well should be Weir Well No. 4 and not Well No. 1.

In Paragraph (2) under "It Is Therefore Ordered," the designated well should be Weir No. 4 and not Weir No. 1.

In Order No. R-597, Paragraph (2) under "It Is Therefore Ordered," Weir No. 4 is located in the SE/4 of the NW/4 and not in the SW/4 of the NW/4 of Section 35.

This is called to your attention so that you may correct your copies, or if you prefer, you may send us copies of new originals if new originals are to be made.

For your convenience, we are attaching a plat of the unit.

Yours very truly,

R. S. Christie

R. S. Christie

RSC:mt
attachment

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

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

**CASE NO. 796
Order No. R-597**

**THE APPLICATION OF AMERADA
PETROLEUM CORPORATION FOR
AN ORDER GRANTING APPROVAL
OF AN EXCEPTION PURSUANT TO
RULE 5 (a) OF ORDER NO. R-520
IN THE ESTABLISHMENT OF AN
UNORTHODOX GAS PRORATION UNIT
OF 280 CONTIGUOUS ACRES CONSIST-
ING OF NW/4 AND W/2 SW/4 OF SECTION
35, TOWNSHIP 19 SOUTH, RANGE 36 EAST
AND THE NW/4 NW/4 OF SECTION 2,
TOWNSHIP 20 SOUTH, RANGE 36 EAST,
NMPM, LEA COUNTY, NEW MEXICO, IN
THE FUMONT GAS POOL.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 16, 1954, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 28th day of February, 1955, the Commission, a quorum being present, having considered the record and the testimony adduced at said hearing, and being fully advised in the premises,

FINDS:

(1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.

(2) That pursuant to the provisions of Rule 5 (a) of Order No. R-520, the Commission has authority to permit the formation of a gas proration unit consisting of other than a legal section after notice and hearing by the Commission.

(3) That applicant, Amerada Petroleum Corporation, is the owner of oil and gas lease or leases in Lea County, New Mexico, covering the land concerned herein which comprises other than a legal section, and described as follows, to-wit:

Case No. 796
Order No. R-597

TOWNSHIP 19 SOUTH, RANGE 36 EAST
NW/4 and W/2 SW/4 of Section 35

TOWNSHIP 20 SOUTH, RANGE 36 EAST
NW/4 NW/4 of Section 2

containing 280 acres, more or less.

(4) That applicant, Amerada Petroleum Corporation, has a producing well on the aforesaid lease known as Amerada Petroleum Corporation Weir No. 4, located 1980 feet from the north line and 1980 feet from the west line of Section 35, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico.

(5) That said well was completed and on production prior to August 12, 1954, the effective date of Order No. R-520, and is located within the limits of the pool heretofore delineated and designated as the Eumont Gas Pool.

(6) That the establishment of an unorthodox gas proration unit consisting of NW/4 and W/2 SW/4 of Section 35, Township 19 South, Range 36 East, NMPM, has heretofore been approved by the Commission in Administrative Order NSP-34, said order being thereafter affirmed by the Commission after notice and hearing.

(7) That the royalty interest in the lease or leases under the proposed proration unit is of common ownership.

(8) That the entire unorthodox proration unit as herein proposed may be assumed productive of gas from the Eumont Gas Pool.

(9) That it is impractical to pool applicant's leases with adjoining acreage in the E/2 of the SW/4 of Section 35, Township 19 South, Range 36 East and the NW/4 of Section 2, Township 20 South, Range 36 East, and that there have been no objections to the formation of the proposed 280-acre unorthodox proration unit.

(10) That unless a proration unit consisting of applicant's aforesaid acreage is permitted, applicant will be deprived of the full use and value of the leases herein described and the well location thereon.

(11) That the creation of the proration unit herein described is in the interests of conservation and will protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the application of Amerada Petroleum Corporation for the approval of an unorthodox proration unit in the Eumont Gas Pool be and the same is hereby approved, and a proration unit consisting of the following described acreage is hereby created:

TOWNSHIP 19 SOUTH, RANGE 36 EAST
Section 35: NW/4, W/2 SW/4

-3-

Case No. 796
Order No. R-597

TOWNSHIP 20 SOUTH, RANGE 36 EAST
Section 2: NW/4 NW/4

(2) That applicant's well, Amerada Petroleum Corporation, Weir No. 4, located in the S E/4 of the NW/4 of Section 35, Township 19 South, Range 36 East, NMPM, shall be granted an allowable in accordance with the Fument Gas Pool Rules in the proportion that the above-described 280-acre proration unit bears to the standard or orthodox proration unit for the Fument Gas Pool, all until further order of the Commission.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

John F. Simms

JOHN F. SIMMS, Chairman

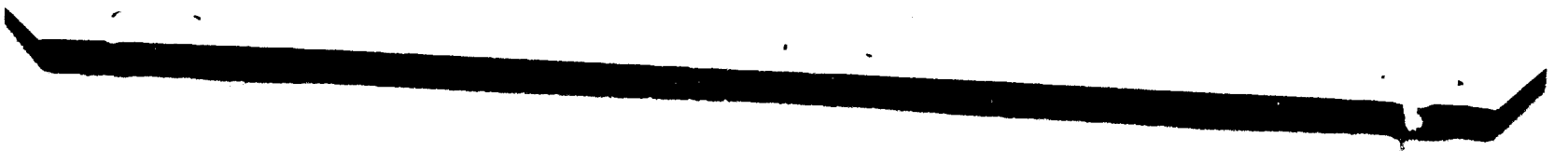
E. S. Walker

E. S. WALKER, Member

W. B. Macey

W. B. MACEY, Member and Secretary





OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

March 11, 1955

Amerada Petroleum Corporation
Box 2040
TULSA, OKLAHOMA

Attention: Mr. R. S. Christie

Gentlemen:

We attach copies of Orders R-592 and R-597 issued in Cases 827 and 796, which were heard by this Commission under date of February 28, 1955.

Very truly yours,

W. B. Macey
Secretary - Director

WBM:nr

C
O
P
Y

AMERADA PETROLEUM CORPORATION
P. O. BOX 2040
TULSA 2, OKLAHOMA

MAIN OFFICE 608
NOV 10 1954 9:01

Drawer D
Monument, New Mexico
November 8, 1954

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

Re: Application for Exception to Rule
5 (a), Order No. R-520 for Amerada
Weir No. 4, Eumont Gas Pool

Gentlemen:

By this letter of application Amerada Petroleum Corporation wishes to state the following:

- (a) That Amerada Petroleum Corporation Weir No. 4 located 1980 feet FNL and 1980 feet FWL of Section 35, Township 19-S, Range 36-E, was dually completed May 10, 1953.
- (b) That the subject well is producing gas from the Eumont Gas Pool and assigned a non-standard gas proration unit of 160 acres which comprises the NW/4 of Section 35, Township 19-S, Range 36-E.
- (c) That by letter to the Commission dated November 1, 1954, the applicant has proposed to increase the gas unit size from 160 to 240 acres by including the W/2 of the SW/4 of Section 35, Township 19-S, Range 36-E with the present unit.
- (d) That, providing the above proposal is approved, the applicant proposes to increase the gas unit size from 240 to 280 acres by including the NW/4 of the NW/4 of Section 2, Township 20-S, Range 36-E with the subject unit.
- (e) That the proposed non-standard gas proration unit consists of contiguous quarter - quarter sections.
- (f) That the proposed non-standard gas proration unit is the same royalty interest.
- (g) That the proposed non-standard gas proration unit is 6600 feet in length.
- (h) That the proposed non-standard gas proration unit may reasonably be presumed to be productive of gas.

- (i) That by copy of this letter of application all offset operators are notified.

Therefore, Amerada Petroleum Corporation requests that the Oil Conservation Commission set a certain day upon which this application may be heard and after said hearing to grant permission in order that applicant may increase the gas unit for the subject well as proposed in this application.

Respectfully submitted,
AMERADA PETROLEUM CORPORATION

By: D. C. Capps
D. C. Capps
District Superintendent

DCC/WGA/df

CC: Sun Oil Company
Box 1861
Midland, Texas

Gulf Oil Corporation
Box 1667
Hobbs, New Mexico

Shell Oil Company
Box 1957
Hobbs, New Mexico

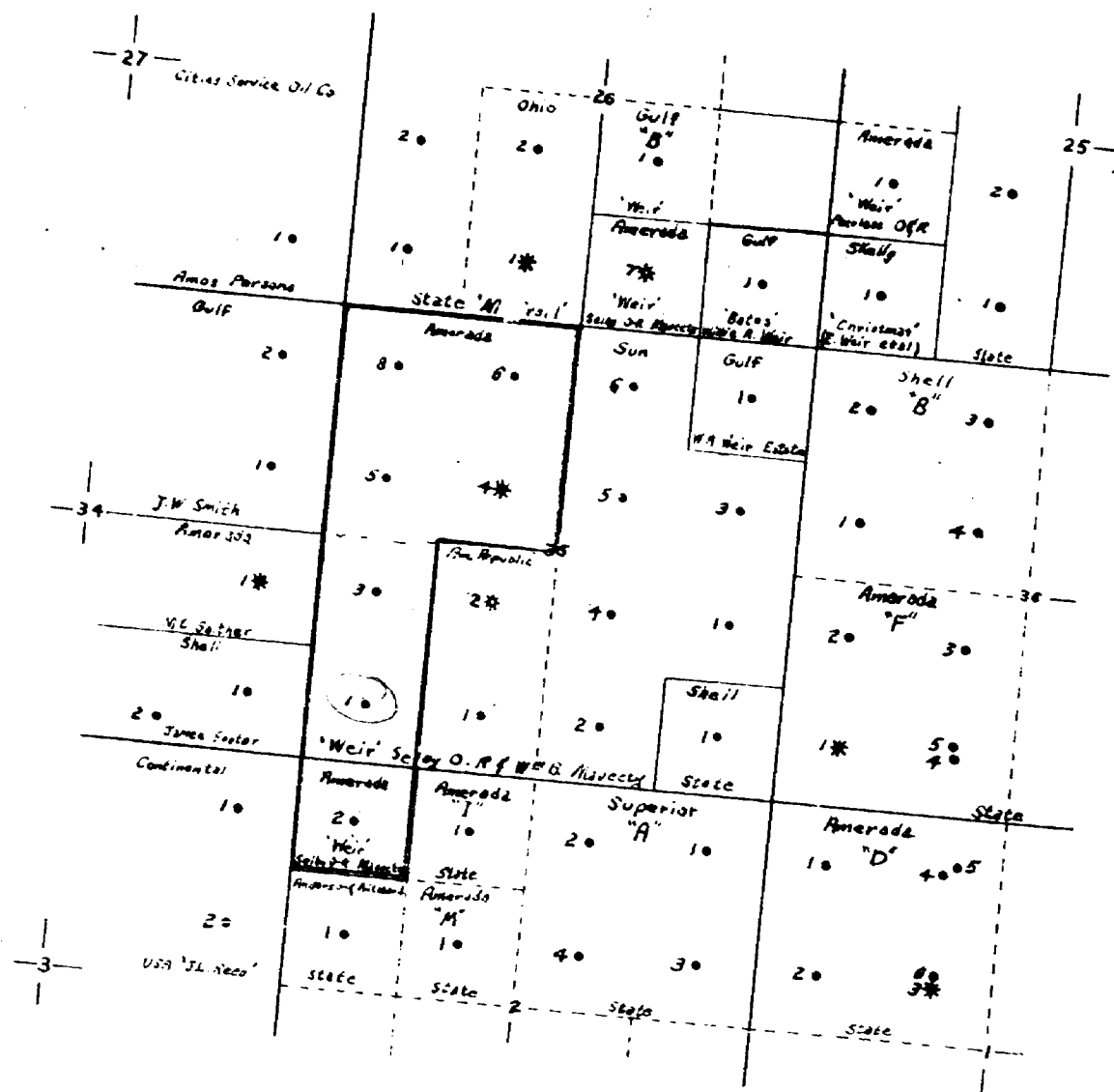
American Republic Corporation
Box 547
Artesia, New Mexico

Anderson-Pritchard Oil Corporation
Box 2197
Hobbs, New Mexico

Fred Turner, Jr.
Box 910
Midland, Texas

The Superior Oil Company
Box 510
Midland, Texas

Continental Oil Company
Box 427
Hobbs, New Mexico



AMERADA PETROLEUM CORPORATION

'Weir' Selby O.R. & Wm.B. Maveety et al Lease
 NW/4 Sec. 35 and the W/2 of the SW/4, Sec. 35, T19-S, R36-E
 NW/4 of the NW/4 Sec. 2, T20-S, R36-E
 Lea County, New Mexico

Scale 1" = 2000'

BEFORE THE
Oil Conservation Commission
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 796

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES
COURT REPORTERS
ROOMS 105, 106, 107 EL CORTEZ BUILDING
TELEPHONE 7-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 16, 1954

Application of Amerada Petroleum Corporation
for approval of a 280-acre non-standard gas
proration unit in the Eumont Gas Pool: NW/4
and W/2 SW/4 of Section 35, Township 19 South,
Range 36 East, and NW/4 NW/4 Section 2, Town-
ship 20 South, Range 36 East.

No. 796

BEFORE:

MR. E. C. (Johnny) WALKER
MR. WILLIAM B. MACEY

TRANSCRIPT OF HEARING

MR. WOODWARD: If the Commission please, we would like to consolidate our present case 796 with 797 and 804, since all of these cases deal with the establishment of non-standard gas proration units in the Eumont Gas Pool and then following that we will present Case 798.

MR. MACEY: You are taking up Case No. 796 first.

MR. WOODWARD: Yes, sir.

R. S. CHRISTIE,

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

DIRECT EXAMINATION

By: MR. WOODWARD:

Q Will you state your name, please.

A R. S. Christie.

Q By whom are you employed and in what capacity?

A Amerada Petroleum Company as a petroleum engineer.

Q Have you previously testified before this Commission

in your capacity as a petroleum engineer and an expert witness?

A Yes, I have.

Q Are Mr. Christie's qualifications accepted?

MR. MACEY: They are.

MR. WOODWARD: Mr. Christie, will you describe the non-standard gas proration unit that Amerada is proposing in this case?

A The non-standard gas proration unit in 796 is the northwest quarter of Section 35, Township 19 South, Range 36 East, and the west half of the southwest quarter of Section 35, Township 19 South, Range 36 East, and the northwest quarter of the northwest quarter of Section 2, Township 20 South, Range 36 East.

Q Section 2 is immediately south of 35 in this 40 acre tract that you are proposing here, is immediately south of the west half of the southwest quarter, is that correct?

A Yes, it is, yes, sir.

Q Is actually that acreage contiguous?

A It is contiguous.

Q And held under the same leasehold?

A Yes, sir.

Q Is the proposed unit longer than 5280 feet?

A Yes, one dimension of the proposed unit would be 6600 feet in length.

Q And it crosses the section line?

A Yes, sir.

Q Where is the unit well located on this proposed unit?

A The unit well is located in the southeast quarter of the northwest quarter of section 35, Township 19 South, Range 36 East.

Q What acreage is presently attributed to this well for

allowable purposes?

A 240 acres.

Q How much acreage in the Eumont Pool will this well drain?

A It has been testified previously before this Commission that one well in the Eumont Pool would drain at least 640 acres and in my opinion this well will drain approximately the same number of acres.

Q Well, then all this application amounts to is that you want to add the northwest quarter of the northwest quarter of Section 2, to the acreage presently attributed to the well?

A That is correct, yes, sir.

Q And do you propose that the allowables be increased proportionately?

A Yes, I do.

Q In your opinion, can this 40-acre tract be consolidated with other acreage in Section 2 to form a producing unit at this time?

A At this time it doesn't seem to be very practical for two reasons. It is better, I think, to attach it to the acreage in the section to the north because it is the same ownership and secondly, we are still in doubt as to the finding of the Federal Power Commission so that it is doubtful whether a well would be drilled in this quarter section or this quarter quarter section at this time.

Q Would the applicant be unwilling to consider incorporation of this 40-acre tract with other land in the Section 2, if that should prove feasible in the future?

A Yes, we would be.

Q In your opinion, is this an interim measure for the protection of correlative rights?

A Yes, sir.

Q Have all offset operators been notified of this proposed non-standard unit, Mr. Christie?

A Yes, they have.

Q Have you received any objections to it?

A No, we have not.

MR. WOODWARD: That is the extent of our direct examination in Case 796. If the Commission please, we'd like to introduce a plat which is attached to our original application, like to introduce this as Amerada's Exhibit A in Case 796.

MR. MACEY: Is there objection to the introduction of this exhibit in evidence? If not, it will be received. Are there any questions of the witness in Case 796?

MR. RHODES: I have one, Mr. Macey. Mr. Christie, in regard to 796, you are asking there not only for an exception to the standard acreage unit as thought of when we speak of proration units but also you wish to get an exception to 5-a, to Rule 5-a, where it pertains to the well location, do you not, that is, I believe that you need two exceptions there in this order, is that right? One an exception to the size of the proration and number two, an exception to the location of the well.

A As I understand it, it is primarily one exception, that is to the standard proration unit.

MR. WOODWARD: If the Commission please, I believe our application states that the unit well is located 1980 feet from the north line and 1980 feet from the west line of section 35.

MR. RHODES: But it is 660 in two directions to the boundary of the proration unit?

A Let's see, well --

MR. WOODWARD: That is correct, it is. It was drilled prior to the institution of the order and that is one reason we were basing our exception here, our application for an exception on that ground and Mr. Rhodes is correct, we are asking an exception on both of those counts.

MR. MACEY: You have anything else?

MR. RHODES: No, that is all.

MR. MACEY: I think Mr. Rhodes was thinking about the fact that he would have the task of writing an order in the case.

Any further questions of the witness in Case 796?

MR. MONTGOMERY: I have a statement, shall I make it at this time, in regard to this?

MR. MACEY: Whatever you'd like to do.

MR. MONTGOMERY: I'd like to point out that this is not just particularly referring to Amerada but to most all the gas wells completed in the Eumont Pool, particularly in this area, roughly from the middle of Township 20 South and all of 19 South, most of the gas wells are completed in the Pinrose Sand, which is a member of the Queen and as we go off structure the same sand becomes productive of ore but on this particular application within a distance of one mile west of this gas well, why we do have oil production from the same strata as the well is producing gas.

If there is unequal withdrawal in the gas wells and it is receiving a lion's share, the oil will move up-structure, meaning

some 80 per cent of the oil which moves up-structure will be lost and never recovered. At this time there is very small difference in the bottom hole pressure in this particular area, in the Pinrose oil and Pinrose gas. The following figures are a little rough but they are probably very close to the actual situation: Assuming a gas well on 40-acres and an oil well on 40-acres, the gas with an estimated take of 200 MCF per day, based on 40-acres will void 2310 cubic feet of reservoir space while the oil well will void 290 cubic feet making the oil short 2,011 cubic feet of reservoir space.

Now putting it on raw economic facts, 1,000 cubic feet of gas is worth about 10¢ and voids about two barrels of reservoir space and oil over 40 degrees of gravity is selling for \$2.77 a barrel or 5¢ worth of gas is obtained from the same amount of space that oil would pay \$2.77. Thank you.

MR. WOODWARD: If the Commission please, we are aware of the considerations that Mr. Montgomery raised and recognized there. However, we'd like to point out that this non-standard unit is only 280 acres, it is less than half in size and less than half in allowable of standard size 640 acre unit and none of the acreage along this west side, including this 40 acre tract is any closer to this proposed oil well to the west. Consequently, the effect of exception here, we do not believe would have any impact whatever on the oil production to the west inasmuch as it is considerably smaller than the standard unit and the standard allowable which could be granted if all of the acreage in that section were under the same ownership and lease.

MR. MONTGOMERY: I believe that the witness testified that

the gas well would drain 640 acres.

MR. MACEY: I think he testified that it could drain 640 acres if it was necessary for it to drain 640 acres.

MR. WOODWARD: That is correct, but it is only going to get a 280 acre allowable and there is plenty of testimony in the record that that is what a well will drain in the Eumont Pool but we are not asking that that well be assigned such an allowable.

A I might add that it is our opinion that this reservoir is primarily a gas reservoir and that we have this fringe of oil around the periphery of the gas zone and it has been our experience that this is very tight formation and it takes, requires fracturing and it is very doubtful whether this oil would migrate to any great extent. If there is an inequitable withdrawal from the reservoir standpoint it seems to me that it would be better to increase the oil allowable so that it would lower the bottom hole pressure at about the same rate as the gas withdrawals.

MR. MACEY: Mr. Christie, I think we are all talking pretty much about the same thing. That is, that we probably are going to have to watch the bottom hole pressures in the pool and at the same time watch the withdrawals and make any adjustments, if necessary, if it looks like it is going to be necessary.

A I think that is correct, we know that condition exists and it should be kept in mind and possibly be a subject for a special hearing some time after we get more additional information but I don't believe at this time that the gas well should be penalized until we know more about the conditions in the reservoir.

MR. MACEY: Is there anyone else?

MR. WALKER: I'd like to ask Mr. Christie one question.

ADA DEARNLEY & ASSOCIATES
STENOGRAPHIC REPORTERS
ALBUQUERQUE, NEW MEXICO
TELEPHONE 3-6691

Would you advocate, for instance, if you had an offset well there right across the line that produced oil -- this is a theoretical proposition -- and your well was a gas well, would you advocate a volumetric proposition then, Mr. Christie, in other words, what kind of equity would you recommend in that condition?

A Well, I think you'd have to make a pretty good study of the reservoir to determine whether your oil is migrating to any great extent, if it is, why then you'd have to adjust all over the reservoir. I wouldn't think you could adjust over any quarter section line, you'd have to consider the entire reservoir.

MR. WALKER: Thank you.

MR. MACEY: Any one else?

MR. MONTGOMERY: I'd just like to make the further statement that we have quite a number of gas wells that are completed in the Pinrose that are going to oil and apparently this Pinrose Reservoir could be quite large depending on the porosity that we get but down the road it is a very serious problem.

MR. MACEY: Anyone else? If not, we will take the case under advisement. Proceed to Case 797.

STATE OF NEW MEXICO }
COUNTY OF BERNALILLO } ss.

I, MARGARET MCCOSKEY, 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 23rd day of December, 1954.
My commission expires August 15, 1956.

Margaret McCoskey
Notary Public - Court Reporter
ADA DEARNLEY & ASSOCIATES
STENOGRAPHIC REPORTERS
ALBUQUERQUE, NEW MEXICO
TELEPHONE 3-6691

