

CASE 1111: Continental Oil Co. application  
for 80 acre NS gas proration unit, N/2 SW/4  
Sec. 18-21S-36E, Lockhart "A-18" #3 Well.

Case No.

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Application, Transcript,  
Small Exhibits, Etc.

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

September 10, 1956

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P  
Y

Mr. Jason Kellahin  
P.O. Box 597  
Santa Fe, New Mexico

Dear Sir:

In behalf of your client, Continental Oil Company, we enclose  
two copies of each of the following orders:

Order R-864 issued in Case 1110  
Order R-865 issued in Case 1114  
Order R-866 issued in Case 1115  
Order R-872 issued in Case 1113  
Order R-876 issued in Case 1111

All of these orders are dated August 30, 1956.

Very truly yours,

A. L. Porter, Jr.  
Secretary - Director

brp

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. 1111  
Order No. R-870

THE APPLICATION OF CONTINENTAL OIL  
COMPANY FOR AN ORDER GRANTING  
APPROVAL OF AN EXCEPTION TO RULE 5  
(a) OF THE SPECIAL RULES AND REGULATIONS  
FOR THE EUMONT GAS POOL AS SET FORTH IN  
ORDER NO. R-520 IN ESTABLISHMENT OF A  
NON-STANDARD GAS PRORATION UNIT OF 80  
CONTIGUOUS ACRES CONSISTING OF THE N/2  
OF THE SW/4 OF SECTION 18, TOWNSHIP 21  
SOUTH, RANGE 36 EAST, NMPM, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
July 25, 1956, at Hobbs, New Mexico, before Daniel S. Nutter,  
Examiner duly appointed by the New Mexico Oil Conservation Com-  
mission, hereinafter referred to as the "Commission," in accordance  
with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 30<sup>th</sup> day of August, 1956, 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 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 the applicant is the operator of a non-standard  
gas proration unit consisting of the SW/4 of Section 18, Township 21  
South, Range 36 East, NMPM, Lea County, New Mexico, which is presently  
dedicated to applicant's A. M. Lockhart "A-18" No. 3 Well located  
1980 feet from the South and West lines of said Section 18.

(3) That the applicant proposes to delete the S/2 of  
the SW/4 of said Section 18 from the aforementioned non-standard  
gas proration unit, thereby creating an 80 acre non-standard gas

proration unit consisting of the N/2 of the SW/4 of said Section 18; said unit to be dedicated to the said A. M. Lockhart "A-18" No. 3 Well.

(4) That the creation of the proposed proration unit will not cause but will prevent waste, and will protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the application of Continental Oil Company for approval of a non-standard gas proration unit in the Eumont Gas Pool consisting of the following described acreage:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM  
N/2 of the SW/4 of Section 18

be and the same is hereby approved, and a proration unit consisting of aforesaid acreage is hereby created.

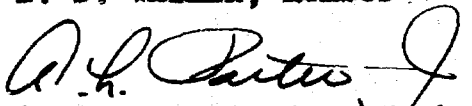
(2) That applicant's well, A. M. Lockhart "A-18" No. 3 located in the NE/4 of the SW/4 of said Section 18 shall be granted an allowable in the proportion that the above-described 80-acre unit bears to the standard proration unit for said pool, all until further order of the Commission.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
JOHN F. SIMMS, Chairman

  
E. S. WALKER, Member

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



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CONTINENTAL OIL COMPANY

Roswell, New Mexico  
June 11, 1956

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

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

Re: Continental Oil Company  
Application for 80-acre NSP Unit  
for its Lockhart A-18 No. 3 well  
in Section 18, T21S, R36E, Eumont  
Pool, Lea County, New Mexico

Gentlemen:

*Now 160 Ac*

Continental Oil Company respectfully requests administrative approval under the provisions of Rule 5 (b) of the Special Rules and Regulations for the Eumont Gas Pool in Order No. R-520 for a reduction from 160 to 80 acres of the non-standard gas proration unit presently assigned its A. M. Lockhart A-18 No. 3 well located 1980 feet from South and West lines of Section 18, T21S, R36E, Lea County, New Mexico in the Eumont gas pool.

The unit presently consists of the SW/4 of said Section 18 and is proposed to consist of the N/2 SW/4 of said Section 18.

In support of this request we should like to point out that the proposed unit conforms with the requirements of said Rule 5 (b) in all respects as follows:

1. Said unit consists of contiguous quarter-quarter sections (and/or lots).
2. Said unit lies wholly within a single governmental section.
3. The entire proposed unit may be reasonably presumed to be productive of gas.
4. The length or width of said unit does not exceed 5,280 feet.
5. Copies of this application have been furnished this date by registered mail to all offset operators and all operators within 1,500 feet of said well, as required by the provisions of said rule 5 (b).

A Plat is attached hereto showing to the best of our knowledge and belief the proposed unit, the location of the well and the offset ownership.

In view of the facts set out herein it is respectfully re-

requested that the Commission enter an order approving the non-standard gas proration unit for Continental Oil Company's A. M. Lockhart A-18 No. 3 well as described above.

Accompanying this request for Reduction in proration unit size is a request for Enlargement of the proration unit now assigned to Continental's A. M. Lockhart A-18 No. 1. It is respectfully requested that these changes in proration unit size be made simultaneously.



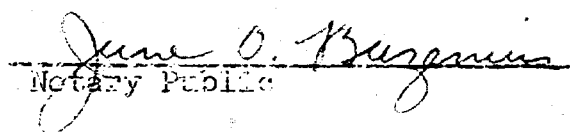
R. L. ADAMS  
Division Superintendent  
of Production  
New Mexico Division

STATE OF NEW MEXICO )  
COUNTY OF CHAVES ) ss

R. L. Adams, upon being duly sworn, deposes and says that he is the Division Superintendent of Production for Continental Oil Company, and as such is authorized to file the foregoing application, that he has read said application and knows the contents thereof, and that the statements made therein are true, as he is credibly informed and believes.



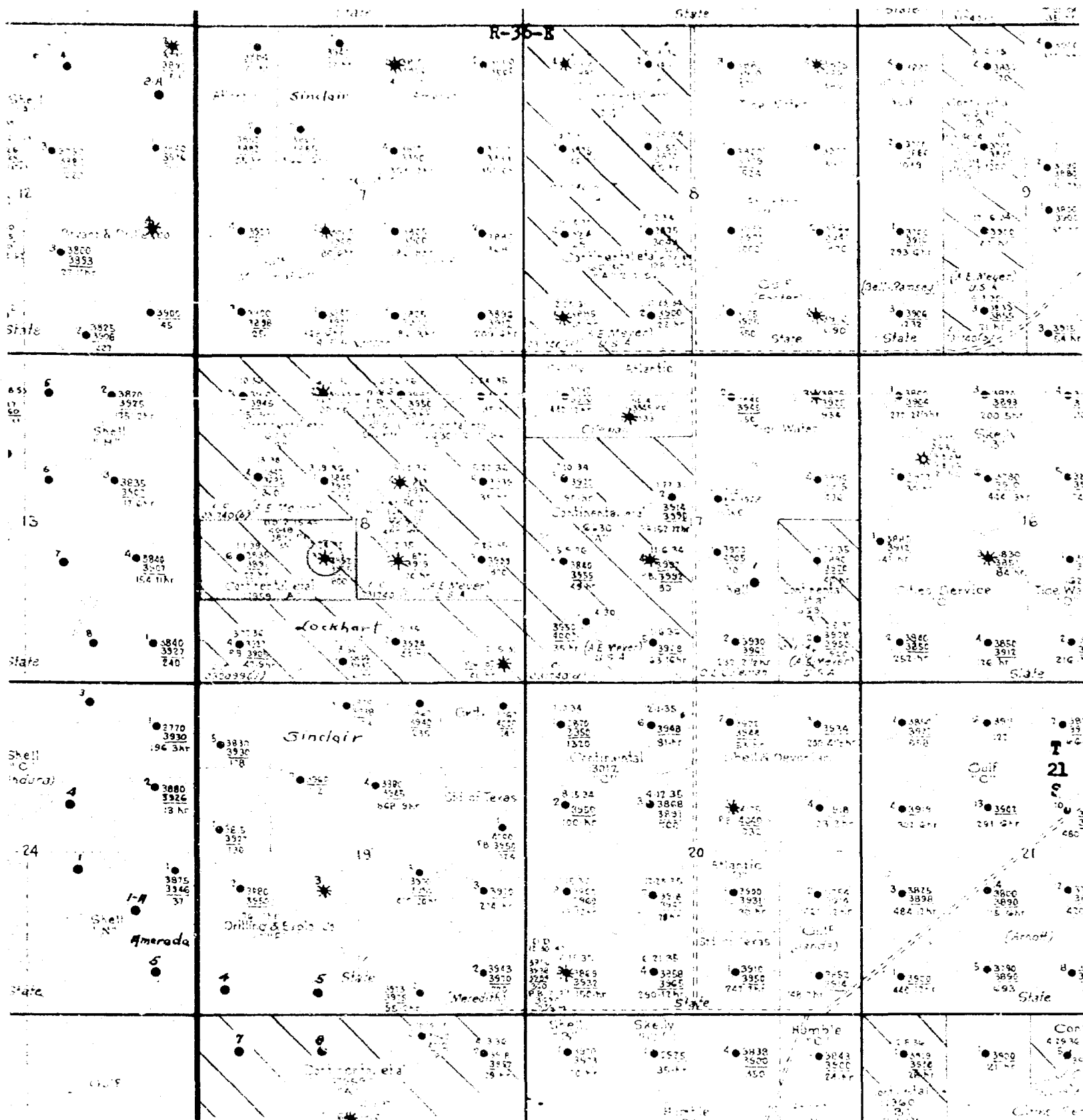
Subscribed and sworn to before me this 11th day of June, 1956.

  
Notary Public

My commission expires:

August 15, 1956

Copies to:  
New Mexico Oil Conservation Commission -3  
HLJ-2 RLA File



OFFSET OWNERSHIP MAP  
 CONTINENTAL - OIL COMPANY  
 Section 17, T-21-S, R-36-E.  
 Lea County, New Mexico.

Proposed Gas Unit

Unit Gas Well



BEFORE THE  
**Oil Conservation Commission**  
SANTA FE, NEW MEXICO  
July 25, 1956

IN THE MATTER OF:

CASE NO. 1110 & 1111

**TRANSCRIPT OF PROCEEDINGS**

**DEARNLEY-MEIER AND ASSOCIATES**  
COURT REPORTERS  
605 SIMMS BUILDING  
TELEPHONE 3-6691  
ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO  
JULY 25, 1956

IN THE MATTER OF:

CASE 1110: Application of Continental Oil Company for a non-standard proration unit in the Eumont Gas Pool in exception to Rule 5 (a) of the Special Rules and Regulations for the Eumont Gas Pool as set forth in Order R-520. Applicant in the above-styled cause, seeks an order authorizing a 160 acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 of the S/2 of Section 18, Township 21 South, Range 36 East, Lea County, New Mexico; said unit to be dedicated to applicant's A. M. Lockhart "A-18" No. 1 Well located 330 feet from the South and East lines of said Section 18.

CASE 1111: Application of Continental Oil Company for a non-standard proration unit in the Eumont Gas Pool in exception to Rule 5 (a) of the Special Rules and Regulations for the Eumont Gas Pool as set forth in Order R-520. Applicant in the above-styled cause, seeks an order authorizing an 80 acre non-standard gas proration unit in the Eumont Gas Pool consisting of the N/2 of the SW/4 of Section 18, Township 21 South, Range 36 East, Lea County, New Mexico; said unit to be dedicated to applicant's A. M. Lockhart "A-18" No. 3 Well, located 1980 feet from the South and West lines of said Section 18.

BEFORE:

Mr. Daniel S. Nutter, Examiner.

P R O C E E D I N G S

MR. NUTTER: The next case on the docket is 1110.

MR. GURLEY: Application of Continental Oil Company for a non-standard gas proration unit in the Eumont Gas Pool in exception to Rule 5 (a) of the Special Rules and Regulations for the Eumont Gas Pool as set forth in Order R-520.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Santa Fe. Since Case 1110 involves the increase of the size of a proration unit, and 1111 involves the reduction of a proration unit affecting the same lands, I move that the two cases be consolidated for the purpose of the record and facilitation of the presentation of evidence.

MR. NUTTER: Is there any objections to the consolidation of Cases 1110 and 1111 for the purpose of taking the record? If not, they will be consolidated.

MR. KELLAHIN: I would like to call Mr. E. V. Boynton as a witness.

MR. NUTTER: Is he your only witness?

MR. KELLAHIN: Yes, sir.

(Witness sworn.)

E. V. BOYNTON,

a witness on behalf of the applicant, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please.

A E. V. Boynton.

Q By whom are you employed?

A Continental Oil Company.

Q What position?

A District Engineer.

Q Have you testified before this commission before, before the New Mexico Oil Conservation Commission and had your qualifications

accepted?

A I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: They are.

Q Mr. Boynton, are you familiar with the applications which have been filed in cases 1110 and 1111 by Continental Oil Company?

A Yes, sir.

Q State, briefly, what is proposed to be done in those two cases.

A This Lockhart "A-18" Lease consists of the SW/4 of Section 18, 21, 36, and the S/2 of the SE/4. We propose to change the size of the gas proration units assigned to Well No. 1 and Well No. 3, reducing the proration unit assigned to Well No. 3 to 80 acres and increasing the unit assigned to Well No. 1 to 160 acres.

Q Now, have you prepared an exhibit showing the proposed unit for the Lockhart "A-18" Well No. 1?

A I have here an ownership structure plat contoured on top of the Yates that shows --

Q That is marked as Exhibit No. 1, --

A Exhibit No. 1.

Q -- Case No. 1110?

A It is.

Q Proceed.

A It shows the present proration unit in the red dashed line, the proposed proration unit outlined in solid red, and the well in question encircled in red. It also shows the offset proration units outlined in green, and offset wells outlined or encircled in green.

Q Now, what are the structure lines shown on Exhibit No. 1?

A They represent the top of the Yates Formation, contoured on an interval of twenty-five feet.

Q Now, referring to this exhibit, what do you note with regard to the Shell State H No. 2 and No. 4 wells?

A What do I note with regard to those? Well, they each have 160 acres assigned to them.

Q Where do they stand on the structure?

A Considerably lower structure than any of our Lockharts.

Q On that basis, is it probable to assume that the entire unit which is proposed to be dedicated to the No. 1 Well is productive of gas?

A Yes, it is.

Q Have you prepared a cross section diagram?

A I have here, as Exhibit No. 2 in Case 1110 is a comparison of Well locations west across the Lockhart "A-18" Lease, beginning with Well No. 4 and continuing eastward to Well No. 1. This plat shows the casing set in each of the wells, and shows the present producing intervals, both oil and gas, for the subject well and the oil producing interval for the other wells on the lease. It indicates that the gas from Well No. 1 is coming from the Seven Rivers and Yates Formations, whereas the oil in Well No. 2 and Well No. 4, and formerly Well No. 5, is being produced from the Queen Formation.

Q Does that indicate to you that there is a separation of the formations?

A Yes, sir, they are entirely different formations. As to -- this is an old Well, this Lockhart "A-18" No. 1, has seven inch casing

set at 3,825, cemented with 50 sacks. We had no temperature survey on the top of the cement in this well, however, recent development in that area, in comparing the whole section gauges on recent completions, shows that the holes drilled are very near to bit size, so with eight and three-quarter bit, and assuming that nine inch hole, the cement would extend up above the top of the Queen Formation to approximately 3526.

Q Are you familiar with the production history of the two wells involved in these cases?

A Yes, sir.

Q Before we get to that, what is the completion of Well No. 1?

A It is a Braden Head gas well.

Q Would you state, briefly, what the production history is of these two wells?

A During the past year, the No. 1 well has been shut in. At the advent of gas rationing, it was produced for three months, became over produced, because we were lifting oil wells with the gas, to the extent that it has not caught up yet. It is twenty-four and one-half MMCF over produced at this time. The No. 3 Well, on the other hand, at this time is under produced approximately 105 MMCF.

Q Now, Mr. Boynton, those two wells are completed in substantially the same point of structure, are they not?

A Yes, sir.

Q How do you account for the difference in productivity of the two wells?

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A No. 1 is essentially an open hole completion, whereas your No. 3 Well was perforated and only has a small section in the Yates Formation perforated open to production.

Q In your opinion, could that well be recompleted and made as productive as the No. 1 Well? A Yes, that could.

Q Would that be expensive? A It would.

Q Would any more gas be recovered as a result of such operation?

A I don't think so.

Q Now, have you prepared an exhibit in Case 1111 showing the proposed unit, the present unit and the proposed unit?

A I have.

Q Is that marked as Exhibit No. 1 in Case 1111?

A Exhibit No. 1, Case 1111, is essentially the same as Exhibit No. 1 in Case 1110, it again shows the proposed proration unit outlined in red, and the present unit as a dashed red line, and the well in question encircled in red, and offset proration units outlined in green, with offset gas wells encircled in green. It again has Continental acreage cross-hatched and contoured on top of the Yates Formation.

Q Now, is it necessary, in your opinion, to reduce the size of the unit attributed to Well No. 3?

A It is, in order that we may recover our fair share of the gas.

Q Now, have you a cross section involving Well No. 3?

A I have a comparison of well logs showing Well No. 3 and Well

No. 6.

Q Is that marked as Exhibit No. 2 in Case 1111?

A Yes, sir.

Q What does that show?

A These wells are the wells producing in the N/2 of the SW/4, Section 18; it shows the producing interval of Well No. 3 to be in the Yates Formation from 3168 to 3269, and producing interval of Well No. 6 to be in the Queen Formation, 3775 to 3891; the entire Seven Rivers separates the producing intervals.

Q There again it is your opinion that the oil zone and the gas zones are entirely separate?

A Yes, sir.

Q A moment ago, Mr. Boynton, you referred to Well No. 1 being over produced and Well No. 3 being under produced; what do you base those figures on?

A The proration schedules as of May 31st, 1956.

Q Do you have a deliverability test on the two wells involved?

A No, sir, I don't.

Q You are basing your testimony on their productive history?

A Strictly on production.

Q As reflected by the proration schedule?

A Yes, sir.

Q Now, the proposed unit consists of contiguous quarter-quarter sections?

A That is right.

Q Within a governmental quarter section?

A That is right.



Q They do not exceed 5,230 feet in length or width?

A No, sir.

MR. KELLAHIN: That is all.

MR. NUTTER: Does anyone have a question of the witness?

MR. KELLAHIN: I have one more question.

Q Mr. Boynton, were the exhibits to which you have referred during your testimony prepared by you or under your direction?

A They were prepared under my direction and supervision, yes, sir.

MR. KELLAHIN: We offer Exhibits 1, 2 and 3 in Case 1110 and Exhibits 1 and 2 in Case 1111 in evidence.

MR. NUTTER: Is there any objection to the introduction of these exhibits? If not, they will be received.

THE WITNESS: Correction, there is only 1 and 2 in each case.

MR. KELLAHIN: Correction, Exhibits 1 and 2 in each case.

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

BY MR. REEDER:

Q Mr. Boynton, I am not clear which of the wells presently is under produced.

A No. 3.

Q No. 3, and your No. 1 is currently over produced?

A That is correct.

Q Are they both connected to the pipeline?

A No. 1 has no pipeline connection; No. 3 is connected to El Paso.

Q How is the gas being utilized from the No. 1?

A Since March, 1954, it has been shut in. We stopped gas lifting at that time, and in the near future, we will have a connection to El Paso Natural Gas Company.

Q But the overproduction was achieved while under gas <sup>lift</sup> ~~raise~~?

A Yes.

Q The dedication would once more put this well into production?

A That is correct.

Q And that is basically the primary reason for the transfer of the acreage?

A That is true.

Q Do you have a potential back test, or any other comparative test on the two wells available?

A We will have. They are testing the well today and I can make that available to you in the next day or two.

Q But do you have, from your past knowledge or anything, the comparison?

A No potential test has ever been taken.

MR. REEDER: That is all.

BY MR. GURLEY:

Q Mr. Boynton, who owns this offset property, is that owned by Continental, too, next to your Lockhart No. 1?

A All of our property is shown to be cross-hatched there. We own the property to the north, to the northeast and to the east. I believe that is Shell to the west and southwest, and <sup>Simla</sup> (Repollo) to the south.

Q Is it your opinion, sir, that your Lockhart No. 1 will drain

the 160 acre unit you are asking for?

A I think so. It isn't over a mile long.

Q Do you know the -- even though it is sitting down there in the corner of the unit?

A I believe so, yes.

Q You think it will drain any other part around there?

A If they don't produce their gas it will, yes, sir.

MR. NUTTER: Does anyone else have any further questions of the witness? If not, he may be excused and we will take the case under advisement.

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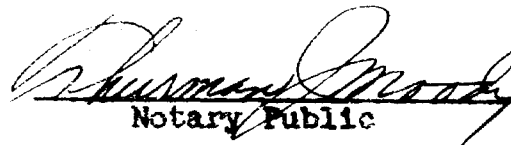
STATE OF NEW MEXICO )

: ss

COUNTY OF BERNALILLO )

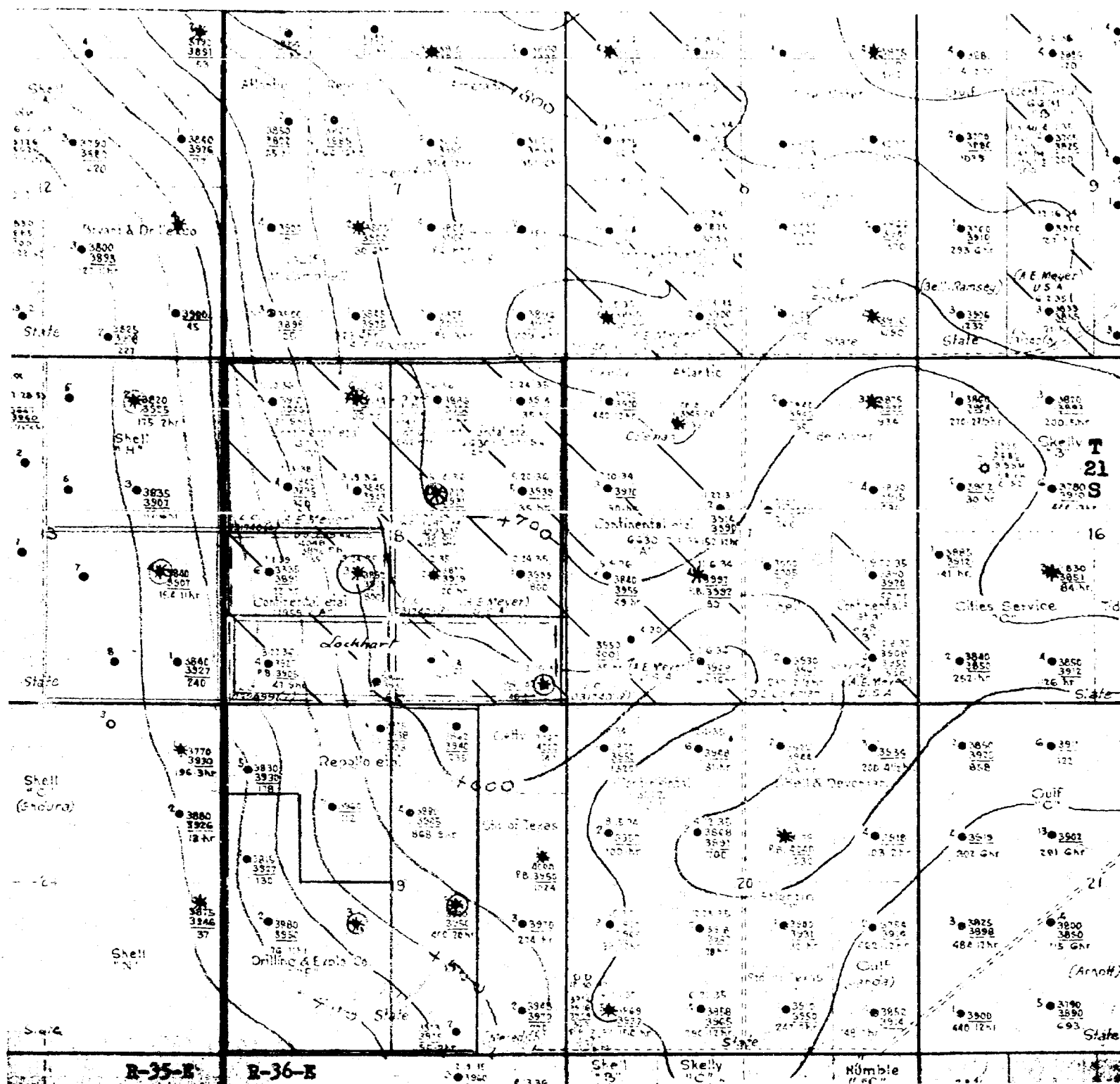
I, THURMAN J. MOODY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision; and that the same is a true and correct transcript thereof to the best of my knowledge, skill and ability.

WITNESS MY HAND AND SEAL, this, the 6th day of August, 1956, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

  
Notary Public

My Commission Expires:  
April 3, 1960.

DEARNLEY-MEIER AND ASSOCIATES  
STENOGRAPHIC REPORTERS  
ALBUQUERQUE, NEW MEXICO  
TELEPHONE 3-6691



○ Subject Gas Well  
 — Existing Pro. Unit  
 — Proposed Pro. Unit

CONTINENTAL OIL COMPANY  
STRUCTURE MAP - EUNICE AREA

○ Offset Gas Well  
 — Proration Unit for  
 Offset Gas Well

Contoured on top of Yates

July, 1956

Contour Int: 50' BEFORE THE

OIL CONS. DIVISION COM. BEFORE THE  
SANTA FE, NEW MEXICO

EXHIBIT No. 1  
CASE 1111

CASE: 1111  
EXHIBIT 1111