

Case No.

1425

Application, Transcript,  
Small Exhibits, Etc.



7

EXAMINER HEARING  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
May 6, 1958

IN THE MATTER OF: Case No. 1425

TRANSCRIPT OF PROCEEDINGS

DEARNLEY - MEIER & ASSOCIATES  
INCORPORATED  
GENERAL LAW REPORTERS  
ALBUQUERQUE, NEW MEXICO  
3-6691 5-9546

EXAMINER HEARING  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
May 6, 1958

-----  
IN THE MATTER OF:

Application of Continental Oil Company for a  
non-standard gas proration unit. Applicant, in  
the above-styled cause, seeks an order establish- ) Case 1425  
ing a 160-acre non-standard gas proration unit in )  
the Tubb Gas Pool consisting of the E/2 E/2 of )  
Section 14, Township 21 South, Range 37 East, )  
Lea County, New Mexico, said unit to be dedi- )  
cated to the applicant's Lockhart B-14 "A" Well )  
No. 2, located 660 feet from the South and East )  
lines of said Section 14. )  
-----

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The hearing will come to order, please. The  
first case on the docket this morning will be Case 1425.

MR. PAYNE: Case 1425: Application of Continental Oil  
Company for a non-standard gas proration unit.

MR. FOX: I would like to enter the appearance of Kellahin  
and Fox, appearing by Robert Fox. I would like to call Mr. Lyon.

(Witness sworn.)

VICTOR T. LYON

called as a witness, having been first duly sworn on oath, testi-  
fied as follows:

DIRECT EXAMINATION

By MR. FOX:

Q State your name, please?

A Victor T. Lyon.

Q By whom are you employed, Mr. Lyon?

A Continental Oil Company.

Q What is your position?

A Acting district engineer.

Q Have you testified before the Commission previously as an expert petroleum engineer?

A Yes, sir.

Q And have your qualifications been accepted by the Commission?

A Yes, sir.

MR. FOX: Does the Examiner accept the qualifications of Mr. Lyon?

MR. NUTTER: Yes, sir, he may proceed.

Q Are you familiar with the application in Case 1425 before the Commission?

A Yes, I am.

(Continental's Exhibits 1, 2, 3, & 4 marked for identification.)

Q Will you describe the nature of the application, Mr. Lyon?

A This is Continental's application for approval of a 160-acre non-standard gas proration unit in the Tubb Pool for our Lockhart B-14 "A" No. 2, which is located 660 feet from the south and east

lines of Section 14, Township 21 South, Range 37 East, Lea County, New Mexico. The reason this is a non-standard unit is that it is requested to consist of the East Half of the East Half of the Section, which makes it a mile long.

Q Is Continental the operator of the Lockhart B-14 "A" Lease involved in the application?

A Yes, sir.

Q Referring to Exhibit 1 -- those are all marked, are they?

A They're in order. I don't believe they are marked.

Q What is Exhibit No. 1?

A Exhibit No. 1 is a location and ownership plat of the Lockhart B-14 "A" lease and the immediately surrounding area. It shows the Lockhart B-14 "A" lease outlined in red, and the No. 2 well circled in red.

Q Does this exhibit show the lease ownership and the well locations in the vicinity of the proposed non-standard unit?

A Yes, sir, it does.

Q Referring to Exhibit 2, which is the contour plat, will you state what this shows, Mr. Lyon?

A Exhibit No. 2 is a plat of the same area shown on Exhibit No. 1, showing the structural contours of the Tubb formation on ten foot contour intervals. It also shows the Lockhart B-14 "A" lease outlined in red, the No. 2 well circled in red. It shows the other producing Tubb wells in the area circled in green, and proration units allocated to those wells outlined in green.

Q Based on the information in this plat, can it reasonably be said in your opinion that all of the acreage which you propose to dedicate to the well in question is productive of gas from the Tubb Gas Pool?

A In my opinion it is productive of gas in its entirety.

Q In regard to this pool and this unit, is the proposed unit within the horizontal limits of the Tubb Gas Pool as defined by the Commission?

A If my nomenclature list is correct, this well, or this unit is outside the presently defined Tubb Gas Pool. I believe that in this section, the West Half of the section is included in the Pool. The East Half is not.

Q Referring to Exhibit 3, which is the log, what does this exhibit show, Mr. Lyon?

A Exhibit No. 3 is a copy of the radioactivity log which was run on this well, and the top of the Blinebry formation and the top of the Tubb formation and the top of the Drinkard formation and the perforations in the Tubb formation are shown by red-pencilled notations.

Q Is this particular well a dual completion well?

A Yes, sir, it is.

Q In what formation is the well completed?

A It's completed in the Tubb formation for gas and in the Blinebry formation for oil, producing from the Terry-Blinebry Oil Pool.

Q As it is presently completed, is it located within the vertical limits of the Tubb Gas Pool, as defined by the Commission?

A Yes, it is.

Q Now, referring to Exhibit 4, what does this exhibit show?

A Exhibit No. 4 is a copy of the Commission's Form C-122 showing the result of a multi-point back pressure test on this well. Actually we were unable to get the points to line up on this well, and therefore an extrapolation at a 45-degree angle was drawn through the 20-hour rate of flow, and this exhibit shows the deliverability at 600 pounds to be 2,370 mcf per day; deliverability of 150 pounds to be 2,630 mcf per day. I think this is quite conservative because some of the shorter flow rates were actually in excess of this.

Q In your opinion, if this application is approved, is this well capable of producing 160-acre allowable from the Tubb Gas Pool?

A Yes, sir, in my opinion it is.

Q Is this unit within one Section?

A Yes, sir.

Q Is it composed of contiguous quarter-sections?

A Yes, it is quarter-quarter sections.

Q Does it exceed in length or width 5,280 feet?

A It is 5,240 feet in length.

Q Is the entire acreage in your opinion reasonably presumed to be productive of gas?



A It is.

Q Were all of these Exhibits 1 through 4 prepared by you or under your direction and supervision?

A Yes, they were.

MR. FOX: If the Examiner please, I would at this time like to offer Exhibits 1 through 4 in evidence.

MR. NUTTER: Is there objection to the introduction of Continental's Exhibits 1 through 4? If not, they will be received.

Q Is the approval of the application in the interest of preventing waste and the protection of correlative rights?

A Yes, sir.

MR. FOX: That's all we have.

MR. NUTTER: Does anyone have any questions of the witness?

CROSS EXAMINATION

By MR. NUTTER:

Q What evidence do you have that the 80 acres in the northernmost portion of this unit is productive from the Tubb?

A If you will notice, the lowest contour line which passes through the Magnolia Williamson lease goes through the northern part of that 80 acres, so we feel quite certain that at least the Tubb is productive to that point, and we feel that it is productive below that, also.

Q What control did you have in drawing your contour lines?

A We have --

Q (Interrupting) Are there any Tubb wells to the north of

this well?

A Not immediately, no.

Q Did you have any tops for the Tubb formation in Section 11 or the northeast corner of Section 14?

A I am not certain what formations these wells are producing from except on those four leases. I believe that the Western Oil Field Bunin No. 1 is producing from the Drinkard, but I'm not certain. Actually these contours were given to us by our geologists.

Q What is the lowest contour that is shown on this plat that is a gas producing zone in the Tubb formation, Mr. Lyon?

A Sir?

Q What is the lowest contour on this plat that goes through a well which is producing from the Tubb formation?

A I believe that the Magnolia Williamson is the lowest well, which is producing from approximately a minus 2695. Also, let me point out, if I may, that our No. 1-D on the Lockhart B-14 "A" is a Drinkard well and of course we have a Tubb top on it.

Q However, the contour that goes through your No. 1-D is outside the Magnolia Williamson unit, is it not?

A Yes, it is. We haven't tested the Tubb in that well.

Q So without any control to positively indicate that the Tubb is productive, your assumption that the northernmost 80 acres in this proposed unit is based on a certain amount of conjecture, is it not?

A No, I don't believe it is. If you will note, these contour

intervals are ten feet, so there's only about 30 feet structural difference shown on this plat throughout this lease.

Q What's the total interval that you have perforated in this well?

A There is an interval of approximately 50 feet.

Q Mr. Lyon, has any effort been made to communitize the 80 acres in the East Half of the Southeast Quarter of Section 14 with the West Half of the Southwest Quarter of Section 14?

A No, sir, I don't believe that there has been.

Q So no effort has been made to form a standard unit for this well?

A No, sir, but may I point out that should this acreage be communitized in order to develop the entire lease, it would take two communitizations, one with Gulf and one with Shell.

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

MR. UTZ: Yes, I have one.

MR. NUTTER: Mr. Utz.

By MR. UTZ:

Q Did I understand you to say that the slope in excess of one was plotted on the data that you have submitted here from whatever exhibit it was?

A I don't believe I stated it was in excess of one. I said that we could not get the points to line up. I really didn't check the slope.

Q Do you happen to have a plat that you plotted the slopes on?

A Let me see if I have.

Q What I am driving at, I think you plotted the points on the C-121 "C" and while there are only three outer points, the point is considerably less than point five?

A That is true.

Q So that an O.F. based on 45-degree slope would be considerably in error?

A Yes, sir, it is considerably.

Q Rather than one point zero, it ought to be on a point five, so your points fell on less than point five?

A Yes, sir. We drew it on a one point slope just to stay on the conservative side. It didn't line up on a point five slope.

Q I wouldn't say that was on the conservative; I would say it was on the other side of the conservative, too high.

A I believe we had flow rates in excess of our calculated open flow.

Q The pressure information you got gave you a bad figure; that is your reason for saying that 2650 is on the conservative side?

A Yes, sir.

Q In the flow rates?

A Yes.

Q It was not due to the point of alignment?

A That is true.

Q This slope that you have here is that last point stabilized,

or is any of the points stabilized?

A Well, yes, sir, they were all stabilized.

Q The last point of 2329 Q is stabilized?

A Yes, sir.

Q Then tell me why you drew the slope where you did.

A We drew the slope through the 20-hour point which was the longest rate of flow, longest period of flow on one rate, and felt that it was the most representative.

Q Perhaps I'm in error due to having plotted these real quick. I wonder if I gave you this, you would plot me that stabilized point; this being the stabilized point here, the 2329 and the 3181. The point I get is this one.

A Well, your Q here is only 200.

Q That's okay, I was too fast. That's all I have.

MR. NUTTER: Anything further, Mr. Utz?

MR. UTZ: No.

By MR. NUTTER:

Q In drilling its Continental Lockhart No. 1-D, was any gas encountered in the Tubb formation?

A Not to my knowledge. It's quite unusual to pick up traces of gas in the Tubb, because it has to be in nearly every case stimulated considerably in order to get it to produce.

Q No effort was made to see if there was any gas in the Tubb when that well was drilled?

A No, the Tubb was not under development at that time.

MR. NUTTER: Anyone else? If not, the witness may be excused.

(Witness excused.)

MR. NUTTER: Does anyone have anything further they wish to offer in Case 1425? If not, we will take the case under advisement.

\* \* \* \* \*

C E R T I F I C A T E

STATE OF NEW MEXICO     )  
                                  ) ss  
COUNTY OF BERNALILLO    )

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 12<sup>th</sup> day of May, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Ada Dearnley  
NOTARY PUBLIC

My commission expires:  
June 19, 1959.

I do hereby certify that the foregoing is a complete and correct transcript of the proceedings in the Exhibit of Case No. 1425 heard by me on 5-6, 1958.

[Signature] Examiner  
New Mexico Oil Conservation Commission

DEARNLEY, MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE, NEW MEXICO  
Phone CHapel 3 6591

**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. 1425  
Order No. R-1203**

**APPLICATION OF CONTINENTAL OIL COMPANY  
FOR APPROVAL OF A 160-ACRE NON-STANDARD  
GAS PRORATION UNIT IN THE TUBB GAS POOL,  
LEA COUNTY, NEW MEXICO.**

**ORDER OF THE COMMISSION**

**BY THE COMMISSION:**

This cause came on for hearing at 9 o'clock a.m. on May 6, 1958, at Santa Fe, New Mexico, before Daniel S. Mutter, 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 18<sup>th</sup> day of June, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Mutter, 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 E/2 E/2 of Section 14, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant proposes to establish a 160-acre non-standard gas proration unit consisting of the above-described acreage, said unit to be dedicated to the applicant's Lockhart B-14 "A" Well No. 2, located 660 feet from the South line and 660 feet from the East line of said Section 14.
- (4) That the entire acreage in the proposed non-standard gas proration unit may reasonably be presumed to be productive of gas from the Tubb Gas Pool.
- (5) That approval of the subject application will not cause waste nor impair correlative rights.
- (6) That the subject application should be approved.

-2-

Case No. 1425  
Order No. R-1203

IT IS THEREFORE ORDERED:

(1) That a 100-acre non-standard gas proration unit in the Tubb Gas Pool, consisting of the E/2 E/2 of Section 14, Township 21 South, Range 27 East, NMPM, Lea County, New Mexico, be and the same is hereby established, said unit to be dedicated to the applicant's Lockhart B-14 "A" Well No. 2, located 600 feet from the South line and 600 feet from the East line of said Section 14.

(2) That the said Lockhart B-14 "A" Well No. 2 be granted an allowable equal to that of a standard gas proration unit in the Tubb Gas Pool.

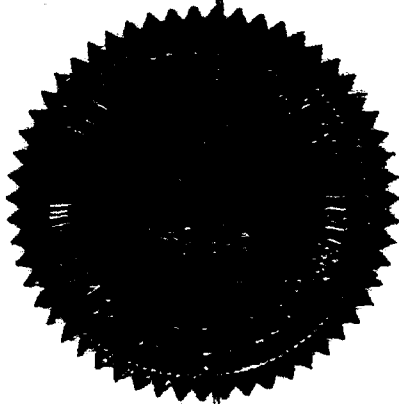
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
EDWIN L. MECHEM, Chairman

  
MURRAY E. MORGAN, Member

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



1r/



**CASE 1429**  
**Continued**

after separately measuring the oil from each of said pools by means of volume type meters.

**CASE 1430:**

Application of El Paso Natural Gas Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 331-acre non-standard gas proration unit in the Blanco Mesaverde Gas Pool consisting of the W/2 of Partial Section 6 and the NW/4 of Partial Section 7, Township 30 North, Range 8 West, San Juan County, New Mexico, said unit to be dedicated to the applicant's Howell No. 2-G Well located 990 feet from the South and West lines of said Section 6.

**CASE 1431:**

Application of Skelly Oil Company for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its P. L. Davis Well No. 1, located 990 feet from the North and East lines of Section 26, Township 26 North, Range 11 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from an undesignated Gallup gas pool and gas from an undesignated Dakota gas pool underlying the above-described area.

**CASE 1432:**

Application of King Oil Company for approval of three unorthodox gas well locations. Applicant, in the above-styled cause, seeks an order authorizing the unorthodox gas well locations for the following described wells:

Navajo A-1 Well, located 2310 feet from the South line and 2310 feet from the West line of Section 4, Township 30 North, Range 17 West;

Navajo A-2 Well, located 1650 feet from the North line and 330 feet from the East line of Section 4, Township 30 North, Range 17 West;

Navajo B-2 Well, located 660 feet from the South line and 660 feet from the East line of Section 34, Township 31 North, Range 17 West,

all in San Juan County, New Mexico.

DOCKET: EXAMINER HEARING MAY 6, 1958  
 OIL CONSERVATION COMMISSION 9 a.m., MABRY HALL, STATE CAPITOL, SANTA FE,

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1425: Application of Continental Oil Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 160-acre non-standard gas proration unit in the Tubb Gas Pool consisting of the E/2 E/2 of Section 14, Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Lockhart B-14 "A" Well No. 2, located 660 feet from the South and East lines of said Section 14.

CASE 1426: Application of Neville G. Penrose for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 120-acre non-standard gas proration unit in the Blinbry Gas Pool consisting of the S/2 SE/4 and SE/4 SW/4 of Section 17, Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Percy Hardy No. 1 Well, located 660 feet from the South line and 1980 feet from the West line of said Section 17.

CASE 1427: Application of Pan American Petroleum Corporation for approval of a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 480-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the N/2 and SE/4 of Section 24, Township 20 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's O. J. Gillully "A" No. 4 Well, located 660 feet from the North line and 1980 feet from the East line of said Section 24.

CASE 1428: Application of E. G. Rodman for the approval of a communitization agreement and for a forced pooling order. Applicant, in the above-styled cause, seeks an order approving a communitization agreement embracing the NW/4 and the W/2 NE/4 of Section 20, Township 21 South, Range 37 East, Lea County, New Mexico, as to dry gas and associated liquid hydrocarbons produced from said tract from the interests of all persons in the above-described tract who have not voluntarily subscribed to above-referenced communitization agreement.

CASE 1429: Application of Standard Oil Company of Texas for a dual completion and for permission to commingle the production from two common sources of supply. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its V. L. Leavitt No. 2 Well, located 1650 feet from the North line and 2310 feet from the West line of Section 13, Township 18 South, Range 26 East, Eddy County, New Mexico, in such a manner as to permit the production of oil from the Atoka-Grayburg Pool and oil from the Atoka (San Andres Pool) through parallel strings of tubing; and further, for permission to commingle the production from the said V. L. Leavitt No. 2 Well from both of the above-described pools in common tankage

- CASE 1433: Application of Graridge Corporation to expand a pilot water flood project in the Caprock Queen Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order permitting the expansion of the pilot water flood project authorized by Order No. R-972 in the North Caprock Queen Unit in the Caprock-Queen Pool, Lea County, New Mexico, to include eight additional water injection wells in Sections 30, 31, and 32 of Township 12 South, Range 32 East, Lea County, New Mexico.
- CASE 1434: Application of Tidewater Oil Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Coates "C" Well No. 11, located 1980 feet from the North line and 1650 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool and oil from the Justis-Fusselman Pool through parallel strings of tubing.
- CASE 1435: Application of Continental Oil Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the SE/4 of Section 5 and the NE/4 of Section 8, all in Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Hawk A-8 No. 2 Well located 660 feet from the North line and 1980 feet from the East line of said Section 8.
- CASE 1436: Application of Amerada Petroleum Corporation for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Bagley-Upper Pennsylvanian Gas Pool consisting of the SE/4 of Section 3 and the NE/4 of Section 10, all in Township 12 South, Range 33 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Amerada Mathers No. 2 Well located in the SE/4 SE/4 of said Section 3.
- CASE 1437: Application of Continental Oil Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the N/2 of Section 7, Township 23 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Stevens B-7 Unit Well No. 1 located 990 feet from the North and West lines of said Section 7.
- CASE 1438: Application of Monsanto Chemical Company for an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order authorizing an unorthodox gas well location for its Viersen Well No. 1 at a point 660 feet from the North and East lines of Section 19, Township 30 North, Range 13 West, San Juan County, New Mexico.

ir/

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 6-5-58

CASE NO. 1425

HEARING DATE DSN SF 9am 5-6-58

My recommendations for an order in the above numbered case(s) are as follows:

Enter an order approving the 160-acre non-std gas proration unit in the Tubbs gas pool as requested by applicant.

While there is considerable doubt in my mind as to whether applicant has provided substantial evidence that the acreage within the unit is entirely productive of gas, particularly the North half of it, the consensus of Commission staff experts is that it is. I: yield

  
Staff Member  
examiner



## CONTINENTAL OIL COMPANY

825 PETROLEUM BUILDING  
ROSWELL, NEW MEXICO

R. L. ADAMS  
DIVISION SUPERINTENDENT  
OF PRODUCTION  
NEW MEXICO DIVISION

March 28, 1958

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

Attention: Mr. A. L. Porter, Jr., Secretary-Director  
Gentlemen:

Attached are three copies of Continental Oil Company's application for an exception to Rule 5 (a) of the special rules and regulations for the Tubb gas pool contained in Order No. R-586 in the establishment of a non-standard gas proration unit of 160 acres consisting of the E/2 of the E/2, Section 14, T 21S, R 37E, NMPM, Lea County, New Mexico, to be allocated to its Lockhart B-14 "A" Well No. 2. It is respectfully requested that this matter be set for hearing at the earliest convenient date.

Yours very truly,

RLA-JC

Enc.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE  
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF CONTINENTAL OIL COMPANY FOR AN  
EXCEPTION TO RULE NO. 5 (a) OF THE  
SPECIAL RULES AND REGULATIONS FOR  
THE TUBB GAS POOL CONTAINED IN ORDER  
NO. R-586 IN ESTABLISHMENT OF A NON-  
STANDARD GAS PRORATION UNIT OF 160  
ACRES CONSISTING OF THE E/2 E/2  
SECTION 14, T 21S, R 37E, NMPM, LEA  
COUNTY, NEW MEXICO, TO BE ALLOCATED  
TO ITS LOCKHART B-14 "A" WELL NO. 2.

A P P L I C A T I O N

Comes now applicant, Continental Oil Company and petitions the Commission for an order approving a non-standard gas proration unit consisting of the E/2 E/2 Section 14, T 21S, R 37E, NMPM, in the Tubb gas pool, Lea County, New Mexico, to be allocated to its Lockhart B-14 "A" well No. 2 located 660 feet from the south and east lines of said Section 14, and in support thereof would show:

1. That applicant is co-owner and is the operator of a lease designated as the Lockhart B-14 "A" lease consisting of the E/2 E/2 Section 14, T 21S, R 37E, NMPM, Lea County, New Mexico.

2. That applicant drilled and completed on January 10, 1954, its No. 2 well on said lease located 660 feet from the south and east lines of said Section 14, as an oil well producing from the Wantz Abo pool.

3. That subsequently in conformance with order No. R-875 dated September 13, 1956, the said well No. 2 was plugged back and dually completed on January 14, 1958, as a Terry Blinebry oil well and a Tubb gas well.

4. That no portion of the said lease is allocated to any gas well, and that all of said lease may reasonably be presumed to be productive of gas from the Tubb formation and should be allocated to a gas well in the interest of the prevention of waste and the protection of correlative rights.

5. That the most practical and economical method of allocating said acreage for Tubb gas production is to establish a 160-acre non-standard gas proration unit for assignment to the Lockhart B-14 "A" No. 2 as outlined above.

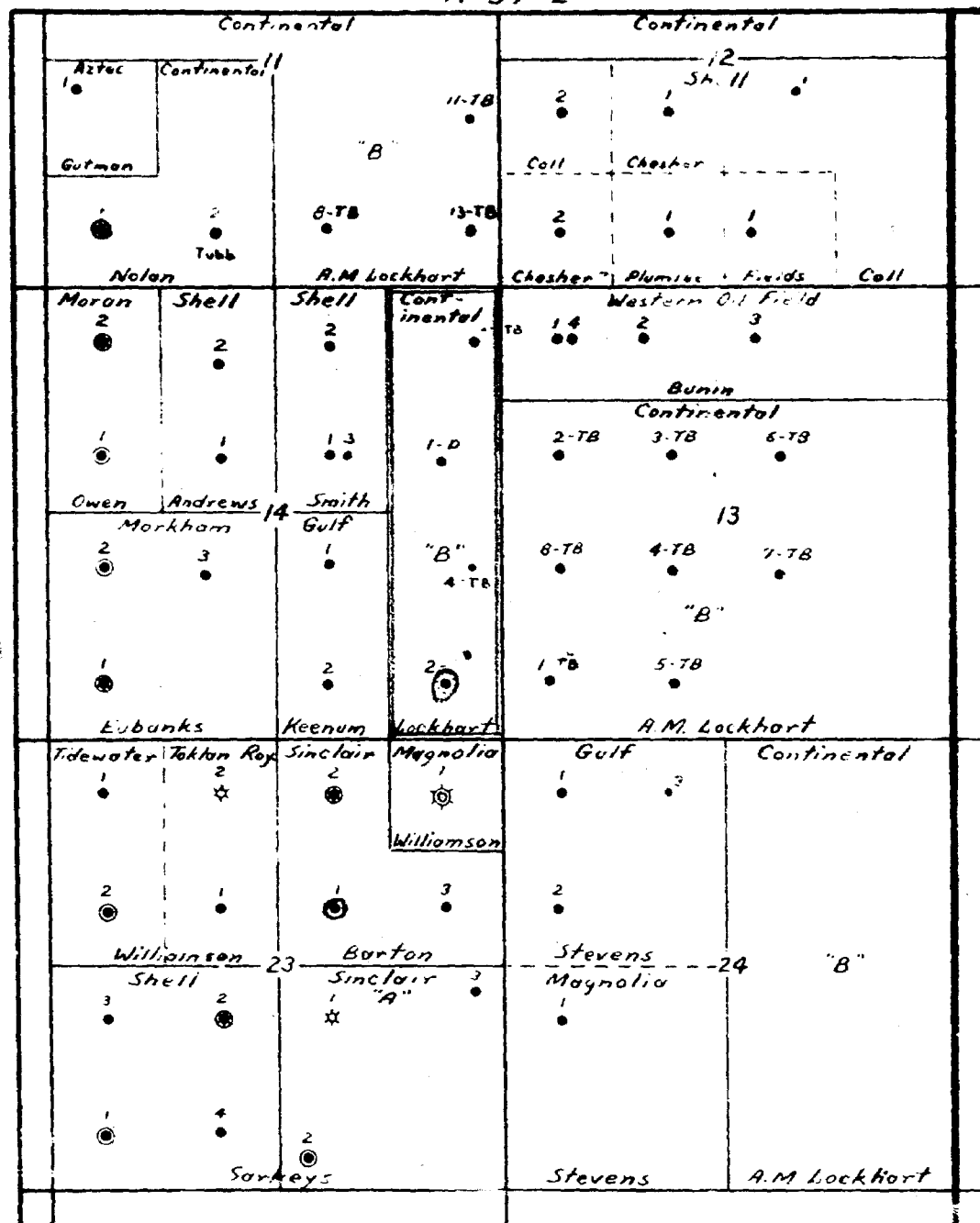
Wherefore, applicant prays that this application be set for hearing before the Commission's duly appointed examiner, that appropriate notice thereof be given, and that upon hearing an order be entered granting applicant an exception to Rule 5 (a) of the special rules and regulations for the Tubb gas pool contained in Order No. R-586 for the non-standard gas proration unit described above.

Respectfully submitted,  
CONTINENTAL OIL COMPANY



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

R-37-E



T  
21  
S

### LEGEND

- Single Completion for Oil
- ⊙ Dual Completion (Tubb gas)
- \* Dual Completion (Blinbry gas)
- ⊗ Gas-Gas Dual (Blinbry & Tubb)
- ☆ Blinbry Gas Well

### LOCATION AND OWNERSHIP PLAT

Continental Oil Company  
Lockhart B-14 "A" Lease  
Sec. 14, T-21S, R-37E.  
Lea County, New Mexico

Scale 1" = 2000'

Bunice District  
Office  
January 14, 1958



NEW MEXICO  
OIL CONSERVATION COMMISSION  
P. O. Box 871  
Santa Fe, New Mexico

Date April 18, 1958

Continental Oil Co.  
825 Petroleum Bldg.  
Roswell, New Mexico

ATTENTION: R. L. Adams

Gentlemen:

Your application for 160-acre non-standard gas proration unit in the Tubb  
Gas Pool

dated March 28, 1958 has been received, and has been tentatively  
scheduled for hearing before an examiner on  
May 6, 1958

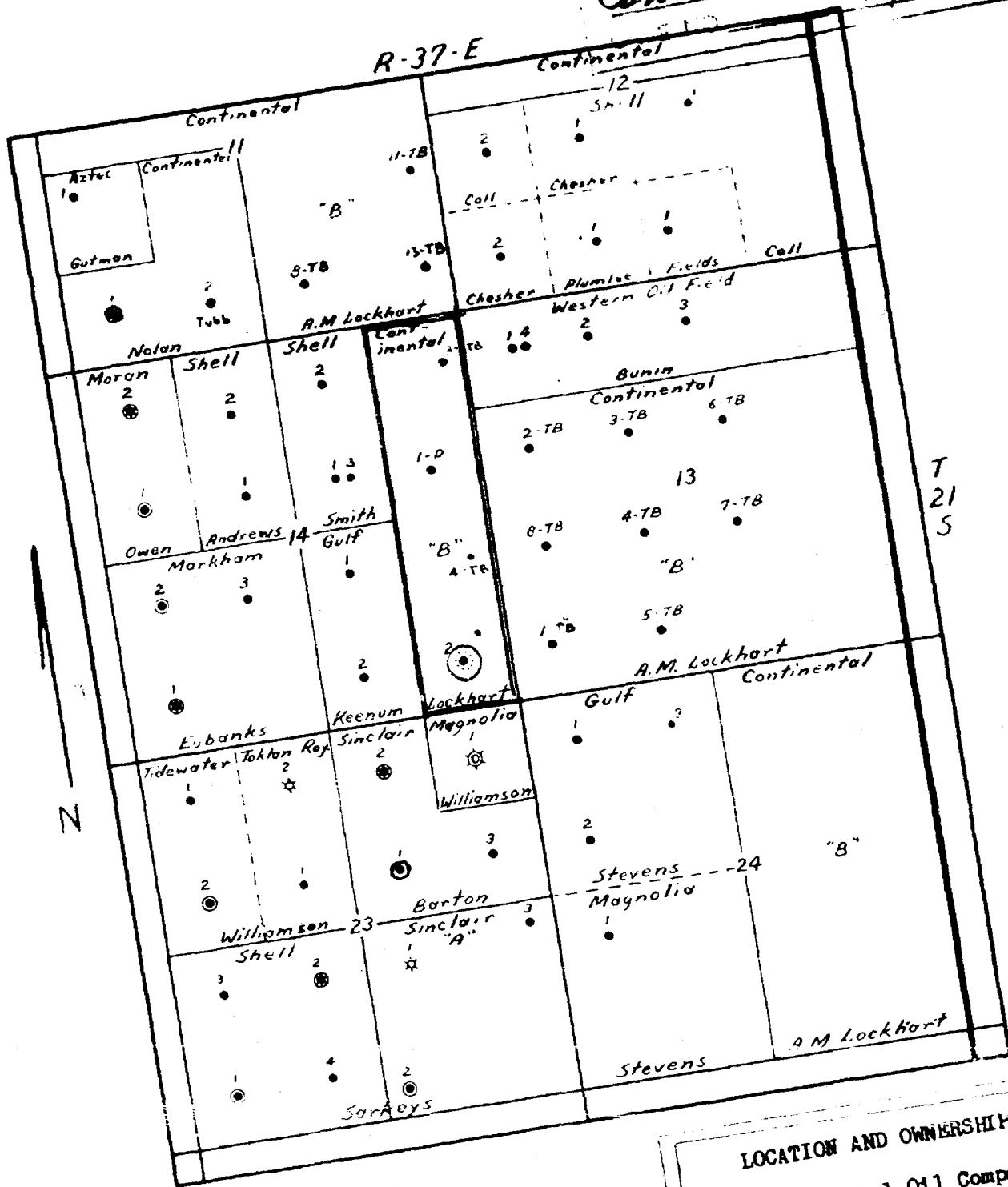
A copy of the docket will be forwarded to you as soon as the matter is  
advertised.

Very truly yours,

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

ga

BEFORE EXAMINED NUTTER  
U. S. CONSERVATION COMMISSION  
*Cont.* EXHIBIT NO. 1  
1425



LEGEND

- LEGEND
- Single Completion for Oil
  - ◎ Dual Completion (Tubb gas)
  - \* Dual Completion (Blinbry gas)
  - ☼ Gas - Gas Dual (Blinbry & Tubb)
  - ☆ Blinbry Gas Well

LOCATION AND OWNERSHIP PLAT

Continental Oil Company  
Lockhart B-14 "A" Lease  
Sec. 14, T-21S, R-37E.  
Lea County, New Mexico

Scale 1" = 2000'

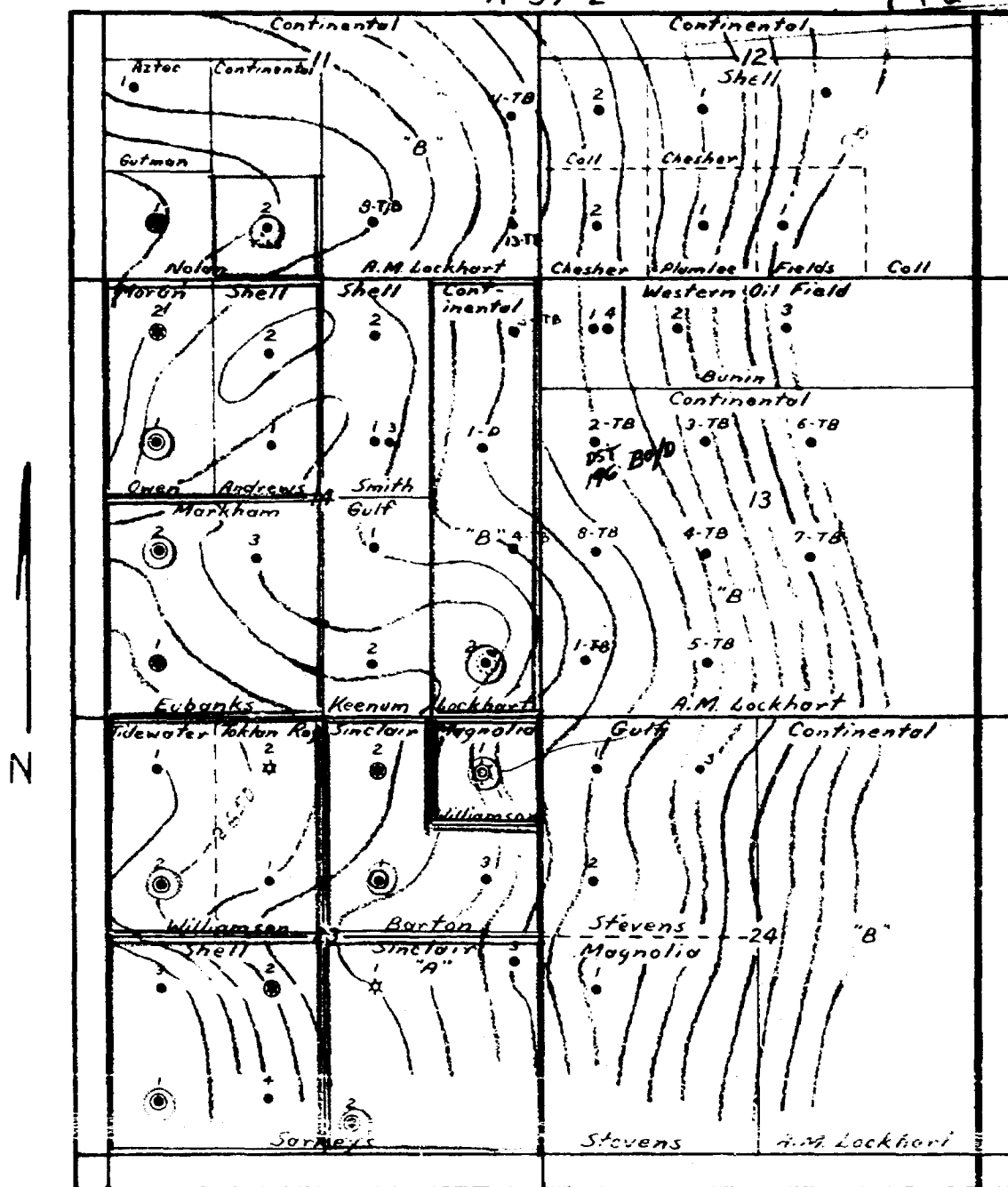
Bunice District  
Office  
January 4., 1958

FORE EXAMINER NUMBER

RECEIVED BY COMMISSION

Cont EXHIBIT NO. 2  
1425

R-37-E



T  
21  
5  
441 MCF

LEGEND

- Single Completion for Oil
- ◉ Dual Completion (Tubb gas)
- ◐ Dual Completion (Blinbry gas)
- ⊗ Gas - Gas Dual (Blinbry & Tubb)
- ☆ Blinbry Gas Well

TUBB CONTOUR PLAT

Continental Oil Company  
Lockhart B-14 "A" Lease  
Sec. 14, T-21S, R-37E  
Lea County, New Mexico

Scale 1" = 2000'  
Contour Int. = 10'

Bunice District  
Office  
January 14, 1958

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT PRESSURE TEST FOR GAS WELLS

Pool Tubb Perforation Tubb County Lea

Initial X Annual  Special  Date of Test 1-13/1-14-58

Company Continental Oil Company Lease Lockhart -14 A Well No. 2-A

Unit P Sec. 14 Twp. 21-S Rge. 37-E Purchaser El Paso Natural Gas Company

Casing 5 1/2" wt. 178 I.D. 4.892 Set at 7446' Perf. 6163 To 6287

Tubing 2" wt. 4.7 I.D. 1.995 Set at 6160' Perf.  To

Gas Pay: From 6163 To 6287 L 6163 xG .670 -GL 4129 Bar. Press. 13.2

Producing Thru: Casing X Tubing  Type Well G. O. Dual

Date of Completion: 1-14-58 Packer 5855 & 5671 Reservoir Temp. 102°

## OBSERVED DATA

Tested Through XXXXXX (XXXXX) (Meter)Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								1890		72
1.	4"	1.500	250	10.0	100			1592		3
2.	4"	1.500	260	19.0	190			1320		3
3.	4"	1.500	265	28.0	280			982		3
4.	4"	1.500	275	43.0	420			573		3
5.	4"	1.500	270	31.0	380			647		20

## FLOW CALCULATIONS

No.	Coefficient Flange (24-Hour)	$\sqrt{h_{wPF}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	126.69	1605.2	1.0518	.9463	1.333	2351
2.	13.99	139.16	1333.2	1.0419	.9463	1.248	2739
3.	13.99	166.93	995.2	1.0323	.9463	1.137	2639
4.	13.99	156.91	586.2	1.0178	.9463	1.077	2277
5.	13.99	158.39	660.2	1.0219	.9463	1.087	2329

G. F. Potential based on extrapolation from 20-hr rate at 45° slope.

## PRESSURE CALCULATIONS

Above points do not line up.

Gas Liquid Hydrocarbon Ratio dry cf/bbl.

Gravity of Liquid Hydrocarbons 1.812 deg.

F<sub>c</sub> (1-e<sup>-S</sup>) 0.247

Specific Gravity Separator Gas .670

Specific Gravity Flowing Fluid 1.933.2

P<sub>c</sub> 3022.2

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> P <sub>c</sub>
1.	1605.2	2576.7	4.22	17.81	4.40	2581.1	1041.1	1600.6	84.41
2.	1333.2	1777.4	4.96	24.60	5.08	1783.3	1838.	1335.2	70.17
3.	995.2	990.4	4.78	22.85	5.64	996.9	2026.2	998.0	52.44
4.	586.2	343.6	4.13	17.06	4.21	347.8	3274.4	589.8	30.99
5.	660.2	435.9	4.22	17.81	4.40	440.3	3181.9	663.6	34.36

Absolute Potential: 2,650 MCFPD; n 1.000

COMPANY Continental Oil Company

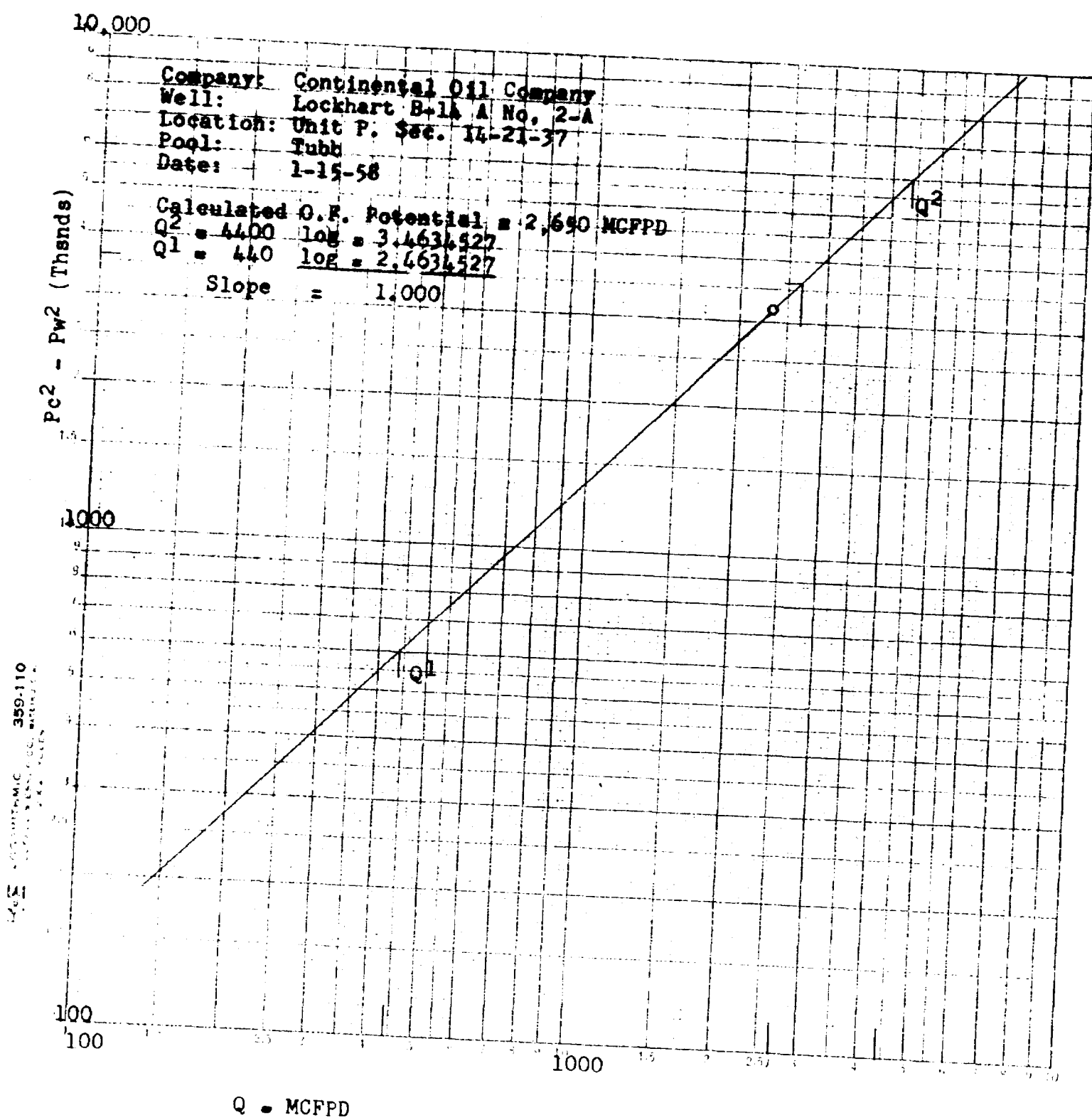
ADDRESS Box 88, Unice, New Mexico

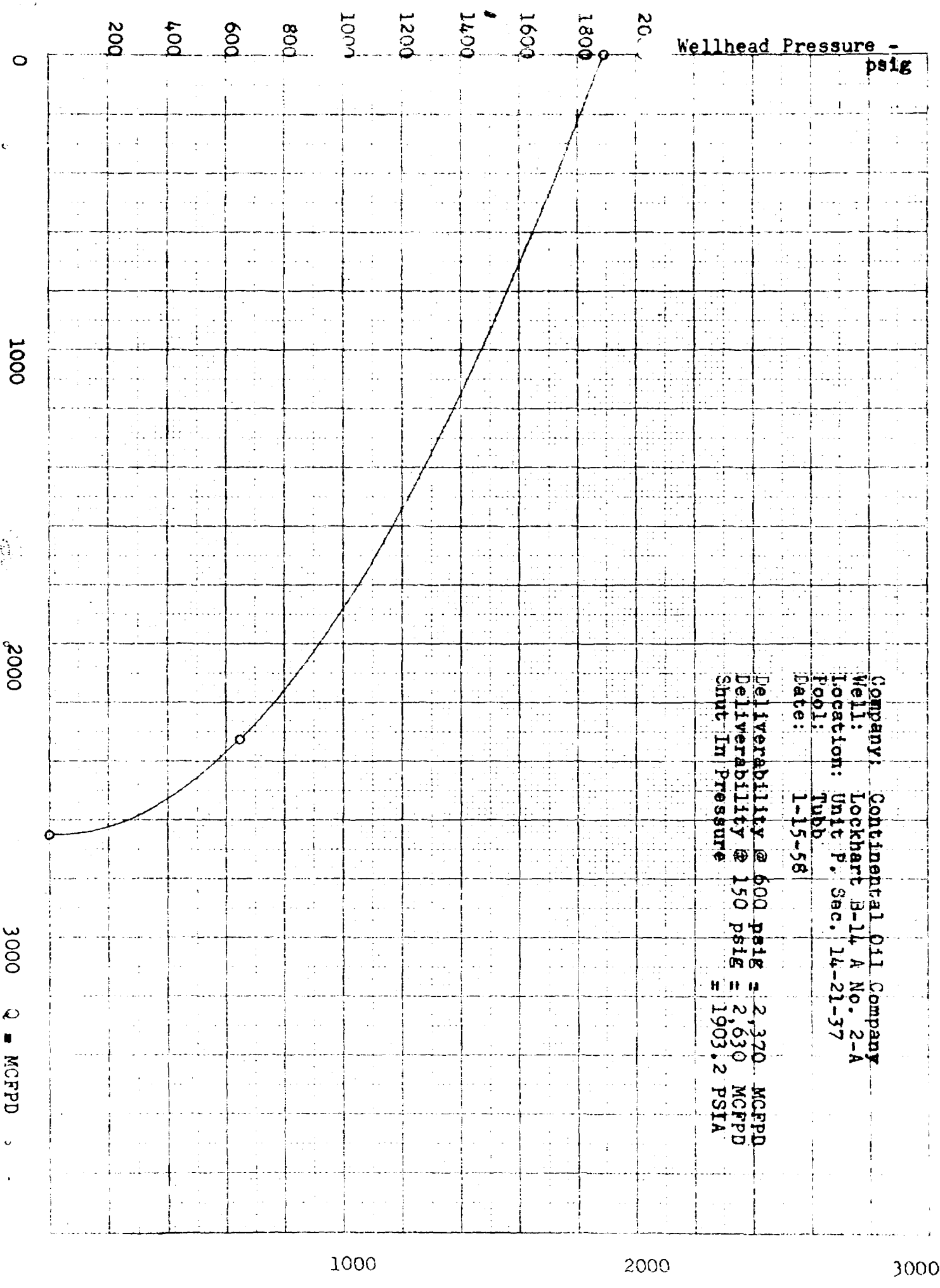
AGENT and TITLE

WITNESSED

COMPANY

\*0.15 crossover choke set 5670'. REMARKS





Company: Continental Oil Company  
Well: Lockhart B-14 A No. 2-A  
Location: Unit P. Sec. 14-21-37  
Pool: Tubb  
Date: 1-15-58  
Deliverability @ 600 psig = 2,370 MCFPD  
Deliverability @ 150 psig = 2,630 MCFPD  
Shut In Pressure = 1903.2 PSIA

NEW MEXICO OIL CONSERVATION COMMISSION

Mabry Hall

Santa Fe, NEW MEXICO

1425

REGISTER

HEARING DATE \_\_\_\_\_ Examiner \_\_\_\_\_ May 6, 1958 TIME: 9:00 a.m.

NAME:	REPRESENTING:	LOCATION:
Henry R. Levinger	Skelly	Julian, Okla
Lee R. King	Skelly Oil Co.	Farmington, N.M.
R. J. Churchill	Neville G. Pennon, Inc.	Fort Worth, Texas
John P. McLaughlin	"	"
John F. Sumner	King Oil Co.	"
Harold C. Kidd	Amerada Pet. Corp.	Monument, New Mexico
RE FOX	"	Santa Fe
RH Stewart	Std Oil Co. of Tex	Houston, Tex
R. A. Elliott	"	"
J. R. GRAHAM	"	"
G. Smith	dist. - New York	Arto, Tex
RN Miller	Tidewater Oil Co	Hobbs
DAN CURRENS	PAN AMERICAN	Roswell
Guy Buell	"	Elk, New Mex
V. T. LYON	CONTINENTAL OIL	Deming, N.M.
W. H. Smith	Belmont & Levin	Deming
Lamar Lunt	"	"
Nancy Royal	"	Santa Fe

NEW MEXICO OIL CONSERVATION COMMISSION  
Mabry Hall  
Santa Fe, NEW MEXICO

REGISTER

HEARING DATE May 6, 1958 Examiner                      TIME: 9:00 a.m.

NAME:	REPRESENTING:	LOCATION:
<i>Garnett Whitcomb</i>	<i>El Paso Natural Gas</i>	<i>El Paso, Texas</i>
<i>E. J. Motter</i>	<i>Cities Service</i>	<i>Nobbs, N. M.</i>
<i>D. N. Carefuld</i>	<i>El Paso Natural Gas</i>	<i>Farmington, N. M.</i>
<i>Robert H. Pack</i>	<i>Bramble Corp.</i>	<i>Breckenridge, Tex.</i>
<i>BBGind</i>	<i>Bramble Corp.</i>	<i>Breckenridge, Tex.</i>