

CASE 4165: Application of SAM  
BOREN FOR SPECIAL POOL RULES FOR  
EAST BAGLEY-PENNSYLVANIAN POOL.

Case Number.

4/65

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Application

Transcripts.

Small Exhibits

ETC.

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

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 1, 1970

EXAMINER HEARING

-----  
IN THE MATTER OF: )

In the matter of Case No. 4165 )  
being reopened pursuant to the )  
provisions of Order No. R-3795 )  
which order established 160-acre ) Case No. 4165  
spacing units and an 80-acre )  
proportional factor of 4.77 )  
for the East Bagley-Pennsylvanian )  
Pool, Lea County, New Mexico. )  
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BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: In the matter of 4165 being reopened pursuant to the provisions of Order No. R-3795, which order established 160-acre spacing units an 80-acre proportional factor of 4.77 for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, I have been advised the original applicant in this case will not appear and present any testimony as to why the 80 acre, 160-acre spacing units developed on less than a 160-spacing unit to show cause why the said pool should not be developed on 40-acre spacing units and why the limiting gas-oil ratio should not revert to 2000 to 1. If there are no other appearances in the case, I would recommend that the rules for the pool be abolished.

MR. UTZ: Any appearance in Case 4165?

Since there are no appearances, the applicant in this case does not wish to reappear and show cause why we should retain 160-acre spacing, we will abandon the order and the East Bagley Pool will revert to its original spacing which, I believe, was 40 acres.

STATE OF NEW MEXICO )  
 ) ss  
 COUNTY OF BERNALILLO )

I, PETER A. LIMIA, Certified Shorthand Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Peter A. Limia  
 CERTIFIED SHORTHAND REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4465 heard by me on July 19, 1970.  
[Signature] Examiner  
 New Mexico Oil Conservation Commission

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 9, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Sam Boren for special  
pool rules, Lea County, New Mexico.

Case No. 4165

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 4165.

MR. HATCH: Case 4165, application of  
Sam Boren for special pool rules, Lea County, New  
Mexico.

(Whereupon, Applicant's  
Exhibits 1 through 3 were  
marked for identification.)

MR. KELLAHIN: If the Examiner please,  
Jason Kellahin, Kellahin and Fox, Santa Fe, appearing  
for the applicant, and I have one witness I'd like  
to have sworn.

(Witness sworn.)

RALPH VINEY

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A My name is Ralph Viney, V-I-N-E-Y. I am  
domiciled in Midland, Texas.

Q What business are you in, Mr. Viney?

A In the consulting business.

Q As a petroleum engineer?

A Yes, sir.

Q Consulting engineer?

A Consulting engineer.

Q Have you testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Viney, in connection with your work as a consulting engineer, have you done any work for Sam Boren in connection with Case 4165?

A Yes, sir.

Q What's proposed in this application?

A Case 4165, special pool rules requesting a hundred and sixty acre spacing and proration units with the assignment of eighty-acre allowables to said proposed spacing unit.

Q Now, have you made a study of the East Bagley-Pennsylvanian Pool in connection with this application?



A Yes, sir.

Q Referring to what has been marked as the Applicant's Exhibit "A," consisting of numbered -- a booklet containing numbered exhibits, will you discuss the information shown in that exhibit?

A Yes sir, Mr. Kellahin. The basic premise for the application is economics and drainage. The ultimate recovery of a well in the east Bagley field based on available performance of an offsetting well indicates such a well could approach a hundred and eight thousand barrels of oil. Volumetrically, using historical data as derived from electric logs of porosity, connate water saturation, et cetera, and fluid characteristics as calculated, using gas-oil ratio and gravity, temperature, pressure information, indicates that a well on a hundred and sixty acres could recover approximately ninety-six thousand barrels if the recovery efficiency is twenty per cent.

Q Now, what bottom test did you use in making that --

A The parameters are shown in the first

page of the exhibit, and include eight and a half per cent porosity, a water saturation of thirty per cent, a formation volume factor of 1.23 barrels per barrel, and a twenty per cent recovery efficiency.

Q Now, this information, is this based primarily on a well drilled by Sam Boren, the applicant?

A No sir, the parameters, the time circle data used encompasses information obtained from existing wells in the field.

Q How many are there?

A There are four with the Sam Boren. The Barbera State Number One --

Q Now, Sam Boren did drill the Barbera State "A" Well Number One, is that right?

A This is correct.

Q The Barbera --

A Yes, sir.

Q And what is the location of that well?

A The well is located 660 feet from the south and east lines of Section 6, Township 12 South, Range 34 East.

Q And what was the potential on that well?

A This well was potentialed June 1st for two hundred twelve barrels of oil and seventy-five barrels of water, and total gas was 254 MCF, and the gas-oil ratio calculated out to be twelve hundred cubic feet per barrel.

MR. NUTTER: What was the water again?

A Seventy-five barrels, as is shown on the fourth paragraph on the front page.

Q (By Mr. Kellahin) Now, referring to what has been marked as Exhibit One of Exhibit "A," will you identify that exhibit, please?

A Yes sir, this is a land lease map. Posting date of this land lease was June 20th, and it shows in yellow outline the Boren acreage acquired or obtained through farmouts.

Q Now --

A Excuse me --

Q -- the applicant is seeking a hundred sixty acre spacing in this application. Would he have a hundred sixty acres to dedicate to a well on each of the units he presently controls?

A Yes sir, and -- with the exception of possibly the west half of Section 6. At that point, he controls forty acres out of the -- out of those of the southwest.

Q Other than that, he could dedicate a hundred sixty acres to each well that he would drill?

A Yes, sir.

Q Referring to Exhibit Two of Exhibit "A," would you identify that exhibit?

A Exhibit Two of Exhibit "A" is a structure map contoured on top of the Bough "C," zoned -- in actuality production from the East Bagley Field from the Bough "B," which is, oh, thirty to forty feet above the top of the Bough "C," outlines the structural position, and shows again Mr. Boren's acreage outlines.

Q Does the Bough "C" zone, in your opinion, affect the same structure in the Bough "B" zone?

A Yes, sir.

Q Now, referring to Exhibit Three of Exhibit "A," would you identify that exhibit, please?

A Yes sir, the electric log cross section included has Mr. Boren's Barbera State "A" Well Number One as the center log. The Tenneco State "W" Number 2 Well in Section 31, 11 South, 34 East is the left offset, and the Coastal States Pan American State Number 1 is the right offset to the Boren projection, or the log projection.

Q Does that --

A Excuse me.

Q Pardon me, go ahead.

A The producing zone is as shown in yellow, and the perforations of all wells used in this cross section are indicated on the plat.

Q Does that indicate that the producing formation is continuous throughout the area involved in this application, in your opinion?

A Yes sir, it would appear this way, and the pressure information available also supports this contention.

Q Now, do you have some pressure information available?

A We have pressure information, yes. It's not included in the exhibits. We have the drill

stem test pressures on Mr. Boren's well and on the Tenneco well.

Q Would you give the Examiner some information on pressures and any pressure draw-down information you might have?

A Yes sir, on the Boren Barbera State, on a drill stem test of the Bough "B" and the bottom of the test was 9980. Unfortunately, the operator did not show where he set his packer on the top, but he had a fifty-foot tail pipe on the section. He did not -- the test people did not show the top of -- the top packer setting.

The initial shut-in pressure, one hour, 1985; final shut-in pressure, one hour, 1914; initial flow, 384; final flow, 528, and this flow period was for sixty minutes.

The Tenneco State "W" Number 2 Well, drill stem test was 9979 to 10,025. Initial shut-in pressure, not reliable; initial flow pressure, 172 pounds; initial flow, 449, one hour; final shut-in pressure, 2093; two hour, 2481; three hour, 2696; four hour, 2823.

Mr. Boren did not -- excuse me, Mr. Boren

did not take a buildup beyond the first hour, or one hour, and if we compare the one hour final shut-in pressures on the Barbera State Well with the Tenneco State "W" 2, they are for all practical purposes nearly equal.

Q And --

MR. NUTTER: Would you repeat that one hour final shut-in on that Tenneco test?

A 2093.

MR. NUTTER: Thank you.

MR. KELLAHIN: Do you have the rest?

MR. NUTTER: I've got the rest, thank you, yes. In other words, you are talking about approximately a hundred seventy-five pounds difference between -- what were the dates of those tests, Mr. Viney?

A The date of the one test was -- well, the -- it actually was two days before they set casing. I don't have the actual date on the Boren well. It was in May. Dan, I'll have to supply the actual date. I did not bring the test with me.

MR. NUTTER: The well was completed -- or the well was logged the 15th of --

A Yes, sir.

MR. NUTTER: Of May?

A Yes, sir.

MR. NUTTER: Approximately the middle of May?

A Well, I would say that probably about three days before the logging date.

MR. NUTTER: And how about that Tenneco well, when was that?

A All right, the Tenneco well was tested 4/16/69.

MR. NUTTER: About a month before then?

A Yes, sir. Using the pressure information we did use, the pressure information to calculate any permeabilities, it would appear that there is fair to good permeability, using the build-up pressure information.

It would also appear, Mr. Kellahin, that one well could probably drain effectively a hundred sixty acres.

Q (By Mr. Kellahin) Now, do you have any core data available?

A No sir, there is no core data available.



Q Well, in your opinion, one well could probably drain and develop not less than a hundred sixty acres, is that your testimony, Mr. Viney?

A Yes, sir.

Q You are asking for a hundred sixty acre spacing, and the application asks for a hundred eighty acre allowable to be assigned to the well, is that right?

A Yes sir, this is correct.

Q And is that because of the potential of these wells?

A Yes sir, these wells drop off -- the Coastal States well ran anywhere from thirty to seventy days -- or barrels a day, depending on the mechanical efficiency that they have. Of these wells, the Coastal States -- I mean the Tenneco well is about fifty barrels a day and Mr. Boren's well at the last test, June 3rd, or June 6th, was seventy-five barrels -- or July 6th, excuse me, July 6th.

Q Would the applicant seek a temporary spacing order for a period of one year, Mr. Viney?

A Yes, sir.

Q And at the end of one year, do you feel that there would be sufficient information to come back to the Commission in connection with the spacing and allowable indication in this pool?

A Yes sir, I feel we would have at least additional information to make that request, yes sir.

Q Was Exhibit "A," consisting of Exhibits One, Two and Three prepared by you or under your supervision?

A Yes sir, they were.

MR. KELLAHIN: At this time, I would like to offer in evidence Applicant's Exhibit "A."

MR. NUTTER: Applicant's Exhibit "A" will be admitted in evidence.

(Whereupon, Applicant's Exhibit "A" was offered and admitted in evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Viney, when you were mentioning the parameters used to make this volumetric calculation, is this on an average of the four wells in the pool,

or are there four or three?

A Actually, four wells, Mr. Nutter. You will notice there's a well existing in Section 9 approximately two miles east of Boren's well in the northwest quarter. Now, this well has been abandoned and reopened and is still producing.

Q Is it producing from the Bough "B" zone?

A Yes sir, it is. Now, allow me to make one qualification. There's some -- sometimes these wells over there have been classified as Wolf Camp and -- but the perforations and the test data would indicate that it's the Bough "B" zone.

Q How about this dry hole in the northeast quarter of Section 8, however?

A This was very tight, and in effect -- let me pull something. This well was drilled by Dean Stoltz, it was tight, there was no section available in the Bough "B" zone.

Q Now, when was this Coastal States well drilled?

A I do not have the exact date of that, Mr. Nutter. I do not know.

Q It's an older well, however, isn't it?

A Yes sir, and its recovered approximately forty-five, forty-eight thousand barrels to date.

Q Your date on your log, on your cross section is 7/28/65.

A Right.

Q And its made about forty-five thousand barrels?

A Yes sir, and the well in Section 9 has produced in excess of nineteen thousand barrels.

Q You don't have any fairly recent pressure information on that Coastal State well?

A No sir, there has been none that we have available. They are all old pumps, and I do not have anything on it.

Q And now, what are the current productivities of those three wells again?

A Basically, the Coastal States will range on monthly tests anywhere from thirty barrels a day up to eighty barrels a day. The Tenneco well runs about fifty to sixty barrels a day. Mr. Boren's well on production July 6th was seventy-five barrels.

Q And that was after a potential on June the 1st of two hundred twelve barrels?

A Yes, sir.

Q What did it do, rapidly decline and level off at about seventy-five?

A Yes, sir. It actually dropped to about one hundred eight barrels within a couple of weeks, less than two weeks.

MR. NUTTER: I see; are there any further questions of this witness?

You may be excused.

(Witness excused.)

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

MR. KELLAHIN: That's all I have in that case.

MR. NUTTER: Does anyone have anything else they wish to offer in Case 4165? We'll take the case under advisement -- oh, excuse me.

MR. HATCH: I have a letter from Tenneco dated July the 3rd addressed to the Oil Conservation Commission, in reference Case 4165: "Tenneco Oil Company is an operator in the East Bagley-Pennsylvanian

field, Lea County New Mexico. We are aware of the pending hearing covering the subject wells. We support Mr. Boren's request of one hundred sixty acre spacing and a proration unit and assignment of eighty acre allowable to his well in this area.

We also have no objection to this operator's request for the annulus disposal of salt water in his Barbera State "A" Well Number 1."

This is in reference to Case 4166, right?

MR. KELLAHIN: Right.

MR. HATCH: And then a telegram addressed to the Oil Commission from Coastal States Gas Leasing Company in reference to Case 4165 and Case 4166 appearing in the docket for the Examiner hearing for Wednesday, July the 9th, 1969:

"Coastal States Gas Producing Company agrees and concurs with Sam Boren's application and request."

MR. KELLAHIN: We have another copy of that Tenneco letter.

MR. NUTTER: There were two, but it's not

in this other file.

MR. KELLAHIN: We'll give you one.

MR. NUTTER: We've got one in 4165.

MR. KELLAHIN: All right.

MR. NUTTER: If there's nothing further  
in Case Number 4165, we'll take the case under  
advisement.

I N D E XWITNESSPAGE

RALPH VINEY

Direct Examination by Mr. Kellahin  
 Cross Examination by Mr. Nutter

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EXHIBITMARKEDOFFERED AND  
ADMITTED

Applicant's 1  
 through 3

2

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Applicant's  
 Exhibit "A"

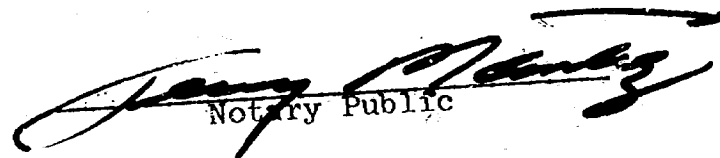
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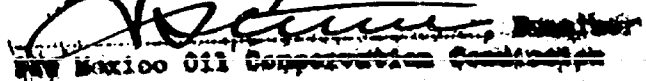
STATE OF NEW MEXICO  
COUNTY OF BERNALILLO }

I, JERRY MARTINEZ, Notary Public in and for the  
County of McKinley, State of New Mexico, do hereby  
certify that the foregoing and attached Transcript  
of Hearing before the New Mexico Oil Conservation  
Commission was reported by me and that the same is a  
true and correct record of the said proceedings, to  
the best of my knowledge, skill and ability.

  
Notary Public

My Commission Expires:  
January 24, 1970.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 4165  
heard by me on 7/7 1969.

  
Notary Public, Examiner  
New Mexico Oil Conservation Commission



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2089 - SANTA FE  
87501

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

July 16, 1969

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

Re: Case No. 4165  
Order No. R-3795  
Applicant:  
Sam Boren

DOCKET MAILED

Date 6-18-70

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.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other



# OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**  
**P. O. BOX 2088 - SANTA FE**  
**87501**

**GOVERNOR  
DAVID F. CARGO  
CHAIRMAN**

**LAND COMMISSIONER  
ALEX J. ARMIGO  
MEMBER**

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

July 10, 1970

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

Re: Case No. 4165  
Order No. R-3795-A  
Applicant:  
Sam Boren (Reopened)

**Dear Sir:**

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

G. L. Parker, Jr.

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

ALP/ir

**Copy of order also sent to:**

Hobbs OCC X

Artesia OCC

**Aztec OCC**

**Other** \_\_\_\_\_

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4165  
Order No. R-3795-A

APPLICATION OF SAM BOREN  
FOR SPECIAL POOL RULES,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 1, 1970,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of July, 1970, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That by Order No. R-3795, dated July 15, 1969, temporary  
Special Rules and Regulations were promulgated for the East Bagley-  
Pennsylvanian Pool, Lea County, New Mexico, establishing 160-acre  
spacing units and an 80-acre proportional factor of 4.77 for  
allowable purposes for a period of one year.

(3) That pursuant to the provisions of Order No. R-3795,  
this case was reopened to allow the operators in the subject  
pool to appear and show cause why the East Bagley-Pennsylvanian  
Pool should not be developed on less than 160-acre spacing units  
and to show cause why the 80-acre proportional factor of 4.77  
should or should not be retained.

(4) That no operator in the subject pool appeared to show  
cause why the East Bagley-Pennsylvanian Pool should not be

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CASE No. 4165

Order No. R-3795-A

developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

(5) That only two wells are presently producing from the subject pool.

(6) That it is not anticipated that additional wells will be drilled in the subject pool.

(7) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 160 acres.

(8) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3795 and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, promulgated by Order No. R-3795, are hereby abolished.

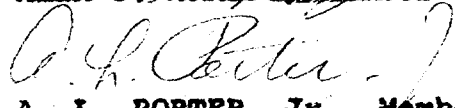
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
ALEX J. ARMILLO, Member

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

  
esr/

4165

Washed 7-1-70

Rec. 7-6-70

There was no appearance  
for this case. Alford R-3795 to  
expire for lack of evidence &  
no appearance on the record.

The future space shall be in  
conformance with ~~the~~ Gen.  
R & R rule 104. - 40 Ac.

Rule 104(c) I.

*Thistle*

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. 4165  
Order No. R-3795

APPLICATION OF SAM BOREN  
FOR SPECIAL POOL RULES,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 9, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of July, 1969, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Sam Boren, seeks the promulgation  
of special rules and regulations for the East Bagley-Pennsylvanian  
Pool, Lea County, New Mexico, including a provision for 160-acre  
spacing and proration units and the assignment of 80-acre allow-  
ables.

(3) That in order to prevent the economic loss caused by  
the drilling of unnecessary wells, to avoid the augmentation of  
risk arising from the drilling of an excessive number of wells,  
to prevent reduced recovery which might result from the drilling  
of too few wells, and to otherwise prevent waste and protect  
correlative rights, temporary special rules and regulations  
providing for 160-acre spacing units and the assignment of 80-  
acre proportional factor of 4.77 should be promulgated for the  
East Bagley-Pennsylvanian Pool.

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CASE No. 4165

Order No. R-3795

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in July, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the East Bagley-Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 assigned to the subject pool should or should not be retained.

IT IS THEREFORE ORDERED:

That temporary Special Rules and Regulations for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
EAST BAGLEY-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision



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CASE No. 4165  
Order No. R-3795

of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned an 80-acre proportional factor of 4.77 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 1, 1969.

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CASE No. 4165

Order No. R-3795

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the East Bagley-Pennsylvanian Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

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

S E A L

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 1, 1970

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

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

CASE 4354: (Continued from the May 13, 1970, Examiner Hearing)

Application of Michael P. Grace and Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 11, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, said acreage to be dedicated to a well to be drilled in either the NE/4 NW/4 or the NW/4 NE/4 of said Section 11. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4165: (Reopened):

In the matter of Case No. 4165 being reopened pursuant to the provisions of Order No. R-3795, which order established 160-acre spacing units and an 80-acre proportional factor of 4.77 for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

CASE 4173: (Reopened):

In the matter of Case No. 4173 being reopened pursuant to the provisions of Order No. R-3811, which order established 80-acre spacing units and a limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil for the Hobbs-Drinkard Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on 40-acre spacing units and why the limiting gas-oil ratio should not revert to 2000 to one.

CASE 4371: Application of Betty Oil Company for a waterflood expansion and amendment of Order No. R-2966, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Justis-McKee Unit Waterflood Project, Justis-McKee Pool, by the conversion to water injection of four additional wells in Units B and H of Section 24, Township 25 South, Range 37 East, and Units D and M of Section 19, Township 25 South, Range 38 East, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2966, as amended, to permit administrative approval for the drilling or conversion of additional injection wells at orthodox or unorthodox locations without a showing of well response.

CASE 4372: Application of International Hydrocarbons Incorporated for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for a well to be drilled 990 feet from the North and West lines of Section 8, Township 26 South, Range 33 East, Red Hills-Wolfcamp Gas Pool, Lea County, New Mexico.

CASE 4373: Application of Benson-Montin-Greer Drilling Corporation for pool redelineation, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of certain pool boundaries to include the deletion of the following-described acreage from the East Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico.

TOWNSHIP 26 NORTH, RANGE 1 EAST

Section 20: W/2  
Section 29: All  
Section 32: All  
Section 33: W/2

TOWNSHIP 25 NORTH, RANGE 1 EAST

Section 4: W/2  
Section 5: All  
Section 8: All  
Section 9: W/2  
Section 17: All  
Section 20: All  
Section 29: W/2

and for the extension of the West Puerto Chiquito-Mancos Oil Pool to include the above-described acreage and the following-described acreage in said county:

(Case 4373 continued)

TOWNSHIP 24 NORTH, RANGE 1 WEST

Sections 1 through 36 - All

TOWNSHIP 24 NORTH, RANGE 1 EAST

Section 6: All

Section 7: All

Section 8: W/2

Section 17: W/2

Section 18: All

Section 19: All

Section 20: W/2

Section 30: All

CASE 4374: Application of Benson-Montin-Greer Drilling Corporation for expansion of a unit area, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand the Canada Ojitos Unit Area, authorized by Order No. R-2544, to include some 20,480 additional acres, more or less, of Federal, State and Fee lands in Township 24 North, Ranges 1 East and 1 West, Township 25 North, Ranges 1 East and 1 West; and Township 26 North, Range 1 East, Rio Arriba County, New Mexico.

CASE 4366: (Readvertised)  
Application of Mobil Oil Corporation for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Vacuum-Wolfcamp and Vacuum-Upper Pennsylvanian Pools in the well-bore of its Bridges State Well No. 109, a triple completion, located in Unit N of Section 24, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4375: Application of Pan American Petroleum Corporation for an exception to Rule 104 C. I, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception Rule 104 C. I of the Commission Rules and Regulations to permit the completion within 660 feet of another producing

CASE 4375 - Continued from Page 3 -

well of its Byers "A" Well No. 1 which is being directionally drilled in Unit C of Section 5, Township 19 South, Range 38 East, Hobbs Pool, Lea County, New Mexico, pursuant to Order No. R-3973.

CASE 4376: Application of Pan American Petroleum Corporation for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Lusk "A" Lease comprising the NE/4 of Section 6, Township 15 South, Range 30 East, Double L-Queen Pool, Chaves County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said lease in an unlined surface pit.

CASE 4377: Application of Champlin Petroleum Company for a unit agreement, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of the State 32-7-33 Unit Area comprising 640 acres, more or less, of State lands in Section 32, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 4378: Application of Champlin Petroleum Company for a waterflood expansion and amendment of Order No. R-3550, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its State 32 Waterflood Project, Chaveroo-San Andres Pool, by the conversion of water injection of one additional well located in Unit B of Section 32, Township 7 South, Range 33 East, Roosevelt County, New Mexico. Applicant further seeks the amendment of Order No. R-3550 to permit administrative approval for the drilling or conversion of additional injection wells without a showing of well response.

CASE 4379: Application of Hal M. Stierwalt for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, for himself and as agent for Southern Union Production Company, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. Said exception would be for eight of Stierwalt's wells and four of Southern Union Production Company's wells located in Sections 1 and 2 of Township 15 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said wells in unlined surface pits located in the vicinity of said wells.

CASE 4380: Application of Shenandoah Oil Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Shugart Pool, Eddy County, New Mexico, by the injection of water into the Yates and Queen formations through its Shugart "B" Well No. 1 located in the SW/4 SE/4 of Section 33, Township 18 South, Range 31 East.

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. 4165  
Order No. R-3795

APPLICATION OF SAM BOREN  
FOR SPECIAL POOL RULES,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 9, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of July, 1969, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Sam Boren, seeks the promulgation  
of special rules and regulations for the East Bagley-Pennsylvanian  
Pool, Lea County, New Mexico, including a provision for 160-acre  
spacing and proration units and the assignment of 80-acre allow-  
ables.

(3) That in order to prevent the economic loss caused by  
the drilling of unnecessary wells, to avoid the augmentation of  
risk arising from the drilling of an excessive number of wells,  
to prevent reduced recovery which might result from the drilling  
of too few wells, and to otherwise prevent waste and protect  
correlative rights, temporary special rules and regulations  
providing for 160-acre spacing units and the assignment of 80-  
acre proportional factor of 4.77 should be promulgated for the  
East Bagley-Pennsylvanian Pool.



-2-

CASE No. 4165

Order No. R-3795

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in July, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the East Bagley-Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 assigned to the subject pool should or should not be retained.

IT IS THEREFORE ORDERED:

That temporary Special Rules and Regulations for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
EAST BAGLEY-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision

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CASE No. 4165  
Order No. R-3795

of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned an 80-acre proportional factor of 4.77 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 1, 1969.

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CASE No. 4165

Order No. R-3795

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the East Bagley-Pennsylvanian Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.


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

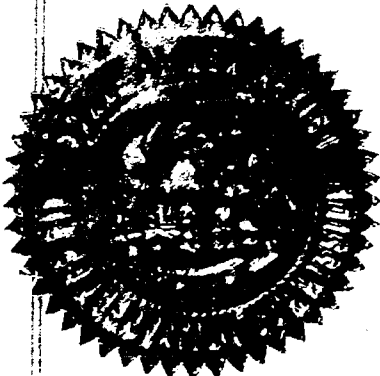
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
ALEX J. ARRIJO, Member

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



esr/

DOCKET NO. 19-69

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 9, 1969

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, Alternate Examiner:

CASE 4160: Application of Roger C. Hanks for pool redelineation, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of certain pool boundaries to include the deletion of the NE/4 of Section 29 from the South Prairie-Cisco Pool and the extension of the Middle Allison-Pennsylvanian Pool to include all of Section 29, the SE/4 of Section 30, and the N/2 of Section 32, all in Township 8 South, Range 36 East, Roosevelt County, New Mexico.

CASE 4161: Application of Roger C. Hanks for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the North Mescalero-Cisco Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.

CASE 3786: (Reopened)

In the matter of Case No. 3786 being reopened pursuant to the provisions of Order No. R-3437, which order established special rules and regulations for the North Paduca-Delaware Pool, Lea County, New Mexico, including provisions for the classification of and spacing for oil and gas wells and a special gas-liquid ratio limitation. All interested parties may appear and show cause why the special rules and regulations should not be discontinued.

CASE 4162: Application of Western States Producing Company for a dual completion and salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State 3C Well No. 2 located in Unit M of Section 30, Township 7 South, Range 33 East, Roosevelt County, New Mexico, in such a manner as to permit the production of oil from the Chaveroo-San Andres Pool and the disposal of produced salt water through 8 5/8 X 4 1/2 inch casing-casing annulus into the Yates, Seven Rivers, and Queen formations in the open-hole interval from approximately 1825 feet to 3785 feet.

- CASE 4163: Application of Pan American Petroleum Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 181-acre non-standard gas proration unit for its Pike Federal Well No. 1 located in Unit A of Section 6, Township 23 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico, said unit to comprise the N/2 N/2 of said Section 6.
- CASE 4164: Application of Mobil Oil Corporation for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Fristoe Well No. 8 at an unorthodox location 2470 feet from the North line and 430 feet from the East line of Section 3, Township 25 South, Range 37 East, Langlie Mattix Pool, Lea County, New Mexico.
- CASE 4165: Application of Sam Boren for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.
- CASE 4166: Application of Sam Boren for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Barbera State "A" Well No. 1 located in Unit P of Section 6, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the East Bagley-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres and Glorieta formations in the open-hole interval from approximately 4060 feet to 6562 feet.
- CASE 4167: Application of Charles B. Read for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Hobbs "Y" Well No. 1 located in Unit J of Section 29, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the East Hightower-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres, Glorieta, Yeso, and Abo formations in the open-hole interval from approximately 4195 feet to 7720 feet.

- CASE 4168: Application of Charles B. Read for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers Reef formation in the open-hole interval between 3783 feet and 3797 feet in his Sinclair State Well No. 1 located 2310 feet from the South and West lines of Section 2, Township 21 South, Range 33 East, Lynch Pool, Lea County, New Mexico.
- CASE 4169: Application of Mask, Jennings, Keohane and Westall for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicants' wells in the E/2 NW/4 and the NE/4 of Section 2, Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico. Applicants seek authority to dispose of salt water produced by said wells in an unlined surface pit located in Unit C of said Section 2.
- CASE 4170: Application of H. C. Hood for pool redelineation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of the High Plains-Pennsylvanian Pool by the deletion of the SW/4 of Section 14 and the SE/4 of Section 15, Township 14 South, Range 34 East, Lea County, New Mexico.

**CLASS OF SERVICE**

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# WESTERN UNION TELEGRAM

**SYMBOLS**

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DANIEL F NUTTER, EXAMINER=

98 8 40 8 70P 69  
OIL CONSERVATION COMMISSION CONFERENCE ROOM  
STATE LAND OFFICE BLDG SANTA FE NMEX=  
IN REFERENCE TO CASE #4165 AND CASE #4166 APPEARING  
ON DOCKET #19=69 EXAMINER HEARING WEDNESDAY JULY 9TH  
1969 COSTAL STATES GAS PRODUCING COMPANY AGREES AND  
CONCURS WITH SAM BOREN APPLICATION REQUESTS=  
COSTAL STATES GAS PRODUCING CO MIDLAND TEXAS=

#4165 #4166 #1969 9TH 1969=

WU1201 (R2-65)

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE



TENNECO OIL COMPANY • P. O. BOX 1031 • 1800 WILCO BUILDING • MIDLAND, TEXAS 79701

July 3, 1969

MAIL OFFICE  
JUL 8 AM 8 21

*file case  
4165  
4166*

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Request for Special Pool Rules  
and Annular Salt Water Disposal  
East Bagley (Penn) Field  
Lea County, New Mexico

Gentlemen:

Tenneco Oil Company, as an operator in the East Bagley (Penn) Field, Lea County, New Mexico is aware of the pending hearing covering the subject wells. We support Mr. Boren's request of 160 acre spacing and proration units and the assignment of 80 acre allowables to wells in this area. We also have no objection to this operator's request for the annular disposal of salt water in his Barbera State "A" Well No. 1.

Yours very truly,

TENNECO OIL COMPANY

*F. J. McDonald*  
F. J. McDonald

District Production Superintendent

JFC:gs



NEW MEXICO OIL CONSERVATION COMMISSION  
EXAMINER HEARING

Wednesday, July 9, 1969

CASE 4165

Application of Sam Boren Oil Company for Special Pool Rules,  
East Bagley - Pennsylvanian Pool, Lea County, New Mexico

Barbera State "A" Well No. 1

Location being designated as Unit P, 660 feet from the south line and 660 feet from the east line, Section 6, Township 12 South, Range 34 East, N.M.P.M.

PRORATION UNIT REQUEST

Sam Boren's request for 160-acre spacing and proration units and the assignment of 80-acre allowables for the captioned field is made with projected economics being the major consideration.

The drilling of Bough "B" wells in the East Bagley - Pennsylvanian Field appears, at best, a return on investment only type economic venture coupled with a lower than desired rate of return.

The ultimate recoverable reserves of Bough "B" wells in the subject field based on available performance data indicate recoveries could approach 108,000 barrels of oil per well. The estimated ultimate recovery using volumetric calculation methods is 96,000 barrels per well. The parameters used in the volumetric calculations assume 160-acre drainage area per well, a net average pay thickness of 8 feet, an average porosity of 8½ percent, a connate water saturation of 30 percent, 1.23 barrels per barrel formation volume factor and a 20 percent recovery efficiency.

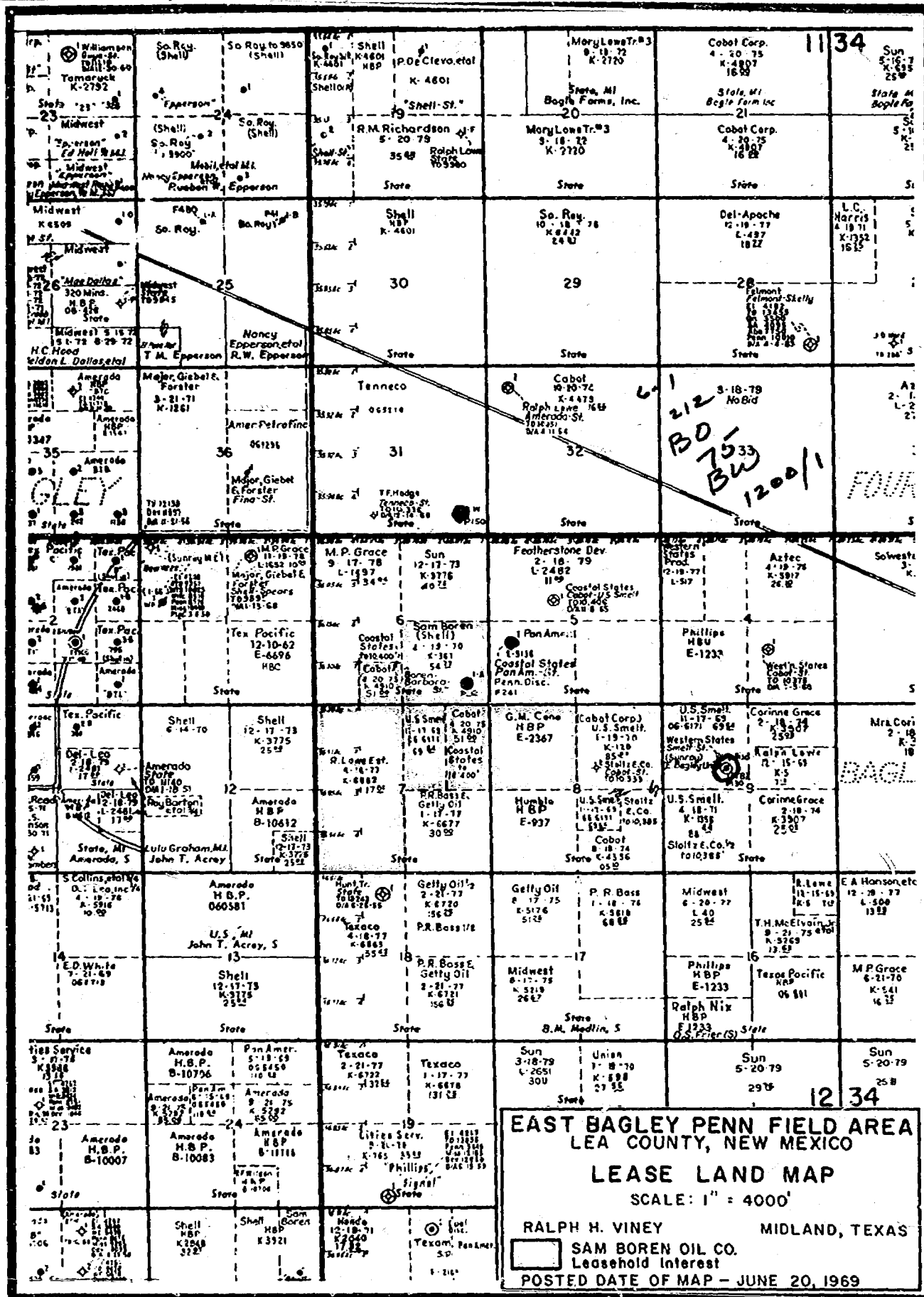
The Barbera State Well was potentialed June 1, 1969 and on a 24-hour pumping test, recovered 212 barrels of oil, 75 barrels of water and 254 MCF of gas. On July 6, 1969, production was 75 barrels of oil and 50 barrels of water during a 24-hour period.

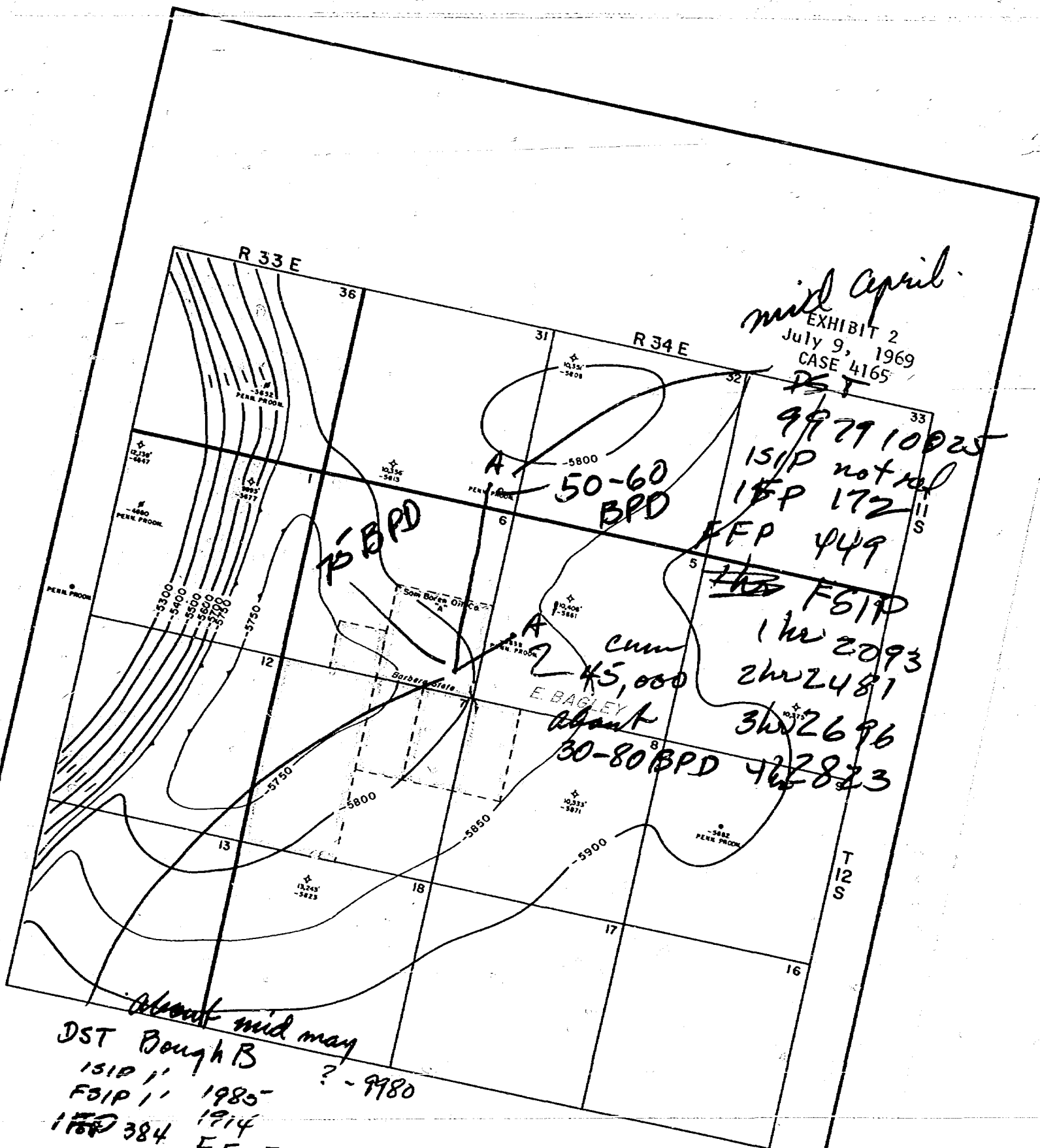
Mr. Boren respectfully requests the Commission to consider this application and establish 160-acre spacing proration units with 80-acre allowable assignment to wells in the East Bagley - Pennsylvanian Field.

A list of exhibits presented follows:

- Exhibit 1 - Land Lease Map of the East Bagley Field.
- Exhibit 2 - Structure Map on Top of the Bough "C" zone in the East Bagley Area.
- Exhibit 3 - Electrical Log Cross Section showing Sam Boren Oil Company's Barbera State "A" Well No. 1 in relation to Coastal States Gas Producing Company's Pan American State No. 1, Section 5, T-12-S, R-34-E and Tenneco Oil Company's State "W" No. 2, Section 31, T-11-S, R-34-E.

EXHIBIT 1  
July 9, 1969  
CASE 4165





About mid May  
 DST Bough B  
 151P 1985  
 FSIP 1914  
 15P 384  
 FF 528

EAST BAGLEY PENN FIELD AREA  
 LEA COUNTY, NEW MEXICO  
 BOUGH "C" STRUCTURE MAP  
 CONTOUR INTERVAL: 50'  
 SCALE 0 2000 4000 FEET  
 RALPH H. VINEY  
 SAM BOREN OIL CO.  
 LEASEHOLD INTEREST  
 MIDLAND, TEXAS

RALPH H. VINEY

H

Consultant to the Oil and Gas Industry

MAIN OFFICE 9000  
Central Building  
MIDLAND, TEXAS 79701  
915 682-5346  
JUN 16 1969

Case 4165

New Mexico Oil Conservation Commission  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

Request for Special Pool Rules for the East Bagley (Penn) Field,  
Lea County, New Mexico, and Annular Salt Water Disposal for  
Barbera State "A" Well No. 1

Sam Boren respectfully requests a hearing before the Commission to consider the promulgation of special rules for the captioned field ~~and permission to dispose of salt water in the San Andres zone through the annular casing space in the captioned well.~~

In the request for special pool rules, Mr. Boren is asking for the provision of 160-acre spacing and proration units together with the assignment of 80-acre allowables to the proposed units.

Mr. Boren intends to inject water down the annular space between the 4 $\frac{1}{2}$ " and 8-5/8" casing and dispose of such water between the base of the 8-5/8" casing in the annular space between the 7-7/8" hole and the 4 $\frac{1}{2}$ " casing in the San Andres zone between the base of the 8-5/8" casing at 4,060' and the top of the cement at 6,562'.

The lease and well in question is the Sam Boren Oil Company Barbera State "A" Lease Well No. 1, State Lease No. K 367, Bagley (Penn) Field, Lea County, New Mexico. The well is located 660' FSL and 660' FEL of Section 6, Township 12 South, Range 34 East, N.M.P.M.

Mr. Boren respectfully requests of the Oil Conservation Commission, a hearing of this application at the first open available date.

Very truly yours,

Ralph H. Viney

Agent

RHV:mm

cc: Mr. J. D. Ramey  
Box 1980  
Hobbs, New Mexico 88240

Mr. F. J. McDonald  
Tenneco Oil Company  
Wilco Building  
Midland, Texas 79701

Mr. J. D. Rankin  
Sam Boren Oil Company  
4520 West Highway 80  
Midland, Texas 79701

Mr. Sam Boren  
225 Park Cities Bank Building  
Dallas, Texas 75205

DOCKET MARKED  
Date 6-25-69

Case 4165

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NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105  
Revised 1-1-63

5a. Indicate Type of Lease	State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	5337

1a. TYPE OF WELL		DIL. WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>		7. Unit Agreement Name	
b. TYPE OF COMPLETION		NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>		8. Farm or Lease Name	
2. Name of Operator		Sam Boren		9. Well No.	
3. Address of Operator		Box 953 Midland Texas 79701		10. Field and Pool, or Wildcat	
4. Location of Well		UNIT LETTER <u>P</u> LOCATED <u>360</u> FEET FROM THE <u>South</u> LINE AND <u>560</u> FEET FROM		12. County	
THE <u>East</u> LINE OF SEC. <u>6</u> TWP. <u>12S</u> RGE. <u>34E</u> NMPM				13. Elev. Casinghead	
15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead	
5-16-69	5-25-69	6-1-69	3166 SL		
20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	24. Producing Interval(s), of this completion - Top, Bottom, Name	
12,180	10,460		Rotary Tools 6-11-60	9972-74-76 (Pena)	
26. Type Electric and Other Logs Run				27. Was Directional Survey Made	
Gamma Ray Neutron				Yes	
28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11-3/4	42	305	17-1/2	375	0
8-5/8	28	2020	9-7/8		0
8-5/8	32	4050	9-7/8	450	0
4-1/2	11.6	10860	7-7/8	600	0
29. LINER RECORD			30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	PACKER SET
					9942
31. Perforation Record (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		
			DEPTH INTERVAL		
			AMOUNT AND KIND MATERIAL USED		
			257 - 7-7/8 200 H2O acid		
33. PRODUCTION					
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)		Well Status (Prod. or Shut-in)	
6-1-69		Pumping		Producing	
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF
6-1-69	24			212	254
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.
9	2500				75
34. Disposition of Gas (Sold, used for fuel, vented, etc.)				Test Witnessed By	
Sold				Helen Beck	
35. List of Attachments					
Inclination Survey 2-1-69					
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.					
SIGNED		TITLE		DATE	
		Agent		6-3-69	

4/65  
OFFICE OF  
MAY 1969  
AM 8:35

This form is to be filled with the appropriate District Office of the Commission not later than 20 days after the completion of any newly drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

Southeastern New Mexico		Northwestern New Mexico	
<b>Runtler</b>			
<b>1922</b>			
T. Canyon	10,500	T. Ojo Alamo	T. Penn. "B"
T. Salt	10,935	T. Kirtland-Fruitland	T. Penn. "C"
T. Shinarump		T. Pictured Cliffs	T. Penn. "D"
T. Yates	2745	T. Cliff House	T. Leadville
T. 7 Rivers	2952	T. Menelee	T. Madison
T. Queen		T. Point Lookout	T. Elbert
T. Grafburg		T. Mancos	T. McCracken
T. San Andres	4063	T. Gallup	T. Ignacio Qtzite
T. Glorieta	5510	T. Base Greenhorn	T. Granite
T. Paddock		T. Dakota	T. _____
T. Dinebty		T. Morrison	T. _____
T. Tubb	6950	T. Todilto	T. _____
T. Drinkard	7753	T. Entrada	T. _____
T. Abo		T. Wingate	T. _____
T. Wolfcamp	9070	T. Chinle	T. _____
T. Penn.		T. Permian	T. _____
T. Glass (Bough C)	10020	T. Penn. "A"	T. _____
T. Cisco	10120		
T. Ranger Lake	10240		

FORMATION RECORD (Attach additional sheets if necessary)

FORMATION RECORD (Attach additional sheets if necessary)

[illegible]

DRAFT

GMH/esr

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:

RECORDS CENTER

CASE No. 4165

Order No. R- ~~4165~~

APPLICATION OF SAM BOREN  
FOR SPECIAL POOL RULES,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 9, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this        day of July, 1969, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Sam Boren, seeks the promulgation  
of special rules and regulations for the East Bagley-Pennsylvanian  
Pool, Lea County, New Mexico, including a provision for 160-acre  
spacing and proration units and the assignment of 80-acre allow-  
ables.

(3) That in order to prevent the economic loss caused by  
the drilling of unnecessary wells, to avoid the augmentation of  
risk arising from the drilling of an excessive number of wells,  
to prevent reduced recovery which might result from the drilling  
of too few wells, and to otherwise prevent waste and protect  
correlative rights, temporary special rules and regulations

providing for 160-acre spacing units and the assignment of 80-acre proportional factor of 4.77 should be promulgated for the East Bagley-Pennsylvanian Pool.

(4) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(5) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(6) That this case should be reopened at an examiner hearing in July, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the East Bagley-Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 assigned to the subject pool should or should not be retained.

IT IS THEREFORE ORDERED:

That temporary Special Rules and Regulations for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
EAST BAGLEY-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the East Bagley-Pennsylvanian Pool or in the ~~Bough C zone of the~~ Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.



RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. *Each well shall be located within 150 feet of the center of a governmental quarter-section or lot.*

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned an 80-acre proportional factor of 4.77 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 1, 1969.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the East Bagley-Pennsylvanian Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well

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CASE No. 4165

presently drilling to or completed in the East Bagley-Pennsylvanian Pool or in the Pennsylvanian formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

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

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

DRAFT

GMH/esr

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:

RECORDS CENTER

CASE No. 4165

Order No. R-3795-A

APPLICATION OF SAM BOREN  
FOR SPECIAL POOL RULES,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 1, 1970,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this        day of July, 1970, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That by Order No. R-3795, dated July 15, 1969, temporary  
Special Rules and Regulations were promulgated for the East Bagley-  
Pennsylvanian Pool, Lea County, New Mexico, establishing 160-acre  
spacing units and an 80-acre proportional factor of 4.77 for  
allowable purposes for a period of one year.

(3) That pursuant to the provisions of Order No. R-3795,  
this case was reopened to allow the operators in the subject  
pool to appear and show cause why the East Bagley-Pennsylvanian  
Pool should not be developed on less than 160-acre spacing units  
and to show cause why the 80-acre proportional factor of 4.77  
should or should not be retained.

(4) That no operator in the subject pool appeared to show cause why the East Bagley-Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

✓ (5) That only <sup>two</sup>~~one~~ well<sup>is</sup>~~s~~ presently producing from the subject pool.

✓ (6) That it is not anticipated that additional wells will be drilled in the subject pool.

(7) That the operators in the subject pool have not established that one well can efficiently and economically drain and develop 160 acres.

(8) That no necessity exists for the continuation of the Special Rules and Regulations promulgated by Order No. R-3795 and that said rules should therefore be abolished.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the East Bagley-Pennsylvanian Pool, Lea County, New Mexico, promulgated by Order No. R-3795, are hereby abolished.

(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.

CASE 4166: Application of SAM  
BOREN FOR A DUAL COMPLETION AND  
SALT WATER DISPOSAL.