

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.)

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 of
 the Examiner hearing of Case No. 4465
 held by me on July 6, 1970

Peter A. Limia, 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 potentialized 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

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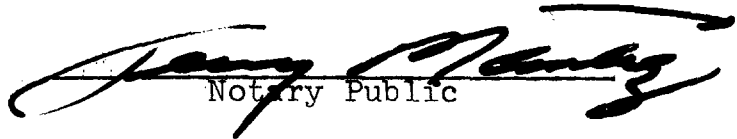
Applicant's
 Exhibit "A"

2

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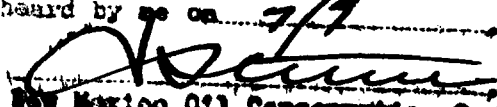
STATE OF NEW MEXICO }
COUNTY OF BERNALILLO }

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 7/9, 1969.

Notary Public
New Mexico Oil Conservation Commission