

CASE 3993: Application of COASTAL
STATES FOR CREATION OF NEW OIL
POOL AND SPECIAL POOL RULES.

Continue to
March 19th

Case Number

3993

Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

February 19, 1969

REGULAR HEARING

IN THE MATTER OF:)

Application of Coastal)
States Gas Producing)
Company for the creation)
of a new pool and for)
special pool rules, Lea)
County, New Mexico.)

Case 3993

BEFORE: A. L. Porter, Jr., Secretary, Director
Alex J. Armijo, Land Commissioner
George Hatch, Counsel

TRANSCRIPT OF HEARING

MR. PORTER: Case 3993.

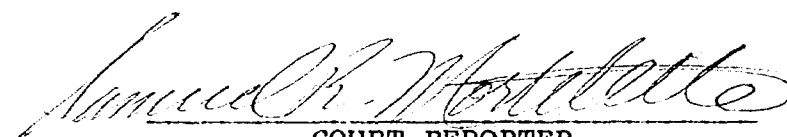
MR. HATCH: Case 3993, (De Novo) application of Coastal States Gas Producing Company for the creation of a new pool and for special pool rules, Lea County, New Mexico.

The Commission has received a letter from the applicant requesting that this case be continued to March 19.

MR. PORTER: We will continue Case 3993 as requested, to March 19th.

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court 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.


COURT REPORTER

dearnley-meier 333-4433

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 7, 1970

EXAMINER HEARING

-----)
IN THE MATTER OF:)
)
Case No. 3993 being reopened)
pursuant to the provisions of)
Order No. R-3644, which order) Case No. 3993
established 160-acre spacing)
units for the North Baum-Upper)
Pennsylvanian Pool, Lea County,)
New Mexico.)
-----)

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please. We were on Case 3993.

MR. HATCH: Case 3993. In the matter of Case No. 3993 being reopened pursuant to the provisions of Order No. R-3644, which order established 160-acre spacing units for the North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant and Christy, appearing on behalf of Costal States Gas Producing Company.

We have one witness I would like to have sworn.

(Witness sworn).

(Whereupon, Applicant's Exhibits 1 through 8 were marked for identification).

JACK MCGRAW

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name, your residence, by whom you are employed.

A My name is Jack McGraw. I work for Costal

States Gas Producing Company in Midland, Texas, as division petroleum engineer.

Q Have you previously testified before the Oil Conservation Commission?

A Yes, sir, I have.

Q Your qualifications as petroleum engineer are a matter of record with the Commission?

A Yes, sir.

Q Did you testify in this Case, 3993, approximately a year ago --

A Yes, sir, I did.

Q -- for the adoption of temporary one-year rules?

A Yes, sir.

Q Have you made a continuing study of the North Baum-Upper Penn Pool since that time?

A Yes, sir, I have.

Q Familiar with all of the wells that have been drilled?

A Yes, sir.

Q Have you prepared or has there been prepared under your direction certain exhibits for introduction in this case?

A Yes, sir, there have.

Q Refer to Exhibit 1 and explain what it is and what it shows.

A Exhibit No. 1 is a structure map constructed on top of the Bough C Formation in the immediate vicinity of the North Baum-Upper Penn Field.

This also extends over the Lazy J Field, the Baum Field, as well as the North Baum Field.

Q The legend shows the outlines here of the North Baum.

A Yes. Outlined on the plat is the boundary of the Lazy J Field and also the boundary of the North Baum-Upper Penn Field.

Q Does this show all the wells that have been drilled in these two fields?

A Yes, sir, it does.

Q Now, the portion that is shown in Sections 23, 24 and 26; is that still part of the North Baum or is that the separate pool?

A This is a portion of the North Baum Field. However, in this area there is a separation of the reservoir.

Q Now, what wells had been drilled in the North

Baum Pool at the time of the original hearing approximately a year ago?

A At the time of our original hearing, when we requested temporary rules, the two Costal States Wells in the south half of Section 20 were completed and producing.

The south -- the well in the southeast quarter of Section 19, Apache Corporation State No. 1, 19 No. 1, was completed and producing and there were two wells over in Section 21, the Hannigan State No. 1 and the Texaco State "DM" No. 1 which are -- both wells are in the southeast quarter of Section 21.

Q Now, what wells have been drilled since the hearing a year ago?

A Since that hearing, Costal has drilled two additional wells in the north half of Section 20. Apache has drilled one additional well in the northwest -- northeast quarter of Section 19 and then Pan American, Sun, Union Texas and Bobby Holt; all those wells have been completed since that hearing.

Q They are all producing from the same pool?

A Yes, sir. They are all in the North Baum-Upper Penn Pool.

Q Is there anything else that you would like to show by this exhibit?

A This exhibit plainly shows the structure in the area and it also shows that we have what we refer to as a ditch, a low place, which separates the North Baum-Upper Penn Pool from the major portion of the Lazy J Pool.

Also, it separates the reservoir in the North Baum Pool itself. The wells completed in Sections 23, 26 and 24 are separated by another ditch, which is shown by the contour lines here.

Also, the wells in Sections 13, 18 and portions of Section 19. Now, this is brought out much more clearly on the cross section that we will go to following this exhibit.

MR. NUTTER: Mr. McGraw, while you were on the subject of wells that have been treated; in Section 21, there appears to be a new well there in the southwest quarter, that No. 2 well?

THE WITNESS: Yes, sir.

MR. NUTTER: Is that well completed in the Bough C?

THE WITNESS: Yes, sir.

MR. NUTTER: That is in the Lazy J, however, is it not?

THE WITNESS: That is right.

MR. NUTTER: That is the third well on that 160, but this is a 40-acre pool here?

THE WITNESS: That's right.

MR. NUTTER: What kind of potential do they get on this well; do you know?

THE WITNESS: Yes, sir, I have that. This well is the McGrath and Smith Hannigan State No. 2 and it is located in Unit L, Section 21, 13 South, 33 East.

It was potentialled flowing for 228 barrels of oil and no water; 110 MCF on 2264 choke with 25 pound tubing pressure.

MR. NUTTER: What was the date on that, please?

THE WITNESS: That date is November 17, '69.

MR. NUTTER: Thank you. Go ahead. I'm sorry.

Q (By Mr. Hinkle) The well just testified to, is it capable of making its allowable, then?

A Yes, it is. I understand it is top allowable.

Q Anything else you have with respect to Exhibit No. 1?

A Not at this time. It might be handy to refer back to this, though, during the cross section that we will be discussing.

Q Now, refer to Exhibit No. 2.

A Exhibit No. 2 is the north-south cross section in this field. It begins in a dry hole that was drilled by Costal States down in Section 32; extends up through Section 29, Costal States Chambers No. 1.

It goes on into Section 20, Costal States Federal 20 No. 2 and up through the 20 No. 4 and then shows the pinch-out of the reservoir in the old well that was drilled by Trigg, Federal Trigg No. 1 in the northeast quarter of the northeast quarter of Section 20.

This exhibit shows the trapping mechanism in the North Baum-Upper Penn reservoir. It shows that we have a pinch-out of the porosity in the up-dip direction and it extends into the water-oil contact in the lower end of the reservoir.

The blue represents water in the section. The yellow represents the oil portion of the reservoir. You could see that the Chambers No. 1, which was completed by Costal States Pipe, was set. We pumped the well for approximately two months in an effort to pull in some oil.

We never were successful at this time. However, pipe is still set in the well and it was used in our interference test that we will be discussing in a few moments.

This plat shows the three well bores of the three wells that were used in the interference test that we conducted, being the Chambers No. 1, Federal 20 No. 2 and the Federal 20 No. 4.

Q Now, refer to Exhibit No. 3 and explain what that shows.

A Exhibit No. 3 is an east-west cross section through the North Baum Field and it shows the continuity of the reservoir on into the Lazy J Field in Section 21.

It also shows the separation of the North Baum reservoir into actually two separate reservoirs in Section 19, due to this ditch that was referred to earlier. The formation dropping off, getting below the oil-water contact and actually pinching out -- the porosity more or less disappears in the Pan American State "DN" No. 1 in Section 19.

I understand that well is not producing at this time, but it is producing further to the west as it comes back up again and gets high enough to produce.

The main thing that we want to show with this exhibit is the continuity of the pay from Section 20 into Section 21 and through these new wells that have been drilled in Section 21.

Now, it also shows that the pay does pinch-out on the farthest end of this cross section in Section 21. There is a lack of porosity in this C zone and this particular well was completed from the A and B zone in the old Lazy J pay period.

Q Now, you referred to making interference tests. I believe you did that in connection with Exhibit No. 2 and explained the wells that were used. Have you prepared any exhibits with respect to the interference tests?

A Yes, we have.

Q Refer to Exhibit 4 and explain that to the Commission.

A On February 17, 1969, Costal States conducted an interference test in the North Baum-Upper Penn Field to determine if one well could effectively drain 160 acres.

Exhibit No. 4 shows the conditions that existed in the field at the time of this test. Just the wells that were completed at that time are shown and the --

whether they were pumping, flowing or used as observation wells, is indicated on this plat.

The Federal 20 No. 2 and the Federal 20 No. 4 were shut in for extended periods in order to determine the true static reservoir pressure. The Chambers No. 1 was also chosen for an observation well because of its condition as a temporarily abandoned producer that had been shut in for approximately thirty days.

A bottom hole pressure was run in these three wells with the following results. The Federal 20 No. 2 was shut in for 291 hours. The pressure at a depth of 9710 was found to be 2493.

The Federal 20 No. 4 was shut in for 289 hours; the pressure at 9710 was found to be 2474. The Chambers No. 1, shut in approximately thirty days, had a pressure of 2517, at 9710.

Now, this is an average bottom hole pressure of 2494 and the maximum variation is only 43 pounds between all three of these pressures. We feel that this proves conclusively that they are all in a common reservoir.

Q Due to the fact that the pressures are approximately the same?

A Approximately the same and, of course, -- back

at our initial hearing in this case, we showed that the initial bottom hole pressure on these wells varied from 2900 down to 2850, along in that range and, at this time, then they had dropped to 2494.

Q Have you made a tabulation of the bottom hole pressures?

A Yes, we have. And this is reported on the next exhibit.

Q Exhibit No. 5?

A Yes. After obtaining the static reservoir pressure on the Federal 20 No. 4, it was opened and produced at a stabilized rate of 274 barrels of oil per day and 25 barrels of water per day. A bottom hole pressure bomb was then run in the 20 No. 2 and left on bottom for forty-seven hours while all the other producing wells were being produced at their normal rates.

Exhibit No. 5 is a tabulation of the bottom hole pressure as recorded by the bottom in this well. You will note that the pressure shows a continual decline throughout the test from 2494 to 2483 at the end of forty-seven hours.

The bomb was then pulled and run in the Chambers No. 1. The Federal 20 No. 2 was placed on

production at a stabilized rate of 274 barrels of oil per day and no water. Exhibit No. 6 shows the average producing rates for all the wells that were producing during the test period.

Q Do you have any further comments with respect to Exhibit No. 6?

A No, sir; not at this time.

Q Refer to Exhibit No. 7 and explain that to the Commission.

A Exhibit No. 7 is the tabulation of the pressure recorded in the Chambers No. 1, while the bomb was on bottom. The bomb was left on bottom for twenty-six hours with the pressure declining from 2517 to 2510 in twenty-six hours.

Q What does that show?

A We feel that this shows conclusively that one well can drain far in excess of 160 acres in this reservoir. This is extremely good communication, pressure communication within the reservoir.

MR. NUTTER: This is the dry hole; isn't it?

THE WITNESS: Yes, sir; this is the water well.

Q (By Mr. Hinkle) Now, refer to Exhibit 8 and explain that to the Commission.

A Costal States is also requesting that the proportional factor for allowable purposes be increased from 4.77 to 6.77 or whatever is the normal factor for 160 acres in this area. Costal States feels that this is necessary in order to protect the correlative rights of the operators and royalty owners in Section 20.

You will note that the field boundary line separating the North Baum from the Lazy J Field is the section line between Section 20 and 21. Since the separation in the Lazy J Field is 40 acres per well, two additional wells have recently been drilled and completed in the south half of Section 21 and completed in the common reservoir with the wells located in Section 20.

Q Now, this common reservoir is shown on your cross section No. 3?

A Yes, sir. These wells are located on Exhibit 8. Also shown is the potential test as reported to the Oil Conservation Commission by the operator.

The first well was drilled by Texas American. It was their Sinclair State No. 1. It was completed August 29, 1969, and potentialled for 370 barrels of oil per day and zero barrels of water per day, flowing on

2464 choke.

The second well was drilled by McGrath and Smith. Their Hannigan State No. 2, which was completed on November 16, 1969, and potentialized for 228 barrels of oil and zero barrels of water, flowing on 2264 choke.

The present allowable producing capacity in the southwest quarter of Section 21 is as follows. McGrath and Smith operate both Hannigans. They now own the Hannigan -- or operate the Hannigan tract; operate both wells; the Hannigan State No. 1, I understand, is producing 29 barrels of oil and 230 barrels of water.

The No. 2, according to the potential test, is 228 barrels of oil and no water and Texaco State "DM" No. 1 is producing 235 barrels of oil and 303 barrels of water.

This gives a total producing capacity of 492 barrels. This is also within the allowable, 492 barrels of oil and 533 barrels of water from the southwest quarter of Section 21.

The present allowable for 160 acres in the North Baum Field is 4.77 times 70 or 335 barrels of oil per day. If the portional factor is changed to 6.77,

the allowable would be 474 barrels per day and would allow the operators in Section 20 to recover a more equitable share of the remaining primary reserves.

Q Is that the only way, in your opinion, that you can protect correlative rights in this instance?

A This is one way of doing it. There might be others.

Q What are your recommendations to the Commission with respect to these rules and allowable?

A Costal States respectfully request that the allowable be increased in the North Baum Field in order to protect correlative rights of the operators and royalty owners, but we do not ask for any changes in the other field rules.

We would like for them to remain the same.

Q And be made permanent?

A Be made permanent.

MR. HINKLE: We would like to offer in evidence Exhibits 1 through 8.

MR. NUTTER: Applicant's Exhibits 1 through 8 will be admitted in evidence.

MR. HINKLE: That's all of direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. McGrath, referring to your cross section AA Prime, which is Exhibit No. 3, it would appear that the sixth well from the left shows oil and water both in that well; is that correct?

A Yes, sir; that is true.

Q Which well is that?

A Are you referring to this one?

Q No, the sixth one from the left.

A This is the Costal States Federal 20 No. 1, which does produce oil and water. It would be this well right here.

Q It's in the southeast southeast of Section 20; is that correct?

A That's true.

Q Now, that would be one of the wells that you would have to increase the production on in order to protect the interest in Section 20, I would think. I am wondering if it might not be rate sensitive since you have water and oil both in there. Isn't there a danger of more water coming in if you increase the rate of production?

A In the Bouch C interval throughout this area, has not been the case. In fact, the larger the pumping equipment the more water you can move, the more you are likely to increase the oil.

Q I know in many places in the Northern Lea County, in the Pennsylvanian Formation, there isn't a direct water-oil contact. The water and the oil are intermixed with each other throughout the formation but it would appear from your cross section that you do have water-oil contact and that the water is below the oil?

A We feel this is true. We feel this is true in the other areas, also. There is not enough structural relief -- what you actually do in producing a well like this is cone the water down.

You pull it hard enough and you will actually pull the water level down and increase the amount of oil that you are able to pull into this reservoir, it being a very thin reservoir.

Now, if it were a thick zone you would probably cone water up from the bottom. It just doesn't work that way in this particular reservoir.

Q This isn't different than the other Bouch
C reservoirs in Lea County?

A No, sir.

Q I see. It appears so from the cross section.

A Well, I think that a lot of times people have
not -- maybe they have felt like the water and oil are
intermingled; but, it is my opinion that over geologic
time that this oil has separated from the water and it
does actually lay in the reservoir.

The logs don't detect this in every case.
Now, they do in this particular well. The logs indicate
that this would be wetter down here. But, you don't
always see this on a log being so thin.

But, you have oil -- you have a column of oil
and a column of water and if you can pull on that zone
by reducing the pressure in the well bore, then you get
a greater percentage of oil.

This has happened many times. I am sure you
have heard people refer to this where a well -- that was
the reason for us pumping this Chambers well here. We
felt like that we might actually cone oil into the well
bore rather than coning water. It's happened before.

Q Well, now, is the well there in the southeast

southeast of Section 20 capable of producing more fluids that you are presently producing?

A Yes, it is. We are pumping it now at about thirty strokes a minute, with a cobe high volume pump and we could increase this to a fifty-four.

Q What is the percent of oil, percent of water that the well presently makes?

A It makes about fifty-fifty. It makes about twenty-six or seventy barrels of oil and probably five hundred barrels of water.

Q While you were conducting your interference test, that well was pumping 274 barrels of oil and 514 barrels of water?

A Yes; that's true. That's just about what -- both of those wells along this line down here are able to make at about thirty strokes a minute.

Q Now, what is the present depth portional factor in the pool?

A Four point seventy-seven.

Q By going to 160-acre allowable factor, it would be 6.77?

A Yes, sir.

Q What's top allowable for a well in the Lazy J

Penn?

A Their factor is 3.77, I believe. I think it's about 235.

MR. NUTTER: Are there any further questions of Mr. McGrath? He may be excused.

Do you have anything further, Mr. Hinkle?

MR. HINKLE: That's all I have.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3993?

MR. HATCH: The Commission has received a telegram from Union Texas Petroleum and a letter from Pan American Corporation supporting the Applicant.

MR. NUTTER: Thank you. If there's nothing further --

MR. HINKLE: I might ask Jack one more question. Have you had any protest from any of the offset operators with respect to make these rules permanent or increasing the allowables?

THE WITNESS: No, sir, we have not.

(Witness excused).

MR. NUTTER: If there's nothing further, we will take the case under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
JACK McGRATH	
Direct Examination by Mr. Hinkle	2
Cross Examination by Mr. Nutter	17

E X H I B I T S

Applicant's Exhibits 1 through 8	2
-------------------------------------	---

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, GLENDA BURKS, Court Reporter in and for
the County of Bernalillo, State of New Mexico do here-
by 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.

Glenda Burks
Notary Public

My Commission Expires:

March 12, 1973

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 3993
heard by me on 17 19 72

W. S. S. S. Examiner
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 11, 1968

EXAMINER HEARING

IN THE MATTER OF:

Application of Coastal States
Gas Producing Company for the
creation of a new oil pool and
for special pool rules, Lea
County, New Mexico.

CASE NUMBER
3993

BEFORE:

ELVIS A. UTZ, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3993.

MR. HATCH: Case 3993, application of Coastal States Gas Producing Company for the creation of a new oil pool and for special pool rules, Lea County, New Mexico.

MR. HINKLE: Mr. Examiner, Clarence Hinkle, of Hinkle, Bondurant and Christy, appearing on behalf of Coastal States Gas Producing Company. We have two witnesses, Mr. Jack McGraw and Mr. Carl Slayton.

MR. UTZ: Any other appearances?

MR. RYAN: For Pan American Petroleum, Gordon Ryan and Guy Buell.

MR. HINKLE: Mr. Examiner, I would like to call your attention to an error in connection with the notice for publication. At the end of it, it states that applicant further seeks contraction of the Lazy J-Pennsylvanian Pool by the deletion from such pool to the east half of Section 20 and the west half and southeast quarter of Section 21, both in Township 13 South, Range 37 East. Now, we didn't intend that the southeast quarter of 21 be deleted from the Lazy J Pool.

It doesn't make any difference as far as Coastal States is concerned, but the testimony will be introduced, I think, to indicate that probably the southeast quarter of

Section 21 should stay in the Lazy J, rather than be deleted. I don't think this makes any difference as far as the Commission's jurisdiction of this case is concerned, but I call that to your attention.

(Whereupon, Applicant's Exhibits 1-7 were marked for identification.)

(Witness sworn.)

CARL SLAYTON

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q Will you state your name, your residence, and by whom you are employed?

A I am Carl Slayton. I am employed by Coastal States Gas Producing Company in Midland, Texas, as senior geologist.

Q Have you previously testified before the New Mexico Oil Conservation Commission?

A I have.

Q And your qualifications as a geologist are a matter of record with the Commission?

A Yes, sir.

Q Are you familiar with the application of Coastal

States in this case?

A Yes, sir.

Q What is Coastal States seeking to accomplish in this case?

A Coastal States is seeking the establishment of a new pool in Lea County, New Mexico, for Pennsylvanian oil production, and temporary rules for this pool to provide for 160-acre spacing in proration units with assignment of 80-acre allowables.

Q Have you made a study of this area as a geologist?

A Yes, I have.

Q You are familiar with all the wells drilled in this particular area, and in the adjoining pools?

A Yes, I am.

Q Have there been prepared under your direction certain exhibits for introduction in this case?

A Yes, I have, with the exception of one, Exhibit 3, which is a Xerox copy of the published information that we will rely on for portions of our testimony.

Q Refer to Exhibit Number 1, and explain what this is, and what it shows.

A Exhibit Number 1 is a regional map of Southeast New Mexico, showing the geographic location of the producing

areas of that portion of the State. We have outlined in red the producing areas of the proposed new pool as indicated by the green arrow.

Q Will you now refer to Exhibit Number 2, and explain what this exhibit shows?

A Exhibit 2 is a diagrammatic cross-section of selected wells in the area of the proposed new pool, beginning on the south end with the Wolfcamp Pool, and extending northerly through the Tulk-Pennsylvanian Pool, into the Baum-Pennsylvanian Pool, and ending with Coastal States Number 1 Federal 20 in the central part of this proposed new pool. It was designed primarily to establish the age of the production in the Coastal States Number 1-20 Federal Well, relating it with known producing areas which have been previously designated as Pennsylvanian in age.

Q Does this show the continuity of the zone through the area in which this cross-section is drawn?

A Yes, it does. It shows that production from the proposed new pool is in the C Zone of the Bough, which has been determined elsewhere as Pennsylvanian in age.

Q Does this include any of the wells that are in the Lazy J Pool?

A No, sir, it does not. It is a line that is

approximately two miles west of the Lazy J Pool. We are prepared to show in our other exhibits the producing age in the Lazy J Pool, itself.

Q Do you have any further comments you have with respect to Exhibit 2?

A No, sir. It was designed strictly to show the age of the production.

Q Now, refer to Exhibit Number 3, and explain what this shows.

A Exhibit 3 is a Xerox copy of a map presented by Mr. Henry Krusecopf, who was at the time with Pubco Petroleum. It is a reproduction of pages 228 and 229 of the publication entitled, "A Symposium of Oil and Gas Fields of Southeastern New Mexico," published by the Roswell Geological Society in 1956.

I have taken the liberty of showing in the upper right margin, across from Mr. Krusecopf's typed log, a brief correlation of the Bough Sections. As you will note, this map is contoured on what is called the top of the solid line. I would chose to call that top of the Bough A, and then subdivide the lower portions of the typed log into the B and C Zones. As you will note on this typed log, Mr. Krusecopf determines that the pay is in particular in the Lazy J, in what I would term the Bough A and Bough B.

Q What is the purpose of this exhibit?

A To show that the majority of the production in the Lazy J, proper, is from the A and the B Zones of the Bough Complex.

Q Do you have any further comments with regard to Exhibit 3?

A No, sir.

Q All right, refer to Exhibit Number 4, and explain what this shows.

A Exhibit Number 4 is a structural map of the areas of the North Baum proposed new pool, the Lazy J Pool, and the Baum Pool to the south. I have chosen to contour this on the top of the Bough C Zone, whereas we have just looked at a structural map, Exhibit Number 3, contoured on the top of the Bough A. It shows merely the structural configuration in the subsurface at that depth.

Q Throughout the whole area?

A Throughout the area we are looking at the present, yes.

Q Refer to Exhibit 5, and explain what this is.

A Exhibit 5 is a map entitled, "Isopatch Map of the Baum Field." At the time I prepared this exhibit, as you will notice, 11-6-68, we were thinking in terms of a continuous reservoir into this area from the Baum Field. I determined

a net porosity figure for the Bough C Zone over this area, and contoured the map accordingly.

What in particular I would like to bring out at this point is that the area of our proposed new field is in the southern portions of the Sections 19, 20 and 21 of Township 13 South, Range 37 East. And that, as you will notice, in an eastward direction from Section 20, there is a reduction in the amount of net porosity in the Bough C Reservoir. What I am trying to show in this particular case is that between the Texaco Well in the southeast of the southwest of Section 21, there is a reduction in net porosity to the Sinclair Well in the southeast, southeast, of the same section from twenty-five feet net pay in the Texaco Well, to none in the Sinclair Well. And as you will notice in a southeast direction, there is the similar phenomena in this particular reservoir rock, in the direction of the Sinclair Wells in the northeast quarter of Section 28. What I am showing is a lateral deterioration of the reservoir character of the Bough C.

Q What does this show with respect to the Lazy J and your proposed new field?

A It shows that they are separated by virtue of a disappearance of the same porosity in the proposed new pool as

opposed to the Lazy J Field, proper. In other words, the reduction in the reservoir character separates it in an eastward direction from the Lazy J Field.

Q In other words, it would show horizontal separation?

A That is it.

Q Between the proposed new pool and the Lazy J Pool?

A Yes, sir, in an eastward direction.

Q Do you have any further comments with respect to Exhibit 5?

A No, sir.

Q Now, referring to Exhibit 6, explain what this shows.

A Exhibit 6 is entitled, "North Baum Field Type Logs," and shows portions of the logs in two wells drilled by Coastal States. The one on the left entitled, "Producer," is Coastal States Gas Producing Company Number 2 Federal 20 in the southeast, southwest of Section 20. The one on the right entitled, "Dry Hole," is Coastal States Gas Producing Company Number 1 Chambers 29, which is due south of the 2-20 Federal, a distance of one-half mile.

What I am showing in this particular instance is a southern limit to the proposed new pool, one that is not a matter of disappearance of porosity, but one that is a matter of one producing quantities of oil and water, and the other

producing nothing but water.

Our Number 2 Federal 20 was completed as a very good well, and our attempt to extend this new pool in a southerly direction has resulted in a drill stem test over the same producing interval, some twenty-four feet lower structurally, that was entirely water bearing. Coastal States has run the pipe on this particular well, and for the past two weeks and maybe more, we have been producing water at high rates to test a theory.

Q What have these tests shown as to date?

A That we are producing high volumes of water without hydrocarbons.

Q Without any indication of oil?

A None at the present time.

Q Then this exhibit shows what?

A Shows a limit of the producing area of the proposed new field to the south.

MR. UTZ: I don't find the location on these graphs here, the logs. If you will give me the location?

A The location of the one to the left, the Coastal States Number 2 Federal 20, is in the southeast, southwest of Section 20, Township 13 South.

Q I think that would be better shown by the next

exhibit, the location of these wells.

A The Coastal States Number 1 Chambers 29 is in the southeast, northwest Section 29, Township 13 South, Range 33 East.

MR. UTZ: That is the one that is shown the location on your map that you sent in?

A It is shown as a location. It has been drilled, pipe has been run, and it is currently in limbo. We are producing water at high volumes at the present time.

Q Now, refer to Exhibit 7, and explain what this shows.

A Exhibit 7 is a plat of the same area designed to more or less wrap up everything that we have set previously.

Q Will you point out on this exhibit the wells that are on Exhibit Number 6?

A Yes. You will notice in Section 20 in the southeast of the southwest of that section, Coastal States Number 2 Federal 20 due south one-half mile in Section 29 in the southeast of the northwest, and Number 1 Chambers 29.

Q Are there any other wells there that produce water to the south?

A Dry holes, yes, you will notice one, Section 25-F, entitled the Hoat Well, the same productive interval that we

are producing in a proposed new pool, by drill stem tests recovered water and oil. Due east of that one mile is the Delaware-Apache Number 1 State in Section 30, southeast quarter of the northeast quarter. Drill stem tests over the productive interval in the North Baum-Pennsylvanian Pool recovered 100 per cent water, as did our Chambers 29.

You will notice in Section 28, the Hanogan Number 1, which also recovered in the upper zone of the C, 100 per cent water, less than a half mile south of the Texaco Number 1-DM State in Section 21, southeast quarter of the southwest quarter.

Q Are there any other dry holes or wells producing water?

A Not at the moment. Of course, producing this reservoir anywhere is a matter of handling volumes of water and oil.

Q I mean exclusively water.

A No, sir, there are not. At the present time, there are five producing wells in the proposed new pool.

Q What conclusions did you draw from Exhibit 7?

A I can show a separation from the proposed new pool in an eastward direction from the Lazy J Pool. And definitely I can show in a southerly direction a limit to production toward the Baum Field.

Q Does Exhibit 7 show the wells which have been completed and which are being drilled in the new field area?

A Yes, sir. As you will notice, there are five wells that are shown to be producers. There are three wells shown to be drilling, and if you would designate our Chambers 29 as drilling, so that would make four drilling wells in addition to the five producing wells at the present time.

Q Is there any further comment you would have with respect to Exhibit 7?

A No, sir.

MR. HINKLE: We would like to offer in evidence Exhibits 1 through 7.

MR. UTZ: Without objection, Exhibits 1 through 7 will be entered in the record.

(Whereupon, Applicant's Exhibits 1-7 were admitted in evidence.)

MR. HINKLE: That is all the direct examination from this witness.

CROSS EXAMINATION

BY MR. UTZ:

Q I have been trying to find five producing wells within the limits that you recommended here, and I only find three so far.

A In Section 21, the Hanogan Well in the southeast -- northeast, southwest. Look in the southwest quarter, there are two wells, the Hanogan and the Texaco Well. There are two there. In Section 20, Coastal States Number 1 Federal 20, and Coastal States Number 2 Federal 20.

Q I thought you were going to leave out those two wells to the east there.

A No. The southeast quarter.

Q The southeast quarter. Do you want to include the southwest quarter of 21?

A Include all of the west half. Another drilling well, the Delaware-Apache Number 2-19 in the northeast, northeast of Section 19. And in Section 20, Coastal States Number 3 Federal 20 in the southwest of the northwest, in addition to the Chambers.

Q What is the status of the drilling wells in the northeast, northeast 20?

A At the present time, Coastal States is re-entering that well to clean out to the Devonian, in order to take care of produced water in the area. It was originally completed in the Bough Complex, and subsequently it was abandoned.

Q What do you know about the Sinclair Well over in the southeast of 21?

A That is a plugged well at the present time.

Q It is plugged tight?

A Plugged tight. But it was tight in the C Zone, it produced some crude out of A and B.

Q Now, the Sinclair, the Number 2 Well in the northeast of 28, what is the status of that one?

A I have no specific knowledge about the current status of this well.

MR. McGRAW: I plan to cover that.

MR. UTZ: Any other questions of the witness? It is my understanding that you are asking for 160-acre spacing and 80-acre allowance?

THE WITNESS: Yes, sir, similar with other cases that have been presented in the recent past.

MR. UTZ: Any other questions? You may be excused.

(Witness excused.)

MR. HINKLE: I would like to call Mr. Jack McGraw.

(Witness sworn.)

JACK McGRAW

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q Will you state your name, your residence, and by whom you are employed?

A My name is Jack McGraw. I work for Coastal States Gas Producing Company in Midland, Texas, as division petroleum engineer.

Q Have you previously testified before the New Mexico Oil Conservation Commission?

A Yes, I have.

Q Your qualifications as a petroleum engineer are a matter of record?

A Yes.

Q Are you familiar with the application of Coastal States in this case?

A Yes, I am.

Q Have you made the study of the proposed North Baum-Upper Pennsylvanian area?

A Yes, sir.

Q And all the adjoining areas, and are familiar with the wells that have been drilled in the area?

A Yes, sir.

Q Have you prepared certain exhibits for introduction in this case?

A Yes, Exhibits 8 through 10.

(Whereupon, Applicant's Exhibits 8-10 were marked for identification.)

Q Please refer to Exhibit Number 8, and explain what this is and what it shows.

A Exhibit Number 8 is a plat showing the proposed North Baum-Upper Pennsylvanian area outlined in yellow. This plat also shows the Baum-Upper Penn Field, which is outlined in red, and the portions of the Lazy J Field which are outlined in blue. It shows that the proposed North Baum-Upper Penn Pool overlaps portions of the Lazy J Pool. These portions that do overlap are the ones that we would like to delete from the Lazy J Pool.

Q This shows all the wells drilled in the area?

A Yes, it shows all the producing wells, the abandoned producers, the dry holes, and the current drilling wells.

Q Do you have any further comment with respect to Exhibit Number 8?

A Yes. While we are looking at that exhibit, I might go into a brief description of the wells and the time that they were drilled. For example, the first well drilled in the area was the Texaco State DM Number 1, which was completed in December, 1967. That well is located in the southeast quarter of the southwest quarter of Section 21, Range 33 East. The

well was completed in the Bough C Zone of the Upper-Penn Formation, and was potential flowing for 426 barrels of oil per day and 128 barrels of water per day. It is currently producing about 216 barrels of oil per day and nineteen barrels of water still flowing.

The second well drilled was the Hanogan State 21, Number 1, which is located in the northeast quarter of the southwest quarter of Section 21, Township 13 South, Range 33 East. This well was completed from the Bough C Zone of the Upper-Penn Formation, and was originally potential flowing for 426 barrels of oil per day, plus 120 barrels of water per day, and currently produces less than 100 barrels of oil per day and about 150 barrels of water per day, and it is pumping.

The third well drilled was the Coastal States Federal 20, Number 21, which is in the southeast quarter of the southeast quarter of Section 20. This well was drilled and completed in the Bough C Zone, and is currently producing approximately 190 barrels of oil per day, and 420 barrels of water per day.

The next well drilled was the Coastal States Federal 20, Number 2, and it is located in the southeast quarter of the southwest quarter of Section 20. It is producing 220

barrels of oil per day, no water flowing.

The next well drilled was the Delaware-Apache, State 19, Number 1, which is in the northeast quarter of the southeast quarter of Section 19. There are two wells, active wells now, Delaware-Apache Number 2-19 in the northeast, northeast of 19, and Coastal States Number 3-20, which is in the southwest of the northwest of 20.

I might point out that the wells in the Lazy J Field that are nearest to the Texaco Well, which is the easternmost well in the proposed North Baum-Upper Penn Field did not produce from the same zone that we are completed in. Now, that was shown in previous testimony, they were completed in the Bough A and Bough B. They have been abandoned, they are abandoned producers. There was a well, the Sinclair Well, their Number 1 -- their State 2-45, Number 1, which is located in the southeast quarter of the northeast quarter of Section 28, Township 13 South, Range 33 East. This well produced from the Bough C Zone, and it recovered 102,468 barrels, and then reached the economic limit and was abandoned. I believe that is all on this exhibit.

Q Now, refer to Exhibit Number 9, and explain what this shows.

A Exhibit Number 9 shows the initial reservoir pressure

in the C Zone as obtained from drill stem tests on many wells completed in the proposed North Baum and the Baum-Upper Penn Fields. You will note that these pressures are relatively uniform in any given area, indicating that they do represent the static reservoir pressure in that area.

You will note in the Baum Field, it is somewhere near 3,000 pounds. In the North Baum area it is right near 2,900 pounds. And then by published information on the Lazy J Field, their original pressure was 3,546, so we see that we appear to have three separate reservoirs with different initial reservoir pressures.

Of course, the pressure in the Lazy J Field has since depleted.

Q This would seem to indicate that these three reservoirs are not connected?

A That is true. The fact that the Sinclair Well in Section 28 that recovered oil from the C Zone depleted, would indicate the presence of a barrier between that well and the Texaco Well in Section 21. And, of course, the dry hole that was drilled by Hanogan, Hanogan's Debco State in the northeast quarter of the northwest quarter of 28, proves the existence of this barrier. That being a 100 per cent water test would have to indicate that it is below the water-oil contact in the

zone that produces to the northwest, and is separate from the zone producing to the southeast.

Q Will Coastal States continue to make pressure tests or obtain information on pressure tests on the additional wells that are drilled in the area?

A Yes, we plan to gather all the available reservoir information in order to determine if one well can efficiently and effectively drain 160 acres in that area.

Q Refer to Exhibit 10, and explain what this shows.

A Exhibit 10 shows the economics of the drilling in this area on 40, 80 and 160-acre spacing. These economics have been presented in prior testimony in the Baum Field hearing, and also in the Tulk Upper Penn Field hearing. They also apply in this area because of the similarity between the producing areas. The depths are the same, gravity of the crude is the same, and the producing characteristics are the same, price of the crude, and so forth. In fact, they are all served by the same casing head contract.

Q Referring to Exhibit 10, would it be economical to drill wells either on 40 or 80 acres in that area?

A No, sir. According to our economic evaluation, it would not be. Our investment would not be returned on 80 acres, and certainly would not be returned on 40 acres. However, we do

make a profit -- not a profit, an income to investment ratio of 1.72.

Q On 160 acre?

A On 160-acre spacing, yes.

Q Do you have any particular rules, special rules that you would like to propose to the Commission for temporary adoption in this case?

A Yes, we would like to adopt rules for this pool that are exactly similar to the rules adopted on a permanent basis in the Baum-Penn Field, and on a temporary basis in the Tulk-Penn Field. These rules provide for 160-acre spacing, and a proportional factor of 4.77 for allowable purposes. They also include a provision for locating wells on any Governmental quarter section within 150 feet of the center. This allows flexibility in drilling the acreage.

Q In connection with the adoption of these special field rules, would you make any exceptions as to any existing wells?

A Yes, we would. The two wells that have already been drilled and have been on production for approximately a year, Texaco State DM Number 1, and Hanogan's State 21, Number 1, are drilled on 80-acre tracts, and it is not our intention to limit their allowable below what they now have. I believe they now

operate on 40-acre allowable, and, of course, half of an 80-acre would be less than a 40-acre allowable, and it is not our intention to reduce them below their current allowable.

I might also point out that the total capacity of both wells at this time is just about equal to the allowable for 160-acre tract.

Q In your opinion, would the adoption of the special field rules on a temporary basis for this area avoid the drilling of unnecessary wells?

A Yes, it certainly would.

Q Would the adoption of the special field rules then be in the interest of conservation and prevent waste?

A Yes.

Q During this one-year period that the special field rules would be adopted, do you intend to gather additional information with respect to drainage factors?

A Yes, sir, we would gather the next information to prove conclusively that one well could drain the necessary acreage.

Q Are you prepared to express an opinion as to whether or not one well would effectively and efficiently drain as much as 160 acres?

A Yes, sir, in view of the performance of the Baum

Field and other information gained throughout the Bough C Field, it does appear that one well will drain far in excess of 160 acres.

MR. HINKLE: We would like to offer Exhibits 8, 9, and 10.

MR. UTZ: Without objection, Exhibits 8 through 10 will be received in evidence.

(Whereupon, Applicant's Exhibits 8-10 were admitted in evidence.)

MR. HINKLE: That is all on direct examination.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. McGraw, this southeast southwest quarter of Section 21 is going to offer a bit of a problem, particularly since you want to include it and want to assign them different allowables than the rest of the pool. I believe you are aware of the fact that this just hasn't ever been done so far. I have no doubt that the Commission won't stand still for it. Do you have any other suggestions?

A We would not object if they were assigned allowables equal to the other wells in the field. It is our understanding that they are producing at their capacity at this time.

Q Do you know what they are producing?

A Yes, sir. According to the October New Mexico Engineering Committee Report, the Hanogan Well produced eighty-two barrels of oil and 150 barrels of water. The Texaco Well produced 216 barrels of oil and nineteen barrels of water.

Q Your geological data shows these two wells to be on this North Baum Pool?

A Yes, sir, they are in our reservoir, we feel sure, so therefore we feel they should be included in this field, but we are agreeable to them coming in with an exception to the field rules.

Q The only well in the southeast of 19, which is Southern Minerals, I believe it is Number 1, did you ever say what the production was on that well?

A The southeast of 19, that is Delaware-Apache Number 1-19, and that well is currently producing 285 barrels of oil, and no water per day.

Q The three Sinclair Wells in Section 28, the northeast quarter, the Number 2 Well is plugged and abandoned?

A Yes, sir. That well, to my knowledge, is an abandoned producer. Now, the well to the south of it, the Number 5, has been deepened to some lower zone and is producing. According to the Engineering Committee Report, it was producing 118 barrels of oil, and 500 barrels of water. No logs were run

on this deepening operation, and it is not possible for us to determine just what zone that is coming from. However, we do have a dry hole between us and the wells, so we feel like it is definitely not in our reservoir.

Q I believe you stated that well was completed in the A-B Zone.

A It was originally, but I believe they did deepen it, so it is coming from some other zone. Now, the well south of it is still abandoned. And the well south of that, their Number 3, which is in the southwest of the southeast of 28, it was also deepened, and it makes thirty barrels of oil and 440 barrels of water, so they have been engaged in some recompletion operations in this area.

MR. UTZ: Any other questions of the witness? You may be excused.

(Witness excused.)

MR. UTZ: Any statements in this case?

MR. RYAN: If it please the Examiner, I am appearing for Pan American Petroleum. I would like to make a statement. Do you have an expression in your files from Texaco, Incorporated, relating to this particular case?

MR. UTZ: Yes, we do.

MR. RYAN: I wonder if we could hear it for the

record.

MR. UTZ: Do you want to hear it before you make your statement?

MR. RYAN: Yes, sir.

MR. HATCH: This is addressed to the Commission, dated December 9th, Case 3993. "Texaco, Incorporated, is an operator in the above subject proposed oil pool, and has been duly notified by Coastal States Gas Producing Company of their application for the creation of a new Pennsylvanian Oil Pool to be designated the North Baum-Upper Pennsylvanian Pool, comprising an area that includes Texaco's New Mexico State DM Lease with one producing well. The applicant advises that 160-acre spacing and 80-acre allowables will be included in their application as recommendations for the proposed new pool. Texaco, Incorporated, does not object to the proposals outlined by Coastal States Gas Producing Company, provided that Texaco State of New Mexico DM Well Number 1, which is currently assigned to the Lazy J-Pennsylvanian Oil Pool, be assigned a full 80-acre allowable. The well is drilled on 80-acre tract, and an additional eighty acres contiguous to the tract are unavailable for assignment thereto. Darrow Smith, by C.L. Wigham."

MR. RYAN: Thank you very much, sir. Mr. Examiner,

Pan American is a 100 per cent operator of a well that is in the last stages of completion, as well as a 50 per cent owner in another well in this pool currently being completed. We have made an independent study of our own, and we have reached the same conclusions that the applicant, Coastal States, has reached. That is, one, that the North Baum-Upper Penn Oil Pool is a separate and distinct accumulation of oil from the Lazy J to the south and east, and from the Baum Pool to the south. Our study also revealed to us that it is completely impossible to economically drill wells to an 80-acre density in this pool. Our economic analysis reveals, as did theirs, that with 160, you might make a little money.

Our study also reveals that from a physical standpoint, one well will effectively and efficiently drain in excess of 160 acres. I think we, the operator, and the Commission are extremely fortunate in this case that we have so much data that we can present to you at a hearing where we are only asking for temporary rules. So in view of our independent investigation, we certainly concur in the recommendations of the applicant, Coastal States here. We strongly urge the adoption of the 160-acre oil proration units. We have no objection to their recommendation at this time, that the 160 oil units receive an 80-acre allowable.

Normally, Pan American feels that if a well is assigned 160 acres, it is entitled to 160-acre allowable. And when our interest wells are completed, if they are capable of producing 160-acre allowable, it will be my recommendation to Pan American that we apply to up the allowable in this pool to 160-acre allowable.

I would also suggest to the Commission that that might be one way of handling the peculiar and particular problem we have with the Hanogan Well and the Texaco Well, if we adopt 160-acre allowable for the 160-acre wells in this pool, that we will have no problem at all with the Hanogan and Texaco Well in that they will then receive more allowable than they are currently capable of producing, and it seems to me that would solve the entire problem. But we strongly support the recommendations of the applicant, Coastal States.

MR. UTZ: Any other statements?

BY MR. UTZ:

Q Mr. McGraw, there is a portion of the Lazy J, and you may have said this in your application, I am not sure, but I think we better clarify it right now. Of Section 20, the northeast quarter, Section 21, the northwest quarter, it is your recommendation to delete that also from the Lazy J?

A Since it would be noncontiguous with the rest of

the Lazy J, it really makes no difference. We do not intend to drill on that particular tract at this time. We feel that the drilling well tested that area, but at a later date if we did change our mind, we would definitely want it to be in this North Baum-Upper Penn. So from that standpoint, I assume my recommendation would be that you delete that.

MR. UTZ: All right, sir. Any other statements?
The case will be taken under advisement.

I N D E X

<u>WITNESSES</u>	<u>PAGE</u>
CARL SLAYTON	
Direct Examination by Mr. Hinkle	3
Cross Examination by Mr. Utz	13
JACK McGRAW	
Direct Examination by Mr. Hinkle	15
Cross Examination by Mr. Utz	24

E X H I B I T S

<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED AND ADMITTED IN EVIDENCE</u>
Exhibits 1-7	3	13
Exhibits 8-10	17	24

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, SAM MORTELETTE, Notary Public 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.

Witness my Hand and Seal this 30th day of December, 1968.

Sam Mortelette
 NOTARY PUBLIC

My Commission Expires:

December 6, 1972

I do hereby certify that the foregoing is a complete record of the proceedings in the Bernalillo hearing of Case No. 3993, heard by me on Dec. 11, 1968.
Theresa A. [Signature]
 Notary Public
 New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

F. O. BOX 2088 - SANTA FE

07501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIGO
MEMBER

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

January 20, 1970

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Re: Case No. 3993
Order No. R-3644-B
Applicant:
Coastal States

Dear Sir:

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

Very truly yours,

G. L. Carter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/1E

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. 3993
Order No. R-3644-B

APPLICATION OF COASTAL STATES GAS
PRODUCING COMPANY FOR THE CREATION
OF A NEW OIL POOL AND 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 January 7, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 20th day of January, 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-3644, dated December 31, 1968, temporary Special Rules and Regulations were promulgated for the North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico, for a period of one year, effective January 10, 1969.

(3) That pursuant to the provisions of Order No. R-3644, this case was reopened to allow the operators in the subject pool to appear and show cause why the North Baum-Upper Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the proportional factor of 4.77 assigned to the subject pool should or should not be retained.

-2-

CASE No. 3993

Order No. R-3644-B

(4) That the evidence establishes that one well in the North Baum-Upper Pennsylvanian Pool can efficiently and economically drain and develop 160 acres.

(5) That the evidence establishes that wells in the North Baum-Upper Pennsylvanian Pool can produce a 160-acre allowable based upon a proportional factor of 6.77 without causing waste.

(6) That in order to protect correlative rights of those persons having an interest in the North Baum-Upper Pennsylvanian Pool, Rule 6 of the Special Rules and Regulations governing the subject pool should be amended to provide for the assignment of a 160-acre proportional factor of 6.77 for allowable purposes in the subject pool.

(7) That the Special Rules and Regulations promulgated by Order No. R-3644 have afforded and as amended by this order will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(8) 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, the Special Rules and Regulations promulgated by Order No. R-3644 as amended by this order should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That Rule 6 of the Special Rules and Regulations For The North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico, promulgated by Order No. R-3644 is hereby amended to read in its entirety as follows:

"RULE 6. A standard proration unit (158 through 162 acres) shall be assigned a 160-acre proportional factor of 6.77 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."

-3-

CASE No. 3993

Order No. R-3644-B

(2) That the Special Rules and Regulations governing the North Baum-Upper Pennsylvanian Pool, promulgated by Order No. R-3644 as amended by Order (1) above, are hereby continued in full force and effect until further order of the Commission.

(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. ARMIGO, Member


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


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:

CASE No. 3993
Order No. R-3644-A

APPLICATION OF MAX COLL II FOR A
HEARING DE NOVO IN CASE NO. 3993,
ORDER NO. R-3644, THE APPLICATION
OF COASTAL STATES GAS PRODUCING
COMPANY FOR THE CREATION OF A NEW
POOL AND FOR SPECIAL POOL RULES,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing de novo at 8:30 a.m. on February 19, 1969, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," and was continued, at the request of Coastal States Gas Producing Company, to the Regular Hearing of the Commission on March 19, 1969.

NOW, on this 5th day of March, 1969, the Commission, a quorum being present, having considered the record, 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 for the hearing de novo, Max Coll II, has requested that the application for a hearing de novo in Case No. 3993 be dismissed.

(3) That the applicant's request to dismiss the application for hearing de novo should be granted.

-2-

CASE No. 3993
Order No. R-3644-A

IT IS THEREFORE ORDERED:

- (1) That the application of Max Coll II for a hearing de novo in Case No. 3993 is hereby dismissed.
- (2) That Order No. R-3644, issued by the Commission on December 31, 1968, is hereby fully approved, ratified, and confirmed.
- (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 E. CARGO, Chairman


ALEX J. ARMIJO, Member


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

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:

CASE No. 3993
Order No. R-3644
NOMENCLATURE

APPLICATION OF COASTAL STATES GAS
PRODUCING COMPANY FOR THE CREATION
OF A NEW OIL POOL AND 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 December 11, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 31st day of December, 1968, 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, Coastal States Gas Producing Company, seeks the creation of a new oil pool in Lea County, New Mexico, for the production of oil from the Upper Pennsylvanian formation, to be designated the North Baum-Upper Pennsylvanian Pool, comprising the following-described lands:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM

Section 19: E/2

Section 20: NW/4 and S/2

Section 21: SW/4

(3) That the applicant further seeks the promulgation of temporary special rules and regulations governing said pool,

-2-

CASE No. 3993
Order No. R-3644

including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.

(4) That the applicant further seeks the contraction of the Lazy J-Pennsylvanian Pool, Lea County, New Mexico, by the deletion from said pool of the following-described lands:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 20: E/2
Section 21: W/2

(5) That the reservoir information presently available indicates that the horizontal limits of the Lazy J-Pennsylvanian Pool, as presently designated, encompass more than one separate common source of supply and the horizontal limits of said pool should, in order to prevent waste and protect correlative rights, be contracted by deleting the following-described lands:

LEA COUNTY, NEW MEXICO
TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 20: SE/4

(6) That the reservoir information presently available indicates that the proposed new pool encompasses a separate common source of supply and in order to prevent waste and protect correlative rights, the North Baum-Upper Pennsylvanian Pool should be created, with vertical limits comprising the Upper Pennsylvanian formation, and horizontal limits comprising the following-described lands:

LEA COUNTY, NEW MEXICO
TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 19: E/2
Section 20: W/2 and SE/4

(7) 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 a 160-acre proportional factor of 4.77 for allowable purposes should be promulgated for the North Baum-Upper Pennsylvanian Pool.

-3-

CASE No. 3993
Order No. R-3644

(8) 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.

(9) 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.

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

IT IS THEREFORE ORDERED:

(1) That, effective January 10, 1969, the horizontal limits of the Lazy J-Pennsylvanian Pool, Lea County, New Mexico, are hereby contracted by the deletion therefrom of the following-described area:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 20: SE/4

(2) That, effective January 10, 1969, a new pool in Lea County, New Mexico, classified as an oil pool for Upper Pennsylvanian production, is hereby created and designated the North Baum-Upper Pennsylvanian Pool, with vertical limits comprising the Upper Pennsylvanian formation as found in the interval from 9732 feet to 9814 feet on the log of the discovery well, Coastal States Federal "20" Well No. 2, located in Unit N of Section 20, Township 13 South, Range 33 East, NMPM, Lea County, New Mexico, and horizontal limits comprising the following-described area:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 19: E/2
Section 20: W/2 and SE/4

(3) That, effective January 10, 1969, temporary Special Rules and Regulations for the North Baum-Upper Pennsylvanian Pool,

-4-

CASE No. 3993

Order No. R-3644

Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH BAUM-UPPER PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the North Baum-Uppor Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Upper 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-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

-5-

CASE No. 3993

Order No. R-3644

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 a 160-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 North Baum-Upper Pennsylvanian Pool or in the Upper 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 January 10, 1969.

(2) That each well presently drilling to or completed in the North Baum-Upper Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof shall, after January 10, 1969, receive an allowable in the same proportion to a standard 160-acre allowable for the pool as the acreage presently dedicated to the well bears to 160 acres, until Form C-102 dedicating 160 acres to the well has been filed with the Commission, or until a non-standard unit containing less than 160 acres has been approved.

(3) That this case shall be reopened at an examiner hearing in January, 1970, at which time the operators in the subject pool may appear and show cause why the North Baum-Upper Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the proportional factor of 4.77 assigned to the subject pool should or should not be retained.

-6-

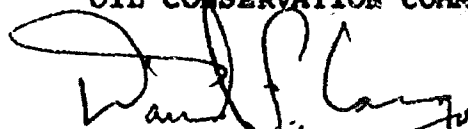
CASE No. 3993

Order No. R-3644

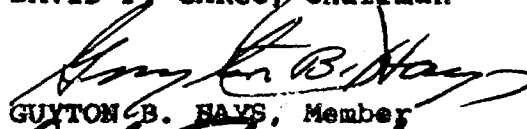
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



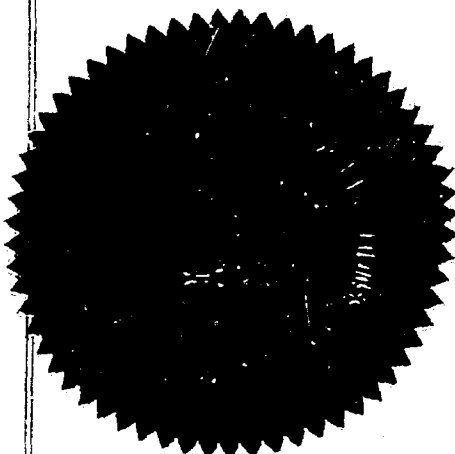
DAVID F. CARGO, Chairman



GUYTON B. HAYS, Member



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



esr/



Telegram

KA025 NSA147

1970 JAN 6 AM 9 29

NS MDA018 NP PD=MIDLAND TEX 6 920A CST=
NEW MEXICO OIL CONSERVATION COMMISSION=
SANTA FE NMEX=

ATTN DANIEL S NUTTER; REF DOCKETT #1-70 EXAMINER
HEARING 1-7-70 CASE #3993 RE OPENED ORDER #R3644.

THIS IS TO ADVISE THAT UNION TEXAS PETROLEUM HAS
REVIEWED THE EXHIBITS AND DISCUSSED THE TESTIMONY TO BE
PRESENTED IN THE SUBJECT CASE BY COASTAL STATES GAS
PRODUCING COMPANY. UNION TEXAS PETROLEUM SUPPORTS THE
COASTAL STATES REQUEST THAT THE NORTH BAUM UPPER
PENNSYLVANIAN POOL BE DEVELOPED ON 160 ACRE SPACING AND

WU 1201 (R 5-69)



Telegram

(930)•

THAT A PROPORTIONAL FACTOR OF 6.67 BE ASSIGNED TO THE
POOL=

HOWARD PARDUE DIST PETR ENGR==

#1-70 1-7-70 #3993 #R3644 160 6.67=

WU 1201 (R 5-69)

JAN 5 1970

PAN AMERICAN PETROLEUM CORPORATION

OIL AND GAS BUILDING

P. O. BOX 1410

D. L. RAY
DIVISION ENGINEERFORT WORTH, TEXAS—76101
December 31, 1969

File: PEH-643-986.510.1

Subject: Permanent Pool Rule Hearing
North Baum-Upper Penn. Pool
Lea County, New Mexico

Case 3993

Jm

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico 87501

Gentlemen:

Pan American Petroleum Corporation hereby supports Coastal States Gas Producing Company in their proposals concerning permanent field rules for the North Baum-Upper Penn Pool, Lea County, New Mexico, which will be considered at a NMOCC hearing on January 7, 1970. We understand the proposed rules will include provisions for retention of the current 160-acre spacing rule. We also understand that Coastal States will propose the approval of 160-acre allowable factors for this pool. Pan American strongly supports Coastal States in their request and urges the Commission to provide for the establishment of 160-acre allowable factor which would be commensurate with unit size in this pool.

Yours very truly,

D. L. Ray

WCW:jn

cc: Coastal States Gas Producing Company
P. O. Box 235
Wilco Building
Midland, Texas 79701
Attn: Mr. Jack McGraw

CASE 4289: Application of Getty Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Justis-Blinbry and Justis-Tubb Drinkard Pools in the wellbore of its State "BB" Well No. 2 located in Unit D of Section 2, Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 4290: Application of Getty Oil Company for a non-standard oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard proration unit comprising the SE/4 NE/4 and the NE/4 SE/4 of Section 29, Township 18 South, Range 38 East, Hobbs-Drinkard Pool, Lea County, New Mexico, said unit to be dedicated to a well to be drilled at a standard location in the NE/4 SE/4 of said Section 29.

CASE 3993: (Reopened)

In the matter of Case No. 3993 being reopened pursuant to the provisions of Order No. R-3644, which order established 160-acre spacing units for the North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico, for a one-year period. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre units and why the proportional factor of 4.77 assigned to the pool should or should not be retained.

CASE 4202: (Reopened)

In the matter of Case 4202 being reopened at the request of the applicant, Mobil Oil Corporation. Applicant, in the original hearing of this case, sought permission to institute a water-flood project in the Langlie Mattix Queen Unit Area, Langlie-Mattix Pool, by the injection of water into the Queen sand formation through 17 injection wells at orthodox and unorthodox locations in Sections 10, 11, 14, 15, 22, and 23, Township 25 South, Range 37 East, Lea County, New Mexico. The Commission, by Order No. R-3823, authorized the applicant to inject water through 16 wells and denied the applicant authority to inject water through the proposed injection Well No. 14 to be drilled 660 feet from the North line and 1220 feet from the West line of said Section 14. Applicant seeks authority to now complete said Well No. 14 as a water injection well, alleging that negotiations for the acquisition or inclusion of acreage offsetting said Well No. 14 have not been successful, that failure to inject water through the well will result in the loss of approximately 200,000 barrels of oil, and that said injection will not violate the correlative rights of the offset operator.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

March 5, 1969

Mr. Max W. Coll, II
Oil and Gas Properties
Post Office Box 1818
Roswell, New Mexico 88201

Re: Case No. 3993

Order No. R-3644-A

Applicant:

Max Coll

DOCKET MAILED

Date 12-24-69

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:

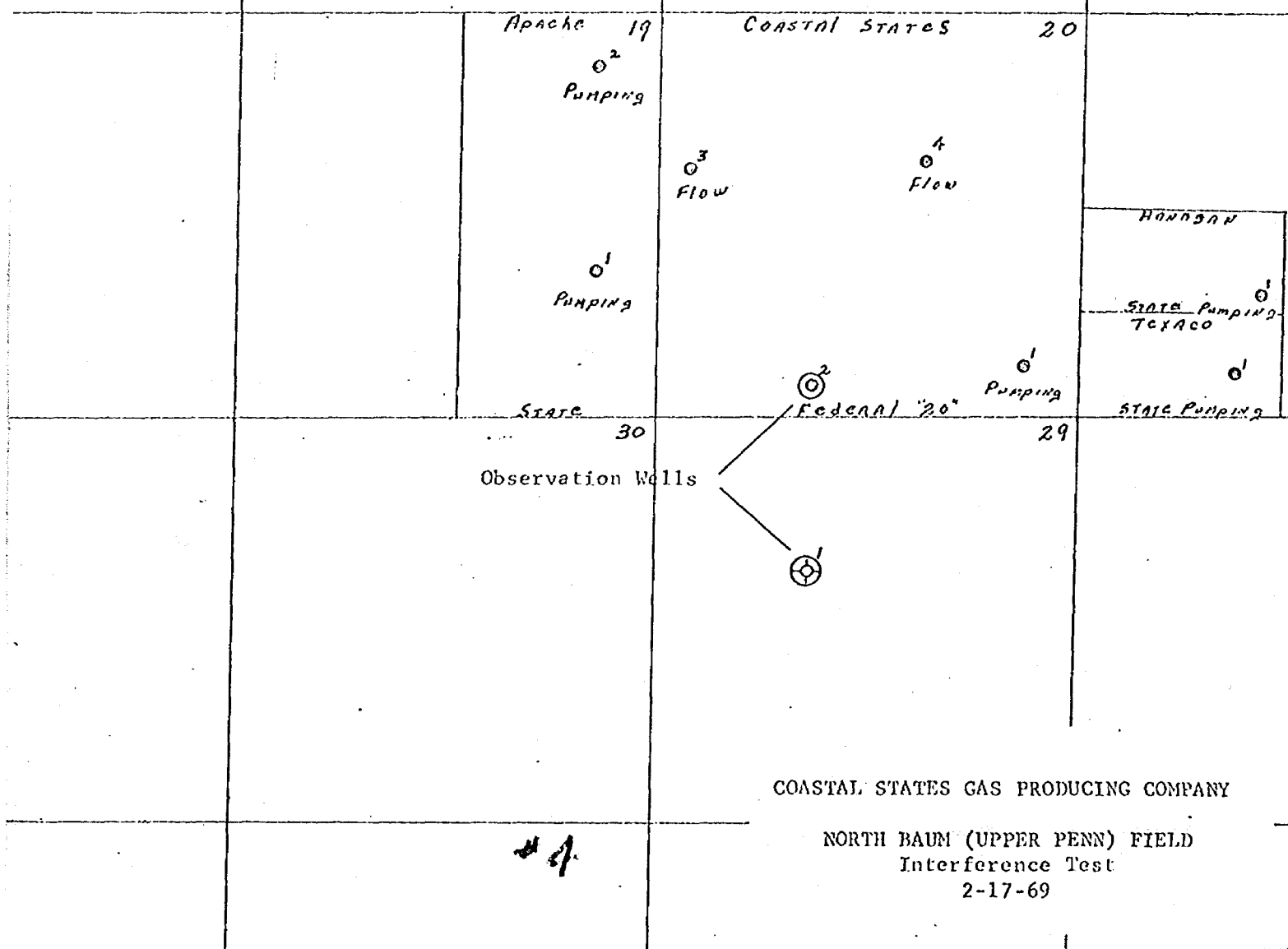
Hobbs OCC x

Artesia OCC

Aztec OCC

Other Mr. Clarence Hinkle

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
App. EXHIBIT NO. 4
CASE NO. 2028



TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : FEDERAL 20 NO. 2
Field : NORTH BRUM UPPER PENN.

Page 3 of 5
File 3-2971-P

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1969 Date	Status of Well	Time	Elapsed Time Hrs. Min.		Wellhead Pressure Tubing	BHP @ 9551' Psig	BHP @ 9714' Psig
2-17	Arrived on location						
	Well shut in	10:00	290	00			
"	Inst. @ 9551'	11:20	291	20	1028	2447	2494
"	Offset wells flwg	16:20	296	20		2446	2493
"	"	21:20	301	20		2445	2492
2-18	"	02:20	306	20		2443	2490
"	"	07:20	311	20		2442	2489
"	Trip inst.	08:20	312	20			
"	Inst. @ 9551'	11:20	315	20		2441	2488
"	"	16:20	320	20		2440	2487
"	"	21:20	325	20		2439	2486
2-19	"	02:20	330	20		2438	2485
"	"	07:20	335	20		2437	2484
"	Inst. off btm	09:20	337	20		2436	2483
"	Off location	10:00					

BEFORE EXAMINER NU
CIL CONSERVATION COMMI
EXHIBIT NO. 5
CASE NO. 3773

#5

#5

CASE NO.

Арache 19

Coastal States

20

02 1948010
1140WPC
umping 52 m.c.FP

274 BOPD
320 BOPD
3231 MCFPD
Flow

274 6120
4 35 6120
0 231. inc 6120
Flon

O' 102 BOPD
150 BOPD
Pumping 199 m c f p d

274 BAPD
0 BAPD
231 MCFPD

2740600 1
5143000 0
231 mcfpp Pumping
1.000

Народна

85 BORO
340 BORO
16 MCFR

~~Shirley Pumping~~
Texaco

218 BOPD
29 BWPD O
63 MCPD
STAG PDPD

State

① Federal "20"

29

Observation Wells

4.77 80.00 Ob.

4.77
6.77 160ac
3

3.77

40 ac

COASTAL STATES GAS PRODUCING COMPANY

NORTH BAUM (UPPER PENN) FIELD
Interference Test

2-17-69

TEFTLELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : CHAMBERS NO. 1

Page 1 of 5

Field :

File 3-2971-P

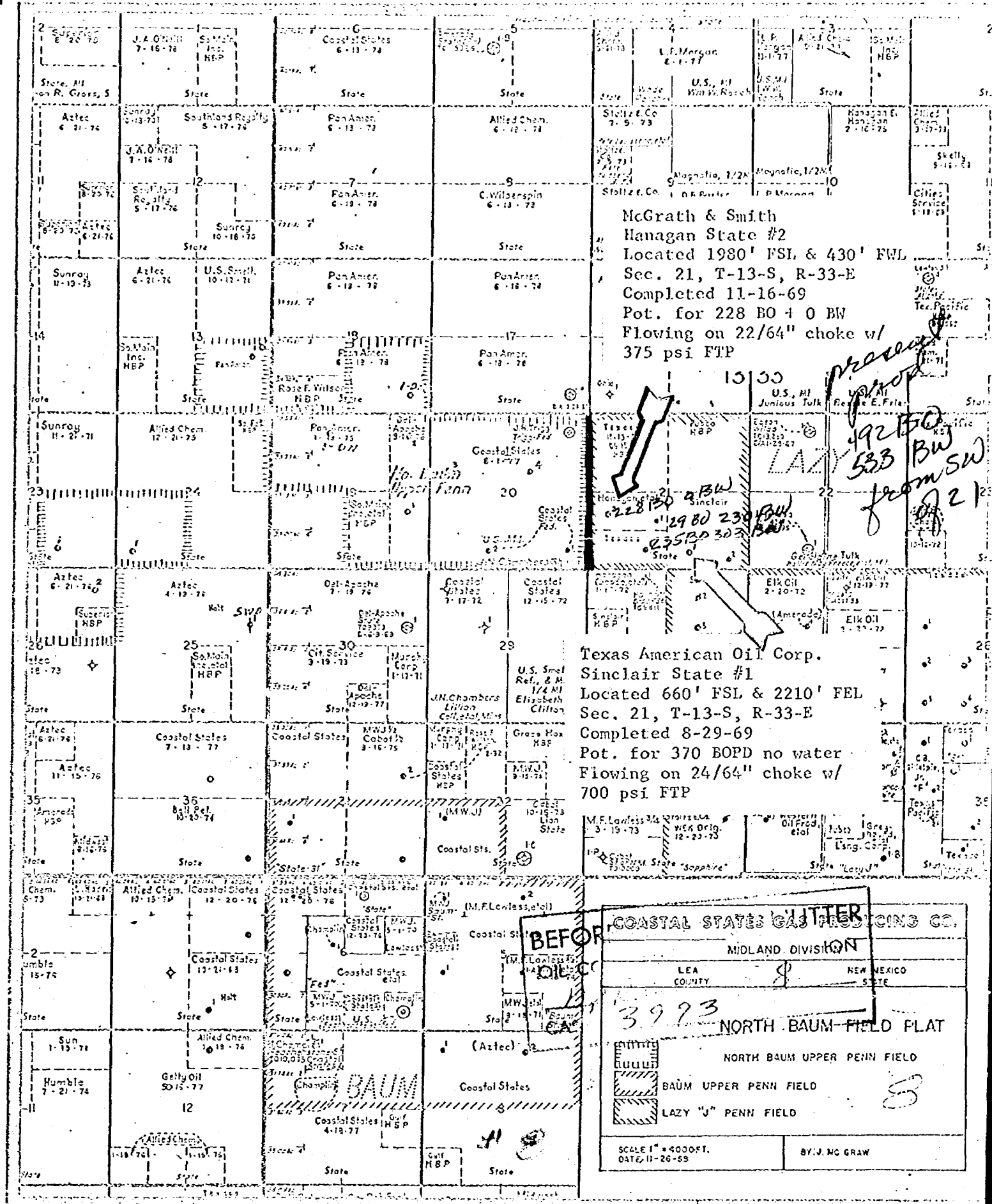
CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1969			Elapsed	Wellhead	BHP @
Date	Status of Well	Time	Time	Pressure	9710'
			Hrs-Min.	Tubing	Psig
2-19	Arrived on location				
	Well shut in	10:00	720 00		
"	Inst. @ 9710'	11:00	721 00	Nil	2517
"	North Brum Field Wells				
	Flowing	14:00	724 00		2516
"	"	17:00	727 00		2515
"	"	20:00	730 00		2514
"	"	23:00	733 00		2514
2-20	"	02:00	736 00		2513
"	"	05:00	739 00		2512
"	"	08:00	742 00		2511
"	"	11:00	745 00		2510
"	Off location	12:00	746 00		

BEFORE EXAMINER NOTED
OIL CONSERVATION COM.
HPP EXHIBIT NO. 7
CASE NO. 3973

#7

#7



McGrath & Smith
Managan State #2
Located 1980' FSL & 430' FWL
Sec. 21, T-13-S, R-33-E
Completed 11-16-69
Pot. for 228 BO + 0 BW
Flowing on 22/64" choke w/
375 psi FTP

Texas American Oil Corp.
Sinclair State #1
Located 660' FSL & 2210' FEL
Sec. 21, T-13-S, R-33-E
Completed 8-29-69
Pot. for 370 BOPD no water
Flowing on 24/64" choke w/
700 psi FTP

COASTAL STATES GAS PRODUCING CO.	
MIDLAND DIVISION	
LEA COUNTY	NEW MEXICO STATE
3923 NORTH BAUM FIELD PLAT	
NORTH BAUM UPPER PENN FIELD	
BAUM UPPER PENN FIELD	
LAZY "J" PENN FIELD	
SCALE 1" = 4000 FT. DATE 11-26-69	BY J. MC GRAW

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 28, 1969

C
O
P
Y

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Dear Mr. Hinkle:

Mr. Max Coll called me this afternoon and requested that Case No. 3993 which was scheduled for hearing as a de novo application on the March regular hearing docket be dismissed and requested that you be notified. You may therefore consider this as official notice that an order of dismissal will be entered in the abovementioned case.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

cc: Mr. Max Coll, II
Post Office Box 1818
Roswell, New Mexico 88201

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 10, 1969

C
O
P
Y

Mr. Max W. Coll, II
Oil and Gas Properties
P. O. Box 1818
Roswell, New Mexico 88201

Dear Mr. Coll:

In reply to your letter of January 8, 1969,
I am enclosing a copy of Commission Order No. R-
3644 which was entered December 31st after the
hearing of Case 3993 on December 11, 1968.

You will note that the case will be reopened
at an examiner hearing in January, 1970.

Yours very truly,

A. L. PORTER, Jr.
Secretary-Director

ALP/esr
Enclosure

BOX 1818
ROSWELL, N. M.
88201

MAX W. COLL, II
OIL AND GAS PROPERTIES
602 SECURITY NATIONAL BANK BLDG.

January 8, 1969

PHONE
OFF. 623-4112
RES. 622-1567

69 JAN 10 AM 8 20

Mr. Pete Porter
Oil Conservation Commission
Santa Fe, N.M.

Dear Mr. Porter,

I will appreciate it if you will let me know when the hearing is to be on spacing in the Baum and Lozy J area of Lea County, being the south-west part of T13 S, R33 E.

I am not in favor of the proposed 160 acre spacing as it does not adequately protect the royalty owners rights and I want to make my views known to the Commission.

I remember that a hearing was once set and postponed on this matter and I will appreciate it if you will let me know when the matter is to be heard.

Yours truly,

Max Coll

Max Coll

MC/s

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
MICHAEL R. WALLER
STUART D. SHANOR

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
600 HINKLE BUILDING
ROSWELL, NEW MEXICO 88201

February 11, 1969

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) MU 3-4691
OF COUNSEL: HIRAM M. DOW
TELEPHONE (505) 622-6510
POST OFFICE BOX 10

69 FEB 12 AM 7 59

DM

Mr. A. L. Porter, Jr.
Secretary - Director
Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 3993 (de novo)
Regular hearing Feb. 19, 1969

Dear Pete:

Our client, Coastal States Gas Producing Company, is re-entering the well which it previously drilled in the NW $\frac{1}{4}$ Section 29, Township 13 South, Range 33 East. It is their intention to squeeze off the upper formations which were previously perforated and tested and to re-perforate in the lower Pennsylvanian zone for the purpose of trying to make a well.

A portion of the mineral rights covering this acreage are owned by Max Coll, II, who is a member of the state legislature, and who requested that the above case be re-heard before the full Commission. This case originally was heard before an examiner on December 11, 1968 and an order was issued on December 31, 1968 pursuant to the application of Coastal States providing for special pool rules. It will take approximately 3 weeks or longer to re-enter the well and completely test the same. The writer has contacted Max Coll and he is agreeable to continuance of the case to the regular hearing in March.

You may consider this as a motion or request on behalf of Coastal States for the continuance of the case to the regular hearing in March. Max Coll suggested that if you wanted his approval, to contact him at the House of Representatives and he would be glad to confirm his consent to the continuance.

Yours very truly,

DOCKET MAILED

HINKLE, BONDURANT & CHRISTY

By

Date

CEH:cs

CC: Coastal States

(Continued Case 4047:)

Laguna Plata, sometimes referred to as Laguna Grande located in Sections 2, 3, 9, 10, and 11, Township 20 South, Range 32 East;

Laguna Gatuna, sometimes referred to as Salt Lake, located in Sections 7, 17, 18, 19, and 20, Township 20 South, Range 33 East;

Laguna Tonto, located in Sections 32 and 33, Township 19 South, Range 33 East, and Section 4, Township 20 South, Range 33 East.

CASE 4048: Application of C. W. Trainer for an exception to Order No. R-3221, as amended, Lea 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 or gas on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for the applicant's leases located in Section 24, Township 19 South, Range 33 East and in Sections 19, 20, 29, 30, Township 19 South, Range 34 East, undesignated Queen pool, Lea County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed on said leases in unlined surface pits on said leases.

CASE 3993: (De Novo)

Application of Coastal States Gas Producing Company for the creation of a new pool and for special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool to be designated the North Baum-Upper Pennsylvanian Pool comprising the following-described lands:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, Lea County, N.Mex.
Section 19: E/2
Section 20: NW/4 and S/2
Section 21: SW/4

and for the promulgation of temporary special rules therefor, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.

Applicant further seeks the contraction of the Lazy J-Pennsylvanian Pool by the deletion from said pool of the E/2 of Section 20 and the W/2 of Section 21, both in the aforesaid Township and Range.

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:

MAIN OFFICE
'69 JAN 29 PM 4 56

CASE NO. 3993
Order No. 3644

APPLICATION OF COASTAL STATES GAS PRODUCING COMPANY
FOR THE CREATION OF A NEW OIL POOL
AND FOR SPECIAL POOL RULES,
LEA COUNTY, NEW MEXICO

APPLICATION FOR DE NOVO HEARING BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

COMES NOW MAX COLL II and respectfully states:

1. That the application in the above-entitled cause came on for hearing before Examiner Elvis A. Utz on the 11th day of December 1968. Thereafter, on the 31st day of December 1968, the Honorable Commission issued its order No. R-3644, all as more fully appears from the official file and record of said proceeding.
2. That the applicant herein is adversely affected by the terms and conditions of said order and desires to have the matter heard de novo before the Honorable Commission.
3. That the above order affects the West one-half, Section 29, Township 13 South, Range 33 East, NMPM, in which the applicant has a property interest.
4. That a list of the names and addresses of all interested parties known to the applicant is as follows:

Coastal States Gas Producing Company
Midland, Texas

Robert Hannagan
J. P. White Building
Roswell, New Mexico

Yvona Stevens
P.O. Box 789
Roswell, New Mexico

DOCKET MAILED

Date _____

DOCKET MAILED

Date 2-10-69

5. That the spacing permitted under the existing order of the commission, and the production from existing wells will drain the oil and gas underlying lands in which the petitioner has an interest.

WHEREFORE, pursuant to Section 65-3-11.1 of the 1953 N.M.S.A., Max Coll II requests that the application of Coastal States Gas Producing Company for the creation of a new oil pool in Lea County, New Mexico, and for special pool rules be heard de novo before the New Mexico Oil Conservation Commission.



MAX COLL II
P. O. Box 1818
Roswell, New Mexico 88201



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

December 9, 1968

DEC 10 PM 8 27

TEXACO INC.
P. O. BOX 3109
MIDLAND, TEXAS 79701

CASE NO. 3993

NORTH BAUM-UPPER PENNSYLVANIAN POOL
LEA COUNTY, NEW MEXICO

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

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

Gentlemen:

Texaco Inc. as an operator in the above subject proposed oil pool has been duly notified by Coastal States Gas Producing Company of their application for the creation of a new Pennsylvanian oil pool to be designated the North Baum-Upper Pennsylvanian Pool comprising an area that includes Texaco's New Mexico State DM lease with one producing well. The applicant advises that 160 acre spacing and 80 acre allowables will be included in their application as recommendations for the proposed new pool.

Texaco Inc. does not object to the proposals outlined by Coastal States Gas Producing Company provided that Texaco's State of New Mexico DM Well No. 1 which is currently assigned to the Lazy J Pennsylvanian Oil Pool be assigned a full 80 acre allowable. The well is drilled on an 80 acre tract and an additional 80 acres contiguous to the tract are unavailable for assignment thereto.

Yours very truly,

Darrell Smith

N-21-13-33

219 all. 150-4000.

By

C. L. Whigham
Division Proration Engineer

CLW/pw

cc: Coastal States Gas Producing Company

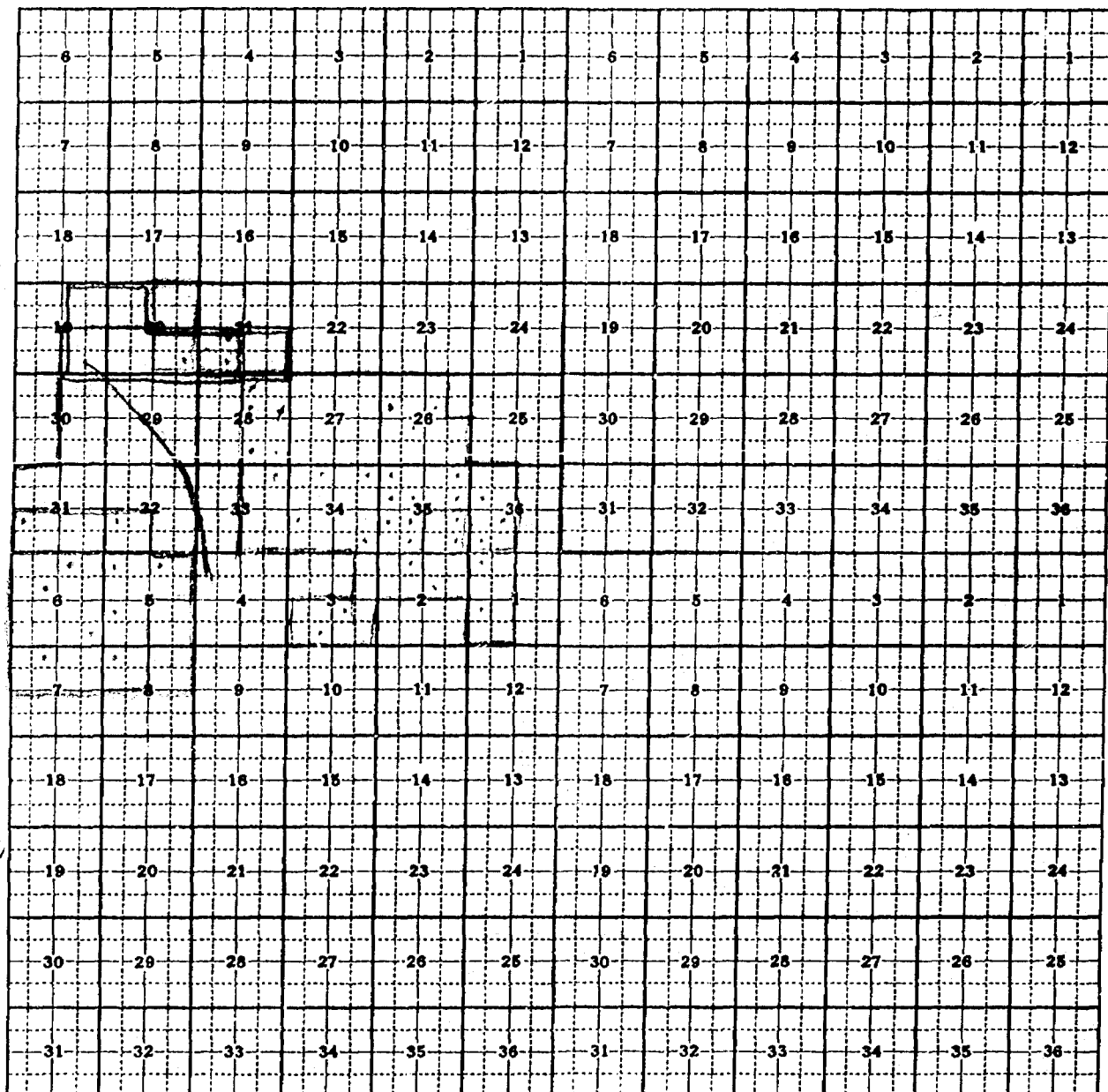
30 Dec 11 1968 100 A-100
80-

Name
Address
Remarks:

Handwritten:
10/14 10/20
6/20
21
20

Name
Address
Remarks:

Ph.



T R State or County T R State or County

Case 3993

Heard 12-11-68

Red. 12-23-68.

Grant. Coasted the request for
a new pool to be called North.
Baum Upper Penn. and with
horizontal limits as follows:

135-33 E.

Sec. 19 - E/2

20 - W/2 + SE/4

~~20~~

The disconey well shall be.

80-9-10=4.77

Sec 20 #1 P. 20-135-33 E.

Top of 138-40

Fl. P. 245 0.21.

0 water.

354 M. of Penn.

The Lazy J. Pool should be
contracted as follows:

135-33 E.

Sec. 20 E/2

~~20~~

Thos. H. R.

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2088
SANTA FE

December 31, 1968

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Re: Case No. 3993
Order No. R-3644
Applicant:
Coastal States Gas Producing

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

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other Mr. Gordon Ryan and Mr. Guy Buell - Pan American
Petroleum Corporation, Fort Worth, Texas

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

*file in case
3993*

January 16, 1969

C
O
P
Y

Mr. Max Coll, II
602 Security National Bank Building
Post Office Box 1818
Roswell, New Mexico 88201

Dear Max:

This will confirm our telephone conversation of yesterday afternoon when I advised you that you may request a hearing de novo in Case No. 3993 by January 30, 1969. If you apply for the hearing de novo it will be set for the regular Commission hearing on February 19, 1969.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

BOX 1818
ROSWELL, N. M.
88201

MAX W. COLL, II
OIL AND GAS PROPERTIES
602 SECURITY NATIONAL BANK BLDG.

January 14, 1969

PHONE
OFF. 623-4112
RES. 622-1567

AK 8 30
JAN 15 1969

*MAA Case 3993
R-3644 was
signed 12-31-68*

Mr. Pete Porter
Director,
Oil Conservation Commission
Box 2088
Santa Fe, N.M.

Dear Mr. Porter,

Thank you for your letter of January 10, 1969 in reference to order R-3644, North Baum Upper Penn Pool, Lea County.

I did not realize that the order was out or that the matter had been set for a hearing or I would have appeared and entered an objection to 160 acre spacing with 80 acre allowable for the following reasons:

1. That unless the well now completed in the SE/4NW/4 Section 29 13-33 becomes a producer it will be apparent to me that one well will NOT drain a 160 acre tract, and that a well drilled somewhere on the N/2NW/4 section 29 would properly drain the 80 acre tract that it would be drilled on.
2. That the rights of the mineral owners would be impaired in that they will not enjoy full recovery with 160 acre spacing.
3. That the mineral owners will not have the volume of income on 160 acre spacing and 80 acre allowable as they will have under 80 acre spacing and 80 acre allowables.

I am looking at it from a mineral owners point of view, since I own a mineral interest in the W/2 Section 29 and am presently being drained by a flowing well in the SE/4SW/4 Section 20 and by a pumping well in the NE/4NW/4 Section 32.

I was wondering why the operators are not required to serve notice on the mineral owners when there is to be a hearing that so vitally effects the rights of the mineral owners and if this procedure can be changed by regulation of the Commission or if it will be necessary to make a change in the laws to accomplish this?

Yours truly,

Max Coll
Max Coll

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 17, 1969

C
O
P
Y

Mr. L. Z. Williams, Area Engineer
Apache Corporation
1720 Wilco Building
Midland, Texas 79701

Dear Mr. Williams:

In reply to your letter of January 16, 1969, I am enclosing a copy of Commission Order No. R-3644 which was issued in Case No. 3993 on December 31, 1968.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Enclosure

APACHE

APACHE CORPORATION ■ 1720 WILCO BUILDING ■ MIDLAND, TEXAS 79701 ■ MU 3-5261
OIL AND GAS DIVISION

January 16, 1969

MAIN OFFICE
'69 JAN 17 AM 8 18

NEW MEXICO OIL CONSERVATION COMMISSION
P.O. Box 2088
Santa Fe, New Mexico

Attention: Mr. Pete Porter

Re: Case No. 3993
Order No. R3664
North Baum Upper Pennsylvanian Pool
Vertical Limits

Gentlemen:

This letter constitutes Delaware-Apache Corporation's Concurrence with Coastal States, the applicant of the referenced Case No. 3993, and Pan American Oil Corporation, that the vertical limits of the North Baum Upper Pennsylvanian Field should be expanded to include the entire Upper Pennsylvanian Formation, or from 9,554 feet to 9,820 feet in the Coastal States - Federal "20" Well No. 2, located in Section 20, T-13-S, R-33-E, Lea County, New Mexico.

It is thought that such vertical limit expansion would result in more efficient and economical production practices which would obtain the maximum oil production.

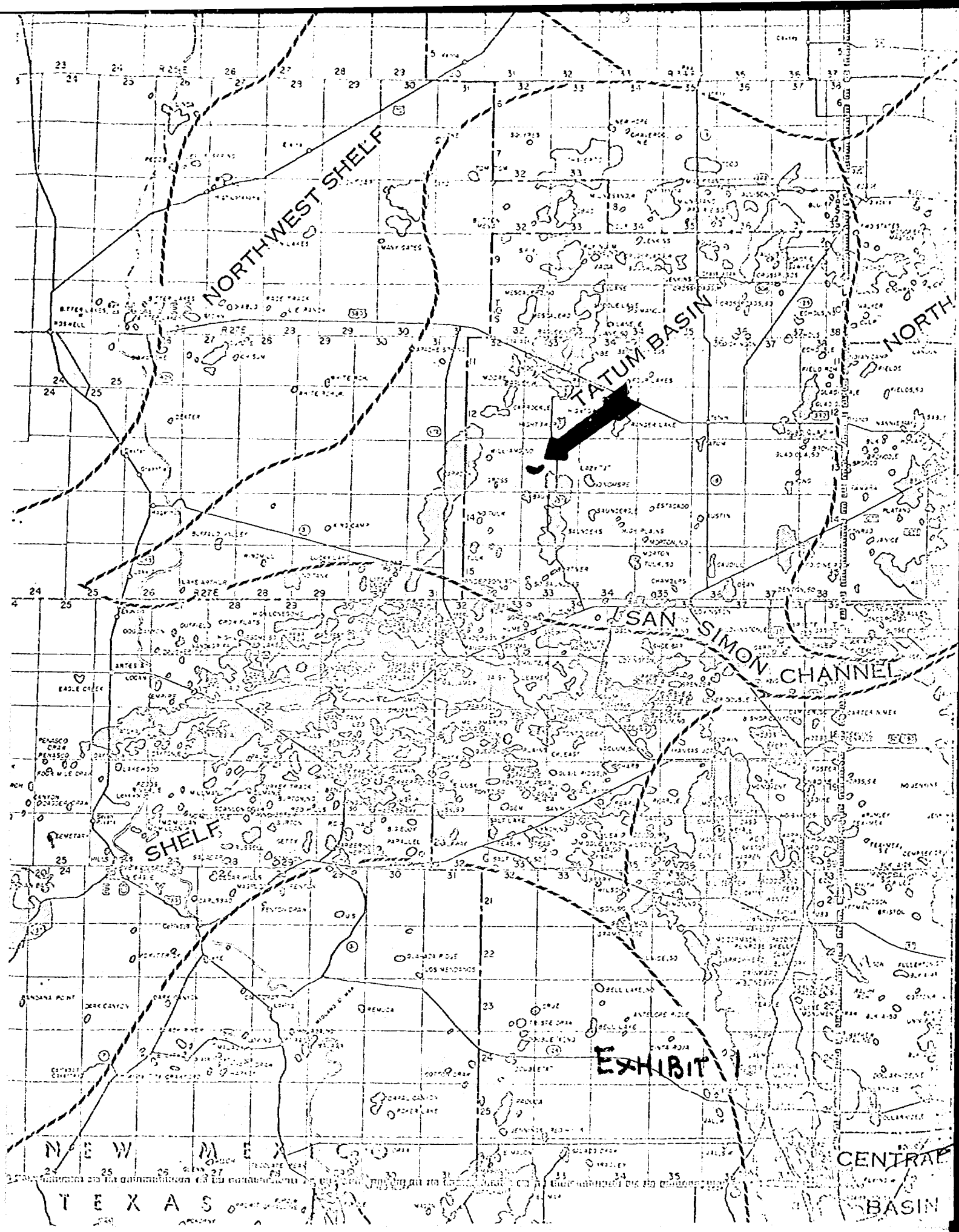
Very truly yours,

DELEWARE-APACHE CORPORATION

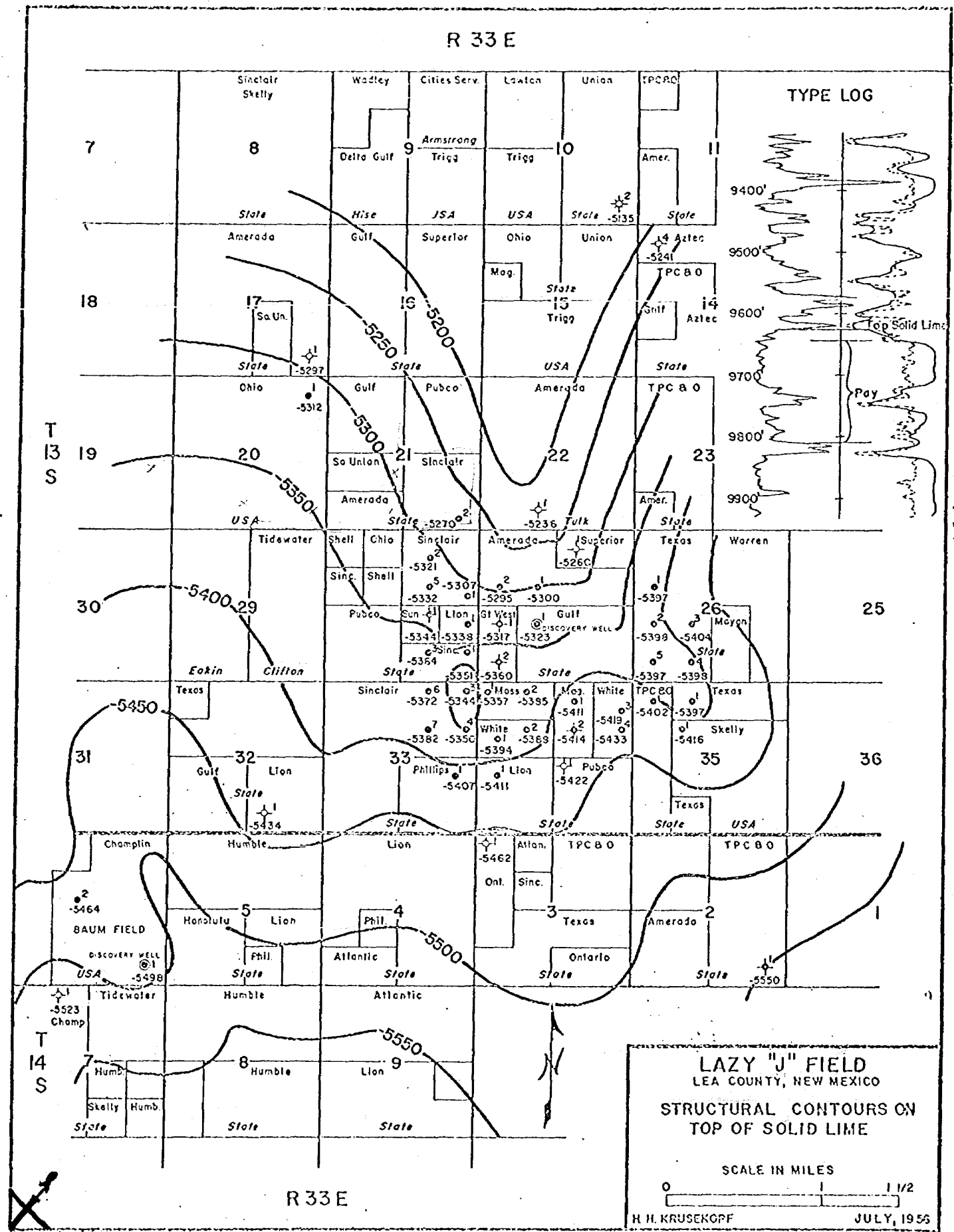
L. Z. Williams
L. Z. Williams
Area Engineer

LZW/bh

*Order entered
12-31-68*



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 3
CASE NO. 3993



*A Symposium of Oil & Gas Fields of Eastern New Mexico, 1956
Rockwell Geological Society. p. 228*

EXHIBIT 3

Data prepared by: Henry H. Krusekopf, Jr.
Affiliation: Pubco Petroleum Corporation
Date: 7-1-56

Field Name: Lazy "J" (Pennsylvanian) 2,200 BOPD
Location: T. 13 S., R. 33 E.
County & State: Lea County, New Mexico

DISCOVERY WELL: Gulf #1 State AN, Sec. 27-13S-33E

COMPLETION DATE: 10-1-52

PAY ZONE: Permo-Pennsylvanian at approximately 9,600 feet (minus 5,350 feet). White to light gray medium crystalline limestone with vuggy porosity and occasional green and gray shale partings. Net pay thickness averages about 20 feet in zones of 1 to 10 feet scattered through an interval of 175 feet. (Map contoured on top of "solid lime" of Permo-Pennsylvanian).

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD:

Perm. in millidarcys		% Porosity	Liquid Saturation (% of pore space)	
Horizontal	Vertical		Water	Oil
8.1		6.2	35.0	10.0

OTHER SHOWS ENCOUNTERED IN THIS FIELD: Lawton #2 State in Sec. 10 was completed as a gas distillate well in 1952 from the lower Penn. at 11,340 feet, later was abandoned after producing 2,754 bbls. distillate and 38,351 MCF gas, reservoir depleted. Lawton #2 State, Ohio #1 Trigg Sec. 20 and Gulf #1 State AN Sec. 27 have tested water in the Devonian.

TRAP TYPE: Sharp nose with permeability barrier on the north.

NATURE OF OIL: Green, paraffin base, sweet oil, gravity 43° A.P.I.

NATURE OF GAS: Solution gas sold to Warren Pet. gasoline plant. GOR 1200-1.

NATURE OF PRODUCING ZONE WATER:

Resistivity: 0.067 ohm-meters @ 27 C.

	Total Solids	Na/K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	H ₂ S
ppm	105,853	33,728	5,520	1,118	tr.	765	64,354		256		

INITIAL FIELD PRESSURE: 3,546 psi. after 190 hrs. at a depth of 5,370 feet below sea level. Reservoir temp. 146° F.

TYPE OF DRIVE: Gas expansion drive.

NORMAL COMPLETION PRACTICES: Drill through the pay, run DST's, set pipe and selectively perforate.

Some wells completed in the upper 50 feet of the solid lime were later drilled deeper 50 to 100 feet into the lower zone. All wells completed flowing but now are all on pump. Usually 50 feet of section is perforated and treated with 1,000 gallons acid.

PRODUCTION DATA:

No. of wells @ yr. end				Production		No. of wells @ yr. end				Production	
Year	Type	Prod.	Shut in or Abnd.	Oil in barrels Gas in MMCF		Year	Type	Prod.	Shut in or Abnd.	Oil in barrels Gas in MMCF	
				Annual	Cumulative					Annual	Cumulative
1941	oil					1949	oil				
	gas						gas				
1942	oil					1950	oil				
	gas						gas				
1943	oil					1951	oil				
	gas						gas				
1944	oil						oil	2	0	18,725	18,725
	gas					1952	gas			25,536	25,536
1945	oil						oil	14	0	347,604	366,329
	gas					1953	gas			484,474	510,010
1946	oil						oil	32	0	674,120	1,040,449
	gas					1954	gas			1,074,527	1,584,537
1947	oil						oil	32	4	708,538	1,748,986
	gas					1955	gas			1,090,515	2,675,052
1948	oil						oil	31	5	175,456	1,924,442
	gas					1956*	gas			249,655	2,924,707

* 1956 Figure is production to 5-1-56.

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
MICHAEL R. WALLER

STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
600 HINKLE BUILDING
ROSWELL, NEW MEXICO 88201

November 27, 1968

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) MU 3-4881
OF COUNSEL: HIRAM M. DOW

TELEPHONE (505) 622-6510
POST OFFICE BOX 10

DEC 2 1968

Case 3993

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

There is on the docket for the examiner's hearing on December 11 Case No. 3993, being the application of Coastal State Gas Producing Company for the creation of a new pool and for temporary special pool rules for the North Baum Pennsylvanian Pool. This case was put on the docket at our request on behalf of Coastal States and there is enclosed herewith in triplicate formal application to be filed in connection therewith.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

By *Clarence E. Hinkle*
as.

CEH:cs
Enc.

cc: Jack McGraw
cc: Bill Elliott

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF COASTAL STATES GAS)
PRODUCING COMPANY FOR CREATION OF)
A NEW PENNSYLVANIAN OIL POOL TO BE)
DESIGNATED AS THE NORTH BAUM UPPER)
PENNSYLVANIAN POOL COMPRISING THE)
E $\frac{1}{2}$ SECTION 19, NW $\frac{1}{4}$ AND S $\frac{1}{2}$ SECTION)
20, SW $\frac{1}{4}$ SECTION 21, TOWNSHIP 13)
SOUTH, RANGE 33 EAST, LEA COUNTY,)
NEW MEXICO AND FOR THE PROMULGATION)
OF TEMPORARY SPECIAL FIELD RULES FOR)
SAID POOL, INCLUDING A PROVISION FOR)
160 ACRE SPACING AND PRORATION UNITS)
AND THE ASSIGNMENT OF 80 ACRE ALLOWABLES.)

No. 3993

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes Coastal States Gas Producing Company, acting by and through the undersigned attorneys, and hereby makes application for creation of a new Pennsylvanian oil pool to be designated as the North Baum Upper Pennsylvanian Pool comprising the E $\frac{1}{2}$ Section 19, NW $\frac{1}{4}$, S $\frac{1}{2}$ Section 20, SW $\frac{1}{4}$ Section 21, Township 13 South, Range 33 East, Lea County, New Mexico and for the promulgation of temporary special field rules for said pool, including provision for 160 acre spacing and proration units and the assignment of 80 acre allowables, and in support thereof respectfully shows:

1. That applicant is the owner of certain oil and gas leasehold interests embracing lands in Section 20, Township 13 South, Range 33 East, Lea County, New Mexico and that applicant and others have heretofore completed wells capable of producing oil and gas in paying quantities from the Baum-Pennsylvanian formation. Applicant also has wells producing from the same zone in the Baum Upper Pennsylvanian field located in Sections 31 and 32, Township 13 South, Range 33 East and Sections 5, 6, 7 and 8, Township 14 South, Range

33 East. It was originally thought that these two areas would be connected but the drilling of additional wells by applicant and others between these two areas has indicated that they are separate pools or fields.


2. The area sought to be designated as the North Baum Upper Pennsylvanian Pool overlaps the designated area included in the Lazy J Penn Pool to the extent of the SE $\frac{1}{4}$ Section 20 and SW $\frac{1}{4}$ Section 21, Township 13 South, Range 33 East. The completion of wells on said lands has indicated that this acreage is not within the Lazy J Penn Pool and should be re-designated as constituting a part of the North Baum Upper Pennsylvanian Pool. That there is attached hereto, made a part hereof and for purposes of identification marked Exhibit "A", a plat showing the proposed North Baum Upper Pennsylvanian Pool, the Baum Upper Pennsylvanian Pool and the Lazy J. Penn Pool; also the wells which have been drilled which are producing from the Baum Pennsylvanian formation and the ownership of the leasehold interests in said areas.

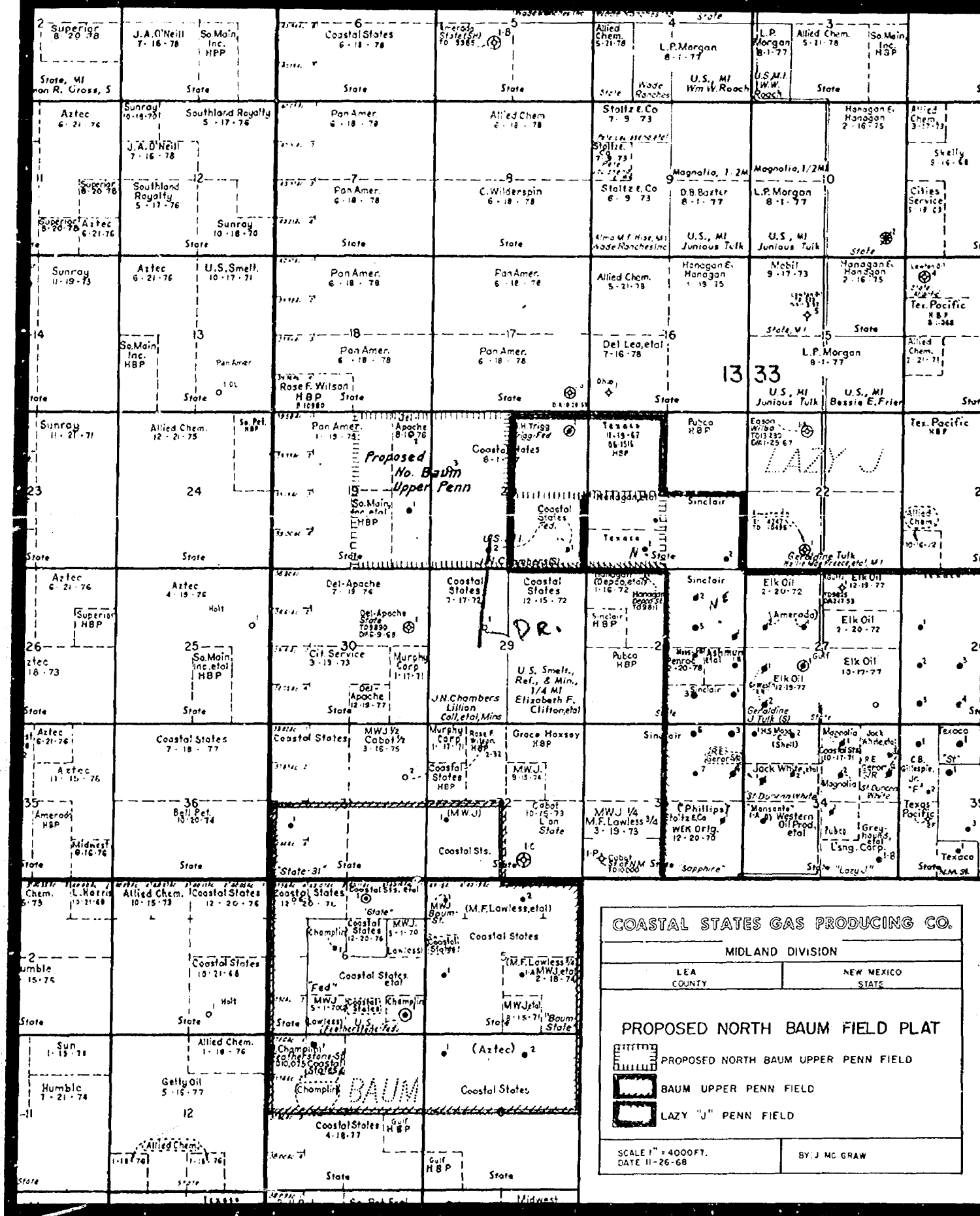
3. All of the wells which have heretofore been completed in the proposed North Baum Upper Pennsylvanian Pool, with the exception of two wells, have been drilled upon a 160 acre spacing pattern and it is believed that one well will effectively and efficiently drain more than 160 acres and that due to the experience which has been had in connection with the Baum Upper Pennsylvanian pool, it is doubtful whether it would be economical to further develop the proposed new area by the drilling of wells on well spacing units of less than 160 acres. That 160 acre spacing will prevent the drilling of unnecessary wells.

4. That it is in the interest of conservation and the prevention of waste to designate the area described above as the North Baum Upper Pennsylvanian Pool and to promulgate temporary special field rules in connection therewith providing for 160 acre spacing and proration units and the assignment of 80 acre allowables, said rules to provide for exceptions in the cases of the two wells which have already been completed on 80 acre spacing units.

That this matter be set down for the examiner's hearing to be held on December 11, 1968.

COASTAL STATES GAS PRODUCING COMPANY

By 
Member of the Firm of
HINKLE, BONDURANT & CHRISTY
Box 10
Roswell, New Mexico 88201
Attorneys for Applicant



CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART O. SHANOR

C. D. MARTIN
PAUL J. KELLY, JR.

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
600 HINKLE BUILDING
ROSWELL, NEW MEXICO 88201

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) MU 3-4891

December 15, 1969

TELEPHONE (505) 622-6510
POST OFFICE BOX 10

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

There is enclosed herewith in triplicate application of Coastal States Gas Producing Company to amend the temporary special pool rules adopted for the North Baum-Upper Pennsylvanian Pool so as to provide for 160 acre allowables rather than 80 acre allowables as provided in the temporary order.

It is our understanding that pursuant to Order R-3644 in Case No. 3993 this matter will be reopened at the first examiner's hearing in January and we desire to have the enclosed application set down for hearing at the same time as a companion case.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

By Clarence E. Hinkle
CH

CEH:cs
Enc.
cc: Jack McGraw

It is not necessary to set this case with subject matter can be covered in the re-opening of Case No. 3993
George
file
Cor
3993

DOCKET MAILED

Date 12-24-69

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF COASTAL STATES GAS)
PRODUCING COMPANY TO AMEND THE)
TEMPORARY SPECIAL POOL RULES ADOPTED)
FOR THE NORTH BAUM-UPPER PENNSYLVANIAN)
POOL SO AS TO PROVIDE FOR 160 ACRE)
SPACING UNITS AND 160 ACRE ALLOWABLES)
INSTEAD OF 80 ACRE ALLOWABLES AND TO)
MAKE SUCH RULES PERMANENT)

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes Coastal States Gas Producing Company, acting by and through the undersigned attorneys, and hereby makes application to amend the temporary special pool rules adopted for the North Baum-Upper Pennsylvanian Pool so as to provide for 160 acre spacing units and 160 acre allowables instead of 80 acre allowables and to make such rules permanent, and in support thereof respectfully shows:

1. That on December 11, 1968 at an examiner's hearing held by the Commission pursuant to the application of applicant, temporary special pool rules were adopted for the North Baum-Upper Pennsylvanian Pool as provided by Order No. R-3644 issued by the Commission on December 31, 1968 providing for 160 acre spacing units and the assignment of a 160 acre proportional factor of 4.77 for allowable purposes. Said order also provided that the case would be reopened at an examiner's hearing in January 1970, at which time the operators in the subject pool would be required to appear and show cause why the North Baum-Upper Pennsylvanian Pool should not be developed on less than 160 acre spacing units and to show cause why the proportional factor of 4.77 assigned to such pool should or should not be retained.

2. Since the original hearing, additional wells have been drilled in the North Baum-Upper Pennsylvanian Pool and most of the

wells are capable of producing, without being detrimental to the producing formation, an allowable equal to an allowable which would normally be assigned to 160 acre spacing units. Applicant desires that the special pool rules heretofore adopted be amended to increase the allowable from that normally assigned to 80 acre spacing units to that normally assigned for 160 acre spacing units.

3. Applicant believes that due to the production history and additional information which has been obtained since the original hearing adopting the temporary special pool rules, one well will effectively and efficiently drain more than 160 acres and that in order to prevent the economic loss caused by the drilling of unnecessary wells and to avoid the augmentation of risk arising from the drilling of an excessive number of wells and to prevent reduced recovery which might result from the drilling of too few wells and to otherwise prevent waste and protect correlative rights, said temporary special pool rules should be amended as above set forth and made permanent.

4. Applicant requests that this matter be set down for hearing at the same time as Case No. 3993 pursuant to Order R-3644 is set down for hearing by the Commission.

Respectfully submitted,

COASTAL STATES GAS PRODUCING COMPANY

By Clarence E. Hinkle
Member of the Firm of
HINKLE, BONDURANT & CHRISTY
Box 10
Roswell, New Mexico
Attorneys for Applicant

ASD

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 AND LAW LIBRARY

CASE No. 3993

Order No. R-3644

NOMENCLATURE

WMA
Co. 100

APPLICATION OF COASTAL STATES GAS
PRODUCING COMPANY FOR THE CREATION
OF A NEW OIL POOL AND FOR SPECIAL
POOL RULES, LEA COUNTY, NEW MEXICO.

See

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 11, 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of December, 1968, 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, Coastal States Gas Producing
Company, seeks the creation of a new oil pool in Lea County, New
Mexico, for the production of oil from the Upper Pennsylvanian
formation, to be designated the North Baum-Upper Pennsylvanian
Pool, comprising the following-described lands:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 19: E/2
Section 20: NW/4 and S/2
Section 21: SW/4

(3) That the applicant further seeks the promulgation of
temporary special rules and regulations governing said pool,
including a provision of 160-acre spacing and proration units
and the assignment of 80-acre allowables.

(4) That the applicant further seeks the contraction of the Lazy J-Pennsylvanian Pool, Lea County, New Mexico, by the deletion from said pool of the following-described lands:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 20: ~~E/2 SE/4~~ E/2
Section 21: W/2 and ~~SE/4~~

(5) That the reservoir information presently available ~~estab-~~
indicates ^{horizontal limits of the}
~~lishes~~ that the Lazy J-Pennsylvanian Pool, as presently designated,
encompasses more than one separate common source of supply and the horizontal limits of said pool should, in order to prevent waste and protect correlative rights, be contracted by deleting from said pool the following-described lands:

LEA COUNTY, NEW MEXICO
TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 20: ~~E/2~~ SE/4
~~Section 21: W/2 SE/4~~

(6) That the reservoir information presently available ~~estab-~~
indicates
~~lishes~~ that the proposed new pool encompasses a separate common source of supply and in order to prevent waste and protect correlative rights, the North Baum-Upper Pennsylvanian Pool should be created, with vertical limits comprising the Upper Pennsylvanian formation, and horizontal limits comprising the following-described lands:

LEA COUNTY, NEW MEXICO
TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 19: E/2
Section 20: ~~NW/4~~ and S/2 W/2 and SE/4
~~Section 21: SW/4~~

(7) 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 a 160-acre proportional factor of 4.27 for allowable purposes should be promulgated for the North Baum-Upper Pennsylvanian Pool.

(8) 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.

(9) 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.

(10) That this case should be reopened at an examiner hearing in January, ¹⁹⁷⁰~~1969~~, at which time the operators in the subject pool should be prepared to appear and show cause why the North Baum-Upper Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the proportional factor of 4.27 assigned to the subject pool should or should not be retained.

IT IS THEREFORE ORDERED:

(1) That, effective January 10, 1969, the horizontal limits of the Lazy J-Pennsylvanian Pool, Lea County, New Mexico, are hereby contracted by the deletion therefrom of the following-described area:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 20: ~~W/2 E/4~~ SE/4
~~Section 21: W/2 SE/4~~

(2) That, effective January 17, 1969, a new pool in Lea County, New Mexico, classified as an oil pool for Upper Pennsylvanian production, is hereby created and designated the North Baum-Upper Pennsylvanian Pool, with vertical limits comprising the

255 found in the interval from 9732 feet to 9814 feet on the log of the desecrating well, Coastal States Federal 20 well No. 2, located in Unit 14 of Section 20, Township 13 South, Range 33 East, N.M.P.M., Lea County, New Mexico.
Upper Pennsylvanian formation, and horizontal limits comprising the following-described area:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM

Section 19: E/2

Section 20: ~~NW/4~~ and S/2 W/2 and SE/4

~~Section 21: SW/4~~

(3) That, effective January 10, 1968 temporary Special Rules and Regulations for the North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH BAUM-UPPER PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the North Baum-Upper Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Upper 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.

OK 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 a 160-acre proportional factor of 4.22 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 North Baum-Upper Pennsylvanian Pool or in the Upper 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

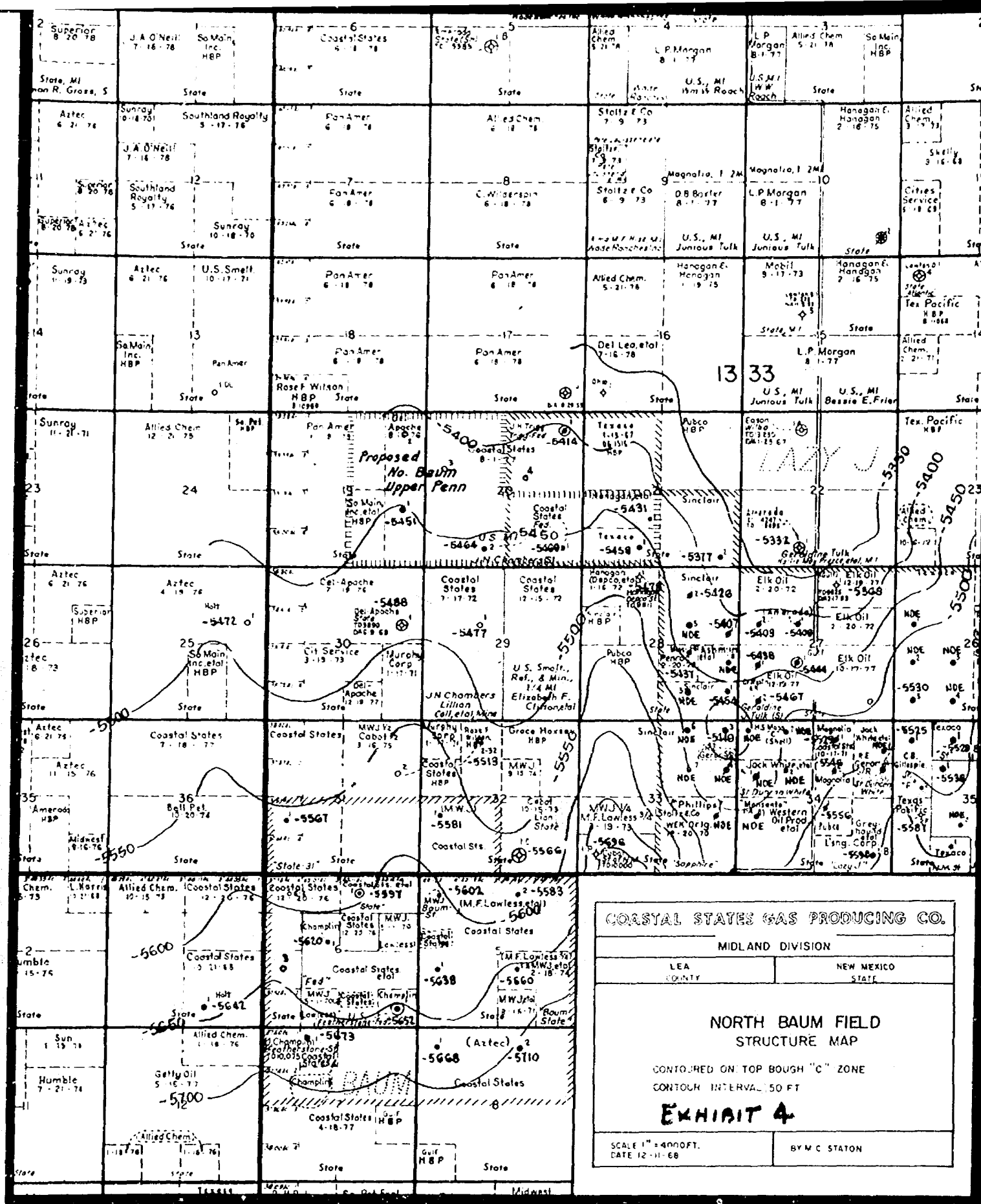
January 10, 1969.

North (2) That each well presently drilling to or completed in the ^{North} Baum-Upper Pennsylvanian Pool or in the Upper Pennsylvanian formation within one mile thereof shall, after ~~June~~ *January* 10 1969, receive an allowable in the same proportion to a standard 160-acre allowable for the pool as the acreage presently dedicated to the well bears to 160 acres, until Form C-102 dedicating 160 acres to the well has been filed with the Commission, or until a non-standard unit containing less than 160 acres has been approved.

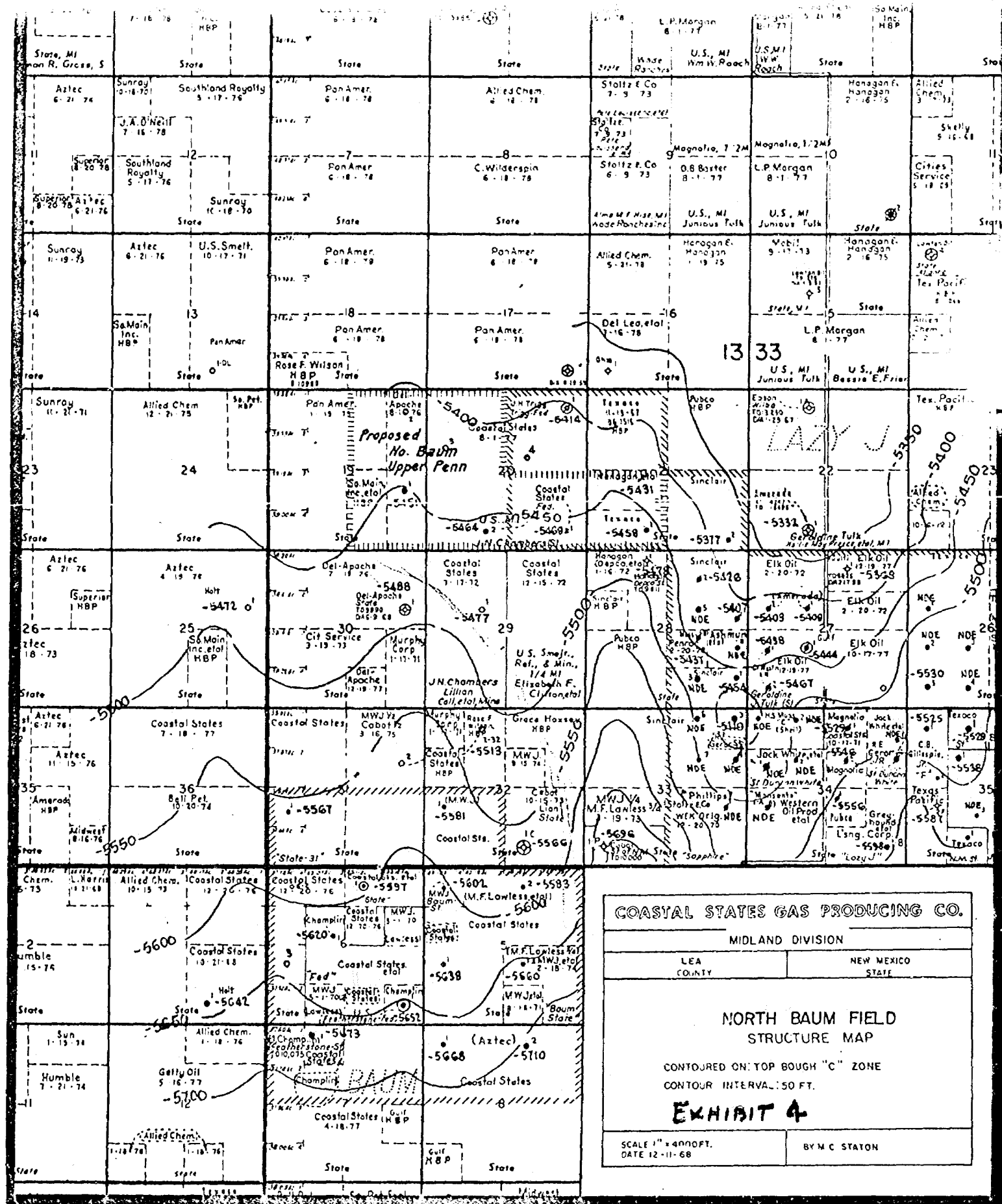
(3) That this case shall be reopened at an examiner hearing in January, ¹⁹⁷⁰~~1969~~, at which time the operators in the subject pool may appear and show cause why the North Baum-Upper Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the proportional factor of 4.77 assigned to the subject pool should or should not be retained.

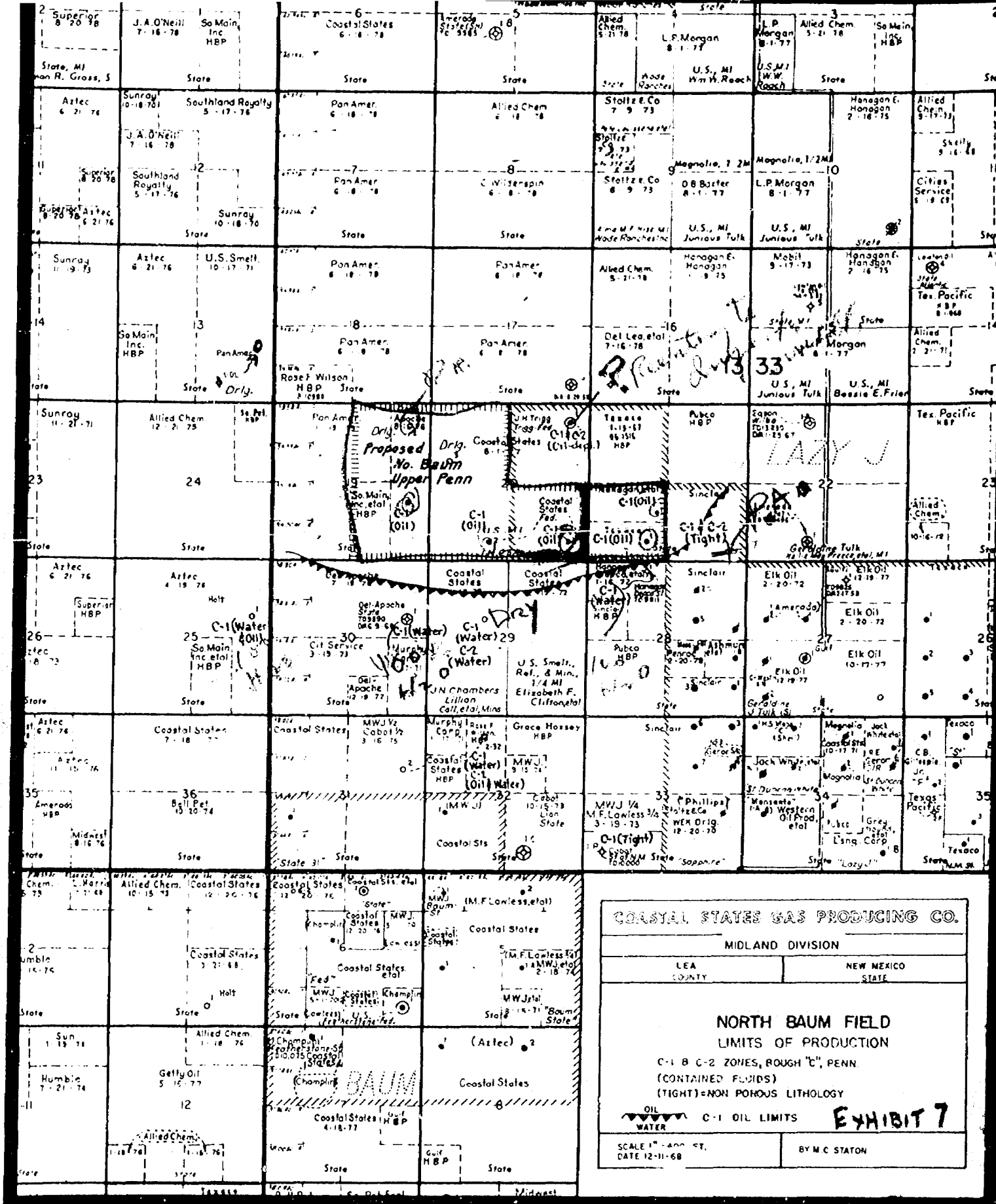
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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



FOUND





Amerada
State (SH)
TO 9985
1-B

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 7002

Lewton
State
TO 13000

Lewton
State
TO 220

Lewton
State
TO 10000

Ohio
State
TO 9765

TA 640

R-33-E

Ohio
State
TO 10670

Eaton
State
TO 13,130

Amerada
State
TO 10,400

Union Tex.
State
TO 10,100

LAZY

Lion
State
TO 9618

Cobalt
State
TO 10,000

Sinclair
State
TO 10000

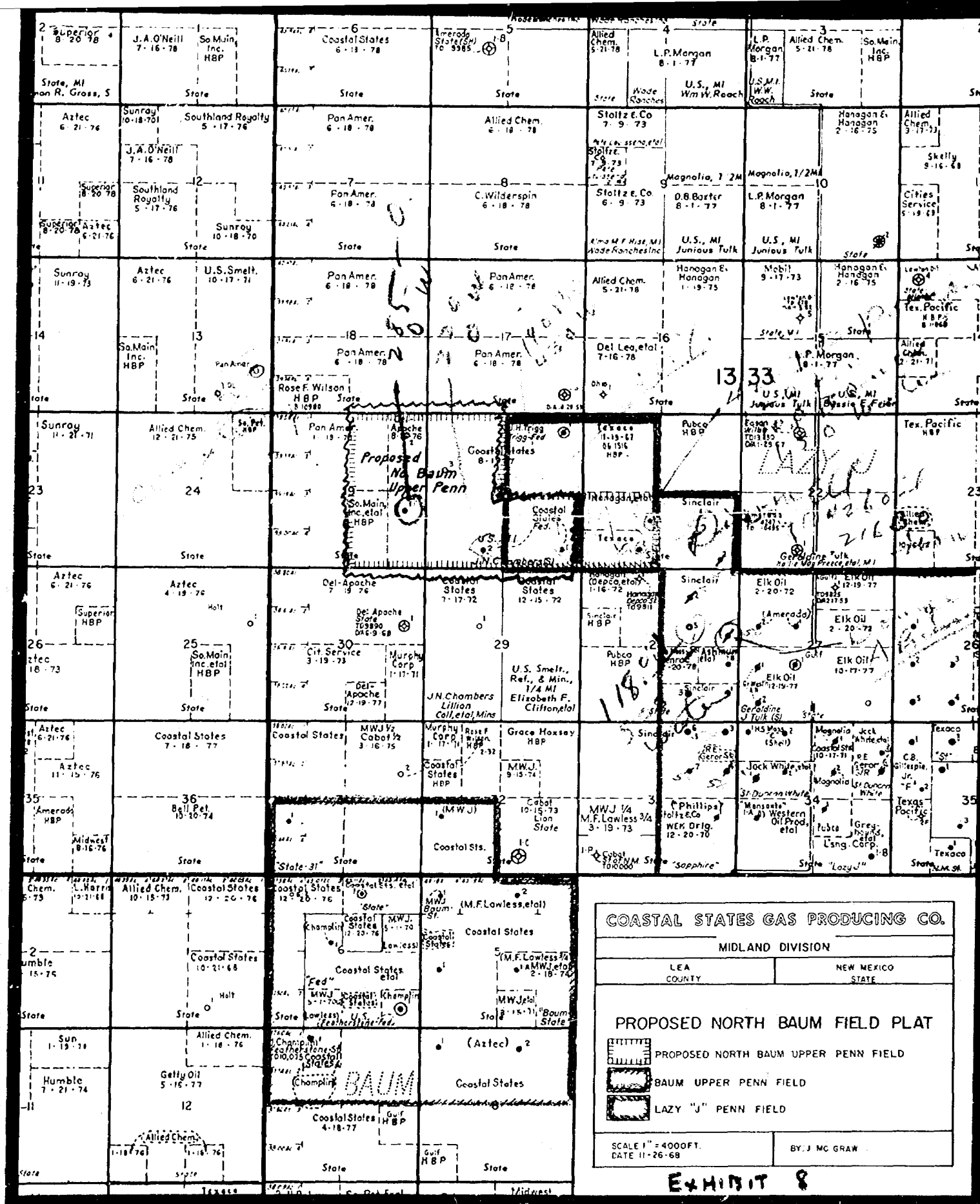
TEXACO
State
TO 100,000

Texaco
State
TO 10000

Champion
State
TO 10000

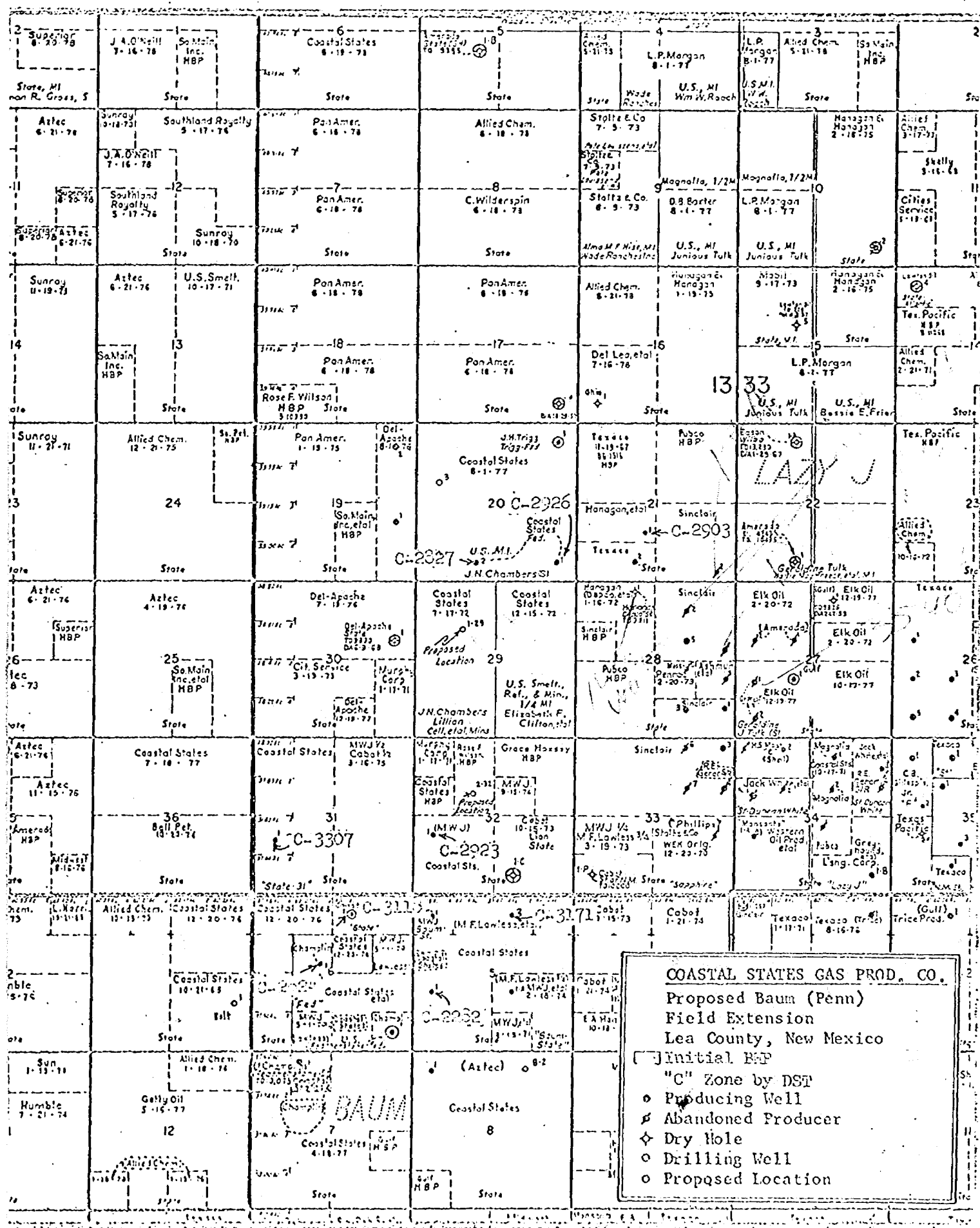
COASTAL STATES GAS PRODUCING CO.	
MIDLAND DIVISION	
LEA COUNTY	NEW MEXICO STATE
BAUM FIELD	
ISOPACH MAP	
CONTOURED ON NET POROSITY, BOUGH "C"	
CONTOUR INTERVAL 10 FEET	
EXHIBIT 5	
SCALE 1" = 2000 FT DATE 11-6-68	BY M C STATION CPG

BAUNDE



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION

EXHIBIT NO. 7
CASE NO. 3948



PROPOSED NORTH BAUM UPPER PENN FIELD
ECONOMICS

Gross price per barrel	\$ 3.13 per barrel
Gross casinghead gas price per barrel of crude15 per barrel
Mineral interest income at .8125	2.66 per barrel
Operating cost, SWD cost and taxes50 per barrel
Net working interest income	2.16 per barrel

Estimated recovery	<u>40 Acres</u>	<u>80 Acres</u>	<u>160 Acres</u>
	37,800 Bbls.	75,500 Bbls.	151,000 Bbls.
Total net income	\$ 81,500	\$ 163,000	\$ 326,000
Development cost per well . . .	\$190,000	\$ 190,000	\$ 190,000
Ratio of income to investment .	0.44	0.86	1.72

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	<u>10</u>
CASE NO.	<u>3993</u>

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. 3993

Order No. R-3644-^B~~2~~

APPLICATION OF COASTAL STATES GAS
PRODUCING COMPANY FOR THE CREATION
OF A NEW OIL POOL AND 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 January 7, 19670,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of January, 19670, 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-3644, dated December 31, 1968,
temporary Special Rules and Regulations were promulgated for the
North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico,
for a period of one year, effective January 10, 1969.

(3) That pursuant to the provisions of Order No. R-3644,
this case was reopened to allow the operators in the subject pool
to appear and show cause why the North Baum-Upper Pennsylvanian
Pool should not be developed on less than 160-acre spacing units
and to show cause why the proportional factor of 4.77 assigned
to the subject pool should or should not be retained.

(4) That the evidence establishes that one well in the North Baum-Upper Pennsylvanian Pool can efficiently and economically drain and develop 160 acres.

(5) That the evidence establishes that wells in the North Baum-Upper Pennsylvanian Pool can produce a 160-acre allowable based upon a proportional factor of 6.77 without causing waste.

(6) That in order to protect correlative rights of those persons having an interest in the North Baum-Upper Pennsylvanian Pool, Rule 6 of the Special Rules and Regulations governing the subject pool should be amended to provide for the assignment of a 160-acre proportional factor of 6.77 for allowable purposes in the subject pool.

(7) That the Special Rules and Regulations promulgated by Order No. R-3644 have afforded and as amended by this order will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(8) 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, the Special Rules and Regulations promulgated by Order No. R-3644 as amended by this order should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That Rule 6 of the Special Rules and Regulations For The North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico, promulgated by Order No. R-3644 is hereby amended to read in its entirety as follows:

"RULE 6. A standard proration unit (158 through 162 acres) shall be assigned a 160-acre proportional factor of 6.77 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."

(2) That the Special Rules and Regulations governing the North Baum-Upper Pennsylvanian Pool, promulgated by Order No. R-3644 as amended by Order (1) above, are hereby continued in full force and effect until further order of the Commission.

(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
3-3-69

RECORDS CENTER & LAW LIBRARY

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. 3993

Order No. R-3644-A

APPLICATION OF MAX COLL II FOR A
HEARING DE NOVO IN CASE NO. 3993,
ORDER NO. R-3644, THE APPLICATION
OF COASTAL STATES GAS PRODUCING
COMPANY FOR THE CREATION OF A NEW
POOL AND FOR SPECIAL POOL RULES,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing de novo at 8:30 a.m. on
February 19, 1969, at Santa Fe, New Mexico, before the Oil Conser-
vation Commission of New Mexico, hereinafter referred to as the
"Commission," and was continued, at the request of ^{Coastal States Gas Producing Company} ~~the applicant~~,
to the Regular Hearing of the Commission on March 19, 1969.

NOW, on this _____ day of March, 1969, the Commission, a
quorum being present, having considered the record, 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, Max Coll II, has requested, ~~prior~~
~~to the hearing~~, that the application for a hearing de novo in
Case No. 3993 be dismissed.

(3) That the applicant's request to dismiss the application
for hearing de novo should be granted.

-2-

CASE No. 3993
Order No. R-3644-A

IT IS THEREFORE ORDERED:

of Max Coll II

(1) That the application/for a hearing de novo in Case No. 3993 is hereby dismissed.

(2) That Order No. R-3644, issued by the Commission on December 31, 1968, is hereby fully approved, ratified, and confirmed.

(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.

Appl of
Coastal States Gas Producing Co.

for creation of
North Baum-Upper Pennsylvanian Pool
to include

E/2 Sec 19
NW/4 & S/2 Sec 20
SW/4 Sec 21

Township 13 South, Rge 33 East
and the
adaption of temp spec pool rules
including provision for 160-acre
spacing and proration units
and the assignment of 80-acre
allowances.

delete E/2 of 20 and W/2 of 21
and SE/4

Logg J-

