

CASE 3072: Application of COASTAL
STATES for extension of a pool
and for special pool rules.

CASE NO.

3071

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

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

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

June 3, 1964

10072
1964 JUN 11 10 55 AM
TELEPHONE 622-6510
AREA CODE 405
POST OFFICE BOX 16 33

New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico

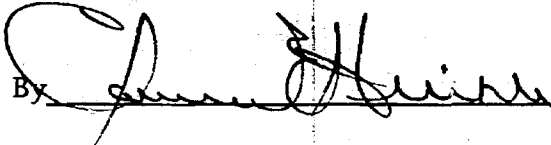
Gentlemen:

We enclose in triplicate Application for Coastal States Gas Producing Company to extend the limits of the Flying "M" San Andres Pool, Lea County, New Mexico and the adoption of special field rules, including 80 acre well spacing and proration units.

We would like to have this matter set down for the first examiner's hearing in July.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

By 

CEH:cs
Enc.

cc: Jack R. Birchum
Coastal States Gas Producing Company
Box 385
Abilene, Texas

DOCKET MAILED

Date 6-17-64

Docket No. 19-65

DOCKET - EXAMINER HEARING - WEDNESDAY - JULY 7, 1965

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

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

CASE 3273: Application of Caulkins Oil Company for a dual completion and an unorthodox well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Breech "A" Well No. 229 to produce gas from the Dakota and Mesaverde formations through parallel strings of 1-1/4 inch tubing. Said well is located at an unorthodox location for the Blanco Mesaverde Pool 1170 feet from the North line and 970 feet from the West line of Section 17, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.

CASE 3274: Application of Continental Oil Company for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Skaggs Pool Waterflood Project by the conversion to water injection of 9 additional wells located in Sections 13, 14, and 24, Township 20 South, Range 37 East, and Section 18, Township 20 South, Range 38 East, Skaggs Pool, Lea County, New Mexico.

CASE 3275: Application of Odessa Natural Gasoline Company for a non-standard gas proration unit and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 360-acre non-standard gas proration unit comprising the E/2 SE/4 of Section 23, SW/4 of Section 24, N/2 NW/4 of Section 25, and NE/4 NE/4 of Section 26, Township 20 South, Range 29 East, Getty Morrow Gas Pool, Eddy County, New Mexico, said unit to be dedicated to its Federal Dooley Well No. 1 located at an unorthodox location 560 feet from the South and West lines of said Section 24.

CASE 3072 (Reopened):

In the matter of Case No. 3072 being reopened pursuant to the provisions of Order No. R-2746, which order established 80-acre spacing for the Flying "M" San Andres Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

Application of Coastal States Gas
Producing Company to extend the
limits of the Flying M San Andres
Pool, Lea County, New Mexico, and
for the adoption of temporary special
field rules for said pool, including
80 acre well spacing and proration
units.

Comes Coastal States Gas Producing Company, a corporation
with offices at Abilene, Texas, acting by and through the undersigned
attorneys, and hereby makes application for expansion of the Flying
M San Andres Pool, Lea County, New Mexico, and for the promulgation
of temporary special rules and regulations for said pool, and with
respect thereto shows:

1. That by Order of the Commission heretofore entered on
April 21, 1964 the Flying M San Andres Pool was created consisting
of the following described area:

Township 9 South, Range 33 East, N.M.P.M.

Section 21 - NW $\frac{1}{4}$

containing 160 acres, more or less

That said Flying M San Andres Pool was discovered by Coastal
States Gas Producing Company Skelly State No. 1 located in Unit "F"
of Section 21, Township 9 South, Range 33 East N.M.P.M. and was com-
pleted in the San Andres formation on or about February 24, 1964.

2. That since the completion of the discovery well above
referred to, three additional San Andres wells have been completed
which wells are located in Units "G" and "N" of Section 16 and Unit
"C" of Section 21, Township 9 South, Range 33 East, and at the
present time there are three additional wells in the process of being
drilled or completed in the San Andres formation in the area, one
of which is more than a mile from the lands presently designated as
comprising said pool.

3. That due to the additional development since the discovery well, applicant believes that the boundaries of the Flying M San Andres Pool should be extended to include all lands which are reasonably proven productive from the same pool or reservoir.

4. 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, applicant believes that temporary special field rules and regulations should be promulgated for the Flying M San Andres Pool, including 80 acre spacing units.

5. That applicant further proposes that each well completed or re-completed in the Flying "M" San Andres Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the $N\frac{1}{2}$, $S\frac{1}{2}$, $E\frac{1}{2}$ or $W\frac{1}{2}$ of a single governmental quarter section, and that any well projected to or completed in the Flying "M" San Andres Pool may be located on either of the governmental quarter quarter sections comprising the unit and that a standard proration unit shall be assigned an 80 acre allowable and in the event there is more than one well on an 80 acre proration unit the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion and in the case of a non-standard proration unit the allowable assigned thereto shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.


6. Applicant requests that this matter be heard at the first regular examiner's hearing in July.

Respectfully submitted,

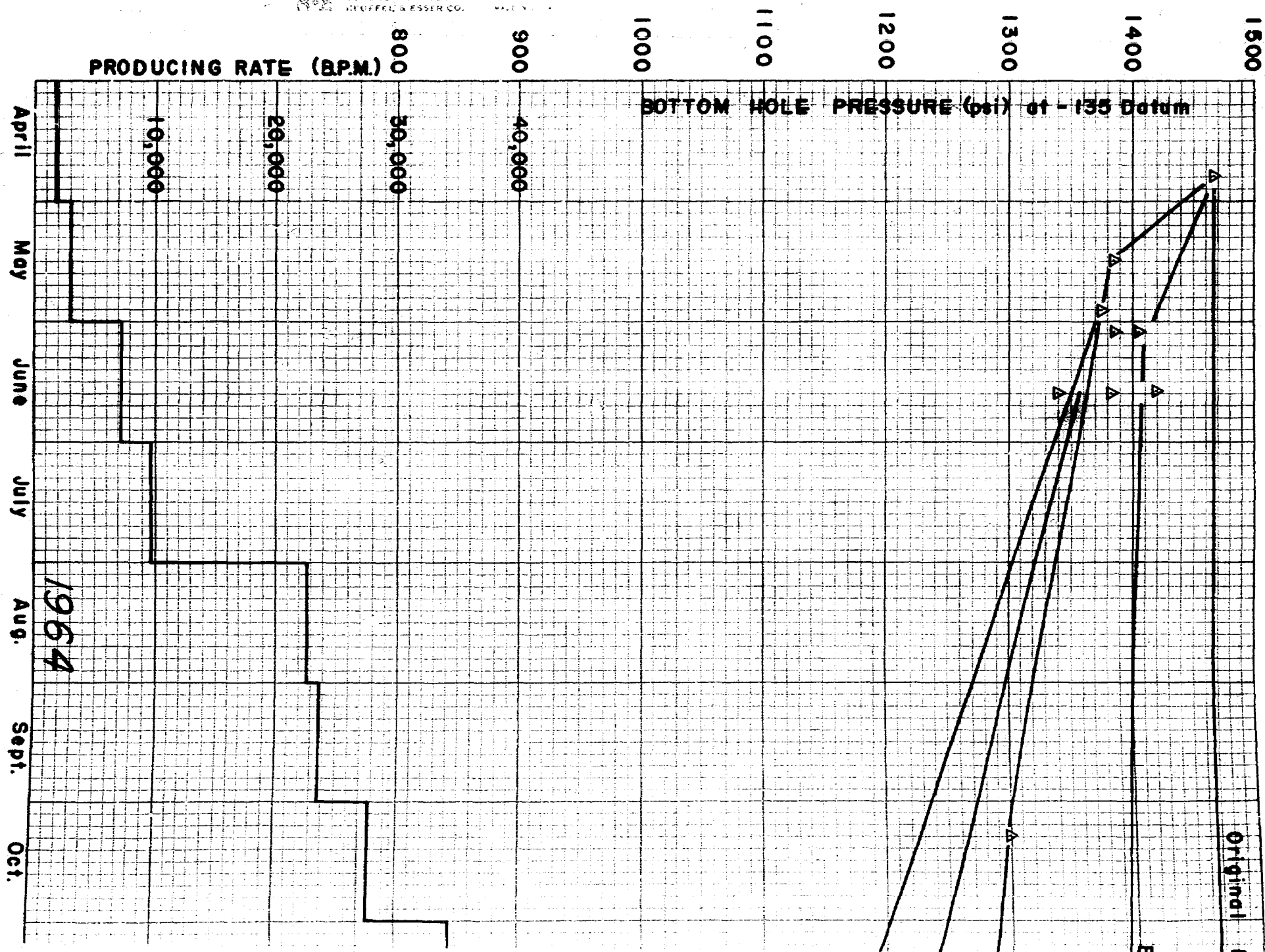
COASTAL STATES GAS PRODUCING COMPANY

By 
Attorney for Applicant

HINKLE, BONDURANT & CHRISTY

By 
P. O. Box 10
Roswell, New Mexico

10 X 10 TO THE INCH 359-5L
HEUFFEL & ESSER CO. MADE IN U.S.A.



Reservoir Pressure - 1466 psi

M.P. Outside 80 acre Location off-set by only ONE well

1/5 L=15

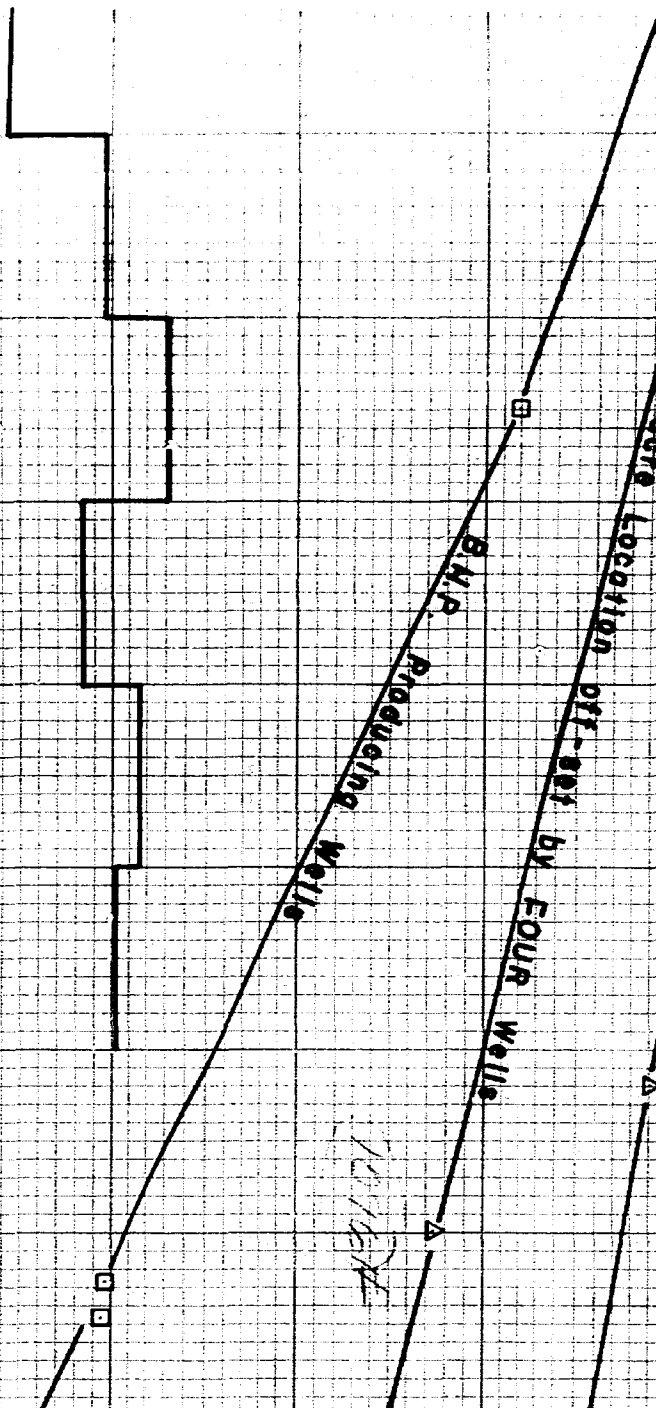
Δ 1/2 = 2
F-28 L-28

B.H.P. Inside Δ 80 acre Location off-set by TWO wells

B.H.P. Inside 40 acre Location off-set by FOUR wells

B.H.P. Producing Wells

10/16/64



FLYING "M"
San Andres

Bottom Hole Pressure
vs

Time

Δ Initial Survey After Complete
□ Subsequent Survey

1965

Nov. Dec. Jan. Feb. Mar. April May June

EXHIBITS FOR CASE NO. 3072

COASTAL STATES GAS PRODUCING COMPANY

FLYING "M" SAN ANDRES POOL

LEA COUNTY, NEW MEXICO

July 1, 1964

EXHIBITS FOR CASE NO. 3072

COASTAL STATES GAS PRODUCING COMPANY'S
APPLICATION FOR EXTENSION OF A POOL

AND FOR

TEMPORARY POOL RULES
FLYING "M" SAN ANDRES OIL POOL
TOWNSHIP 9 SOUTH, RANGE 33 EAST
LEA COUNTY, NEW MEXICO

July 1, 1964

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 1, 1964

EXAMINER HEARING

IN THE MATTER OF: Application of Coastal
States Gas Producing Company for the extension
of a pool and for special temporary pool rules
Lea County, New Mexico. Applicant, in the
above-styled cause, seeks the extension of the
Flying "M" San Andres Pool in Township 9 South
Range 33 East, Lea County, New Mexico, and
temporary special rules therefor, including a
provision for 80-acre well spacing and
proration units.

Case No. 3072

BEFORE:

Mr. Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3871

ALBUQUERQUE, N. M.
PHONE 243-6891



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

MR. UTZ: Case 3072.

MR. DURRETT: Application of Coastal States Gas Producing Company for the extension of a pool and for special temporary pool rules, Lea County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant and Christy, representing Coastal States Gas Producing Company. We have two witnesses, Mr. Carroll Staton and Mr. Elliott. I would like to have them sworn.

(Witnesses sworn.)

MR. UTZ: Are there any other appearances in this case? You may proceed.

MR. HINKLE: We have four exhibits that I would like to have marked.

(Whereupon, Applicant's Exhibits 1 through 4, marked for identification.)

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q Your name is Carroll Staton?

A Yes, it is.

Q By whom are you employed?

A Coastal States Gas Producing Company in Abilene, as geologist.



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

Q How long have you been with the Coastal States?

A Two years.

Q Have you testified before this Commission before?

A Yes, sir, I have.

Q Your qualifications are a matter of record in the Commission's records?

A Yes, sir.

Q Are you familiar with the development in the Flying "M" Field, the San Andres Pool?

A Yes, sir, I am.

Q When was the discovery well brought in in that area?

A The discovery well was, the Number 1 Skelly State, located in the southeast quarter of the northwest quarter of Section 21 was the discovery well for the Flying "M" San Andres Pool and was completed in the latter part of January of this year.

Q Since that time have you made a study of the area, and are you familiar with all of the wells that have been drilled?

A Yes, sir, I have.

Q What, essentially, has your study consisted of?

A Being responsible, geologically, for the development and completion of the San Andres development wells; consisting of examination of well cuttings.

Q Have you examined all the logs of the wells?



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

A All the logs.

Q All the core analyses?

A Yes, sir.

Q All the information available in connection with the well?

A With the geological information of the area.

Q As well as the production data?

A Yes, sir.

Q Now, refer to Applicant's Exhibit Number 1 and explain what that shows.

A Exhibit Number 1 is the plat of Township 9 South, Range 33 East, Lea County, New Mexico, which shows Coastal States land holdings in the area; the completed San Andres Wells as differentiated from the completed Abo producers in the Flying "M" area.

Q Does it show the characteristics of the lands involved that is State, Federal and Fee?

A Yes, sir, I think that this is shown on this map.

Q And it also shows the ownership of the leases?

A Yes, sir, it does.

Q All of the shaded area is acreage held by Coastal States?

A Yes, sir, it is.

Q Were these leases originally acquired by Coastal States,



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

or did you obtain farm-outs in the area?

A The original leases were obtained through various trades in the area and subsequent leases have been bought as commercial type leases; the most recent of which was the acquisition of the west half of Section 4 at a State Land sale, within the last two months.

Q Now, refer to Applicant's Exhibit Number 2 and explain what that shows.

A Exhibit Number 2 is a structural map contoured on top of a San Andres marker which is consistent through the area, readily and easily identified, and the development wells in the area, and on this map, as you will note, I have designated the trace of a north-south cross section from the Coastal States Number 1 Red Fern Well through the Coastal States Number 164 Flying "M" State; through the Kelly State Number 2 to the Number 121 Southern Mineral Well at the South end of the cross section.

Q That cross section will be offered in evidence?

A As Exhibit Number 3, yes, sir.

Q What else does this exhibit show, if anything?

A Nothing more than the stratigraphic nature of this San Andres Pool and that it is continuous from North to South over the area which we are discussing at this hearing.

Q What is the depth of the San Andres zone in this area?



A The productive zones vary in depth from approximately 4,450 feet to approximately 4,600 feet.

Q What is the nature of the producing formation?

A The Flying "M" San Andres Pool is being produced from a reservoir consisting of a sucrosic dolomite where porosity and permeability are limited and controlled by the absence or presence of pore filling anhydrite.

Q Refer to Applicant's Exhibit Number 3, which I believe you've already testified is the cross section which is indicated on Applicant's Exhibit Number 2; explain what Exhibit Number 3 shows.

A Exhibit Number 3 is the north-south cross section to which I have previously referred, showing a structural relationship from north to south, of the five wells in question, which show by the basis of indicated perforated intervals that the reservoir is continuous from north to south.

Q These are electrologs of each of those wells that you have referred to?

A Yes, sir, and I have used the gamma ray neutron log for my cross section, since this is the one log that we have common to all the well bores.

Q Was there any difficulty in correlating the logs of these wells?

A None whatever. It's more or less like matching up



wallpaper.

Q Does it show continuity of the formation in the area?

A Yes, sir, it does.

Q Of the pay zone; do these logs show the area that has been perforated and the wells are producing from?

A Yes, sir, they do.

Q Is there anything else you would like to comment on with respect to this exhibit?

A No, sir.

Q Now, you are familiar with the application which has been filed by Coastal States in this case?

A Yes, sir.

Q Refer to Exhibit Number 4, and I ask you what it shows?

A Exhibit Number 4 is the same plat that we have seen previously, only this time we have outlined in blue that area which we are seeking to be defined as the extension of the Flying "M" San Andres Oil Pool; this area being defined as the west half and the west half of the east half of Section 16, the east half of Section 20, the west half and the west half of the east half of Section 21, Township 9 South, Range 33 East, in Lea County, New Mexico.

Q In your opinion does the area outlined in blue on Exhibit Number 4 reasonably reflect the area that is proven to be productive?



A It does.

Q Is it your opinion that the boundaries as presently defined, should be extended to include this area?

A Yes, sir.

Q What is Coastal States seeking by it's application in this case with respect to standard 80-acre spacing and proration units?

A We're seeking to establish proration units of 80 acres consisting of either the west half, the east half, the north half or the south half of governmental quarter sections.

Q Is Coastal States proposing any definite well-spacing pattern, that is, location for the wells?

A No, sir, we're suggesting that locations can be at either end of the 80-acre proration unit.

Q Do you have any proposal with respect to the location of each well within the quarter-quarter section of the spacing unit?

A We would suggest that it be within reasonable tolerances of 150 or 200 feet of the center of the quarter-quarter section.

Q Had the wells shown on Exhibit Number 4 been drilled on a spacing pattern that would conform to what you propose in this case?

A They would, sir, with the exception of the Number One, 21, Southern Mineral State located in the northwest quarter of the



northwest quarter of the southeast quarter of Section 21.

Q In that case that's a 330 location, is it not?

A out of the corner of the quarter section.

Q Are you proposing that that be made an exception to the special field rules?

A We would ask that it be excepted.

MR. HINKLE: In this connection, Mr. Examiner, we have another witness who is an engineer and we will go into more detail as to the characteristics of the reservoir, but I want to produce by this witness the proposal of the Coastal States as far as the spacing is concerned.

Q (By Mr. Hinkle) Is Coastal States seeking an 80-acre allowable in this case?

A Yes, sir, which should be the normal depth factor, plus one unit of allowable.

Q Just be two normal 40-acre allowables?

A Yes, sir.

Q In case there are two wells drilled on any 80-acre unit, do you propose that they share the production in any proportion?

A We would suggest that they be produced in any proportional part cut of either well or both.

Q Is there anything further you would like to show by Exhibit Number 4?



DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M.
PHONE 243-6691

A I would direct your attention to the 80-acre proration units that I have proposed, or that have been proposed for the existing producing wells in the area. As you will note in Section 16, the 80-acre proration units are depicted as being north-south; in Section 21, east-west and north-south; and in Section 20, east-west. This was made necessary by the nature of our trades in the area. As you will notice, the north-south 80's, in Section 16 and 15 and 21, bear the title of Flying "M" and Southern Minerals. This was the nature of our trade on this particular acreage; subsequent trades have necessitated different delineation in our 80-acre proration units.

Q Exhibit Number 4 also indicates proposed location, just circles, particularly in the southwest quarter of 21 and in some of the other sections surrounding. Are those proposed locations of Coastal States?

A These are locations that we have drilled in Section 21. You referred specifically to Section 21.

Q In the southwest quarter?

A In the southwest quarter. They are at the present in the process of being completed.

Q What about the others that are outside that are indicated as locations?

A In Section 20 we have located two wells designated as Four and Five. These are locations at the moment. In Section



29, we have wells designated Numbers 1 and 2, which are also proposed locations.

Q If those proposed locations are drilled will they conform to the special field rules which you are proposing in this case?

A Yes, sir, they will.

MR. HINKLE: I think that's all from this witness.

MR. UTZ: Any questions of the witness?

CROSS EXAMINATION

BY MR. UTZ:

Q What is the reason that Coastal States is suggesting a flexible spacing pattern in this pool?

A This is being necessitated by the fact that our second well in the area, which is located north of the discovery well is a direct north offset. That would indicate to me that we could put a well location at either end and further testimony by another witness will bring this question more to focus, by locating the Number 2 Skelly at the east end of that east-west 80. We have not neglected to notice that the west end has no well capable of draining it. We have remedied that situation by drilling the Number 3 Skelly southwest of that 80 and will drain that particular portion of the 80 acres.

Q In other words, the Number 3 Skelly has two 80's to drain instead of one?

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691



A I think our testimony will bring out the fact that this is possible.

Q As far as the exceptions are concerned, your Number 2 Skelly and the Coastal Redfern Number 1 would be the only exceptions to the regular pattern, would they not?

A At this moment.

MR. UTZ: Any other questions of this witness? The witness may be excused.

(Witness excused.)

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q Your name is W. D. Elliott?

A Yes, sir.

Q Where do you reside, Mr. Elliott?

A In Corpus Christi.

Q By whom are you employed?

A I am employed by Coastal States Gas Producing Company.

Q How long have you been with Coastal States?

A Six months.

Q What is your present position with them?

A I am Production Manager of Coastal States.

Q Where is their head office?

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691



DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M.
PHONE 243-6691

A In Corpus Christi.

Q You have not previously testified before the Commission?

A I have not.

Q Are you a graduate petroleum engineer?

A Yes, sir, I graduated from the University of Tulsa with a B. S. and M. S. Degree, in 1948-1949.

Q Have you practiced your profession since your graduation?

A Yes, I have.

Q Go ahead.

A I worked for Atlantic Refining; Sunray DX Oil Company, and now with Coastal. With Sunray I was located in Tulsa, Corpus Christi, Louisville, Arkansas and Oklahoma City.

Q What has been your position with these various companies, what type of work did you do?

A I was exploitation and reservoir engineer with both Atlantic Refining Company and Sunray. I was District Engineer in three of Sunray's districts which included reservoir and exploitation engineering.

Q Have you been familiar with the development in the Flying "M" San Andres Area since its inception?

A Yes, I have.

Q Have you had an occasion to make a study of this area, an engineering study?



DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691

A Yes, sir, I have made a study of this area.

Q What does that study consist of?

A That study consisted of studying bottom-hole pressures, core analyses and logs, and characteristics of the oil of this area.

Q In connection with this study, you've examined all of the well logs and all of the available data?

A Yes, I have.

Q Production bottom-hole test, and everything?

A What have you, yes.

Q As a result of this study have you come to any conclusion with respect to the characteristics of the Flying "M" San Andres Pool?

A Yes, I have. The bottom-hole pressure is approximately 1,400 pounds.

Q That's been the case almost without exception in connection with each well as it was completed?

A Each well, as it was completed, we took bottom-hole pressures on each one of them, and they were all, with one exception, within 25 pounds of the 1,400 pound figure.

Q Go ahead.

A The gravity of the oil is 19.2.

Q That's uniform throughout all these wells?

A Yes, uniform throughout the entire field.



MR. UTZ: 19.2?

A Very low.

MR. UTZ: What do you do, scoop it out?

A No, actually it comes out better than one would think.
We have some real good producers down there.

Q (By Mr. Hinkle) What about your permeability and porosity?

A Our porosity is from a dense two percent to a high of 19.4 percent; over the productive intervals that we consider productive, it averages 12.9 percent. Permeability, likewise, varies from a low of approximately one millidarcy to 108 millidarcies.

Q What would you say the average is?

A 7.5 millidarcies.

Q What about the gas-oil ratio?

A The gas-oil ratio is very difficult to measure in this type of crude. Our most, or our highest estimate for gas-oil ratio would be 200 cubic feet per barrel, which would be the saturation pressure. However, we have not been able to measure any measurable amount. We know it does produce some gas. We do not have enough gas for our heater treaters or for pumping units. We have to use electricity and extraneous gas.

Q From your study have you formed an opinion as to the extent of this reservoir, whether there is any continuity between the wells that have been drilled?



A There appears to be a good continuity between the wells that have been drilled. We perforated in approximately the same section in all of them. The porosity develops in the same section in the San Andres.

Q In your opinion, are all of the wells which have been completed in the Flying "M" San Andres Pool from the same pool formation?

A Yes, with a bottom-hole pressure and a gravity, all of them have the same gas-oil ratio tendencies; we believe them all to be in the same, one and the same reservoir. Due to the real low gravity of the oil and it's low gas-oil ratio, we believe that the recovery will be relatively low under primary means.

Q Have you made an estimate of the recovery factor?

A Yes, I estimate that it will be a solution gas-drive reservoir with no more than ten percent recovery of the oil in place, under primary means.

Q From your study of the reservoir, have you formed an opinion as to whether one well will effectively and efficiently drain 80 acres or more?

A Yes, I believe that one well will efficiently and effectively drain at least 80 acres.

Q In your opinion, is it necessary to drill more than one well to each 80-acre unit, to prevent waste?



A I believe one well per 80-acre unit will be sufficient to prevent waste.

Q In your opinion will correlative rights be protected by the development of the pool on an 80-acre spacing pattern?

A Yes.

Q What's been the average cost of drilling and completing wells in the Flying "M" San Andres Pool?

A It has cost approximately \$50,000.00 to drill and complete wells into the tanks in this pool.

Q I believe you've already testified that the gravity of the crude is about nineteen?

A Yes.

Q Is this sour crude or sweet crude, or what?

A It is sour crude. We have to truck this crude.

Q Why do you have to truck it?

A There is a sweet pipeline in the nearby field, but they will not take this crude.

Q They will not mix it?

A They will not mix it with their sweet crude.

Q It has to be treated?

A It has to be treated, right.

Q What is the price differential between this and, say, crude of 35 or 40 gravity?

A We obtain \$2.18 for this crude; 40 gravity crude would



be \$2.95; almost a dollar difference.

Q In addition, do you have to pay a trucking charge?

A That is included in there.

Q That's included in that; so you get about a net of \$2.18 as against \$3.95 --

A \$2.95.

Q I mean \$2.95 for 38 gravity?

A Right.

Q Is there any other area, any other pool in this area that you know of, that you have this unusual condition where you have low gravity of sour crude that you have to handle in this way?

A I understand there is a field, some fields nearby. I'm not familiar with them myself.

Q Based upon the relatively short production history of the pool, and your study of the reservoir characteristics, have you arrived at any conclusions as to whether from an economic standpoint it is feasible to develop the pool on 40-acre spacing and proration units?

A Due to the extremely low gravity and extremely low gas-oil ratio which would effect our recovery factor, we feel that economics on 40 acres would be marginal, at best.

Q In other words, it would be very questionable whether the wells would ever pay out on 40 acres?



A On 40 acres, right.

Q In your opinion will the establishment of special field rules along the lines which you have indicated there prevent economic loss caused by the drilling of an excessive number of wells?

A Yes, it means quite a bit to Coastal, in fact, when you develop half of the wells.

Q In fact, it means probably the difference between having a profit and not having a profit?

A Right, exactly.

Q In your opinion will the special field rules recommended be in the interest of conservation and prevention of waste?

A Yes, very much so.

Q Do you have anything else you would like to present to the Commission?

A No, sir.

MR. HINKLE: I think that's all.

CROSS EXAMINATION

BY MR. UTZ:

Q Have you run any interference tests in this pool?

A No, sir. We have done some calculations and according to our calculations it would take at least 60 days for an interference test to be felt from one 30-acre well to another. It would take approximately 50 days to be felt on 40-acre



DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, N. M.
PHONE 243-6691

spacing. It is rather difficult to run them under those circumstances.

Q When was your discovery well completed?

A In January this year.

Q And your Number 2 was completed when?

A Let's see, it was completed about two months later, I believe.

Q Is it your intention to run any interference tests in the next year or so?

A Yes, we feel like that we may require some. We have been thinking along the terms of interference tests and secondary recovery and other things in order to increase our economic value in this field. Our plans are not real definite yet.

Q You have a pretty low permeability in this pool.

A We have some sections that are extremely high, over, up to a hundred millidarcies.

Q But seven and a half is the average?

A The average throughout, the entire, what we consider the pay section.

Q Would it be true that a low gravity oil passes through low permeability at a lesser rate than higher gravity oil would?

A Yes, that is true.

Q So, with the information that you have at the present time it's not so much a matter of whether one well will drain 80



acres, it's a matter of economics?

A Yes, it's more a matter of economics. We believe that one well will drain 80 acres.

Q You don't have much information to prove that, do you?

A No, we do not have very much information.

Q This is a temporary order that you are asking for?

A Right.

MR. UTZ: Are there any other questions?

MR. HINKLE: You are asking for a one year period of time for trial?

A One year temporary order.

MR. UTZ: The witness may be excused.

(Witness excused.)

MR. UTZ: Any other statements in this case?

MR. HINKLE: That's all that we have.

MR. DURRETT: If the Examiner please, I do have a telegram that we have received this morning from Redfern Development Corporation; stating that they oppose 80-acre spacing as they believe that San Andres formation can be more efficiently and economically produced on a 40-acre pattern. This will be placed in the file, if anyone would like to read it in it's entirety.

MR. HINKLE: I would like to ask one more question in view of that telegram, of Mr. Elliott.



W. D. ELLIOTT, recalled as a witness, having been previously duly sworn, testified further as follows:

REDIRECT EXAMINATION

BY MR. HINKLE:

Q Does Redfern have any acreage within the defined limits of the pool as you are suggesting here?

A Yes.

Q Is that under farm-out to Coastal States?

A No, they have two leases that are not under farm-out.

Q That's within this area that you propose?

A Right.

MR. DURRETT: It states in the telegram that they have acreage in the northwest of Section 16, in the southeast quarter of Section 8.

MR. UTZ: The case will be taken under advisement.



DEARNLEY-MEIER REPORTING SERVICE, Inc.
ALBUQUERQUE, N. M.
PHONE 243-6691

PAGE 23

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 7th day of July, 1964.

Ada Dearnley
Notary Public - Court Reporter

My Commission Expires:

June 19, 1967

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3.272 heard by me on July, 1964.
[Signature] Examiner
New Mexico Oil Conservation Commission



GENERAL DISCUSSION OF CASE #3072 CONCERNING THE
ESTABLISHMENT OF PERMANENT FIELD RULES DESIGNATING
80-ACRE SPACING FOR THE FLYING "M"
SAN ANDRES FIELD LEA COUNTY, NEW MEXICO

Field History

The Flying "M" San Andres Field was discovered by Coastal States in February, 1964. The Skelly State #1 located in SE/4 of NW/4 of Section 21, T9S, R33E was potentialed for 47 bbls. oil and 67 bbls water pumping from the Slaughter zone of the San Andres. By July, 1964, Coastal States had 8 wells producing from this zone. All of these wells were drilled on 80-acre tracts. In July, 1964, Coastal States asked for temporary field rules designating 80-acre spacing for this field. Order No. 2746 was issued by the Commission granting 80-acre spacing for a period of one year at which time Coastal would have to show cause why the field should not be developed on 40-acre spacing. That is, of course, the purpose of this hearing.

At the present time Coastal has 23, 80-acre proration units containing 25 producing wells. Shell has 6 80-acre proration units containing 6 producing wells. Redfern Dev. Corp. has one 80-acre proration unit containing 1 producing well.

Coastal has 2 80-acre proration units containing 2 wells each. The Redfern #2 & #3 wells are located on the W/2 of the NW/4 of Section 16. The No. 3 well was drilled on this unit because the #2 well proved to be a very marginal well due to its location on the extreme north edge of the reservoir.

The Sinclair #4 well located in the NE/4 of the SE/4 of

Section 20 was originally drilled to test the Bough "C" at approximately 9200'. When the Bough "C" was found to be dry the well was plugged back and completed in the San Andres. This San Andres completion was deemed necessary because of the pressure information that could be obtained and also to add additional producing capacity to this proration unit. The Sinclair State #2 is a marginal well because of its location on the western edge of the reservoir. A BHP taken immediately after completing the Sinclair State #4 well showed 1076 psi (original reservoir press. 1466 psi) indicating definite drainage from this area by the off-set wells.

Exhibit #1 is a plat showing the different proration units for the field. This plat shows that there are, at the present time, 30 80-acre proration units containing 32 producing wells. The two exceptions have been noted above.

Pressure

Exhibit # 2 is a graph of all the available pressure information on the Flying "M" San Andres Field. This BHP information has been plotted vs. Time, and the monthly field wide producing rate.

The bottom line on the graph is the bottom hole pressure in the producing wells (72 hrs. SI) (at a -135 Datum). The next line above is the BHP on an inside 40-acre location. This pressure was taken on the Sinclair State #4 in the NE/4 of the SE/4 of Section 20. This well is 1320' (Regular 40-acre location)

from 4 wells producing from the San Andres. The pressure was found to be 1076 psi or some 400 psi less than the original BHP. This pressure information alone proves that one well is draining considerably more than 40 acres. As indicated on the graph, this is approximately 175 psi higher than the BHP in the producing wells. The next line up represents the BHP as encountered in new wells drilled on inside 80-acre tracts. The pressure as recorded in the Southern Minerals#3-16 was 1188 psi or some 300 psi less than the original pressure and some 250 psi above the BHP in the producing wells.

The next line up represents the pressure that is currently being found in the new wells that are being drilled on 80-acre tracts that are off-set by only one producing well. These pressures indicate that the further the well is located from the main body of the field, the higher will be the BHP. The Fee #2 with 1362 psi and the Fee #3 with 1382 psi are shown on the curve.

The top line represents the original BHP of 1466 which was measured in April, 1964, in the Redfern #1.

Volumetric Calculations

Using the average reservoir rock properties that are shown in exhibit # 3 and a recovery factor of 12% of the original oil in place ~~the~~ the estimated recoverable oil under 40 acres is 46,250 bbls. The estimated recovery for 80 acres is 92,500. Exhibit # 4 is a graph of the BHP vs. Cumulative production for the Skelly State #2 well located in the NE/4 of the NW/4 of

Section 21 indicating the recovery from this well should be approximately 90,000 bbls. This indicates that one well is effectively draining 80 acres.

Economics

Exhibit # 3 shows a comparison of the economics on 40-acre and 80-acre spacing. A profit of \$8,400.00 could be realized on a total investment of \$48,100.00 on 40-acre spacing for a profit to investment ratio of 17.5%. On 80-acre spacing a profit of \$58,520.00 could be realized on a total investment of \$56,480.00 for a profit to investment ratio of 104%. This, of course, shows very poor economics on 40-acre spacing and relatively good economics on 80-acre spacing.

Summary

All of the available pressure information indicates that each well completed in the San Andres formation following April, 1964, has suffered varying degrees of pressure depletion. The pressure depletion varies from approximately 400 psi near the center of the field to 75 psi near the south edge.

Volumetric Calculations indicate there should be approximately 90,500 bbls of recoverable oil under each 80-acre tract. The pressure vs. cumulative production^{tion} from the Skelly State #2 indicates that it should recover approx. 90,000 bbls to an abandonment pressure of 200 psi, indicating that it is effectively draining 80 acres. We feel that all the above information indicates beyond any reasonable doubt that one well will drain in excess of 80 acres in this reservoir.

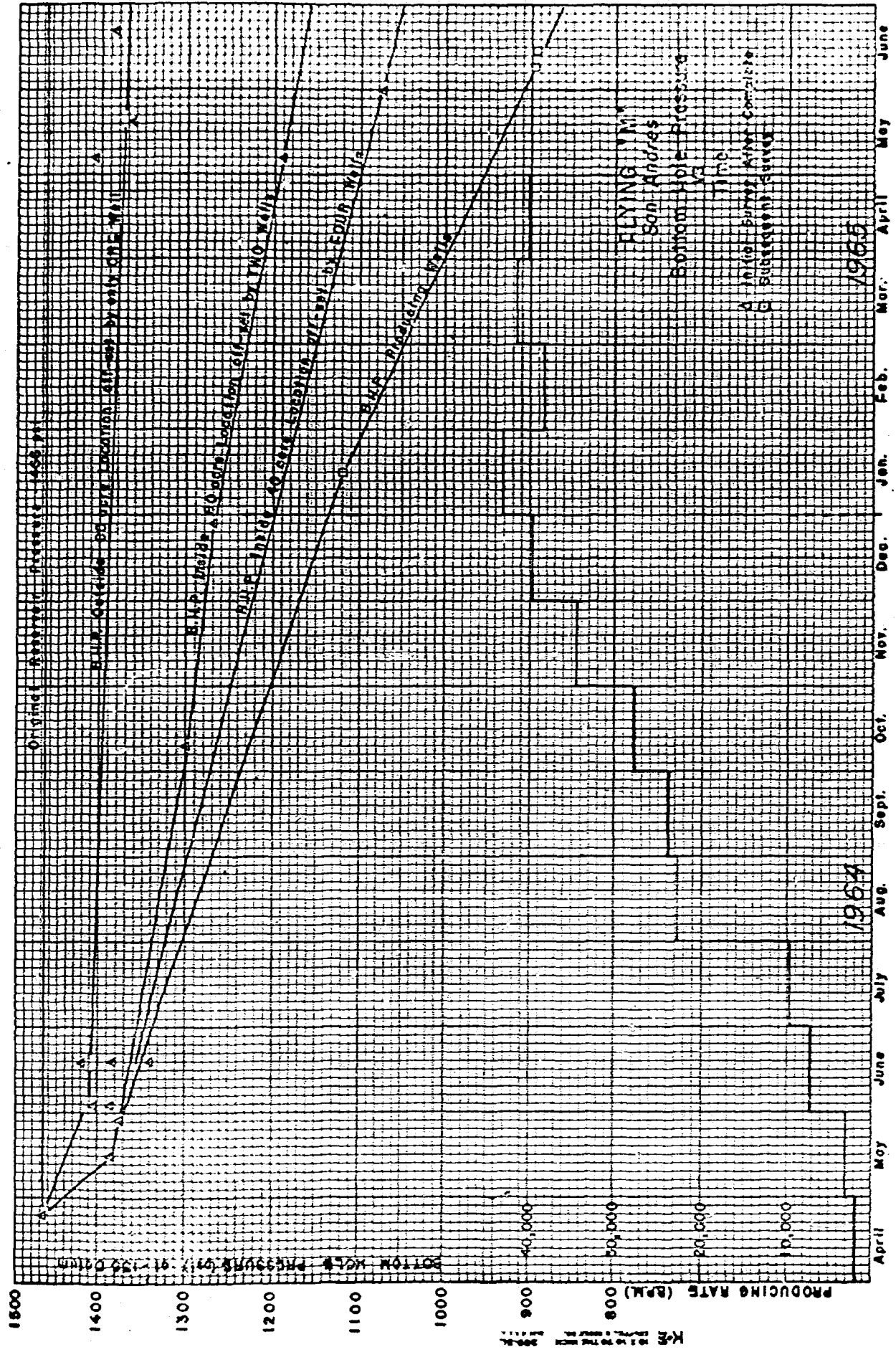


EXHIBIT NO. 2

ESTIMATES OF OIL RESERVES AND ECONOMICS
Flying "M" San Andres
Lea County, New Mexico

Case No. 3072
Exhibit # 3
6-30-65

BASIC DATA

Porosity	Avg.	11%
Net Pay	Avg.	20'
Water Saturation	Avg.	38%
Formation Value Factor	Est.	1.10
Recovery Factor	Est.	12%

$$\text{Recovery} = \frac{7758 \times A \times h \times \phi \times (1 - sw) \times fr}{Bo}$$

RECOVERY FOR 40 ACRES

$$\begin{aligned} \text{Recovery} &= \frac{7758 \times 40 \text{ ac.} \times 20' \times .11 \times (1 - .38) \times .12}{1.10} \\ &= 46,250 \text{ bbls.} \end{aligned}$$

RECOVERY FOR 80 ACRES

$$\begin{aligned} \text{Recovery} &= \frac{7758 \times 80 \text{ ac.} \times 20' \times 11\% \times (1 - .38) \times 12\%}{1.10} \\ &= 92,500 \text{ bbls.} \end{aligned}$$

COMPARISON OF ECONOMICS

	<u>40-ac. spacing</u>	<u>80-ac. spacing</u>
Gross Oil Reserves	46,250	92,500
Net Oil Reserves 60%	27,700	56,500
Net Revenue @ 2.04 per bbl	\$56,500	\$115,000
Drilling & Completion cost	40,000	40,000
Operating Cost .10 per bbl	4,600	9,250
Production Taxes	3,500	7,130
Total Cost	48,100	56,480
Profit	8,400	58,520
Profit to Investment Ratio in %	17.5	104%

K^{SE} 10x10 TO THE INCH 359.5
KEUPPEL & ESSER CO. MADE IN U.S.A.

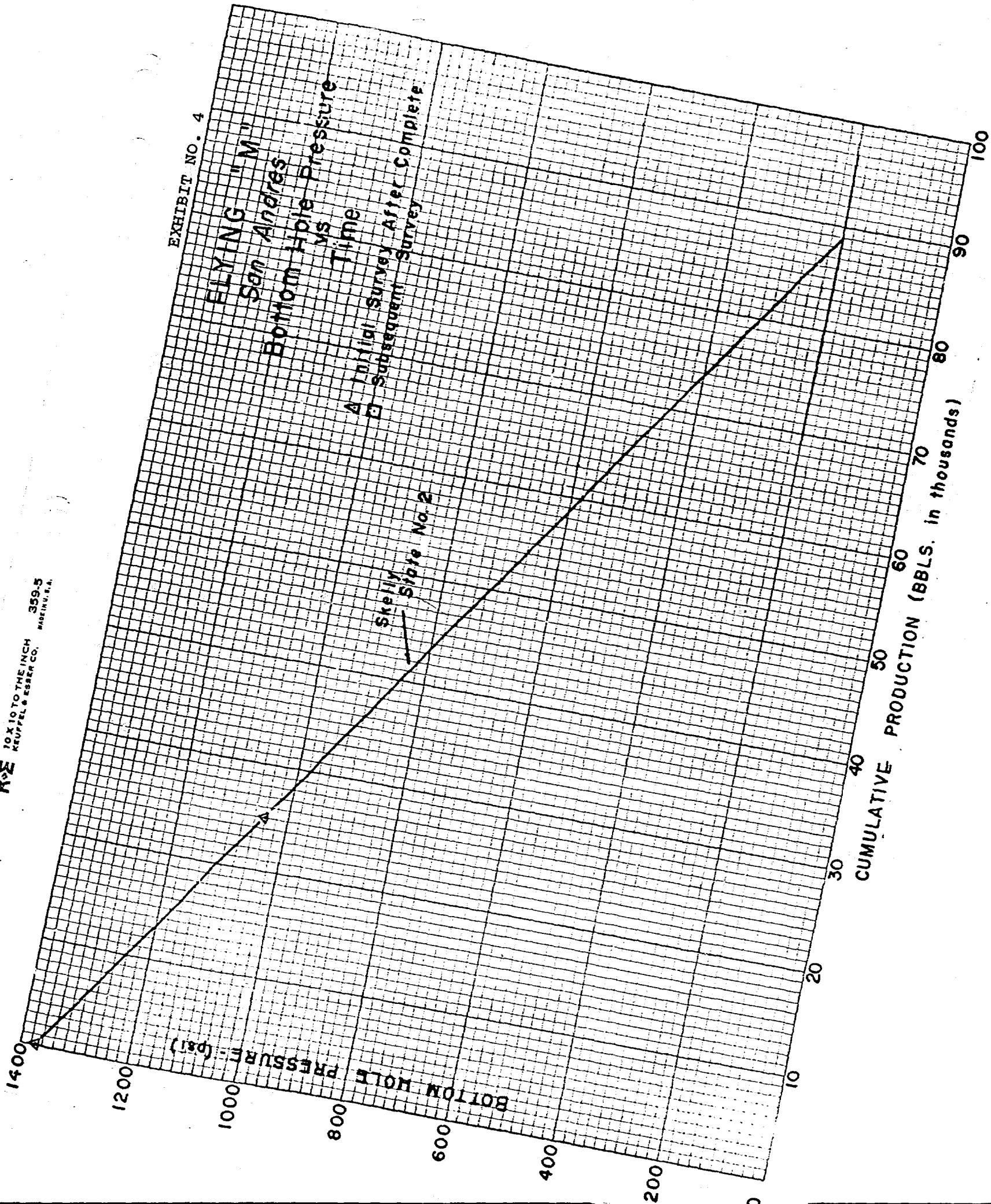
EXHIBIT NO. 4

FLYING "M"
San Andres

Bottom Hole Pressure
vs
Time

A Initial Survey After Complete
B Subsequent Survey

Skelly
Slope No. 2



FLYING "M" (SAN ANDRES)
 BOTTOM HOLE PRESSURE DATA
DATUM (-135 feet subsea)

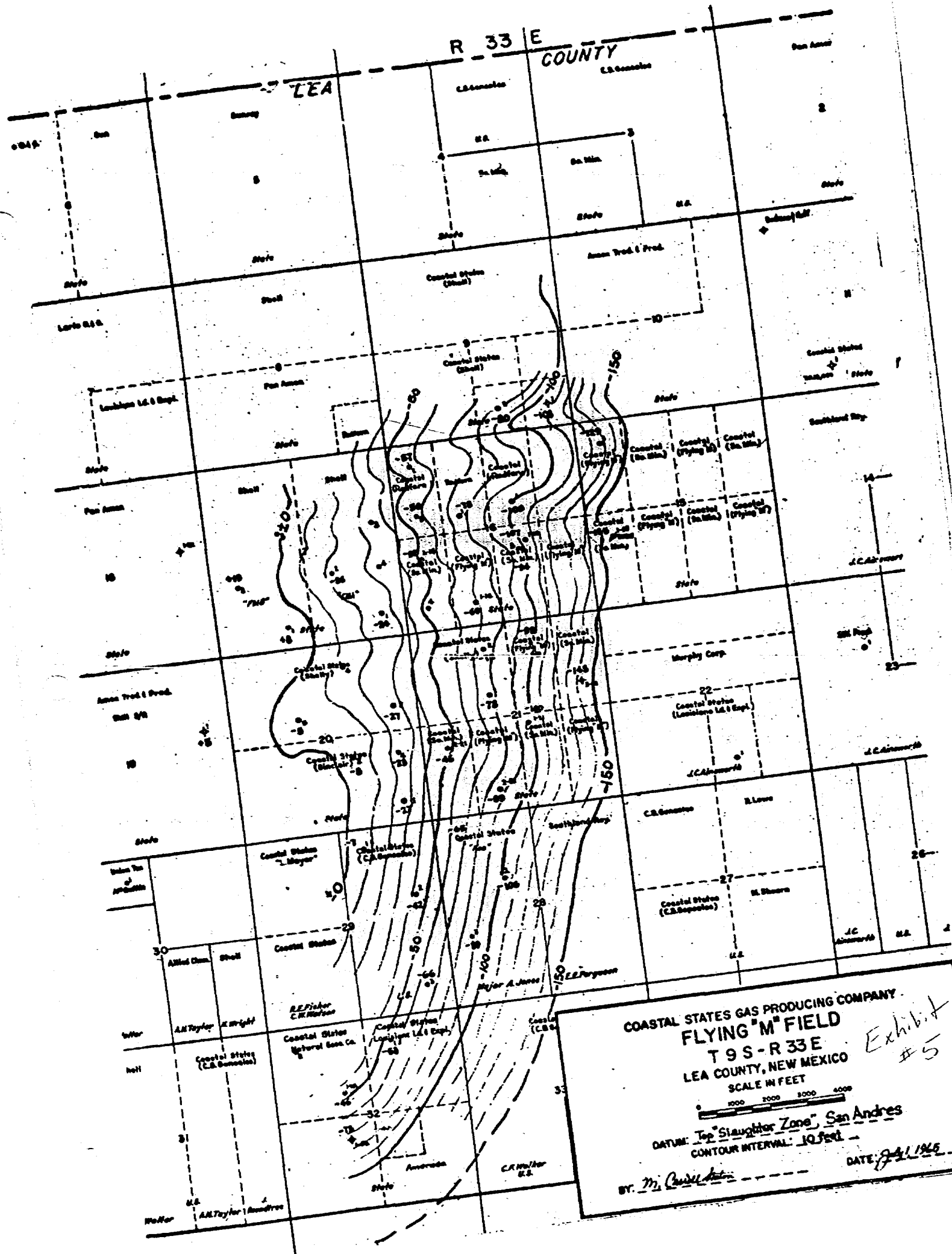
<u>DATE</u>	<u>WELL</u>	<u>TIME</u>	<u>PRESSURE</u>
4-24-64	Redfern State #1	43.5 hours	1466 psi
5-14-64	Flying "M" #1-16	48.0 hours	1383 psi
5-27-64	Skelly State #2	48.0 hours	1374 psi
6-2-64	Skelly State #1	12.0 hours	1402 psi
6-2-64	Southern Minerals #1-21	45.0 hours	1386 psi
6-17-64	Skelly State #3	48.0 hours	1417 psi
6-18-64	Southern Minerals #2-16	48.0 hours	1337 psi
6-18-64	Sinclair State #1	48.0 hours	1380 psi
10-8-64	Shell Oil State FMA #2	72.0 hours	1297 psi
10-8-64	Shell Oil State FMA #3	72.0 hours	1076 psi
12-26-64	Redfern State #3	48.0 hours	1267 psi
1-14-65	Flying "M" #2-21	21.0 hours	1118 psi
5-6-65	Southern Minerals #3-16	72.0 hours	1188 psi
5-6-65	Southern Minerals #1-15	72.0 hours	1409 psi
5-19-65	Fee #2	72.0 hours	1362 psi
5-30-65	Sinclair State #4	72.0 hours	1076 psi
6-8-65	Skelly State #2	72.0 hours	895 psi
6-16-65	Shell Oil Company FMA #2	69.0 hours	892 psi
6-20-65	Fee #3	72.0 hours	1382 psi
6-29-65	Southern Minerals #3-16	72.0 hours	994 psi
6-29-65	Redfern State #1	72.0 hours	857 psi

[illegible]

DATE: *Area Plot, well locations*
 CONTOUR INTERVAL: *-----*
 BY: *Other producers* DATE: *Jan*

Exhibit
1

DATE: July 1, 65



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. 3072
Order No. R-2746

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 1, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 29th day of July, 1964, 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 extension of the Flying "M" San Andres Pool in Township 9 South, Range 33 East, NMPM, Lea County, New Mexico.

(3) That the proposed extension of the Flying "M" San Andres Pool should be considered in a nomenclature case to be called by the Commission and docketed for hearing in the near future.

(4) That the applicant seeks the promulgation of temporary special rules and regulations governing the Flying "M" San Andres Pool, including a provision for 80-acre spacing.

-2-

CASE No. 3072

Order No. R-2746

(5) 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 80-acre spacing units should be promulgated for the Flying "M" San Andres Pool.

(6) 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.

(7) 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.

(8) That an administrative procedure should be established whereby the operators in the pool would be permitted to conduct interference tests and to transfer allowables among producing wells on the same lease during the temporary one-year period in order to facilitate the gathering of information pertaining to reservoir characteristics.

(9) That this case should be reopened at an examiner hearing in July, 1965, at which time the operators in the subject pool should appear and present all available reservoir information, including interference test results, to establish the area that can be efficiently and economically drained and developed by one well and show cause why the subject pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

That temporary Special Rules and Regulations for the Flying "M" San Andres Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
FLYING "M" SAN ANDRES POOL

RULE 1. Each well completed or recompleted in the Flying "M" San Andres Pool or in the San Andres formation within one

-3-

CASE No. 3072

Order No. R-2746

mile of the Flying "M" San Andres Pool, and not nearer to or within the limits of another designated San Andres pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Flying "M" San Andres Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

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 comprising a single quarter-quarter section or lot. 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. The first well drilled on every standard or non-standard unit in the Flying "M" San Andres Pool shall be located in the NW/4 or the SE/4 of a governmental quarter section. All wells shall be located within 200 feet of the center of a governmental quarter-quarter section.

RULE 5. The Secretary-Director may grant an exception to the footage 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, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed unorthodox 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 offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

Memo

From

A. L. Porter, Jr.
Secretary-Director

2/23
Jim W.
Require interference
to be taken

-4-

CASE No. 3072

Order No. R-2746

RULE 6. A standard proration unit (79 through 81 acres) in the Flying "M" San Andres Pool shall be assigned an 80-acre proportional factor of 2.00 for allowable purposes, and in the event there is more than one well on an 80-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 in the Flying "M" San Andres Pool as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That an 80-acre allowable shall not be assigned to a well in the Flying "M" San Andres Pool until the operator of the well files a new Form C-128 and Form C-116 with the Commission.

(2) That any well presently drilling to or completed in the San Andres formation within the Flying "M" San Andres Pool or within one mile of said pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 10, 1964.

(3) That the Secretary-Director of the Commission is hereby authorized to approve interference tests and the transfer of allowables to wells on the same lease or, if in a unitized area, to wells in the same participating area, provided however, that any such authorization shall be limited to a period of six months, but may be renewed. No transfer well shall be permitted to receive, in addition to its own allowable, more than 50 per cent of one top unit allowable for the pool.

To obtain administrative approval for interference tests and the transfer of allowable, the operator shall submit in triplicate a request for such authority describing in detail the proposed method of conducting such tests and transferring the allowable. The application shall be accompanied by a plat showing thereon all wells within a radius of two miles of the proposed shut-in well(s) and the transfer well(s). The plat shall also identify each lease or participating area as to ownership or operating rights. The application shall include evidence that all offset operators to the shut-in well(s) and the transfer well(s)

-5-

CASE No. 3072
Order No. R-2746

have been furnished a complete copy of the application. It shall also be accompanied by Form C-116 for each shut-in well, showing the results of a pre-shut-in test to determine the amount of allowable to be transferred. The transferred allowable shall not exceed the volume of oil produced during the last 24 hours of a 72-hour period during which the well shall be produced at a constant rate. The Commission and offset operators to both the shut-in well(s) and the transfer well(s) may witness such tests if they so desire and shall be notified of the tests at least 48 hours prior to the commencement thereof.

The Secretary-Director of the Commission may grant approval of the interference tests and transfer of allowable upon receipt of waivers from all offset operators or upon expiration of a 20-day waiting period, provided no offset operator has objected to the proposed test and transfer.

(4) That this case shall be reopened at an examiner hearing in July, 1965, at which time the operators in the subject pool shall appear and present all available reservoir information, including interference test results, to establish the area that can be efficiently and economically drained and developed by one well and show cause why the Flying "M" San Andres Pool should not be developed on 40-acre spacing units.

(5) 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



JACK M. CAMPBELL, Chairman


E. S. WALKER, Member


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

ESR/

dearnley-meier reporting service, inc.

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

1120 SHAW BLVD. • P. O. BOX 1092 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 7, 1965

EXAMINER HEARING

IN THE MATTER OF: Case No. 3072 being reopened)
pursuant to the provisions of Order No.)
R-2746, which order established 80-acre)
spacing for the Flying "M" San Andres Pool,)
Lea County, New Mexico, for a period of one)
year.)

Case No. 3072

BEFORE: DANIEL S. NUTTER

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order. The next case we will take up will be Case 3072, reopened.

MR. DURRETT: In the matter of Case Number 3072 being reopened pursuant to the provisions of Order No. R-2746.

MR. CHRISTY: Sam Christy, Hinkle, Bondurant & Christy, Roswell, New Mexico, for the Applicant, Coastal States.

We have one witness, Mr. Examiner, we do have another witness here who can testify on geology matters. Would you stand to be sworn, please?

JACK MCGRAW

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

DIRECT EXAMINATION

BY MR. CHRISTY:

Q Will you state your name, address, by whom you are employed and in what capacity?

A My name is Jack McGraw, I am employed by Coastal State Gas Producing Company, in Abilene, Texas.

Q In what capacity, sir?

A As District Engineer.

Q I believe you have previously testified before this regulatory body, Mr. McGraw, and had your qualifications as a petroleum engineer accepted?

A Yes, sir, I have.

Q Are you familiar with Case 3072, the area in question, the wells in the Flying San Andres Pool?

A Yes, sir, I am.

Q This is the Flying "M" Field?

A This is in our division.

Q Are you familiar with what is sought by the applicant in Case 3072, and are you familiar with the prior hearing?

A Yes, sir.

MR. CHRISTY: Are the qualifications of the witness acceptable?

MR. NUTTER: They are.

Q (By Mr. Christy) Mr. McGraw, would you please give the Examiner a brief historical statement on this field, please?

A The Flying "M" San Andres Field was discovered by Coastal States in February 1964. The Skelly State Number 1, located in the Southeast Quarter of Section 21, Township 9 South, Range 33 East was potentiated for 47 barrels of oil and 67 barrels of water pumping from the slaughter zone of the San Andres formation by July, 1964. Coastal States had eight wells producing from this zone. All of these wells were drilled on 80 acre tracts. In July, 1964, Coastal States asked for temporary field rules designating 80 acre spacing for this field.

Order 2746 was issued by the Commission granting 80 acre spacing for a period of one year, at which time

Coastal States would have to show cause why the field should not be developed on 40 acre spacing. That is, of course, the purpose of this hearing.

At the present time Coastal States has 23 80-acre proration units containing 23 producing wells. Shell has six 80-acre proration units containing six producing wells. Redfern Development Corporation has one 80-acre proration unit containing one producing well. Coastal States has two 80-acre proration units containing two wells each. The Redfern Number 2 and 3 wells are located on the West Half of the Northwest Quarter of Section 16. The Number 3 well was drilled on this unit because the Number 2 well proved to be a very marginal well on the location of the north edge of the reservoir.

The Sinclair State Number 4 well, located in the Northeast Quarter of the Southeast Quarter of Section 20 was originally drilled to test the Bough "C" at approximately 9200. When the Bough "C" formation was found to be dry, the well was plugged back and completed in the San Andres formation. This San Andres formation was deemed necessary because of the pressure information that could be obtained and also to add additional producing capacity to this proration unit. The Sinclair Number 2 well is a marginal well because of its location on the western edge of the reservoir.

A bottom hole pressure test taken immediately after

completion of the Sinclair State Number 4 well showed 1,076, and remembering that the original reservoir pressure in the field was 1,466, this indicates definite drainage from this area by the offset wells.

Q Now, sir, you mentioned a second ago, Exhibit 1. I believe you should identify the Exhibit and tell what it depicts.

A Exhibit 1 is a plat showing all the wells producing from the San Andres formation or in other words, the Flying "M" San Andres field. They are denoted by the blue circles.

We also have a couple of Abo producers in this field. They are denoted by the red circles, and this plat shows all the rest that I have referred to and that they are on 80 acre proration units with the two exceptions I have mentioned.

Q There are 30 proration units with the 32 wells?

A Thirty-two wells.

Q All right. Now, speaking of pressure, would you discuss Exhibit 2, please, refer to the Exhibit?

A So you won't have to strain your eyes, I have some larger plats here so you can see these better.

This Exhibit 2 is a graph of all the available pressure information on the Flying "M" San Andres Field. This bottom hole pressure has been plotted versus time, and it also shows the monthly field wide producing rate.

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-5491 • ALBUQUERQUE, NEW MEXICO
1213 FIRST NATIONAL BANK EAST • PHONE 250-1294 • ALBUQUERQUE, NEW MEXICO

The bottom line on the graph is the bottom hole pressure in the producing well.

Now, this is the older producing wells. This represents subsequent pressures following the initial pressures that were taken in the beginning, so this is the bottom hole pressure decline that we are looking at, these wells have been producing since the beginning of production in this area. These pressures are all 72 hour shut-in pressures, and at a datum of minus 135. The next line above is the bottom hole pressure on an inside 40 acre location.

MR. NUTTER: Those are at a datum of minus 135?

A Yes. This pressure was taken on the Sinclair State Number 4, which I have mentioned before. This well was located 1320 feet, or a regular 40 acre location from the four wells producing in the San Andres. The pressure was found to be 1,076 pounds per square inch, or some four hundred pounds less than the original bottom hole pressure.

This pressure information alone proves that one well is draining considerably more than forty acres as indicated on the graph. This is approximately 175 psi higher than the bottom hole pressure in the older producing wells, so we do have a pressure differential there of about 175 pounds when you move 1320 feet from a present producing well.

The next line up represents the bottom hole pressure

as encountered in new wells drilled on inside 80 acre tracts. The pressure as recorded in the Southern Minerals 3-16 was 1188 or some 300 pounds less than the original pressure and some 250 pounds above the bottom hole pressure in the older producing wells.

Q Would you identify where the Southern Minerals 3-16 well is, please?

A Yes, it's in the Northwest of the Southeast of 16. It's on the same location as the Abo well, the 1-16 Southern Minerals. This well was offset by the--actually, three other producing wells at the time it was completed, and although it shows a higher initial bottom hole pressure than the pressure in a regular 40 acres, this simply shows you are further away and you have a little bit more pressure differential.

MR. NUTTER: That well is located in the Northwest of the South Half of 16?

A Yes, sir, do you see it?

MR. NUTTER: It's offset to the Northwest and Southwest?

A To the Southwest and Northwest; also offset to the South on a regular 80-acre location, so it's what I have generally referred to as an inside 80-acre location.

This pressure on this well shows that this had suffered some pressure depletion also, and we were affecting pressure

on a regular 80-acre pattern.

The next line up represents the pressure that is currently being found in the new wells that are being drilled on 80-acre tracts that are offset by one producing well. Now, this is in the Fee Number 2 and Number 3 wells located in the West Half of Section 28. If you will look at Exhibit 1, you can see Fee Number 2 and Number 3, and they were drilled in that order; and each one, when they were drilled, were offset by one well, and they are shown here. The pressure on the Fee Number 2 was 1362 and Fee Number 3 was showing a little bit higher pressure when you get a little bit further from the main body of the older producing area.

MR. NUTTER: What is the other pressure there, then, the one that is 1400 feet?

A That was a pressure taken in the Sinclair, the Southern Minerals 1-15 which is our present water disposal well. As you can see, it's in Section 15 in the Northeast of the Southwest, and it was also greater than an 80-acre, regular 80-acre location from the closest producing well because at the time the pressure was taken the closest producing well was the Redfern 1, almost a half mile away, and it has suffered some forty pound or fifty pound pressure drop.

Q All right.

A The top line then, is simply a straight line repre-

senting the original reservoir pressure, 1466, the pressure in the Redfern Number 1 in April, 1964.

Q All right. Now let's speak of the volumetric calculation and make reference to Exhibit Number 3, please.

A Using the average reservoir rock properties that are shown in Exhibit 3, and a recovery factor of 12 percent of the original oil in place, the estimated recoverable oil under 40 acres is 46,250 barrels. The estimated recovery for 80 acres is 83,500 barrels.

Exhibit 4 then, which is on the next page, is a graph of the bottom hole pressure versus cumulative production for the Skelly State Number 2, located in the Northeast Quarter of the Northwest Quarter of Section 21, indicating the recovery from this well should be approximately 90,000 barrels. This we feel indicates that one well is effectively draining the 80 acre area.

Q Now, any time we take up an 80-acre proration problem, we get into a matter of economics. Would you give us a little statement of the economics?

A Exhibit 3 also shows a comparison of the economics on 40-acre and 80-acre spacing. If you will look at Exhibit 3 you can see that we have used the gross oil reserves. Under this are the costs. This shows the net interest to Coastal and net revenue on this net reserve at about \$2.04 a barrel.

Since this is 19 gravity crude, that's about all the price is. That results in gross income of \$56,500.00 for 40 acres, and \$113,000.00 on 80-acre spacing; drilling and completing cost is about \$40,000.00 per well; operating cost at ten cents a barrel would be about \$4,600.00 on 40-acre spacing and \$9,250.00 on 80-acres; approximate taxes of course, are shown; total cost, \$48,100.00 for 40, and \$56,480.00 for 80-acre spacing. This would yield a profit of only \$8,400.00 on 40 acres and probably about \$58,000.00 on 80 acres or a profit to investment ratio of 17 1/2 percent for 40 acres and 104 percent for 80 acres.

Q Over approximately what period of time?

A This will be over a period of six to eight years.

Q So this shows very poor economics on 40-acre spacing and relatively good economics on 80-acre spacing?

A Yes. For the Examiner's information, we have attached as Exhibit 5 a contour map on the top of the Slaughter Zone. This is the same map as Exhibit 2 in the original hearing except it has been updated as we have learned more about the field. We have also tabulated at the last page of the set of exhibits, a tabulation of the wells referred to by the Examiner when he mentioned that they had some bottom hole pressures at minus 135 datum.

Q Now, Mr. McGraw, can you summarize for us, please,

what you feel has been learned and what these exhibits depict?

A All of the available pressure information indicates that each well completed in the San Andres Formation following April, 1964, has suffered varying degrees of pressure depletion. The pressure depletion varies from approximately 400 psi in the center of the older producing area to 75 psi in the new development to the south. Volumetric calculation indicates there should be approximately 92,500 barrels of recoverable oil under 80 acre tracts. Pressure versus cumulative production from the Skelly State Number 2 indicates that it should recover approximately 90,000 to abandonment pressure of 200 psi, and indicates that it is effectively draining 80 acres. We feel that all the above information indicates beyond any reasonable doubt that one well will drain in excess of 80 acres in this reservoir.

Q You believe it could be done economically and without violation of the correlative rights of the interested parties?

A Yes, sir, I sure do.

Q Now, the temporary rules, speaking specifically about Rule 2, provided that each well would consist of a drilling unit of either the North Half, South Half, East Half or West Half of a single governmental section. Rule 3 provides for certain non-standard exceptions to that. Do you feel those rules should be continued?

A Yes, we feel those are all right.

Q Now, Rule 4 of the temporary rules provided that the first well in any 80-acre spacing unit shall be drilled in either the Northwest quarter or the Southeast Quarter of single governmental section, and will be within 200 feet of the center of that quarter section. Do you feel that rule should be continued?

A Yes, sir.

Q Now, I believe interference tests were not taken?

A No, interference tests as such were not conducted because of the pressure information that we had accumulated at the time we considered conducting this interference test. We feel that the information gained is actually better and shows more conclusive evidence of drainage than an interference test would, which is conducted over a specific period of time.

Q The operator mentions a transfer allowable which, of course, has not been taken and there is no necessity for it. I assume, however, that you would recommend to the Examiner that if in the future the Commission wishes interference tests or deems it advisable, the transfer of allowable would be permitted in line with the prior order?

A Yes.

Q And the same thing might be true in the event we

come to pressure maintenance or secondary recovery, but at this time there is no particular reason for it?

A No, sir.

Q Would you recommend to the Commission that the temporary rules promulgated in Order R-2746 be made permanent in their present wording?

A Yes, sir.

Q Were Exhibits 1 through 5 either prepared by you or under your direct supervision?

A Yes, sir.

MR. CHRISTY: That's all from this witness.

MR. NUTTER: Does anyone have any question of Mr. McGraw?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. McGraw, is the development continuing in this pool, or pretty well completed?

A We are currently drilling in the south part of this and at the present time we don't have a rig running, we just recently completed the Gonzales State Number 3 in the Southeast, Southeast of 29. That well has not yet been potentialized and we are watching the results of that well to determine where our next location will be.

Q How about your wells in Section 32, are they

marginal or pretty fair wells?

A In 32, yes, these are marginal wells. One especially is bad, the other one is just fair.

Q And evidently you got close to the productive limit on the north end, when you stated that the Redfern was a poor well and you drilled the second well on that unit?

A That's true.

Q Are those wells up in Section 9?

A Yes.

Q Did they test the San Andres?

A Yes, sir, they did, and the Shell State Number 2 has recently been abandoned. We pumped it for several months making one percent oil, ninety-nine percent water.

Q Now, what is the well in the Southwest, Southwest of 16, what formation is that in, Number 4, there?

A Southwest, Southwest -- oh, yes, that is a well drilled to the Bough "C" and it should show on there as a plugged well because we have plugged it and we did not attempt to complete it in the San Andres because we did not need a San Andres completion, as that proration unit makes it allowable, and we didn't need to complete in the San Andres, and that well has been plugged and it does not show here to be, but it has been plugged.

Q What about Shell's FMA Number 4, same situation, attempting to complete in the Bough "C" or running log, aren't

they?

A They were running logs yesterday.

Q Now, you mentioned that the gravity here is nineteen, is this a pretty viscous oil also?

A Yes, sir, it is. They were running around five centipoise, which is pretty high.

Q Is this a solution gas drive oil?

A As far as we drilled it's solution gas drive.

Q This well probably later on in its life might be subject to waterflood, wouldn't you expect?

A Yes, we intend to pursue this with all haste. We would like to start a pressure maintenance program in this field to try to maintain the bottom hole pressure.

Q What was your recovery factor on your tabulation?

A Twelve percent.

MR. CHRISTY: In the prior hearing we were estimating around 10 percent. This is the most optimistic percentage you have?

A Yes, sir. The field is performing very good at this time, pressure is dropping. We, of course, are aware of that and we want to start some pressure maintenance program in which case this field should perform very nicely.

MR. CHRISTY: But 12 percent would be optimistic even with this kind of oil and solution gas drive?

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
1213 FIRST NATIONAL BANK EAST • PHONE 236-1294 • ALBUQUERQUE, NEW MEXICO

PAGE 16

A Certainly would, and that figure was used partly because in the case of Skelly 2, it looks like it is going to recover greater than 10 percent of oil.

Q (By Mr. Nutter) Do you happen to know what the solution gas oil ratio is?

A Yes, about 250.

Q Now, again, to be sure, the rules that you were advocating be continued, I don't suppose you had any suggested change actually, did you?

A No, sir.

MR. NUTTER: Are there further questions of Mr. McGraw?

MR. CHRISTY: One. Who are the other operators in the field?

A Only two other operators are presently active in the field, and that's Skelly and Redfern Development Corporation.

MR. CHRISTY: That's all.

MR. NUTTER: If there are no further questions the witness may be excused.

(Witness Excused.)

MR. CHRISTY: Thank you. We offer Exhibits 1 through 5 inclusive.

MR. NUTTER: One through five will be admitted in evidence.

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
1213 FIRST NATIONAL BANK EAST • PHONE 236-7264 • ALBUQUERQUE, NEW MEXICO

PAGE 17

(Whereupon, Exhibits 1 through 5 were admitted in evidence.)

MR. CHRISTY: That's all from the Applicant.

MR. NUTTER: Does anyone have anything they wish to offer in this case?

MR. DURRETT: I would like to state for the record that the Commission has received a telegram from Shell Oil Company stating that they support the application to continue the rules.

MR. NUTTER: Thank, Mr. Durrett. Is there anything further in Case 3072, reopened? If not we will take the Case under advisement and the hearing is adjourned.

(Whereupon, the Oil Conservation Commission Examiner Hearing was adjourned.)



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
1212 FIRST NATIONAL BANK BLDG. • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO)
) SS
COUNTY OF BERNALILLO)

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

WITNESS my Hand and Seal this 7th day of October, 1965.

Denny Watts by
DENNY WATTS
Ida Dearnley

My Commission Expires:

I do hereby certify that the foregoing is a complete record of the proceedings in the Court and hearing of Case No. 2072 heard by me on 7/7, 1965.
[Signature], Secretary
New Mexico Oil Conservation Commission

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. 3072
Order No. R-2746

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 1, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 29th day of July, 1964, 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 extension of the Flying "M" San Andres Pool in Township 9 South, Range 33 East, NMPM, Lea County, New Mexico.
- (3) That the proposed extension of the Flying "M" San Andres Pool should be considered in a nomenclature case to be called by the Commission and docketed for hearing in the near future.
- (4) That the applicant seeks the promulgation of temporary special rules and regulations governing the Flying "M" San Andres Pool, including a provision for 80-acre spacing.

-2-

CASE No. 3072

Order No. R-2746

(5) 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 80-acre spacing units should be promulgated for the Flying "M" San Andres Pool.

(6) 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.

(7) 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.

(8) That an administrative procedure should be established whereby the operators in the pool would be permitted to conduct interference tests and to transfer allowables among producing wells on the same lease during the temporary one-year period in order to facilitate the gathering of information pertaining to reservoir characteristics.

(9) That this case should be reopened at an examiner hearing in July, 1965, at which time the operators in the subject pool should appear and present all available reservoir information, including interference test results, to establish the area that can be efficiently and economically drained and developed by one well and show cause why the subject pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

That temporary Special Rules and Regulations for the Flying "M" San Andres Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
FLYING "M" SAN ANDRES POOL

RULE 1. Each well completed or recompleted in the Flying "M" San Andres Pool or in the San Andres formation within one

-3-

CASE No. 3072
Order No. R-2746

mile of the Flying "M" San Andres Pool, and not nearer to or within the limits of another designated San Andres pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Flying "M" San Andres Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

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 comprising a single quarter-quarter section or lot. 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. The first well drilled on every standard or non-standard unit in the Flying "M" San Andres Pool shall be located in the NW/4 or the SE/4 of a governmental quarter section. All wells shall be located within 200 feet of the center of a governmental quarter-quarter section.

RULE 5. The Secretary-Director may grant an exception to the footage 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, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed unorthodox 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 offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

-4-

CASE No. 3072

Order No. R-2746

RULE 6. A standard proration unit (1/4 through 81 acres) in the Flying "M" San Andres Pool shall be assigned an 80-acre proportional factor of 2.00 for allowable purposes, and in the event there is more than one well on an 80-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 in the Flying "M" San Andres Pool as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That an 80-acre allowable shall not be assigned to a well in the Flying "M" San Andres Pool until the operator of the well files a new Form C-128 and Form C-116 with the Commission.

(2) That any well presently drilling to or completed in the San Andres formation within the Flying "M" San Andres Pool or within one mile of said pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 10, 1964.

(3) That the Secretary-Director of the Commission is hereby authorized to approve interference tests and the transfer of allowables to wells on the same lease or, if in a unitized area, to wells in the same participating area, provided however, that any such authorization shall be limited to a period of six months, but may be renewed. No transfer well shall be permitted to receive, in addition to its own allowable, more than 50 per cent of one top unit allowable for the pool.

To obtain administrative approval for interference tests and the transfer of allowable, the operator shall submit in triplicate a request for such authority describing in detail the proposed method of conducting such tests and transferring the allowable. The application shall be accompanied by a plat showing thereon all wells within a radius of two miles of the proposed shut-in well(s) and the transfer well(s). The plat shall also identify each lease or participating area as to ownership or operating rights. The application shall include evidence that all offset operators to the shut-in well(s) and the transfer well(s)

-5-

CASE No. 3072

Order No. R-2746

have been furnished a complete copy of the application. It shall also be accompanied by Form C-116 for each shut-in well, showing the results of a pre-shut-in test to determine the amount of allowable to be transferred. The transferred allowable shall not exceed the volume of oil produced during the last 24 hours of a 72-hour period during which the well shall be produced at a constant rate. The Commission and offset operators to both the shut-in well(s) and the transfer well(s) may witness such tests if they so desire and shall be notified of the tests at least 48 hours prior to the commencement thereof.

The Secretary-Director of the Commission may grant approval of the interference tests and transfer of allowable upon receipt of waivers from all offset operators or upon expiration of a 20-day waiting period, provided no offset operator has objected to the proposed test and transfer.

(4) That this case shall be reopened at an examiner hearing in July, 1965, at which time the operators in the subject pool shall appear and present all available reservoir information, including interference test results, to establish the area that can be efficiently and economically drained and developed by one well and show cause why the Flying "M" San Andres Pool should not be developed on 40-acre spacing units.

(5) 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

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

S E A L

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

esr/

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2088
SANTA FE

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

July 15, 1965

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

Re: Case No. 3072
Order No. R-2746-A
Applicant:

Coastal States Gas Prod. Co.

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

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

OTHER

DRAFT

JMD/esr

July 9, 1964

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CF Subj. _____

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

CASE No. 3072

Order No. R-2746

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
July 1, 1964, at Santa Fe, New Mexico, before Examiner
Elvis A. Utz.

NOW, on this _____ day of July, 1964, 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 Com-
pany, seeks extension of the Flying "M" San Andres Pool in Town-
ship 9 South, Range 33 East, NMPM, Lea County, New Mexico.

(3) That the proposed extension of the Flying "M" San
Andres Pool should be considered in a nomenclature case to be
called by the Commission and docketed for hearing in the near
future.

(4) That the applicant seeks the promulgation of temporary
special rules and regulations governing the Flying "M" San Andres
Pool, including a provision for 80-acre spacing.

(5) 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 80-acre spacing units should be promulgated for the Flying "M" San Andres Pool.

(6) 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.

(7) 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.

(8) That an administrative procedure should be established whereby the operators in the ~~Puerto Chiquito Callup Oil Pool~~ *pool* would be permitted to conduct interference tests and to transfer allowables among producing wells on the same lease during the temporary ~~three~~ year period in order to facilitate the gathering of information pertaining to reservoir characteristics.

(9) ~~That~~ That this case should be reopened at an examiner hearing in ^{July} June, 1965, at which time the operators in the subject

pool should appear and ~~show cause why the Flying "M" San Andres~~ *present all available reservoir information*

including interference test results, to establish the area that can be efficiently and economically drained and developed by one well and show cause why the subject pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

Temporary
That Special Rules and Regulations for the Flying "M"

the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Flying "M" San Andres Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

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 comprising a single quarter-quarter section or lot. 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. The first well drilled on every standard or non-standard unit in the Flying "M" San Andres Pool shall be located in the NW/4 or the SE/4 of a governmental quarter section. All wells shall be located within 200 feet of the center of a governmental quarter-quarter section.

RULE 5. The Secretary-Director may grant an exception to the footage 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, provided the well

will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed unorthodox 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 offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) in the Flying "M" San Andres Pool shall be assigned an 80-acre proportional factor of 2.00 for allowable purposes, and in the event there is more than one well on an 80-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 in the Flying "M" San Andres Pool as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That an 80-acre allowable shall not be assigned to a well in the Flying "M" San Andres Pool until the operator of the well files a new Form C-128 and Form C-116 with the Commission.

(2) That any well presently drilling to or completed in the San Andres formation within the Flying "M" San Andres Pool or within one mile of said pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before August 10, 1964.

~~(3) That this case shall be reopened at an examiner hearing.~~

(3) (4) That the Secretary-Director of the Commission is hereby authorized to approve interference tests and the transfer of allowables to wells on the same lease or, if in a unitized area, to wells in the same participating area, provided however, that any such authorization shall be limited to a period of six months, but may be renewed. No transfer well shall be permitted to receive, in addition to its own allowable, more than 50 per cent of one top unit allowable for the ~~Puerto Chiquito Gallup Oil~~ Pool.

To obtain administrative approval for interference tests and the transfer of allowable, the operator shall submit in triplicate a request for such authority describing in detail the proposed method of conducting such tests and transferring the allowable. The application shall be accompanied by a plat showing thereon all ~~Gallup~~ wells within a radius of two miles of the proposed shut-in well(s) and the transfer well(s). The plat shall also identify each lease or participating area as to ownership or operating rights. The application shall include evidence that all offset operators to the shut-in well(s) and the transfer well(s) have been furnished a complete copy of the application. It shall also be accompanied by Form C-116 for each shut-in well, showing the results of a pre-shut-in test to determine the amount of allowable to be transferred. The transferred allowable shall not exceed the volume of oil produced during the last 24 hours of a 72-hour period during which the well shall be produced at a constant rate. The Commission and offset operators to both the shut-in well(s) and the transfer well(s) may witness such tests if they so desire

and shall be notified of the tests at least 48 hours prior to the commencement thereof.

The Secretary-Director of the Commission may grant approval of the interference tests and transfer of allowable upon receipt of waivers from all offset operators or upon expiration of a 20-day waiting period, provided no offset operator has objected to the proposed test and transfer.

(4) *That this case shall be reopened at an examiner hearing in June, 1965, at which time the operators in the subject pool shall appear and present all available reservoir information, including interference test results, to establish the area that can be efficiently and economically drained and developed by one well and show cause why the "Flying M" San Andres Pool should not be developed on 40 acre spacing units.*

(5) *Retain jurisdiction*

Done at D. C.

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. 2904
Order No. R-2576

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

~~This cause came on for hearing at 9 o'clock a.m. on September 25, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.~~

~~NOW, on this 3rd day of October, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,~~

FINDS:

(1) That due 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 pool for ~~Abo~~ production and the promulgation of temporary special rules and regulations governing said pool, including provisions for 80-acre spacing and limited well locations.

(3) That a new oil pool for Abo production should be created and ~~designated the Flying "M" Abo Oil Pool.~~ This pool was discovered by the Coastal States Gas Producing Company Southern Minerals State Well No. 1, located in Unit J of Section 16, Township 9 South, Range 33 East, ~~NMPM, Lea County, New Mexico.~~ The top of the perforations in the Abo formation is at 8603 feet.

(4) 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

-2-

CASE No. 2904
Order No. R-2576

too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the Flying "M" Abo Oil Pool.

(5) 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.

(6) 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.

(7) ~~That~~ This case should be reopened at an examiner hearing in ~~October~~, 1965, at which time the operators in the subject pool should appear and show cause why the Flying "M" Abo Oil Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool ~~for Abo production is hereby created and designated~~ the Flying "M" Abo Oil Pool, consisting of the following-described area:

~~TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM~~
~~Section 15: W/2 W/2~~
~~Section 16: E/2~~

(2) That Special Rules and Regulations for the Flying "M" Abo Oil Pool ~~are hereby promulgated as follows:~~
SA

SPECIAL RULES AND REGULATIONS
FOR THE
FLYING "M" ~~ABO~~ OIL POOL
SA

RULE 1. Each well completed or recompleted in the Flying "M" Abo Oil Pool or in the Abo formation within one mile of the Flying "M" Abo Oil Pool, and not nearer to or within the limits of another designated Abo pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations herein-after set forth.

RULE 2. Each well completed or recompleted in the Flying "M" Abo Oil Pool shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a single governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

-3-

CASE No. 2904
Order No. R-2576

RULE 3. The Secretary-Director 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 comprising a single quarter-quarter section or lot. 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. The first well drilled on every standard or non-standard unit in the Flying "M" Abo Oil Pool shall be located in the NW/4 or the SE/4 of a governmental quarter section. All wells shall be located within 200 feet of the center of a governmental quarter-quarter section.

RULE 5. The Secretary-Director may grant an exception to the footage 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, provided the well will be located no nearer than 330 feet to the outer boundary of the unit. All operators offsetting the proposed unorthodox 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 offset operators or if no offset operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) in the Flying "M" Abo Oil Pool shall be assigned an 80-acre proportional factor of ~~4.00~~ for allowable purposes, and in the event there is more than one well on an 80-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 in the Flying "M" ~~Abo~~ Oil Pool as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That an 80-acre allowable shall not be assigned to a well in the Flying "M" ~~Abo~~ Oil Pool until the operator of the well files a new Form C-128 and Form C-116 with the Commission.

-4-

CASE No. 2904

Order No. R-2576

June 65
(2) That this case shall be reopened at an examiner hearing in ~~October, 1964~~, at which time the operators in the subject pool may appear and show cause why the Flying "M" Abo Oil Pool should not be developed on 40-acre spacing units.

(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

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

S E A L

esr/

Docket No. 18-64

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 1, 1964

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

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

CASE 3063: (Continued from June 10th Examiner Hearing)

Application of R. C. Davoust Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Turkey Track Section 3 Unit Area comprising 480 acres of State land in Section 3, Township 19 South, Range 29 East, Eddy County, New Mexico.

CASE 3064: (Continued from June 10th Examiner Hearing)

Application of R. C. Davoust Company for a waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the expansion of the Turkey Track Queen Waterflood Project in Section 34, Township 18 South, Range 29 East and Section 3, Township 19 South, Range 29 East, Turkey Track Field, Eddy County, New Mexico, to include the Grayburg formation.

CASE 3070: Application of Nearburg & Ingram and Kincaid & Watson Drilling Company for a waterflood project, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to institute a waterflood project in the Square Lake Pool by the injection of water into the Grayburg formation through three wells located in Section 6, Township 17 South, Range 30 East, Eddy County, New Mexico.

CASE 3071: Application of Texas Pacific Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its J. P. Collier Well No. 1 located in Unit F of Section 10, Township 11 South, Range 33 East, Lea County, New Mexico, to produce oil from the North Bagley-Upper Pennsylvanian Pool and an undesignated Middle Pennsylvanian Pool through 2 1/16 inch tubing.

CASE 3060: (Reopened)

Application of Frank Darden for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Artesia Pool in his Cowtown Unit Area by the injection of water into the Grayburg and San Andres formations through two injection wells in Sections 13 and 24, Township 18 South, Range 28 East, Eddy County, New Mexico.

CASE 3072: Application of Coastal States Gas Producing Company for the extension of a pool and for special temporary pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the Flying "M" San Andres Pool in Township 9 South, Range 33 East, Lea County, New Mexico, and temporary special rules therefor, including a provision for 80-acre well spacing and proration units.

CASE 3073: Application of Texaco Inc., for the creation of a new oil pool and for special temporary pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Pennsylvanian production for its Navajo Tribal AL Well No. 1 located in Unit H of Section 28, Township 26 North, Range 18 West, San Juan County, New Mexico, and for the establishment of temporary pool rules including a provision for 160-acre spacing and a GOR limitation of

4000 to 1. Applicant further seeks the establishment of an administrative procedure whereby interference tests could be conducted and allowables transferred.

CASE 3074: Application of Continental Oil Company for an amendment of Order No. R-2385, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-2385 to substitute for water injection purposes a well located in Unit H of Section 9, Township 17 South, Range 29 East, Eddy County, New Mexico, for the presently authorized well in Unit I of said Section 9.

CASE 3075: Application of Marathon Oil Company for a special gas well test, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce and flare approximately 1000 MCF per day for a period of not less than three nor more than 30 days from Tom Brown Drilling Company's Antelope Sink Unit Well No. 1, located in Unit G of Section 18, Township 19 South, Range 24 East, Eddy County, New Mexico, in an effort to evaluate the reservoir.

CASE 3076: Application of Marathon 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 NW/4 and NE/4 SW/4 of Section 31, Township 17 South, Range 35 East, Vacuum-Upper Pennsylvanian Pool, Lea County, New Mexico, said unit to be dedicated to its State Warn A/1 Well No. 3, located in Unit F of said Section 31.

CASE 3038: (Reopened)
Application of Kennedy Oil Company for a waterflood project and for designation of a waterflood buffer zone, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Square Lake Pool by the injection of water into the Grayburg-San Andres formation through one well located in Unit L of Section 20, Township 16 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks the designation of the N/2 SW/4 of said Section 20 as a buffer zone offsetting Newmont Oil Company's Waterflood Project immediately south.

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

SYMBOLS

DL = Day Letter
NL = Night Letter
LT = International Letter Telegram

1201 (4-60)

1965 JUL 6 AM 11 27

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LA059 SSB070

L RWA039 PD=ROSWELL NMEX 6 1015A MST=

NEW MEXICO OIL CONSERVATION COMMISSION=

STATE LAND OFFICE BUILDING SANTA FE NMEX=

ATTENTION ELVIS A UTZ, EXAMINER,

OR DANIEL S NUTTER,

ALTERNATE EXAMINER

RE: CASE 3072 (REOPENED) FLYING "M" SAN ANDRES

POOL, LEA COUNTY NEW MEXICO

SHELL OIL COMPANY, AN OPERATOR IN SUBJECT POOL, RECOMMENDS 80-ACRE SPACING BE PERMANENTLY ESTABLISHED FOR THE SUBJECT FIELD AND SUPPORTS COASTAL STATES PRODUCING COMPANY IN THEIR APPEARANCE BEFORE THE COMMISSION TO MAINTAIN SAID SPACING=

SHELL OIL CO S B DEAL ACTING DIVISION PRODUCTION MANAGER=

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

SYMBOLS

DL = Day Letter
NL = Night Letter
LT = International Letter Telegram

1201 (4-60)

1965 JUN 30 PM 4 27

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LA170 DB343

D MDA133 NL PD1EX MIDLAND TEX 30 =

NEW MEXICO OIL CONSERVATION COMMISSION=

PO BOX 2088 SANTA FE NMEX=

RE CASE 3072 FLYING M SAN ANDRES POOL WE OWN LEASEHOLD ACREAGE IN N/W SEC 16 & SE/4 SEC 8 9S 33E AND OPPOSE EIGHTY ACRE SPACING BECAUSE WE BELIEVE SAN ANDRES FORMATION CAN BE MORE EFFICIENTLY AND ECONOMICALLY PRODUCED ON A FORTY ACRE PATTERN=

REDFERN DEVELOPMENT CORPORATION BY JOHN J REDFERN JR.

500
5500

Case 3072

Heard 7-1-64

Rec. 7-7-64

1. Grant Coastal States request for temporary 80 Ac. spacing in "lying in" San Andreas oil pool.
2. Include a finding to the effect that ~~the present recommended pool limits~~ ~~with the~~ all completed wells are within 1 mile of the present pool limits therefore the spacing is preserved until such time as other routine recommended procedure extends the pool.
3. There are two exceptions to the fixed spacing Rules which should be approved in the order.

1. Coastal Sts. - Skelly # 2, 654/N, 1955/21 - 95-33E

2. Coastal Sts. - So. Miners St. # 1, 2307/S, 21-95-33E
2314E

Thurston

Use order R-2576 as a guide.
Da

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



P. O. BOX 671
SANTA FE

LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

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

July 29, 1964

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Hinkle Building
Post Office Box 10
Roswell, New Mexico

Re: Case No. 3072
Order No. R-2746
Applicant:

Coastal States Gas Producing Co.

DOCKET MAILED

Date 6-23-65
JP

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.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Astec OCC

OTHER

DOCKET MAILED

Date 6-23-65

Mr. John J. Redfern, Jr.

1203 Wilco Bldg. - Midland, Texas

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. 3072
Order No. R-2746-A

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 7, 1965, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of July, 1965, 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-2746, dated July 29, 1964, temporary Special Rules and Regulations were promulgated for the Flying "M" San Andres Pool, Lea County, New Mexico.

(3) That pursuant to the provisions of Order No. R-2746, this case was reopened to allow the operators in the subject pool to appear and show cause why the Flying "M" San Andres Pool should not be developed on 40-acre spacing units.

(4) That the evidence establishes that one well in the Flying "M" San Andres Pool can efficiently and economically drain and develop 80 acres.

-2-

CASE No. 3072

Order No. R-2746-A

(5) That the Special Rules and Regulations promulgated by Order No. R-2746 have afforded and 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.

(6) That 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-2746 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Flying "M" San Andres Pool promulgated by Order No. R-2746 are hereby continued in full force and effect until further order of the Commission.

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

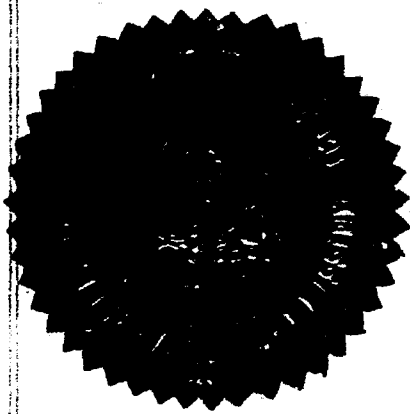
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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



esr/

DRAFT

JMD/esr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CF Subj. _____

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

CASE No. 3072

Order No. R- 2746-A

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
July 7, 1965, at Santa Fe, New Mexico, before Examiner
Daniel S. Nutter.

NOW, on this _____ day of July, 1965, 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-2746, dated July 29, 1964, tempo-
rary Special Rules and Regulations were promulgated for the
Flying "M" San Andres Pool, Lea County, New Mexico.

(3) That pursuant to the provisions of Order No. R-2746,
this case was reopened to allow the operators in the subject pool
to appear and show cause why the Flying "M" San Andres Pool
should not be developed on 40-acre spacing units.

(4) That the evidence establishes that one well in the
Flying "M" San Andres Pool can efficiently and economically
drain and develop 80 acres.

(5) That the Special Rules and Regulations promulgated by Order No. R-2746 have afforded and 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.

(6) That 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-2746 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Flying "M" San Andres Pool promulgated by Order No. R-2746 are hereby continued in full force and effect until further order of the Commission.

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

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