CASE NO. 5438: EXXON CORPORATION FOR SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO

CASE No.

5438

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
19 March 1975

EXAMINER HEARING

IN THE MATTER OF:

CASE 5438: Application of Exxon Corporation for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of temporary special rules for the Fairview Mills-Wolfcamp Gas Pool, Township 25 South, Range 34 East, Lea County, New Mexico, including a provision for 640-acre spacing units.

CASE #5438

BEFORE: Daniel S. Nutter, Examiner.

For the New Mexico Oil Conservation Commission: William H. Carr, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico 87501

For Exxon Corporation: Clarence E. Hinkle, Esq.
HINKLE, BONDURANT, CHRISTY & COX
P. O. Box 10
Roswell, New Mexico

I N D E X

E X H I B I T S

MR. NUTTER: We'll call Case Number 5438.

MR. CARR: Case Number 5438. Application of Exxon Corporation for special pool rules, Lea County, New Mexico.

MR. HINKLE: Clarence E. Hinkle, Roswell, New Mexico, appearing for Exxon Corporation. We have two witnesses I'd like to have sworn and we have eight exhibits.

MR. NUTTER: Are there any other appearances in this case?

(No response.)

MR. NUTTER: Will the witnesses stand and be sworn?

(Witnesses sworn.)

JOHN W. IRVING,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name, your residence, and by whom you're employed.

A My name is John Irving. I live in Midland, Texas. I'm employed by Exxon Company, U.S.A.

Q Are you petroleum geologist?

A Yes, sir, I'm a petroleum geologist.

Q Have you previously testified before the Com-

mission?

A No, sir.

Q State briefly your educational background and experience as a petroleum geologist.

A My formal education was in Mississippi. I received a BS degree in geology in 1957 from Mississippi, at University of Southern Mississippi, and completed my course work for MS degree in geology at Mississippi State University in 1958. At that time I went to work for Humble Oil and Refining Company, now Exxon, and during the past seventeen years I have worked in both exploration and production geology, sub-surface and surface, in north Texas, west Texas, New Mexico, and the Rocky Mountain area, the plains states, midwestern states, and the south-eastern states. I am currently exploitation geologist for the mid-continent division.

Q Are you familiar and made a study of the area which is the subject of this hearing?

A Yes, sir.

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

A Yes, sir.

Q What is Exxon seeking to accomplish?

A Exxon seeks the promulgation of temporary special rules for the Fairview Mills Wolfcamp Gas Pool, Township 25 South, Range 34 East, Lea County, New Mexico, including a provision for 640-acre spacing units.

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

A Yes, sir.

Q Are these the ones marked Exhibits 1, 2, and 3?

A Yes, sir, they are.

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

A Exhibit 1 is a location map for orientation purposes. It shows the oil and gas fields in southeastern New Mexico. The oil is shown in green and the gas is shown in red. It also shows state and county lands as well as township and ranges. The orange area in the southeast portion of the plat indicates the location of the Fairview Mills field, and that's all.

Q Is that all?

A Yes.

Q Refer to Exhibit 2 and explain that.

A Exhibit 2 is another location map and lease

ownership map on a larger scale. It shows township, ranges and sections, and the current lease ownership of record in the general area, as well as location of all the wells in the general area.

Q Are all of the wells producing from the same formation?

A The two wells that are productive on this plat are producing from the same geologic formation; that is Wolfcamp, but at different intervals.

Q That's the only two wells --

A The only two.

Q -- producing in Wolfcamp?

A Yes, sir.

And both fields are shown on this plat, the Fairview-Mills Field indicated in the Strickland, and the Dogie Draw Wolfcamp Oil Field located east of Fairview Mills.

Q And what section is that in?

A Dogie Draw is one well in that field located in Section 20, Township 25 South, Range 35 East. Exxon's Fairview Mills Field, consisting of one well, the Exxon Fairview Mills Federal, is located in Section 14, Township 25 South, Range 34 East. The well is located 990

feet from the south line of the section and 1980 feet from the east line of the section.

Q Now, refer to Exhibit 3 and explain that.

A Exhibit 3 is a structural cross-section showing the two wells just mentioned; on the left, the Exxon Fairview Mills Federal, a portion of the wireline log, and on the right, the Southland Royalty Gulf Federal Number 1, a portion of that well log.

Q These two wells -- excuse me. These two wells shown by the index map?

A Yes, sir, the index map in the lower lefthand corner of the exhibit shows the location of cross-section AA Prime. Also shown on the individual well logs are the completion intervals for each well. The Exxon Fairview Mills Federal was completed in December of 1974 in the interval 13,797 feet to 13,805 feet, for a calculated absolute open flow of 5.7 million cubic feet of gas per day plus 238 barrels condensing per million.

On the east part of the cross-section the Southland Federal Royalty Number 1 was completed in May of 1968 as an oil well in the Wolfcamp formation. Over the gross interval 13,466 feet to 14,379 feet. The well brought 213 barrels of oil, 82 barrels of water in 24 hours. The

December 1974 production from that well was indicated to be 319 barrels of oil and 1,472,000 cubic feet of gas, plus 60 barrels of water.

Q Was the Fairview Mills Federal Number 1 drilled deeper than is shown on this exhibit?

A Yes, sir, it was.

Q What was the total depth?

A Total depth of the Fairview -- on the Southland Royalty --

Q No, on the Fairview Mills.

A Excuse me, on Exxon's Fairview Mills Federal, the total depth was 20,951 feet.

Q And it was plugged back, then, to complete in the Wolfcamp?

A Yes, sir.

Q Anything further with respect to Exhibit 3?

A Let me just refer to the growth correlations of the geologic formations as shown on this cross-section, starting at the bottom part of the section we show correlation of the Morrow and moving upward the Derry and then the Pennsylvanian, undesignated interval, and overlying that is the Wolfcamp formation, which extends on beyond the top of the cross-section. Structural rela-

tionship between these two wells, you'll note on the base of the Wolfcamp or the top of the Penn, on the Exxon Fairview Federal Number 1 well that point is sub-C 10553 and on the Southland Royalty Gulf Federal Number 1 it's at Sub-C 101808; 255 feet difference structurally.

Q That is the Fairview Mills is 250 feet higher?

A Yes, sir.

Q Do you have anything further with respect to these exhibits?

A No, sir.

MR. HINKLE: We'd like to offer Exhibits 1, 2, and 3.

MR. NUTTER: Exhibits 1, 2, and 3 will be admitted in evidence.

MR. HINKLE: That's all of this witness.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Irving, actually, inspection of the Exhibit Number 3 indicates that the Southland Royalty Well is perforated in the Wolfcamp as well as the Pennsylvanian, isn't that true?

A Yes, sir, that is correct.

Q And how has the Commission defined that pool, as

being a thermal Penn pool or as a Wolfcamp pool?

A It's defined as being a Wolfcamp pool.

Q Do you know whether the production is in fact coming from the Wolfcamp or from the Pennsylvanian or --

A On the initial tests on the Southland Royalty well there was production from all intervals.

Q No separate tests made of the Pennsylvanian and Wolfcamp?

A Yes, sir, there were separate tests, and there was production from each test.

Q I see. Now, was the Pennsylvanian tested in your well?

A No, sir.

Q And you've only got this little interval that's marked red on your log here as being a perforated interval, correct?

A Yes.

Q And they've got this great big green spread that runs up and down that thing for almost a thousand feet?

A That's correct.

Q Now, do you have any knowledge or belief or theory as to whether the Wolfcamp pay in your pool is correlative with the Wolfcamp pay in the Southland Royalty and whether the pay extends across through that interval between the two wells?

A I would say that at this point it cannot be definitely established by correlation of the geology across here as to whether or not there is a possibility of there being the same interval in the Exxon well as a portion of that interval in the Southland Royalty well. The correlations are not that good and the Wolfcamp sections thickens some 187 feet between the two wells; so there may be some gross correlation made within the Wolfcamp, but I don't believe we can correlate this individual thin productive interval in Exxon's Fairview Mills well with any particular interval in the Southland Royalty well.

Q Now, you mentioned on Exhibit 2 that there were only two productive wells here. Now, did any of these other wells that are shown on this exhibit penetrate the Wolfcamp?

A No, sir, they did not.

Q They are all shallow test, huh?

A Yes, sir.

Q So we really have no way of knowing from the exhibits we've seen to date whether the Wolfcamp formation in your Exxon Fairview Mills Federal well extends out 640 acres or not, is this correct?

A That's correct. We don't. We cannot determine the limits on --

Q From the information we have here so far?

A Yes, sir.

MR. NUTTER: Are there any further questions of Mr. Irving?

(No response.)

MR. NUTTER: You may be excused.

MR. HINKLE: I'd like to call the next witness.

HARLEY REIVES,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name, your residence, and by whom you're employed.

A My name is Harley Reives. I'm a Conservation Engineer for Exxon in Midland, Texas, for their mid-continent division which covers the State of New Mexico.

Q You've previously testified before the Commission?

A Yes, sir, I have.

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

A Yes, they are.

Q Have you made a study of this particular area that's involved in this case?

A Yes, sir I have.

MR. HINKLE: Are the qualifications sufficient?

MR. NUTTER: Yes, they are.

Q (By Mr. Hinkle) Have you prepared or has there been prepared under your direction certain exhibits for introduction in this case?

A Yes, sir, there have.

Q And they are the ones that have been marked Exhibits 4 through 8?

A Yes, sir.

Q Refer to Exhibit 4 and explain this.

A Exhibit 4 gives a completion date on Exxon's Fairview Mills Federal Number 1, which was drilled to a total depth of 20,915 feet and plugged back to 13,865. A tabulation of the numerous strings of casings set in this well follows, showing a 7-5/8ths liner, 10-3/4 inch casings, and a 7-7/8ths oil string.

This well was perforated 13,797 to 13,805; had a small acid treatment of 2000 gallons; and initial potential is 5.7 million per day with 258 barrels of condensate per million.

MR. NUTTER: Mr. Reives, before you get off that exhibit, I think there may be a number missing there. On this third string of casings shown there, this exhibit says 7/8ths inch at 12 --

A 7-7/8ths.

MR. NUTTER: 7-7/8ths, okay. Go ahead.

Q (By Mr. Hinkle) Now, refer to Exhibit Number 5 --

A That's 7-5/8ths, is what it is.

MR. NUTTER: Now, your liner up here is 7-5/8ths?

A The liner is set below this stuff.

MR. NUTTER: So this casing string should be 7-5/8ths also?

A Yeah, it would be 7-5/8ths too.

MR. NUTTER: Okay.

Q (By Mr. Hinkle) Refer to Exhibit 5 and explain that.

A Exhibit 5 gives the reservoir data as we know it to date for this reservoir and we estimate the porosity on 11 net feet as shown here of 9.5; water at 30. The original reservoir pressure as we have measured in this well is 10,426. Now, you were asking something, and we don't have a real good record on the Dogie Draw well. We do have scout reports indicating that they measured up to 8800 pounds of pressure in that well initially, and that well has been completed since 1968, and we have got a pressure much higher than they had at that time, so there are indications that they are separated. 10,426 is considerably higher than normal salt water grading, or

in West Texas grading, .4, you know, so this is quite a high pressure area at this depth. Gas gravity is .7. The condensate gravity is 52.1, and the condensate ratio is 238 barrels per million.

Q Now, find Exhibit 6 and explain that.

A Exhibit 6 is the New Mexico Oil Conservation Commission Form C-122, which is the tabulated open flow potential, and gives the basic numbers that were used to claculate the 5.7 million cubic feet of gas per day that this well indicated was the open flow on the test made on December 30th, 1974. You'll notice the initial tubing pressure on this well was something like 177 pounds and actually our last flow tubing pressure was like 3080 pounds. This is a type test where you run four one-hour flow tests, as we had no place to put the gas at that time and we were allowed to do this to make initial tests on it.

Q Explain Exhibit Number 7.

A Exhibit Number 7 is two laboratory analyses of the gas -- first is an analysis of the gas from a high state separator from this particular well. This high state separator was operating at 400 psi and the volume of gas was -- they listed it here from the lab report as 5.2. If you look at the flow rates on the Form 122 it shows 4.755, but I imagine that's butane. The lab

gets one number that was received in the pool and not corrected. This shows the comatograph (sic) analysis of the gas, showing that it is 80 percent methane, 20 percent ethane, and it also gives a sulphur determination; there's a small amount of sulphur, very small, that looks like in this gas. One note on this particular analysis, the BTU content is something like slightly over 1200 for the gas.

Now, on the second analysis, which is more significant in determining whether it's a gas well or an oil well, they have run a hydrocarbon analysis, actually by the IBM -- the distillation process. Now, the initial boiling point on this thing was 74 degrees, which is low, indicating gas, liquids. The end boiling point is something like 724 degrees Fahrenheit, which is in the range of what we normally consider -- it's pretty close to an oil or gas -- and then the percent recovery, if it's anything over 90 or 95 percent we usually consider the oil recover as a condensate. The gravity as measured on this thing was 52.10 and those are just some more facts that we gathered for our determination whether we had an oil or gas well.

Q Now refer to Exhibit 8 and wxplain that.

A Number 8 Exhibit is an individual well data sheet prepared by a bottom hole pressure concern that

ran the pressures on this well. It shows the surface pressure on down to pressures measured in the well, down to 12,500 feet. That was as far as they could get the gauge to go at this pressure, and by extrapolating to the mid-perforation they obtained the original bottom hole pressure of 10,426 pounds.

MR. NUTTER: They actually did measure it at 10.124, though?

A They measured 19.124, yes, sir. Now, of significance on this particular thing, besides the high pressure that we obtained, you will note that the gradient all the way from the surface down is about .23, and if this had been an oil we would have found some gradient higher than that; something in the neighborhood of .28-9, and so this was another factor in us considering this a gas well, and this being condensate in the well.

Q Do you have any estimate of what the cost of drilling wells to this particular formation is in this area?

A Yes, sir, this -- we drilled this well, as you know, around 20,000 feet, and of course the cost of drilling that is quite higher than normally a well drilled to 14,000 feet. We did have our drilling and completion group to make an estimate of what it would cost to drill a well in this area to the 14,000 feet depth, and their estimated cost, without too much trouble, is about $1.1

million dollars, which is quite a sum for an 11 foot pay zone well.

Q Have you entered into negotiations on acquiring connections, pipeline connections to run the gas?

A Yes, sir, we have three gas pipelines in the general vicinity. We have already had one turndown from one pipeline because they didn't think there was enough reserves for them to invest even to run a line to us.

Q You do have --

MR. NUTTER: Who were they?

A I don't know what the distance was; seems like it's four or five miles there, and I wouldn't try to hold on that distance. The nearest pipeline has made us an offer and we just received that in the office the day I left, which was Monday, so I think we'll have a sale on this gas in a relatively short time, I hope. Now, we're estimating probably in 100 days or three or four months at the most, if everything goes right on the negotiations on this particular contract.

Q Now, you're requesting special pool rules in this case. Do you have any recommendations to the Commission as to the --

A Yes, sir, we're recommending that the well location be on 640-acre proration units; that the well location be 990 from the lease lines or - and I have looked

at some 20-plus fields in the State of New Mexico and seems like the standard for any 640 is 1650 from the lease lines, and we have no objections to that. We will have no problem with the 1650. Also I note that all of the 640 field rules that have been recently adopted also require 330 from the quarter quarter section line, which we have no problem with. Now, we do -- we are asking for the -- for this -- for these rules on a temporary basis. We would prefer two years from now for us to properly evaluate this deal, and determine what our reserves are from the production figures, which we think we can get within that period of time; that would be much more reliable than anything we can guess at right now. We have no idea exactly what the reserves will be here. We already had the pipe laid in the ground and we could get it at this well, but we do need to evaluate this particular well to see what the drilling prospects are in the area. If we can't get two years, we would request, if you approve a one-year temporary basis, that that be begun at the time the pipeline connection is made, to give us at least a full year on production.

Q Do you have any information as to the area of drainage of this well at the present time?

A No, sir, like I say, this thing is -- net pay thickness is 11 feet and there is no way -- the nearest well is something like two and one-half miles off, and

this looks like it's an entirely different geological provence over there from the looks of the logs and the cross sections we have, and also the type pressures we have in this well. So, we really don't know at this time until wells are drilled and our production is obtained.

Q And anticipate that through the production history of this well and possibly by the drilling of additional wells, by the end of this temporary period you will have sufficient information --

A Yes, sir. I think we'll have a much better feel for what it is at that time. I think we can have a more technical case. Right now there's just no way with available data to really say what the area drainage is or the -- how much one well will drain.

Q In your opinion would the approval of this application be in the interests of conservation, prevention of waste, and protect royalty rights?

A Yes, sir, I do believe that.

MR. HINKLE: We'd like to offer Exhibits 4 through 8.

MR. NUTTER: Humble Exhibits 4 through -- Exxon Exhibits 4 through 8 will be admitted into evidence.

MR. HINKLE: Thank you, Dan. That's all.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Reives, what is the appearance of the

liquids produced from this well?

A I meant to bring that up here. It's -- I've got a bottle on my desk, but the airlines don't want me to bring it along. It is very -- it's a light straw color.

Q It is a straw color?

A Yes. It smells about like condensate would normally smell, you know, a lot of fluid-type stuff.

Q Now, what is the actual gas-oil ratio? You gave us the condensate.

A That is shown on Form 122?

Q Yeah, I saw it but I want you to read it into the record.

A That was 4200 --

Q 4200 to 1.

A The gas-oil ratio was 4200 cubic feet per barrel.

Q And even with this low ratio you feel like you got a gas well?

A Yes, sir, we feel that we've got a gas well.

Q Do you think there's any possibility of a retrograde condensate here?

A Well, that is always a fact to think, Mr. Nutter, in any gas condensate field, that you'll have retrograde condensation; any time that you don't maintain the pressure in there it's going to have retrograde con-

densation. At the time you reach the point that -- the dew point, or whatever you want to call it, that the gas starts dropping liquids out, and then you're going to have the old "J" curve, which causes your barrels per million to be reduced.

Q But you won't have any idea for sure of this until you get the well on production and you observe it.

A Yes, sir, and we -- we've even thought about taking a recombined sample on this well, but it's very expensive and there's not too many laboratories that can do this; what we think is an adequate job to do evaluation. We don't think we know enough about this reservoir yet to really start spending that money, you know, and doing that type study.

Q And you've taken no draw-down tests as yet on the well, either?

A Well, the only test we have is written on that Form 122, which shows a pretty high draw-down pressure, which indicates that we do have -- it may be a limited reserve, and what we're even thinking about, you can take a volume -- metric volume. We may not be draining a big area and we may be draining a big area; we just don't know.

Q Well, right now all you've got is four one-hour flows. You have no reservoir limits test; you have

no draw-down test, as such.

A That's right.

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

(No response.)

MR. NUTTER: You may be excused. Do you have anything further, Mr. Hinkle?

MR. HINKLE: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 5438?

(No response.)

MR. NUTTER: We'll take the case under advisement.

STATE OF NEW MEXICO)
)
COUNTY OF SANTA FE)

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, Notary Public and General Court Reporter, Santa Fe, New Mexico, DO HEREBY CERTIFY that the facts stated in the caption hereto are true and correct; that I reported the captioned proceedings and that the foregoing 23 pages constitute a full, true and correct transcript of said proceedings.

WITNESS my hand and seal, this 3rd day of April, 1975, at Santa Fe, New Mexico.

Sally Walton Boyd
Sally Walton Boyd
Notary Public and General
Court Reporter

My Commission expires:

10 September 1975

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5438, heard by me on 3/19, 1975.

....., Examiner
New Mexico Oil Conservation Commission

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OIL CONSERVATION COMMISSION

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MEMBER

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

April 8, 1975

Mr. Clarence Hinkle
Hinkle, Bondurant, Cox and Eaton
P. O. Box 10
Roswell, New Mexico 88201

Re: CASE NO. 5438
ORDER NO. R-4996

Applicant:

Exxon Corporation

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

ALP/ir

Copy of order also sent to:

Hobbs OCC X X
Artesia OCC _____
Aztec OCC _____

Other _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 5438
Order No. R-4996

APPLICATION OF EXXON CORPORATION
FOR SPECIAL POOL RULES, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 19, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 8th day of April, 1975, 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, Exxon Corporation, seeks the creation of a new gas pool for Wolfcamp production in Lea County, New Mexico, and the promulgation of special rules and regulations governing said pool, including a provision for 640-acre spacing units.

(3) That the Fairview Mills-Federal Well No. 1 located in Unit O of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico, having its top perforations at 13,797 feet, has discovered a separate common source of supply which should be designated the Fairview Mills-Wolfcamp Gas Pool; that the vertical limits of said pool should be the Wolfcamp formation and that the horizontal limits of said pool should be all of said Section 14.

(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, temporary special rules and regulations providing for 640-acre spacing units should be promulgated for the Fairview Mills-Wolfcamp Gas 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 special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.

(7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Fairview Mills-Wolfcamp Gas Pool, at which time the operators in the subject pool should appear and show cause why the Fairview Mills-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(8) That the first operator to obtain a pipeline connection for a well in the Fairview Mills-Wolfcamp Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an exact date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as a gas pool for Wolfcamp production, is hereby created and designated the Fairview Mills-Wolfcamp Gas Pool, with vertical limits comprising the Wolfcamp formation and horizontal limits comprising the following-described area:

LEA COUNTY, NEW MEXICO
TOWNSHIP 25 SOUTH, RANGE 34 EAST, NMPM
Section 14: All

(2) That temporary special Rules and Regulations for the Fairview Mills-Wolfcamp Gas Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
FAIRVIEW MILLS-WOLFCAMP GAS POOL

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

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section.

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 and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

(a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.

(b) The non-standard unit lies wholly within a governmental section and contains less acreage than a standard unit.

(c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proration 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 operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Fairview Mills-Wolfcamp Gas Pool or in the Wolfcamp formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before April 30, 1975.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Fairview Mills-Wolfcamp Gas Pool shall have dedicated thereto 640 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 640 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Fairview Mills-Wolfcamp Gas Pool or in the Wolfcamp formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Fairview Mills-Wolfcamp Gas Pool, at which time the operators in the subject pool may appear and show cause why the Fairview Mills-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(4) That the first operator to obtain a pipeline connection for a well in the Fairview Mills-Wolfcamp Gas Pool shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for reopening this case.

(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

I. R. TRUJILLO, Chairman

PHIL R. LUCERO, Member

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

S E A L

Case 5438

EXXON COMPANY, U.S.A.
POST OFFICE BOX 1600 · MIDLAND, TEXAS 79701

PRODUCTION DEPARTMENT
MIDCONTINENT DIVISION

L. H. BYRD
MANAGER

February 19, 1975

Fairview Mills
Wolfcamp Gas Pool
Lea County, New Mexico

22-2

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

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

Gentlemen:

We respectfully request an examiner hearing be scheduled to consider Exxon Corporation's application for special rules and regulations for the Fairview Mills Wolfcamp Gas Pool located in Section 14 of T-25-S, R-34-E, Lea County, New Mexico.

Exxon will request that the Commission establish 640-acre spacing units with wells to be located no closer than 990 feet from unit boundaries.

Exxon discovered this field with the completion of our Fairview Mills-Federal No. 1 well in the SW/4 of SE/4 of Section 14. Other interested parties in the area are detailed on the attached list, and a copy of this letter has been furnished each of these operators.

Yours very truly,

L. H. Byrd

2/24/75

RLB/aw
Attachment

Tom. Bob Brown called from Midland and requested this Case be docketed on March 19, 1975 LAP

Case 5438

Atlantic Richfield Company
P. O. Box 1610
Midland, Texas

R. C. Bennett and wife, Billie J. Bennett
P. O. Box264
Midland, Texas

Cities Service Oil Company
P. O. Box 1919
Midland, Texas

Getty Oil Company
P. O. Box 1231
Midland, Texas

Jack L. Russell and wife,Frances E. Russell
P. O. Box 1604
Midland, Texas

Skelly Oil Company
P.O. Box 1351
Midland, Texas

Tenneco Oil Company
1200 Lincoln Tower Building
Denver, Colorado 80203

Dockets Nos. 8-75 and 9-75 are tentatively set for hearing on April 2, and April 16, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 19, 1975

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

ALLOWABLE: (1) Consideration of the allowable production of gas from seventeen prorated pools in Lea, Eddy, Roosevelt, and Chaves Counties, New Mexico, for April, 1975;

(2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for April, 1975.

CASE 5415: (Continued from the February 19, 1975, Examiner Hearing)

Application of Burk Royalty Co., for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Double L Queen Unit Area, comprising 2670 acres, more or less, of Federal, State, and fee lands in Townships 14 and 15 South, Ranges 29 and 30 East, Chaves County, New Mexico.

CASE 5409: (Continued & Readvertised)

Application of Atlantic Richfield Company for a non-standard gas proration unit, an unorthodox gas well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the SE/4 of Section 12 and the NE/4 of Section 13, both in Township 24 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its George W. Toby WN Wells Nos. 4, 1, and 1-A, located, respectively, in Units I and P of said Section 12 and in Unit A of said Section 13.

CASE 5438: Application of Exxon Corporation for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of temporary special rules for the Fairview Mills-Wolfcamp Gas Pool, Township 25 South, Range 34 East, Lea County, New Mexico, including a provision for 640-acre spacing units.

CASE 5439: Application of Gulf Oil Corporation for the amendment of Order No. R-4079, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4079, which order, as amended, authorized the commingling, prior to measurement, of Hobbs Grayburg-San Andres, Hobbs-Blinebry, and Bowers-Seven Rivers production from its W. D. Grimes "A" and "B" Leases in Sections 32 and 33, Township 18 South, Range 38 East, Lea County, New Mexico, to include in said commingling authority Hobbs-Drinkard production.

CASE 5440: Application of Gulf Oil Corporation for two unorthodox oil well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its South Penrose Skelly Wells Nos. 220 and 262 to be located, respectively, 1034 feet from the South line and 2635 feet from the West line of Section 5 and 1300 feet from the South line and 1139 feet from the East line of Section 8, both in Township 22 South, Range 37 East, Penrose Skelly Pool, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2794 to provide an administrative procedure for the approval of additional unorthodox locations for injection and producing wells within the South Penrose Skelly Unit Area.

CASE 5441: Application of J. Gregory Merrion and Robert L. Bayless for downhole commingling, Rio Arriba County, New Mexico. Applicants, in the above-styled cause, seek authority to commingle undesignated Gallup and Basin-Dakota production in the wellbore of the El Paso Canyon Largo NP Well No. 1, located in Unit K of Section 3, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.

CASE 5442: Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of his Feil Federal Well No. 1, to be drilled 660 feet from the North and West lines of Section 28, Township 20 South, Range 25 East, Cemetery-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 28 to be dedicated to the well.

CASE 5443: Application of Sun Oil Company for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Bone Spring production for its Jennings-Federal Well No. 1, located in Unit F of Section 15, Township 19 South, Range 32 East, Lea County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 160-acre proration units.

CASE 5444: Application of C & K Petroleum, Inc., for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a new gas pool for production from the Wolfcamp formation for its Harold Olive Com No. 1 Well, located in Unit O of Section 14, Township 22 South, Range 26 East, Eddy County, New Mexico, and the promulgation of temporary special rules therefor, including a provision for 320-acre spacing units.

CASE 5445: Application of C & K Petroleum, Inc., for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp formation underlying the S/2 or, in the alternative, the SE/4 of Section 14, Township 22 South, Range 26 East, Eddy County, New Mexico, to be dedicated to its Harold Olive Com Well No. 1, located at an orthodox location in the SE/4 of said Section 14. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of the applicant as operator of the well and a charge for the risk involved in drilling said well.

CASE 5446: Application of C & K Petroleum, Inc., for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a new oil pool for Strawn production for its Shipp "27" Well No. 1, located in Unit O of Section 27, Township 16 South, Range 37 East, Lea County, New Mexico, and the promulgation of temporary special rules therefor, including a provision for 80-acre proration units.

CASE 5447: Application of C & K Petroleum, Inc., for amendment of Order No. R-4857, Lea County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Order No. R-4857, which order pooled all mineral interests in the Pennsylvanian formation underlying the SW/4 SE/4 of Section 27, Township 16 South, Range 37 East, Lea County, New Mexico, to pool all such mineral interests underlying the S/2 SE/4 of said Section 27.

CASE 5428: (Continued from the February 19, 1975, Examiner Hearing)

Application of Amax Chemical Corporation for the extension of the Potash-Oil Area, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the Potash-Oil Area in Eddy County, New Mexico, as defined by Order No. R-111-A, as amended, by the addition of the following described lands:

TOWNSHIP 19 SOUTH, RANGE 29 EAST
Section 13: S/2 SE/4
Section 14: W/2 SW/4
Section 23: N/2 NW/4, SE/4 NW/4, S/2 NE/4
Section 24: NW/4, W/2 NE/4, NE/4 NE/4

TOWNSHIP 19 SOUTH, RANGE 30 EAST
Section 14: W/2 NE/4
Section 18: SW/4

LAW OFFICES OF
HUNKER, FEDRIC & HIGGINBOTHAM, P.A.
210 HINKLE BUILDING
POST OFFICE BOX 1837
ROSWELL, NEW MEXICO 88201

GEORGE H. HUNKER, JR.
DON M. FEDRIC
RONALD M. HIGGINBOTHAM
ROBERT I. WALDMAN

TELEPHONE 622-2700
AREA CODE 505

April 25, 1975

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

Re: Fairview Mills-Wolfcamp Gas Pool
Case No. 5438

Attention: Ms. Ida Rodriguez

Dear Mr. Porter:

We return herewith the Transcript of Hearing dated March 19, 1975, adduced in the above matter, together with all of the exhibits which you furnished to us. We appreciate very much your sending us this transcript so that we could examine it.

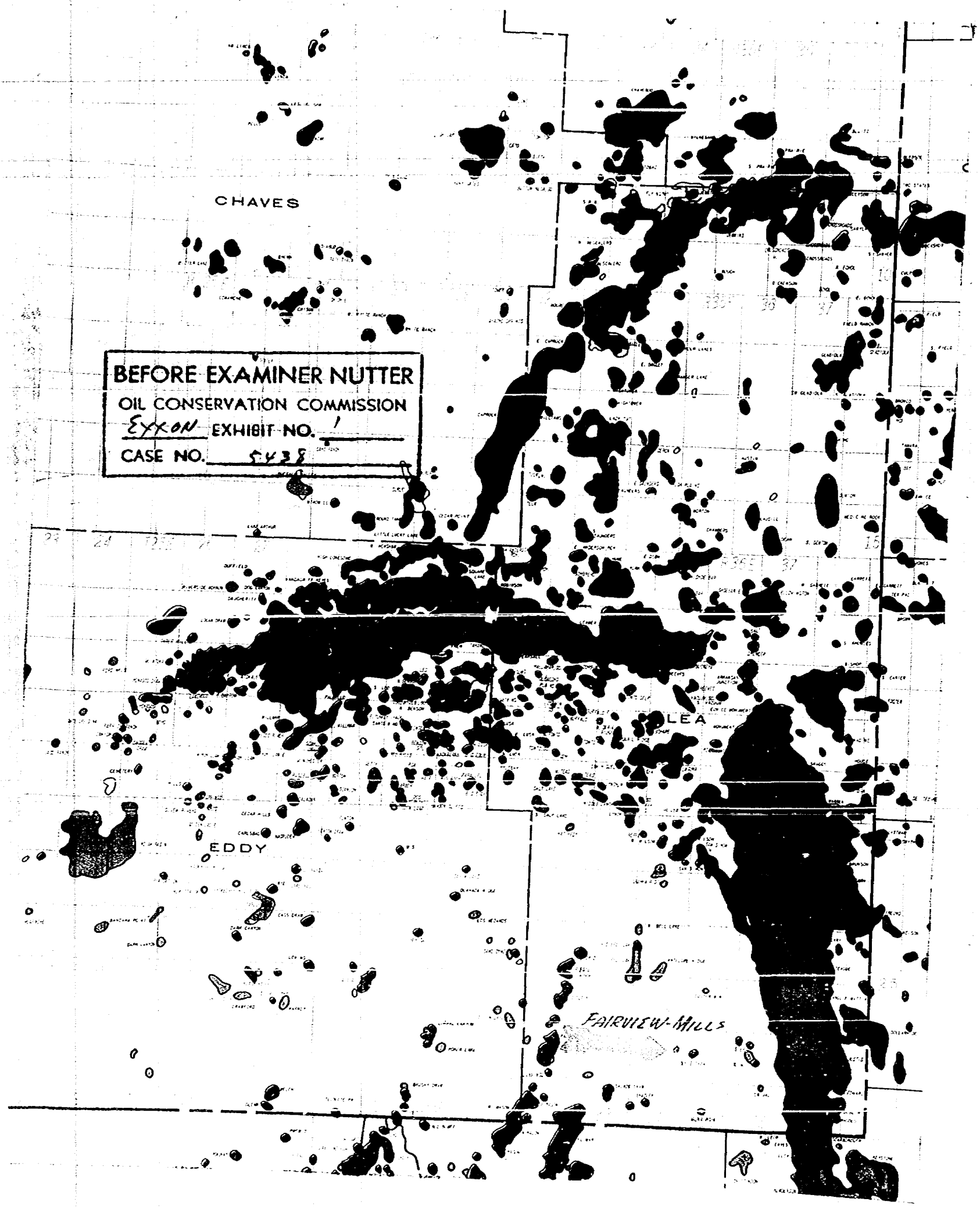
Thank you again for your assistance.

Sincerely yours,

HUNKER, FEDRIC & HIGGINBOTHAM, P.A.

George H. Hunker, Jr.

GHH:dd
Enc.



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXXON EXHIBIT NO. 1
CASE NO. 5438

FAIRVIEW MILLS - WOLFCAMP POOL
LEA COUNTY, NEW MEXICO

COMPLETION DATA

Operator	-	Exxon Corporation
Lease	-	Fairview Mills Federal
Well	-	No. 1
Total Depth, Feet	-	20,915 (Plugged Back to 13,865)
Production Casing	-	Liner - 7-5/8" 12,581-16,835 w/1,100 Sacks Cement - Casing - 10/34" at 13,020 w/2,300 Sacks Cement - Casing - 7/8" at 12,574 w/300 Sacks Cement
Perforations	-	13,797-13,805
Stimulation Treatment	-	2,000 Gallons Acid
Initial Potential	-	CAOF = 5,700 Mcf/D with 238 Bbl/MMcf Condensate

FAIRVIEW MILLS - WOLFCAMP POOL
LEA COUNTY, NEW MEXICO

RESERVOIR DATA

Formation	Dolomite Limestone
Porosity (%)	9.5
Permeability (md)	Unknown
Connate Water Saturation (Est. %)	30
Dip of Formation	Unknown
Gas-Water Contact	Unknown
Average Net Pay (Ft.)	11
Original Reservoir Pressure (psi)	10,426
Reservoir Temperature (°F)	185
Reservoir Datum (Ft. Subsea)	10,443
Gas Gravity (Air = 1.0)	.702
Condensate Gravity (°API)	52.1
Condensate Ratio (Bbl/MMcf)	238

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

KEY

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12/30/74	
Company: Exxon Corporation		Connection: None			
Pool: --		Formation: Wolfcamp		Unit	
Completion Date: 12/30/74	Total Depth: 20,915'	Plug Back TD: 13,830'	Elevation: 3,332' GR	Farm or Lease Name: Fairview Mills-Federal	
Csg. Size: 7 5/8 / Wt.: 39.0 / d: 6.625 / Set At: 16,835'		Perforations: From 13,797' To 13,805'		Well No.: 1	
Tbg. Size: 2 7/8 / Wt.: 10.7 8.7, 7.9 / d: Ave. 2.25 / Set At: 13,765'		Perforations: From Open Ended To		Unit: "O" / Sec.: 14 / Twp.: 25-S / Rge.: 34-E	
Type Well – Single – Bradenhead – G.G. or G.C. Multiple: Single		Packer Set At: 13,765		County: Lea	
Producing Thru: Tubing	Reservoir Temp. °F: 185 @ 13,800'	Mean Annual Temp. °F: --	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13,797	13,797	.702	0.26	1.15	0	--	4"	Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					7177	55	PK		
1.	4 x 2.50	383	2.4	82	6760	62			60 min.
2.	4 x 2.50	383	9.0	100	5330	66			60 min.
3.	4 x 2.50	383	19.4	94	3980	70			60 min.
4	4 x 2.50	375	36.0	88	3080	74			60 min.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	33.29	30.85	396	.9795	1.194	1.040	1249
2.	33.29	59.70	396	.9636	1.194	1.036	2369
3.	33.29	87.56	396	.9688	1.194	1.038	3500
4.	33.29	118.20	388	.9741	1.194	1.039	4755
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	.587	542	1.39	.925
2.	.587	560	1.44	.931
3.	.587	554	1.42	.929
4.	.576	548	1.41	.926
5.				

Gas Liquid Hydrocarbon Ratio 4.2 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 52.1 Deg.
Specific Gravity Separator Gas .702 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 1.22
Critical Pressure 674 P.S.I.A. ____ P.S.I.A.
Critical Temperature 390 R ____ R

P_c 7190 P_c^2 51696

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	45874	6790	46104	5592
2	28548	5414	29311	22385
3	15944	4129	17049	34647
4	9567	3474	12069	39627
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.9$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5700$

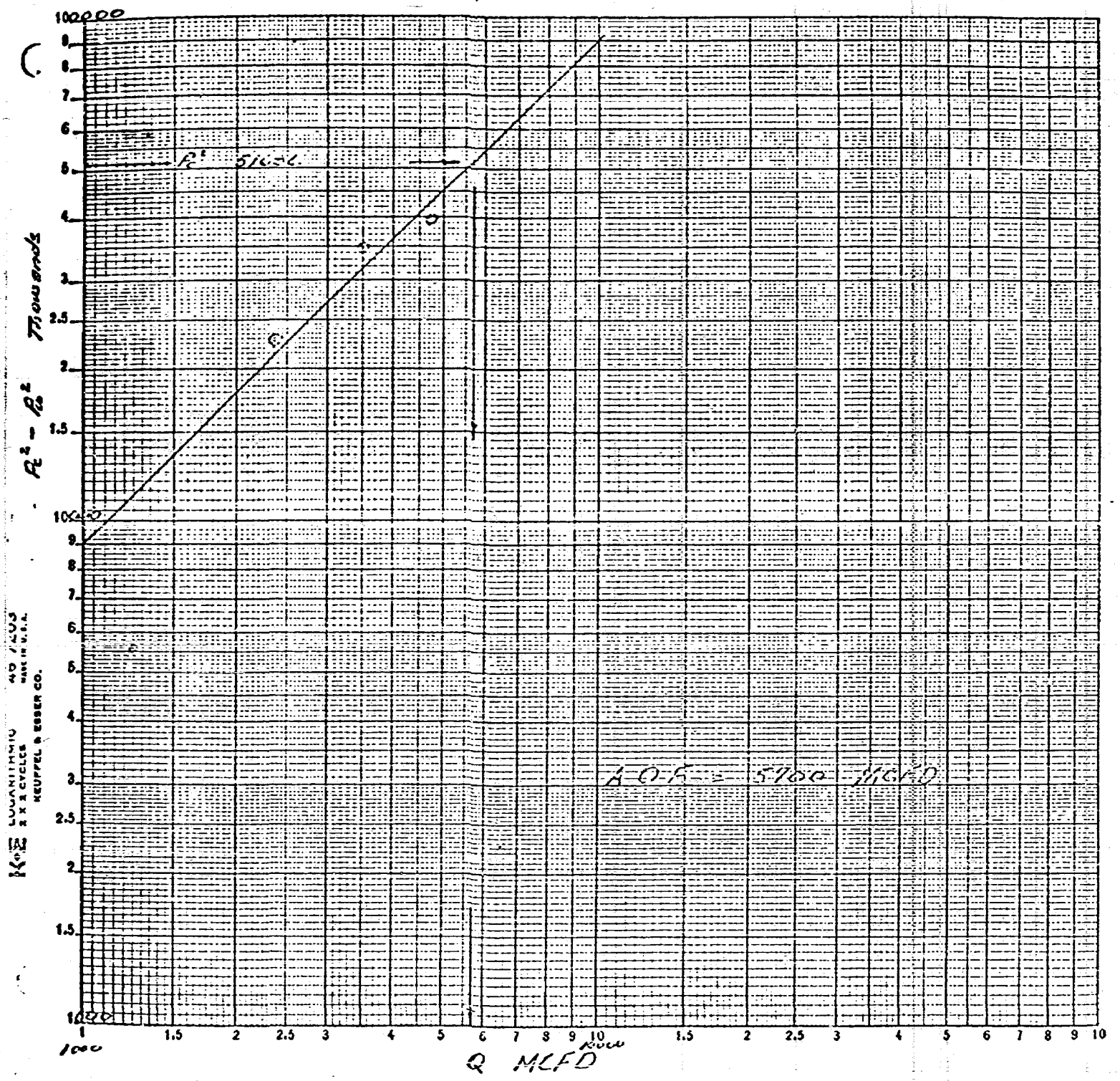
Absolute Open Flow 5700 Mcfd Angle of Slope θ 45 Slope, n 1.00

Remarks:

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXXON EXHIBIT NO. 6
CASE NO. 5438

Approved By Commission:	Conducted By: B. B. Ivanhoe, A. L. Sossomon	Calculated By: W. F. Burchard	Checked By:

COMPANY: [illegible]
WELL: FAIRVIEW MILLS - FEDERAL No. 1
LOCATION: 14 - 25S - 31E
COUNTY: LEA
DATE: DEC. 30, 1974



$\overline{\Delta P_1}^2 = 90000$ $Q_1 = 10000$ $\log Q_1 = 4.000$

$\overline{\Delta P_2}^2 = 9000$ $Q_2 = 1000$ $\log Q_2 = 3.000$

$n = 1.000$

WOLF PETRO LAB, INC.

DIAL EMERSON 6-9701
DIAL EMERSON 6-7171

2411 WEST 42ND STREET

P. O. BOX 643
ODESSA, TEXAS
79760

HYDROCARBON ANALYSIS

LABORATORY REPORT

Charge Exxon Company, U.S.A.
Test No. WPL-74-1661
Date of Run 12-31-74
Date Received 12-30-74

A Sample of Gas From High Stage Seperator - Fairview Mills Federal No. 1

Secured from Wolfcamp Formation

At Lea County, New Mexico Secured by J. Wolf

Purpose _____ Time _____ Date 12-30-74

Sampling Conditions: Seperator Pressure 400 psig @ 90° F.
Gas Volume 5.2 MCF/D
4th Point of Test

CHROMATOGRAPH ANALYSIS

	Gas Vol. or Mol. %	Liquid Vol. %	GPM
Hydrogen Sulfide			
Carbon Dioxide	.26		
Air			
Nitrogen	1.15		
Oxygen			
Methane	80.05		
Ethane	10.65		
Propane	4.61		1.26
Iso-Butane	.73		.24
N-Butane	1.37		.43
Iso-Pentane	.34		.12
N-Pentane	.38		.14
Iso-Hexane			
N-Hexane			
Pentanes (2)			
Hexanes (2)	.46		.20
Heptane (2)			
TOTAL	100.00		2.39

(1) and lighter
(2) and heavier

ANALYSIS INFORMATION

Volume of Sample _____ cc. @ _____ ° F
Sp. Gr. Residue _____ Vol. of Residue _____ cc.
Molecular Wgt. of Residue _____
Gal/lb. Mol. _____

VAPOR PRESSURE

_____ lbs. @ 100° F
Calculated _____ lbs. @ 100° F

GASOLINE CONTENT

26/70 Gasoline .69 G. P. M.
100 % Propane 1.26 G. P. M.
Excess Butanes .44 G. P. M.
TOTAL 2.39 G. P. M.

SULFUR DETERMINATION

Hydrogen Sulfide	H_2S	.0472	grs/100 SCF
Mercaptans	RSH	.1621	grs/100 SCF
Sulfides	RSR	.0450	grs/100 SCF
Residual Sulfides	RSSR	.0050	grs/100 SCF
Total Sulfides		.2593	grs/100 SCF

OTHER DATA

	(cald) Wet Basis		Dry Basis
BTU Content	(~~Actual~~) 1211	(Calc.)	1233
Sp. Gravity	(Actual) .7022	(Calc.)	.7137
A. P. I. Gr.	(Actual)	(Calc.)	

Run by: J. Wolf Checked by: J. Wolf Approved: _____

Additional Data and Remarks

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Exxon EXHIBIT NO. 7
CASE NO. 5438

COPIES

5 - Mr. B. A. Belknap
Box 1600
Midland, Texas 79701
1 - File

WOLF PETRO LAB, INC.

DIAL EMERSON 6-9701
DIAL EMERSON 6-7171
2411 WEST 42ND STREET
P. O. BOX 643
ODESSA, TEXAS
79760

HYDROCARBON ANALYSIS

LABORATORY REPORT

Charge Exxon Company, U.S.A.
Test No. WPL-74-1681-A
Date of Run 12-31-74
Date Received 12-30-74

A Sample of Liquid Hydrocarbons From Low Stage Seperator- Fairview Mills Federal No. 1
Secured from Wolfcamp Formation
At Lea County, New Mexico Secured by J. Wolf
Purpose Date 12-30-74 Time
Sampling Conditions 4th Point of Test

DISTILLATION

I B P	74	°F
5%	110	°F
10%	134	°F
20%	175	°F
30%	214	°F
40%	248	°F
50%	295	°F
60%	364	°F
70%	463	°F
75%	492	°F
80%	532	°F
85%	625	°F
90%	670	°F
95%	719	°F
End Point	724	°F
* % Loss + Residue	2.00	
% Recovery	98.00	
Color		

YIELD

Gasoline 300°F	50.25	%
Gasoline 350°F	8.00	%
Gasoline 400°F	6.00	%
Total Gasoline	64.25	%
Kerosene 525°F	15.25	%
Diesel Fuel 650°F	10.00	%

ASTM OR SPECIAL TESTING

Ash Content
Acid or Base Numbers
B. S. & W. (Centrifuge)
Carbon Residue
Carbon Residue on 10% Residue
Cloud and Pour Point to °F
Doctor Test
Flash Point (open or closed)
Fire Point
Gravity, A. P. I. Hydrometer 52.10 @ 60° F.
Hydrogen Sulfide (Crude Oil)
Salt Content (Crude Oil)
Sulfur (lamp method)
Vapor Pressure (Reid)
Vapor Pressure (N.G.A.A.)
Vapor Pressure (Lean Oil)
Viscosity (Saybolt) 100°F
Viscosity (Saybolt) 210°F
Viscosity (Index No.)

Run by: J. Wo... Checked by: J. Wolf Approved:

Additional Data and Remarks

* % Loss + Residue

Loss	=	.50 %
Residue	=	1.50 %
Total	+	2.00 %

COPIES

5 - Mr. B. A. Belknap
Box 1600
Midland, Texas 79701
1 - File

MIDLAND, TEXAS
563-2025

ODESSA, TEXAS
563-2025

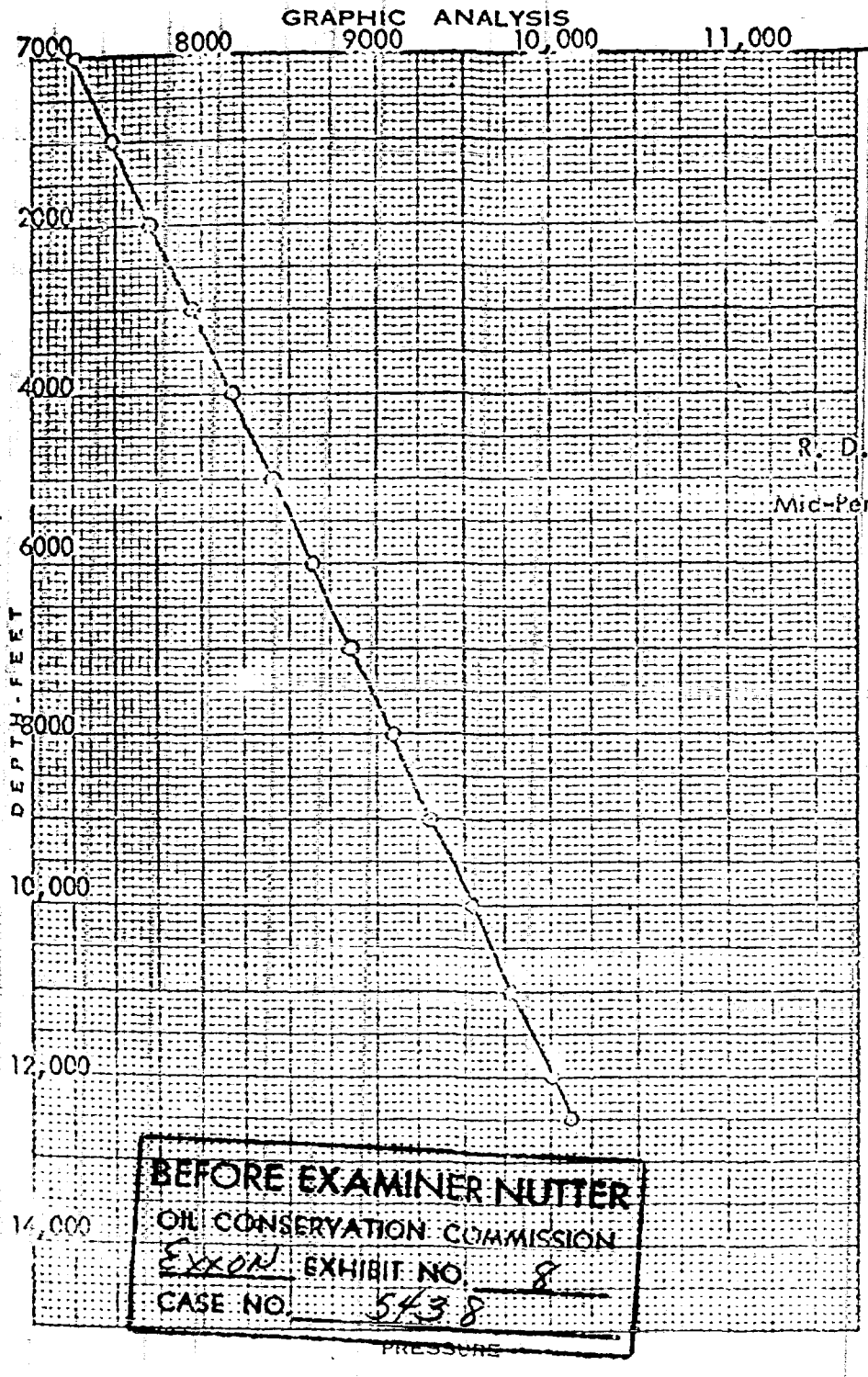
INDIVIDUAL WELL DATA SHEET

Company EXXON CO. - U. S. A. Lease Fairview Mills Federal Well No. 1

Field Wildcat (Wolfcamp) County Lea State New Mexico

Test Date 12-28-74 Time 13:00 Status of Well Shut In 220 hrs Shut In

GRAPHIC ANALYSIS



Depth Feet	Pressure Lbs. Sq. In.	*Gradient Lbs./Ft.
0	7263	
1,000	7478	.215
2,000	7715	.237
3,000	7947	.232
4,000	8178	.231
5,000	8404	.226
6,000	8635	.231
7,000	8862	.227
8,000	9087	.225
9,000	9320	.233
10,000	9544	.224
11,000	9776	.232
12,000	10,008	.232
R. D. -- 12,500	10,124	.232
Mid-Perf. - 13,801	10,426	(.232)

Elev.-D.F.	Gr.
Pressure Datum	Mid-Perf. 13,801
Top of Pay	
Tubing 2 7/8	Depth
B.H.C.	Packer 13,765
Casing	Depth
Perf.	13,797-13,805
Total Depth	
Formation	Wolfcamp
Casing Press.	
Tubing Press.	7260 DWG
Top of Fluid	
Top of Water	
Hrs.-Shut In	Flowing
Temp. @ 12,500	= 170 °F
Last Test Date	NPT
Press. Last Test	
B.H.P. Change	
Gain-Loss/Day	
Instrument	Amerada
Number 31016-N	RPG 3
Calibration No.	@ °F
Run By	Shew, Jr. & Hadorn
Calculated By	Harrington

DRAFT

dr/

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. 5438

Order No. R-4996

APPLICATION OF EXXON CORPORATION
FOR SPECIAL POOL RULES, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 19, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of April, 1975, 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, Exxon Corporation, seeks the creation of a new gas pool for Wolfcamp production in Lea County, New Mexico, and the promulgation of special rules and regulations governing said pool, including a provision for 640-acre spacing units.

(3) That the Fairview Mills-Federal Well No 1 located in Unit O of Section 14, Township 25 South, Range 34 East, NMPM, Lea County, New Mexico, having its top perforations at 13,797 feet, has discovered a separate common source of supply which should be designated the Fairview Mills-Wolfcamp Gas Pool; that the vertical limits of said pool should be the Wolfcamp formation and that the horizontal limits of said pool should be all of said Section 14.

(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, temporary special rules and regulations providing for 640-acre spacing units should be promulgated for the Fairview Mills-Wolfcamp Gas 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 special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.

(7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Fairview Mills-Wolfcamp Gas Pool, at which time the operators in the subject pool should appear and show cause why the Fairview Mills-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(8) That the first operator to obtain a pipeline connection for a well in the Fairview Mills-Wolfcamp Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an exact date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as a gas pool for Wolfcamp production, is hereby created and designated the Fairview Mills-Wolfcamp Gas Pool, with vertical limits comprising the Wolfcamp formation and horizontal limits comprising the following-described area:

LEA COUNTY, NEW MEXICO
TOWNSHIP 25 SOUTH, RANGE 34 EAST, NMPM
Section 14: All

(2) That temporary Special Rules and Regulations for the Fairview Mills-Wolfcamp Gas Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
FAIRVIEW MILLS-WOLFCAMP GAS POOL

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

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section.

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 and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

(a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.

(b) The non-standard unit lies wholly within a governmental section and contains less acreage than a standard unit.

(c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proration 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 operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Fairview Mills-Wolfcamp Gas Pool or in the Wolfcamp formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District office of the Commission in writing of the name and location of the well on or before April 30, 1975.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the Fairview Mills-Wolfcamp Gas Pool shall have dedicated thereto 640 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 640 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Fairview Mills-Wolfcamp Gas Pool or in the Wolfcamp formation within one mile thereof shall receive no more than one-fourth of a standard allowable for the pool.

(3) That this case shall be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Fairview Mills-Wolfcamp Gas Pool, at which time the operators in the subject pool may appear and show cause why the Fairview Mills-Wolfcamp Gas Pool should not be developed on 160-acre spacing units.

(4) That the first operator to obtain a pipeline connection for a well in the Fairview Mills-Wolfcamp Gas Pool shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for xxxxxxxx reopening this case.

(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.