CASE No. 4816

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
September 13, 1972

EXAMINER HEARING

IN THE MATTER OF:

Application of Penroc Oil Corporation for a special gas-oil ratio limitation increase, Lea County, New Mexico.

CASE NO. 4816

BEFORE: Daniel S. Nutter
Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 4816.

MR. HATCH: Application of Penroc Oil Corporation for a special gas-oil ratio limitation increase, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, appearing for the Applicant. We have one witness we'd like to have sworn.

* * * * *

STERLING TALLEY,

appeared as a witness and, having been duly sworn according to law, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please.

A My name is Sterling Talley.

Q By whom are you employed and in what position, Mr. Talley.

A Penroc Oil Corporation, Vice-president in charge of exploration.

Q Have you testified before the Oil Conservation Commission?

A Yes, I have.

Q And made your qualifications a matter of record here?

A Yes, sir.

MR. KELLAHIN: Mr. Examiner, are the witness'

qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Talley, are you familiar with the Application in Case 4816?

A I am.

Q What is proposed by the Applicant in this Case?

A To raise the GOR to 6,000 cubic feet of gas per barrel to the Hobbs-Drinkard Pool, Lea County.

Q Referring to what has been marked as Applicant's Exhibit Number 1, will you identify that Exhibit, please?

A Exhibit 1 is a subsurface structural map of the location of the Blinebry and Drinkard Pools contoured on top of the Drinkard with the contour interval of 10,000 feet scale; four inches equals one mile. Then, you'll notice we also included those wells that were drilled deeper. The dates and depths are on the plat. The red colored wells were completed as single Blinebry producers, the blue colored wells were completed as single Drinkard producers, and the combination of red and blue are dually completed Blinebry and Drinkard.

Now, the wells circled in yellow means that the well was drilled to the Drinkard horizon or depth but was unsuccessful as a producer from that depth. The

date of completion of each of the Drinkard wells and producers is indicated very near that well and is underlined. The lease ownership is evident on the plat.

Now, the solid orange line running NW/SE represents the traverse of a structural cross-section A-A' unit lining ten wells in its construction and we'll examine this cross-section in detail in a moment.

The solid blue line on the map indicates the boundary of the acreage dedicated to the Drinkard Pool.

Now, there have been 28 wells within the Hobbs-Drinkard Pool area to date with nine resulting in failure and 19 completed as producers. The original discovery, or Pan American, which is located in the NE of the NW of Section 4, Township 18 South, 38 East, was completed in April, 1952 and was temporarily abandoned in May, 1969. It was not until June 1969 that there was another Drinkard well completed. By the year's end, ten new wells were on the line. At the end of 1971, 16 wells were completed and producing, only two wells have been added in 1972, resulting in a total of 18 producers.

MR. NUTTER: Where was the second well drilled?

THE WITNESS: The second well drilled in the Drinkard was the Gulf 16 Grimes, located in Section 32 NW/NW.

Q (By Mr. Kellahin) Was that the one drilled in June of 1969?

A Let's see. The first Drinkard well that was completed --

MR. NUTTER: Pan American was the original well.

A It was the original well and produced for all those many years by itself.

Q Then you mentioned it was nulled in May 1969?

A Yes. In fact, during the latter part of the year there were ten wells completed in the latter part of that year. The early wells would be like the Standard of Texas; Chevron 5 State, SW/SE of 29; and the Shell 7 A State, located in the SE of the NE of 32. Those are three of the early wells. Then the rest of those were completed subsequent to that. The Humble-Bowers A, SW of the NW of Section 29, was an early Drinkard well. The June production reports indicate 18 wells were capable of some amount of production. However, only 15 actually reported production. Three were shut from overproducing head gas.

Q Now, referring to what has been marked as Applicant's Exhibit Number 2, will you identify that, please?

A Yes, our Exhibit 2 is a structural cross-section I mentioned a moment ago, being A-A' the original line on the structural map. It runs NW/SE from one end of the Hobbs-Drinkard Pool to the other. And, as I also

mentioned, ten wells are utilized in its construction. The total length of the cross-section is two and three-quarters miles. The scale is one inch equals 100 feet vertically; and one inch is equal to 400 feet horizontally. I indicated on there the correlation of the Tubb sand section, the Drinkard, and the Abo or the base of the Drinkard. The perforations of the wells are indicated in red color. Any cored intervals taken in any well are shown by the green color and all information such as initial potential, whether the well actually produces from the Drinkard or not, and so forth, is also shown below the wells in the legend.

Now, the purpose of this cross-section is to show that the Drinkard continues over the pool, thickness is uniform, running about 410 to 425 feet. We are able to point out that there is some degree of consistency where perforations have been made in the various wedges and where this consistency occurs, where the GOR is very wide.

For instance, in the lower half of the Drinkard section, it can be observed that a zone of porosity has been opened in all nine wells. The wells have perforation zones which are synonymous one to the other, more or less. The wells have open perforations situated in between the upper and lower zones. It

should be noted that the Shell 1-A, which is on the far left of the cross-section, was plugged and abandoned. The Getty 11 McKinley has a GOR of 4,858 to one, being the second well from the left and in continuing across the cross-section left to right, the Ne-o-Tex has a GOR of 4,500 to one, the Chevron 5 State is 6,500 to one, the Amerada 5 State is 29,416 to one, the Shell 6-B State is 1,691 to one, the Penroc Number 1 Conoco State is 7,778 to 1, and the Pan American 1-A was unknown, but evidently did not produce much gas because originally it was completed on the pump for very little oil. The conclusion can be drawn by where these perforations were made in these various wells that you can perforate the most likely porosity zone that exists in any particular well and hope that the gas is not excessive as to a GOR as there exists in the Drinkard formation. From the stratification and porosity logs, it is evident that the correlation zone, if it does in fact exist between the two, will have different gas saturations, resulting in vastly differing gas-oil ratios.

Now, detailed study was conducted on the Drinkard and all of the 18 producing wells concerning their completion zones, total porosity, and what porosity exists for possible future completion for protection of

oil and gas. It was found that six of these wells were perforated and completed in all likely looking porosity zones. In other words, no more new sections will be accepted for additional reservation. Six of these wells have limited amounts available to them, but the amounts may be justifiable to go after; and the six remaining wells have substantially indicated the day of perforating. It is anticipated this would be chanced only when the GOR allowable is higher.

Some of the current producing wells, or nearly all, have reached economic producing limits. Some will never pay out their current paying bases.

That's all I have to say about this section.

Q In connection with that Exhibit, is it your conclusion that the location of the perforation interval has any bearing on the GOR of the well?

A No, you can't normally determine which zone would be high gas bearing and some oil or which would be high oil and some gas, until you perforate them and find out.

Q Then, you do find it varies from well to well in the same zone?

A Yes, definitely.

Q Now, referring to what has been marked as Exhibit 3, will you identify that Exhibit, please?

A Yes, Exhibit 3 is a gammaray acoustic log, every five

inches equals 100 feet detailed from the Penroc Conoco State A located in the SW of the SE of Section 33, 18 South, 38 East, and was completed in February of this year.

Now, this log shows all the Drinkard section being 420 feet thick. The completion perforations are indicated in red color being the interval 6,866 to 6,961. You will note that the porosity zones are in yellow color and counting those continuing porosity zones we find that they are approximately 100 feet net of five percent porosity or greater, which 54 feet net are currently opened, 116 feet behind pipe. The cored intervals are shown in green color, which there are two cores taken in this Drinkard section. A part of the cores, 6,750 to 6,771, was a high and by analysis whose average porosity was 9.5 percent. The average permeability was only 1.5 millidarcies.

Then, the intervals 6,903 to the lower core was analyzed, the average porosity being 10.2 percent; the average permeability being 5.4 millidarcies. There is nothing outstanding in millidarcies or permeability standpoint. The purpose of this Exhibit is to show the stratification porosity zone. They occur in ~~creases~~ streaks of one to five feet to approximately ten feet. The zones are relatively thin. It would be extremely

difficult to predict before perforating any particular point, whether it is high in gas, resulting in a high GOR, and I refer you back to the conversation we had about the cross-section there a moment ago.

Q Now, referring to the Exhibit that has been marked Applicant's Exhibit Number 4, would you discuss that Exhibit?

A Yes, Exhibit 4 is a chart showing several field performance curves of the Hobbs-Drinkard Pool. This chart actually has on it five curves representing some aspects of field performance, plus one curve pointing out the number of wells drilled as the pool was developed.

At the very top of the chart is an orange-colored curve which represents the GOR provided monthly for the three years that the Hobbs-Drinkard pool has produced exclusive of the Pan American 11-X State well, the period is June 1969 through June 1972. This is probably the most significant curve represented and is quite revealing. It is readily apparent that since September of 1970 a definite upward trend of GOR has been established climbing from slightly over 3,000 to one to 10,000 to one in January 1972. Now, the average GOR in 1969 was 3,955 to one, and in 1970, it was 4,500 to one and in 1971 it was 7,550 to one. For the first

six months of 1972 it's been 8,250 to one. The downward dip in the curve commencing in early 1972 is attributed to two factors. One, wells were commencing to be shut in to make up for overproduced casinghead gas. In other words, if those wells had not been shut in, this curve would climb up more than 10,000 to 1, or off scale. Two wells were completed, or secondly, two wells were completed producing very little gas compared to the amount of oil produced in 1972. These facts are also reflected in the pool oil producing curve and the gas production curve. If the shut-in wells would have been allowed to have a higher GOR, the GOR ratio would have exceeded the 10,000 to 1 instead of the present representation. In any event, I pointed out earlier, the average GOR for six months in 1972 still reached 8,250 to 1.

Now, the second curve is green, it's an oil production curve of the pool. It shows this pool performance monthly and the development commences in June, 1969, also exclusive of the last days of the production of the discovery well Pan American 11-X. It was completed in 1952 and abandoned in 1969. So the green curve shown in 1968 and early 1969 represents the oil production from that one well only, and as I have mentioned, at the end of 1969, ten wells were

producing. The first six months of 1970 production was over 20,000 barrels per month from twelve wells. By the end of the year, 13 wells were completed, but the oil amount had dropped to below 15,000 barrels monthly. Now, three more wells were added in 1971, causing the pool monthly total to average 15,000 barrels over the year and continuing in to 1972. Now, in other words, it took more wells to keep their production curve at the same level. Two additional wells in 1972 have caused a slight upturn in the oil curve since about February. The Hobbs-Drinkard pool has produced to July 1, 1972, a total of 637,962 barrels of oil.

The third curve down from the top, being red, is casinghead gas production curve. It shows the pool performance in billions of cubic feet per month. You will note that it approximated 80,000,000 per month during 1970, which was ~~read~~ held rather steady. In spite of the coincidental decline of oil production, it started increasing in early 1972, and climbed to a high of 169,000,000 for the month in January of 1972. But it has shown a downward dip due to the shut-in status of some of the wells. The pool has produced from July 1969 to July 1972, a total of 3,431,960 cubic feet of gas. This also excludes the Pan American 11-X

dearnley, meier & mc cormick
209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

well.

The blue curve, the next one down, is the water production curve. It fairly well parallels the oil production curve and has produced 119,308 barrels of water to July 1, 1972. And, again, this excludes the Pan American 11-X well. This is approximately one barrel to five barrels of oil over all, but closer to one barrel of water to eight barrels of oil during 1971 and 1972.

The brown curve is the accumulation of oil production for the Hobbs-Drinkard Pool and does include the total barrels of oil recorded during the long years of live of the Pan American 11-X well.

And, as I mentioned, the yellow curve is simply a running account of the number of wells completed as producers since July, 1959 to August 1972.

Q Now, on the basis of your study of this pool, would you expect any further increase in the gas production?

A No, because the pool actually has, for all practical purposes, probably developed to its fullest extent. I can't see maybe one or two more wells being drilled out there at any time and the production is declining quite rapidly in some of the edge wells, particularly ~~in~~ from an oil standpoint. As a matter of fact, we'll see that one well has already gone. And so, actually,

as far as receiving more gas, if the wells that are shut-in now were allowed to produce more or less full capacity at 6,000 to 1 the gas-oil ratio, there would not be very much more gas actually produced in the pools ~~after~~ there the production, say, in January of 1972.

Q And would you anticipate that volume of gas production would decline in the future?

A Yes.

Q Now, referring you to what has been marked as Exhibit Number 5, would you identify that Exhibit?

A Exhibit Number 5 is a production performance curve, the oil production for six wells in the Hobbs-Drinkard Pool and the accumulated production for each. The oil production curves of these six wells were selected because these wells have all produced since 1969, which would have the longest production history of any of the wells, and gives almost three years production. You can see by the curve that there are relatively, two relatively good wells, two poor ones, and two more or less in between. The total production for each of these wells is designated on the chart. As you can see, the Humble-Bowers 31 on the top of the list, as of July 1, 1972, has produced 114,296 barrels. The red curve is the Shell B-6, with a total of 105,990. The Shell Grimes Number 9 is 40,070, the Chevron State

2 is 31,486, the Amerada State A is 16,458, and the Getty Grimes 6 is 5,394 barrels.

The estimated ultimate production through the present completed perforations for each of these wells would be something in the order of 140,000 barrels for the Humble 31; 165,000 for the Shell 6-B; only 50,000 for the Shell 9 Grimes; about 42,000 for the Chevron 5; 25,000 for the Amerada 5; and 6,500 for the Getty 6. That's not very much production for that length of time.

Q Does that indicate that this pool is in the latter stages of its production?

A Only for some of the wells. There are about six good wells in the pool. The rest of them are marginal, or as you might say on their last legs of production.

Q Now, referring to what has been marked as Exhibit 6, would you discuss that Exhibit?

A Exhibit 6 is a chart indicating oil pools in District One having a higher GOR than the state gas oil allowable of 2,000 to 1. This is taken from proration schedules July and August of 1972. These pools have all been listed and the GOR for each is noted by each pool. It is pointed out that 32 of the 337 pools are represented in the GOR in August and July, and August proration schedules are in the category which represents about 9.5 percent of the total. This figure

would actually rise to 10.9 percent if you included the 15 pools which have no GOR limit.

Q And the Exhibit indicates that the majority of those pools have GORs in excess of 3,000 to 1, do they not?

A Very definitely. Some go as high as 6,000 and 10,000 to 1.

Q Now, referring to Exhibit Number 7, would you discuss that Exhibit?

A Exhibit 7 is another chart showing the GOR data for each of the Drinkard wells in the Hobbs-Drinkard pool. This is a compilation of the 17 wells which have an allowable listed in the July and August proration schedule and a reported GOR for each. They range from 310 to 1 to 39,200 to 1; and you will note that 11 of the total of 17 wells are greater than 2,000 to 1, which represents 64.7 percent. Nine of the totaled 17 have higher than the current 3,000 to 1 GOR, or 52.9 percent; and eight of these wells have higher than 6,000 to 1, which represents 47 percent.

Q Now, turn to Exhibit 8. Would you discuss that Exhibit?

A Exhibit 8 is actually just for informational purposes. It simply breaks down all the monthly production of all oil, gas, and water, for the Hobbs-Drinkard Pool since its inception, on a monthly basis and with yearly totals to show where all the information was

derived that I used to prepare the previous curves on the charts that we discussed earlier.

Q Now, is this production data taken from the office records of the Oil Conservation Commission?

A Yes.

Q Now, where does the gas from this pool go?

A It goes into the Hobbs plant in Hobbs operated by Phillips.

Q Have you contacted Phillips Petroleum Company to determine if they could handle any increase in gas production under a 6,000 to 1 GOR?

A Yes, I have.

Q Referring to Exhibit Number 9, would you identify that Exhibit, please?

A Exhibit Number 9 is a letter addressed to the New Mexico Oil Conservation Commission from Phillips Petroleum Company applicable to Case Number 4816. Rather than read the whole thing, I will summarize.

This states that Phillips predicts 1972 as the year of peak gas production into the Hobbs plant. This plant processes all casinghead gas from all formations in the Hobbs pool. And, that this plant does have the nominal capability to receive and process, without flaring, all legal volumes of gas that may be produced from the Hobbs-Drinkard Pool. Furthermore, it

represents that additional gas that may be produced will not affect the ability of the plant to render effective service to producers in the Hobbs pool and other pools connected to the facilities. This letter was circulated to all operators within the Hobbs-Drinkard pool.

Q Now, the Commission file reflects a letter from Continental Oil Company that if Phillips is able to take the gas and if El Paso is able to take the residue gas, Continental has no objections to the Application. Does the fact that Phillips says they can handle this gas without flaring indicate to you that El Paso would take the residue gas?

A Well, that is connected with the statement that they made that they feel that by the end of 1972, and with the winter season coming on, that they will have no trouble with El Paso taking all the gas that they can put through the plant. I don't believe they would make this statement otherwise.

Q Now, were Exhibits 1 through 8 prepared by you or under your direction?

A Yes.

Q And Exhibit Number 9 is a copy of a letter from Phillips, which was forwarded?

A Yes.

MR. KELLAHIN: At this time I'd like to offer Exhibits 1 through 9 inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 9 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Number 1 through 9 were marked and admitted into evidence.)

MR. KELLAHIN: That is the conclusion of my Direct Examination at this time.

* * * * *

CROSS-EXAMINATION

BY MR. NUTTER:

Q Mr. Talley, referring to your Exhibit Number 7, which lists the latest GOR tests, when was the last testing season in this pool? Do you know?

A I'm going to say July, but don't hold me to that.

Q No, I don't think it could have been because you say it was taken from July and August schedule.

A It was probably earlier, then.

Q I was just wondering if these were a year old, or how new?

A Some were taken this year and some a year ago because I know that some of these GORs are the same as the year old proration schedules, yes.

Q For example, you mentioned that your well Number 1-A was completed with an original GOR of 1,207. What's

the current GOR on it?

A That well was completed in February and has not had a subsequent GOR made on it.

Q I see. And then, 7,778; and 6,510 to one on your other well was most recent?

A Yes.

Q When were they taken?

A Well, the 7,778 was an original GOR of well Number 1 and it was made when the well was completed about a year ago. The 6,510 to 1 on the Conoco 2 is less than a year old, it was completed in November of last year.

Q I think it's imperative that we have recent GORs.

A All?

Q Well, all of the wells are connected, are they not?

A Yes, sir.

Q For casinghead gas?

A Yes.

Q And Phillips is the purchaser of the casinghead gas throughout the pool?

A Yes.

Q Now, you mentioned that on your Exhibit marked 3 that this illustrated the stratification of the pay in here. Do you feel that although it doesn't make any difference where you perforated in the well, whether its upper or lower, or what your structural position is

on this anticline, you are able to get a high GOR well in one well and a low GOR well in the next one to it. Do you recall that there is a stratified stringer in here that may contain large amounts of gas?

A If you will note that the Shell 6-B State, which is the fourth log from the right on this cross-section, has approximately the same perforated interval as our Number 1 well, which is adjacent to it. Of course, it was drilled and completed before we drilled the first well and they more or less key off this well. Because it does have a low GOR, it's not bothered by being penalized, but lo and behold, when we perforated we came up with a high one and you can take the log and more or less pick a spot between these two wells.

Q There must be stringers in there that are not in communication?

A Right.

Q It's obvious that there is no vertical communication between these stringers.

A Obviously.

Q I don't suppose any tests were ever done to determine any absolute GOR in here?

A Not to my knowledge.

Q Have you made an estimate of the volume of gas that

would be produced under a 6,000 to 1 ratio?
A About three and one-half million per day.
Q And what is the present rate of production under the legal GOR limit, assuming that the wells that are shut-in were producing at the legal GOR?
A For the pool?
Q Yes, sir.
A It's 20,000,000 per month and there are 17 wells producing so 17 times 20, whatever that is.
Q That would be 3.4 million?
A Three hundred forty million per month.
Q Well, now, what's this three and a half million?
A That's just a total daily production, or a month would be about 90,000,000 a month extra, above what it produces now.
Q Approximately 90,000,000 a month more, then?
A Yes, and the pool has an allowable there of some 300,000,000 but it only produces -- the highest ever produced was 169,000,000 in January. I think the June production was something like 111,000,000.
Q What is the depth bracket allowable for this pool?
A It's between 6,000 and 7,000 foot for oil.
Q Yes.
A And no well out there can make it.

MR. NUTTER: Are there any further questions

of Mr. Talley?

* * * * *

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Talley, would approval of this Application, in your opinion, cause waste or result in the loss of any oil production?

A No, it would not.

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

(No response.)

MR. NUTTER: You may be excused.

(Witness excused.)

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

MR. KELLAHIN: That's all I have.

MR. HATCH: Reference is made to Case Number 4816, Application of Penroc Oil Corporation for an increase in the pool ratio from 6,000 to one scheduled for September 13, 1972. Chevron Oil Corporation is opposed to the increase in the gas limit to a 6,000 to 1 ratio, as proposed by Penroc Oil Corporation, and respectively requests that the subject Application be denied and it is signed by W. W. Balkovatz, Western Union from Chevron Oil Company.

MR. NUTTER: If there is nothing further in Case

209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

4816 we will call Case Number 4816 and

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

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

John De La Rosa
COURT REPORTER

9/13

4816
72

I N D E X

	PAGE
WITNESS:	
STERLING TALLEY	
Direct Examination by Mr. Kellahin	3
Cross-Examination by Mr. Nutter	20
Redirect Examination by Mr. Kellahin	24

E X H I B I T S

	OFFERED	ADMITTED
APPLICANT'S:		
Penroc Oil Corporation		
Exhibit Number 1	4	20
Exhibit Number 2	6	20
Exhibit Number 3	9	20
Exhibit Number 4	11	20
Exhibit Number 5	15	20
Exhibit Number 6	16	20
Exhibit Number 7	17	20
Exhibit Number 8	17	20
Exhibit Number 9	18	20

OIL CONSERVATION COMMISSION

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

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

November 13, 1972

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

Re: Case No. 4816
Order No. R-3811-C
Applicant:

Penroc Oil 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.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC

Other

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 4816
Order No. R-3811-C

APPLICATION OF PENROC OIL
CORPORATION FOR A SPECIAL
GAS-OIL RATIO LIMITATION
INCREASE, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 13, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 13th day of November, 1972, 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, Penroc Oil Corporation, is the operator of certain wells in the Hobbs-Drinkard Pool, Lea County, New Mexico.

(3) That the Commission, by Order No. R-3811, dated August 14, 1969, promulgated special rules and regulations for the Hobbs-Drinkard Pool, including a special gas-oil ratio limitation of 4,000 cubic feet of gas per barrel of oil produced.

(4) That the Commission, by Order No. R-3811-B, dated November 10, 1970, amended the previously promulgated special rules for the Hobbs-Drinkard Pool to provide a limiting gas-oil ratio for said pool of 3,000 cubic feet of gas per barrel of oil produced.

(5) That the applicant, Penroc Oil Corporation, seeks the further amendment of the special rules to provide a limiting gas-oil ratio for the Hobbs-Drinkard Pool of 6,000 cubic feet of gas per barrel of oil produced.

(6) That there are wells completed in and producing from the Hobbs-Drinkard Pool with test ratios, as well as daily producing ratios, which are well within the presently assigned limiting ratio of 3,000 to one.

(7) That to adopt a limiting gas-oil ratio of 6,000 to one may give to wells producing with a high ratio of gas to oil an undue share of the reservoir energy, causing waste and violating correlative rights.

(8) That the adoption of a limiting gas-oil ratio for the Hobbs-Drinkard Pool of 5,000 cubic feet of gas per barrel of oil produced will not cause waste nor violate correlative rights, but will ensure the operator of each well in the pool the opportunity to produce without waste his just and equitable share of the oil and gas in the pool.

IT IS THEREFORE ORDERED:

(1) That Rule 7 of the Special Rules and Regulations for the Hobbs-Drinkard Pool, Lea County, New Mexico, is hereby amended to read in its entirety as follows:

"RULE 7. The limiting gas-oil ratio shall be 5,000 cubic feet of gas for each barrel of oil produced."

(2) That the effective date of this order shall be 7:00 a.m. December 1, 1972.

(3) That jurisdiction of this cause may be 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

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E A L

dr/

Docket No. 20-72

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 13, 1972

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

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

ALLOWABLE: (1) Consideration of the allowable production of gas for October, 1972, from seventeen prorated pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico;

(2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for October, 1972.

CASE 4808: Application of Skelly Oil Company for a waterflood expansion and dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to expand its Grayburg-Jackson Skelly Unit Waterflood Project, Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water through its Unit Well No. 114 located in Unit D of Section 14, Township 17 South, Range 31 East. Said Well No. 114 to be completed as a dual completion in such a manner as to permit the production of oil from the Fren-Sevens Rivers Pool and the injection of water into the Grayburg-Jackson Pool.

CASE 4809: Application of Saturn Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Antebellum Unit Area comprising 3,840 acres, more or less, of State and Federal lands in Township 23 South, Range 34 East, Lea County, New Mexico.

CASE 4810: In the matter of the application of the Oil Conservation Commission on its own motion to consider the revision of the special rules for the Devils Fork Gallup Associated Pool and the Escrito Gallup Associated Pool, Rio Arriba and San Juan Counties, New Mexico, promulgated by Orders Nos. R-1670-B and R-1793-A, respectively, to permit taking of gas-oil ratio and bottom-hole pressure tests on an annual basis rather than quarterly and semi-annually, as is now required.

CASE 4747: (Continued from the July 26, 1972, Examiner Hearing)

Application of Union Texas Petroleum, a Division of Allied Chemical Corporation for compulsory pooling, Lea County, New Mexico, Applicant, in the above-styled cause, seeks an order pooling all mineral interests below the base of the Devonian formation underlying the N/2 of Section 33, Township 25 South, Range 37 East, Crosby Field, Lea County, New Mexico. Said acreage to be dedicated to its well to be located 1650 feet from the North line and 2310 feet from the East line of said Section 33. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4577: (Reopened)

In the matter of Case 4577 being reopened pursuant to the provisions of Order No. R-4181, which order established special rules and regulations for the Parkway-Wolfcamp Pool, Eddy County, New Mexico, including a provision for 160-acre spacing units. All interested persons may appear and show cause why said pool should not be developed on 40-acre or 80-acre spacing units.

CASE 4811: Application of Atlantic Richfield Company for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 120-acre non-standard gas proration unit comprising the N/2 SE/4 and NE/4 SW/4 of Section 36, Township 21 South, Range 37 East, Blinebry Gas Pool, Lea County, New Mexico, to be dedicated to its State 367 Well No. 3 located in Unit K of said Section 36.

CASE 4812: Application of Midwest Oil Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 104, authority to drill a wildcat gas well to test the Morrow formation at an unorthodox location 1320 feet from the South and East lines of Section 1, Township 18 South, Range 28 East, Eddy County, New Mexico, with the S/2 of said Section 1 to be dedicated to the well.

CASE 4813: Application of Inexco Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sitting Bull Unit Area comprising 6,665 acres, more or less, of Federal lands in Sections 28, 29, 31, 32, and 33 of Township 23 South, Range 22 East, and Sections 4 through 9 of Township 24 South, Range 22 East, Eddy County, New Mexico.

CASE 4814: Application of Inexco Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Four Forks Unit Area comprising 3,133 acres, more or less, of Federal and Fee lands in Sections 3, 10, 11, 14 and 15 of Township 22 South, Range 25 East, Eddy County, New Mexico.

CASE 4815: Application of Inexco Oil Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn gas pool for its well located 1980 feet from the South and West lines of Section 18, Township 21 South, Range 26 East, Eddy County, New Mexico. Applicant further seeks the promulgation of special rules therefor, including a provision for 640-acre spacing units.

CASE 4816: Application of Penroc Oil Corporation for a special gas-oil ratio limitation increase, Lea County, New Mexico. Applicant, in the above-styled cause, seeks amendment of the special rules and regulations for the Hobbs-Drinkard Pool promulgated by Order No. R-3811, as amended,

(Case 4816 continued from Page 2)

to establish a limiting gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil in said pool.

CASE 4817: Application of Phillips Petroleum Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Drag "B" Well No. 1 located in Unit K of Section 18, Township 23 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce gas from the South Carlsbad-Morrow Gas Pool through tubing and an undesignated Canyon gas pool through the casing-tubing annulus.

CASE 4818: Application of Tipperary Land and Exploration Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the North Bagley-Pennsylvanian Pool by the injection of water into the Strawn and possibly other formations by the injection of water through its Bess Well No. 1 located 660 feet from the North line and 1980 feet from the East line of Section 20, Township 11 South, Range 33 East, Lea County, New Mexico.

CASE 4819: Application of D. L. Hannifin for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in and under the S/2 of Section 24, Township 22 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to a well to be drilled 1980 feet from the South and East lines of said Section 24. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4820: Application of Anadarko Production Company for the creation of an associated pool, special rules therefor, downhole and surface commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new associated pool for the production of oil and gas from the Yates and Seven Rivers formations for its Loco Hills Federal "B" Wells Nos. 1 and 8 located, respectively, in Units P and K of Section 9, Township 17 South, Range 30 East, Eddy County, New Mexico, and the promulgation of special rules therefor including provisions for the classification of oil and gas wells, oil and gas well spacing, and an unlimited gas-oil ratio.

Applicant further seeks authority to commingle in the well-bore of said Well No. 1 the Yates-Seven Rivers production from the newly created pool and the Grayburg-Jackson Pool and to commingle on the surface the Yates-Seven Rivers production from said Well No. 8 with production from the Grayburg-Jackson Pool.

CASE 4821: Application of Getty Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception

(Case 4821 continued from Page 3)

to Rule 303 of the Commission Rules and Regulations, authority to commingle production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Pennsylvanian Pools in the wellbore of its State "BA" Well No. 8 located in Unit B of Section 36, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4822: Application of Getty Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its State "BA" Well No. 9 located 660 feet from the North line and 2310 feet from the East line of Section 36, Township 17 South, Range 34 East, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico. Said well being nearer than 660 feet to another well capable of producing from the same pool.

CASE 4823: Application of Getty Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its A. B. Coates "C" Well No. 28 located 1820 feet from the North and West lines of Section 24, Township 25 South, Range 37 East, Justis Blinebry Pool, Lea County, New Mexico. Said well being located nearer than 660 feet to another well capable of producing from the same pool.

CASE 4824: Application of Getty Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its H. D. McKinley Well No. 11 located 760 feet from the North line and 550 feet from the East line of Section 30, Township 18 South, Range 38 East, Hobbs Grayburg-San Andres Pool, Lea County, New Mexico. Said well being nearer than 660 feet to another well capable of producing from the same pool.

CASE 4825: Application of Hanagan Petroleum Corporation for dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Catclaw Draw Unit Well No. 3 located in Unit D of Section 36, Township 21 South, Range 25 East, Eddy County, New Mexico, in such a manner as to produce gas from an undesignated Strawn gas pool through tubing and from the Catclaw Draw-Morrow Gas Pool through the casing-tubing annulus.

CASE 4826: Application of Hanagan Petroleum Corporation for pool creation, special pool rules, and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn gas pool for its well located 920 feet from the North and West lines of Section 36, Township 21 South, Range 25 East, Eddy County, New Mexico, and the promulgation of special rules therefor, including a provision for 640-acre spacing units. Applicant further seeks approval of an unorthodox location for the above-described well.

CASE 4827: Application of Robert N. Enfield for an unorthodox location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks

(Case 4827 continued from Page 4)

authority to drill a gas well at an off-pattern unorthodox location 990 feet from the North and East lines of Section 11, Township 15 South, Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, with the E/2 of said Section 11 to be dedicated to the well.

CASE 4828: Application of Inexco Oil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority for the dual completion of its McMinn State Well No. 1 located 1980 feet from the South and West lines of Section 18, Township 21 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from the Strawn formation and the Morrow formation adjacent to the Catclaw Draw-Morrow Gas Pool.

	Jmail oil	Jav	GOR			
Amer St A 5A						
Amax Byers B 3A B	1376	1928	1430	1315	1953	1485
" St A 5E	1123	3705	3302	1100	3057	2778
Ches St L 5O	521	3615	6939	533	3713	6966
Cont St A 33 2L	296	12144	41020	300	10722	35740
Kirby Farms 6 I	77	5581	72480	93	6875	73920
Kirby Mtk 4G	631	2259	3580	654	1986	13013
Hmb Bowers A 31E	2149	15524	7242	2188	14532	6642
Marc Hoy St 1F	98	1111	11330	359	1541	6735
2G	161	960	5963	422	1190	2819
Pan Con St 1G	2580	37002	14341	2468	39051	15872
2K						
AST 1O	2329	4150	1782	2175	4118	1893
Stl Bros 9M	572	4578	8003	552	4445	8052
Shaw 10L	343	4061	11839	349	4150	11891
STA 7#	2471	8327	3371	337	9923	2945
STB 6C	4038	6219	1540	2627	5380	2049
	18765	111259	59291	5477	112435	7264

L. P. Thompson
Division Manager
Production Department
Hobbs Division

Western Hemisphere Petroleum Division
Continental Oil Company
P.O. Box 460
1001 North Turner
Hobbs, New Mexico 88240
(505) 393-4141

September 8, 1972

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

Attention Mr. A. L. Porter, Jr.
Secretary Director

Gentlemen:

Case No. 4816 Application of Penroc Oil Corporation for Special Gas Oil Ratio Limitation Increase - Hobbs Drinkard Pool

Continental Oil Company was advised of the application of Penroc in the subject case. In a previous application on this pool, Continental expressed concern that the gas handling facilities in the area would not be able to handle the additional gas. We were primarily concerned with the facilities of Phillips Petroleum Company at their Hobbs Gasoline Plant. We are also advised that often times the flare in that vicinity is due to the inability of El Paso Natural Gas to take the processed gas from the tailgate of Phillips' plant.

We have been advised by Mr. Kellahin that Phillips has indicated their ability to handle the additional gas produced under the proposed amended rules. If Phillips is able to take the gas, and if El Paso is able to take the residue gas, Continental has no objection to the higher GOR limit.

Yours very truly,

L. P. Thompson

rw
Copy to:
Mr. Jason Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501

El Paso Natural Gas Company
Attention Mr. F. M. Woodruff
P. O. Box 1492
El Paso, Texas 79999

RLA

PHILLIPS PETROLEUM COMPANY
ODESSA, TEXAS 79760
PHILLIPS BUILDING, FOURTH & WASHINGTON

EXPLORATION & PRODUCTION DEPARTMENT

September 5, 1972

New Mexico Oil Conservation Commission
Case No. 4816--Application of Penroc
Oil Corporation to Increase Gas-Oil
Ratio Limitation in Hobbs Drinkard Pool

File: W4-Ro-31-72

file case No. 4816

New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

It has been noted that Penroc Oil Corporation has filed an application with the New Mexico Oil Conservation Commission to increase the limiting gas-oil ratio for the Hobbs Drinkard Pool to 6000 cubic feet of gas per barrel of oil produced. Phillips Petroleum Company is neither an operator nor an interest owner in any well producing from the Hobbs Drinkard Pool; therefore, we have no comment on the merits of this application in relation to the potential effect, if any, on the oil producing reservoir. As the operator of the Hobbs Gasoline Plant, which receives all gas sold from the Hobbs Drinkard Pool, we do have a direct interest in the volume of gas expected to be produced, and our comments are limited to this phase of the case.

In a letter to the Commission under date of April 28, 1972, we commented on a similar application by Penroc that was set for hearing as Case No. 4702. At that time Penroc had requested an increase to 10,000-1 for the gas-oil ratio of the Hobbs Drinkard Pool. The application was withdrawn, but our forecast of gas volumes for our Hobbs Plant indicated that had this request been granted that the capabilities of our plant would have been exceeded by the additional gas produced into our system. Since we were approaching the summer months when gas received at the plant normally increases, we did express concern to the Commission. We did state, however, that we foresaw 1972 as the year of peak gas production into our Hobbs Plant. Our continuing review of the Hobbs gas situation supports the repeating of this prediction.

Because we are now approaching the fall and winter months when our gas supply normally decreases, and because we foresee lower average plant loads for the year 1973, we believe the situation that may be created by affirmative action on Case No. 4816 is different than that expected from such action on Case No. 4702 with the request for a 10,000-1 ratio. For

those reasons we feel that we can now properly advise the Commission that should it see fit to approve the application made in Case No. 4816, that our Hobbs Gasoline Plant does have the nominal capability to receive and process, without flaring, all legal volumes of gas that may be produced from the Hobbs Drinkard Pool. Variation in rates of flow are important considerations to any gas processing plant, and our indication of capability assumes that gas will be received from oil produced in accordance with New Mexico Oil Conservation Commission Rule No. 502. Receipt of the additional gas that may be produced will not affect the ability of our plant to render effective service to producers from the Hobbs Pool and other pools connected to our facility.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

F. F. Lovering

F. F. Lovering, Manager
Southwestern District

WCR:ps

cc: New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Messrs. C. G. Eaheart
C. G. Mitchell

Amerada Division - Amerada Hess Corp.
Drawer 817, Seminole, Texas 79360

Amoco Production Company
Box 68, Hobbs, New Mexico 88240

Continental Oil Company
Box 460, Hobbs, New Mexico 88240

Getty Oil Company
Box 1231, Midland, Texas 79701

Humble Oil & Refining Co.
Box 1897, Andrews, Texas 79714

Marcum Drilling Co.
Box 5094, Midland, Texas 79701

Penroc Oil Corporation (2)
P. O. Drawer 831, Midland, Texas 79701

Shell Oil Company
Box 1509, Midland, Texas 79701

western union **Telegram**

KA017 (011) 1972 SEP 11 AM 11 41 (0114P EDT)

K CCD101 (SF 255CC617101)PD=CHEVRON DVR 0118P
EDT09/11/72 =ZCZC 001 DENVER, COLORADO
NEW MEXICO OIL CONSERVATION COMMISSION =
STATE LAND OFFICE BUILDING =SANTA FE, NEW MEXICO =

RECEIVED
SEP 11 1972
OIL CONSERVATION COMM
Santa Fe

REFERENCE IS MADE TO CASE NO. 4816, THE APPLICATION OF PENROC OIL =CORP. FOR AN INCREASE IN THE GAS LIMIT IN THE HOBBS (DRINKARD) POOL =TO A 6,000 TO 1 RATIO, SCHEDULED FOR SEPTEMBER 13, 1972. ==

CHEVRON OIL COMPANY IS OPPOSED TO THE INCREASE IN THE GAS LIMIT TO A =6,000 TO 1 RATIO AS PROPOSED BY PENROC OIL CORP. AND RESPECTFULLY =REQUESTS THAT THE SUBJECT

WU 1201 (R 5-69)

western union **Telegram**

APPLICATION BE DENIED. ==
CHEVRON OIL COMPANY =W.M. BALKOVATZ =
ITS ATTORNEY ====

WU 1201 (R 5-69)

MARCUM DRILLING COMPANY
P. O. BOX 5094
MIDLAND, TEXAS 79701

AC 915 683-1885

September 12, 1972

Mr. A. L. Porter
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Penroc Oil Corporation Hearing
Hobbs-Drinkard Pool
Gas-Oil Ratio
Lea County, New Mexico

Dear Mr. Porter:

In the matter of the application of Penroc Oil Corporation for a special Gas-Oil Ratio for the Hobbs-Drinkard Pool, Marcum Drilling Company, being an operator in the Hobbs-Drinkard Pool, fully supports the Penroc Oil Corporation's application. Our records reflect that the pool can be efficiently and economically produced and operated with a limiting gas-oil ratio of 6,000 to 1 with no waste, and correlative rights will be protected.

It is hoped the Commission will amend Order No. R-3811 to allow this reasonable request.

Yours very truly,

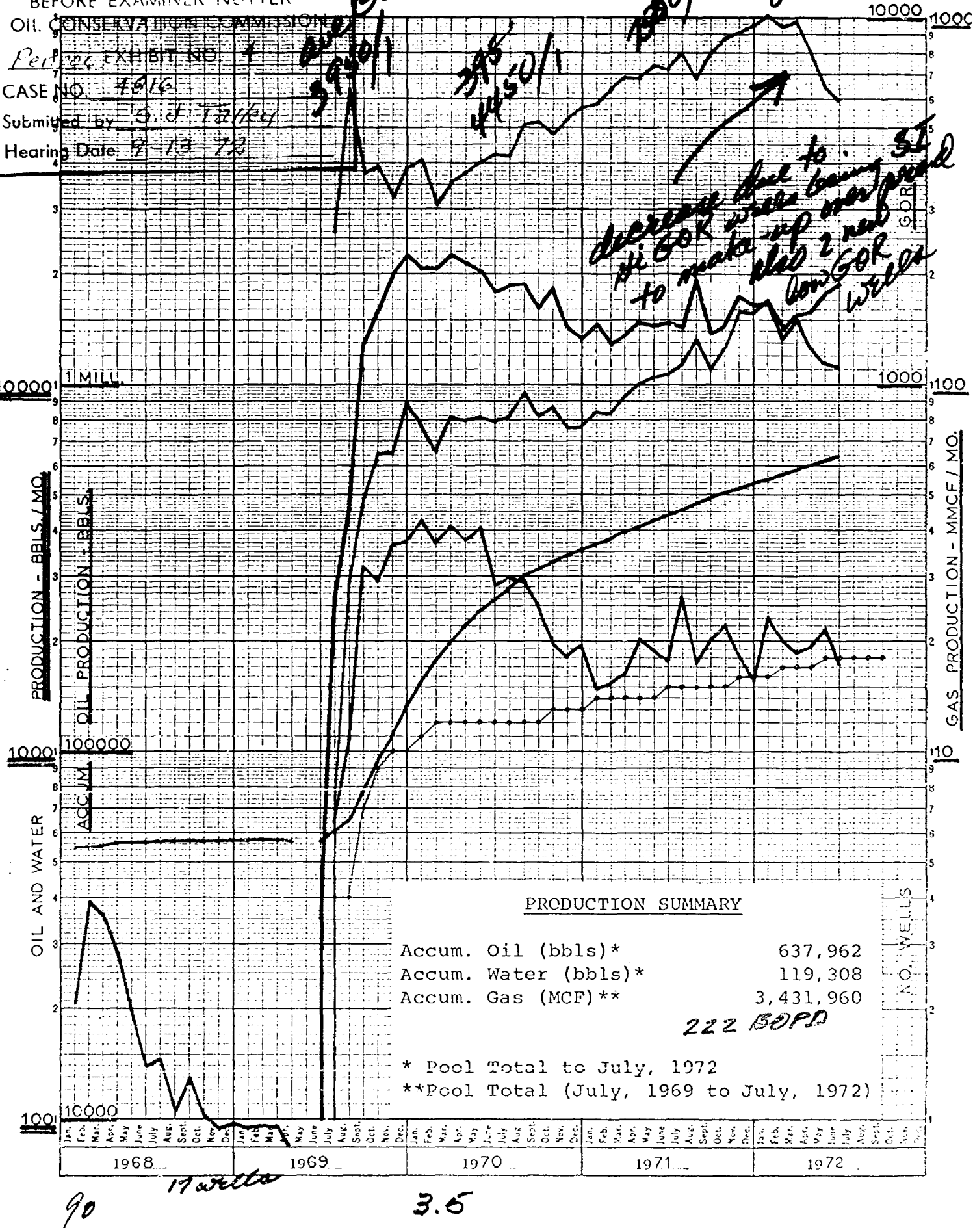
Gordon Marcum
President

GM/jp

cc: Mr. J. D. Ramey
Mr. Jason W. Kellahin
Mr. Sterling J. Talley

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Perry EXHIBIT NO. 4
CASE NO. 4616
Submitted by S. J. Perry
Hearing Date 7-13-72

HOBBS DRINKARD POOL



PRODUCTION SUMMARY

Accum. Oil (bbls)*	637,962
Accum. Water (bbls)*	119,308
Accum. Gas (MCF)**	3,431,960

222 BOPD

* Pool Total to July, 1972
**Pool Total (July, 1969 to July, 1972)

19 wells

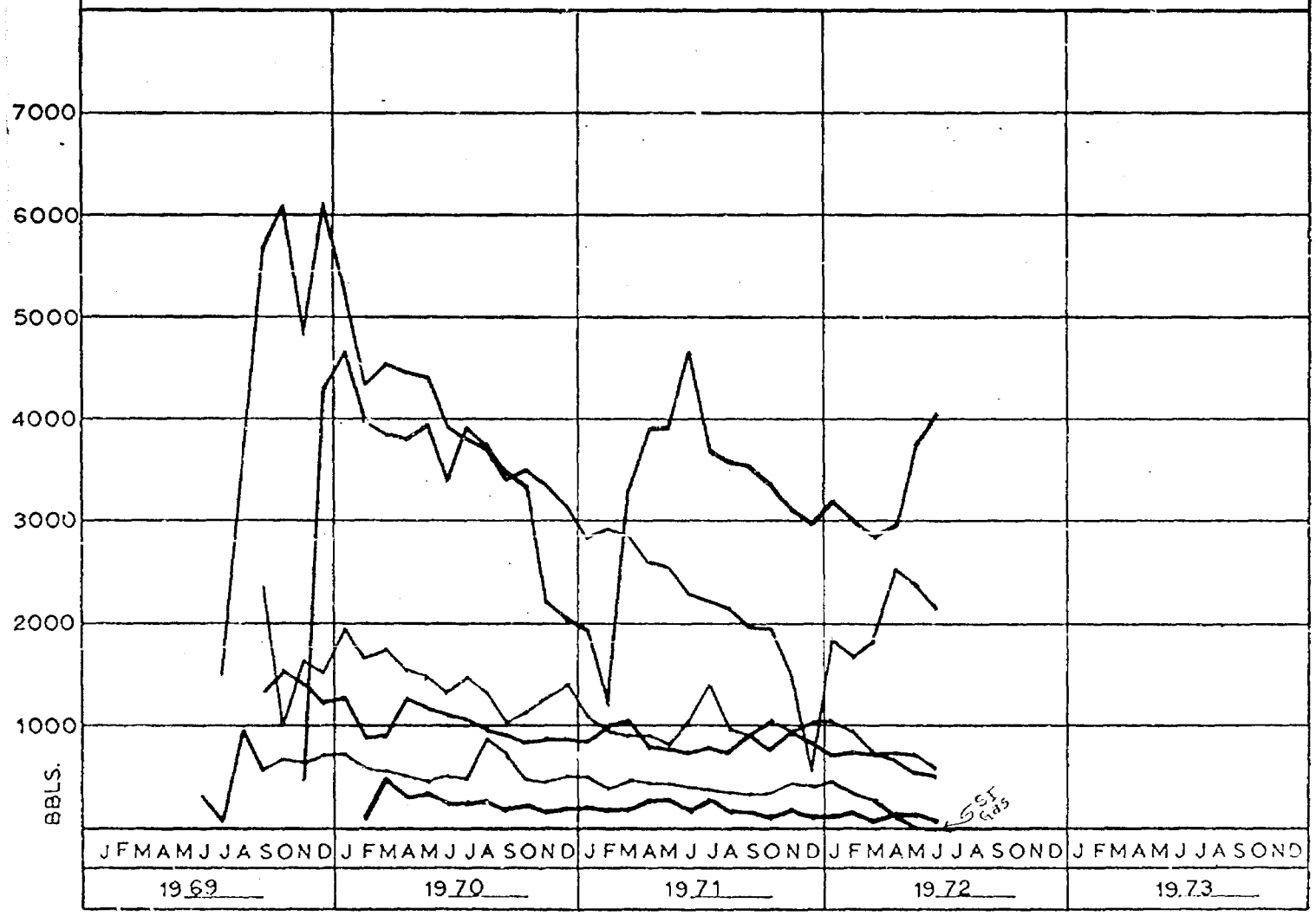
90

3.6

HOBBS DRINKARD POOL
PRODUCTION PERFORMANCE CURVES
6 Wells

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Penroc EXHIBIT NO. 5
CASE NO. 4816
Submitted by S. J. Talley
Hearing Date 9-13-72.

	WELL		Accumulative Production BO To 7/1/72
———	Humble	Bowers-Fed. No. 31	114,296
———	Shell	State "B" No. 6	105,990
———	Shell	Grimes No. 9	40,070
———	Chevron	State "I" No. 5	31,486
———	Amerada	State "A" No. 5	16,458
———	Getty	Grimes No. 6	5,394



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Penroc EXHIBIT NO. 6
CASE NO. 4816
Submitted by S. J. Talley
Hearing Date 9-13-72

OIL POOLS IN DISTRICT I HAVING HIGHER GOR's THAN STATEWIDE ALLOWABLE OF 2000 - 1

(From Proration Schedule for July and August, 1972)

1.	Arrowhead Grayburg	3,500
2.	Blinebry Oil	6,000
3.	D-K Drinkard	10,000
4.	Drinkard	6,000
5.	Eumont (Y, SR, Q)	10,000
6.	Eunice-Monument (G, SA)	4,500
7.	Eunice San Andres, South	5,000
8.	Eunice (SR, Q), South	10,000
9.	Fowler Upper Yeso	6,000
10.	Hobbs Drinkard	3,000
11.	Hobbs (G, SA)	3,500
12.	Jalmat (Y, SR)	10,000
13.	Justis Blinebry	6,000
14.	Langlie Mattix (SR, Q)	10,000
15.	Leonard Seven Rivers	10,000
16.	Leonard Queen, South	10,000
17.	Lightcap Devonian	5,000
18.	Lusk Strawn	4,000
19.	Maljamar Abo	4,000
20.	Mesa Queen	5,000
21.	Monument Tubb	4,000
22.	Oil Center Blinebry	4,000
23.	North Paduca Delaware	3,000
24.	Penrose Skelly Grayburg	10,000
25.	Rhodes Yates	10,000
26.	San Simon Yates North	10,000
27.	Scarborough Yates, Seven Rivers	10,000
28.	Teague Blinebry	6,000
29.	Terry Blinebry	6,000
30.	Vacuum (G, SA)	2,500
31.	Vacuum, Lower Penn	6,000
32.	Vada Penn	10,000

The above named pools represent 9.5% of the 337 pool designations in District I.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Penroc EXHIBIT NO. 7
CASE NO. 4816
Submitted by S. J. Talley
Hearing Date 9-13-72

HOBBS DRINKARD POOL

G O R DATA

Company	Well	GOR (ft.^{3}/Bbl)*
Amerada Hess Corporation	State "A" No. 5A	29,416
Amoco Production Company	Byers "B" No. 34B	1,440 -
Amoco Production Company	State "G" No. 5E	1,723 -
Chevron Oil Company	State "I" No. 5-O	666 -
Continental Oil Company	State "A-33" No. 12 L	12,650
Getty Oil Company	W. D. Grimes No. 6 I	39,200
Getty Oil Company	H. D. McKinley No.9 G	2,000 -
Humble Oil & Rfg. Company	Bowers "A" Federal No. 31E	310 -
Marcum Drilling Company	Hobbs-State No. 1-F	4,500 -
Marcum Drilling Company	Hobbs-State No. 2 G	2,980 -
Penroc Oil Corporation	Conoco-State No. 1-G	7,778
Penroc Oil Corporation	Conoco-State No. 2-K	6,510
Penroc Oil Corporation	Conoco-"A"-State No. 1-O	1,297 -
Shell Oil Company	Grimes No. 9M	7,650
Shell Oil Company	Grimes No. 10 L	11,308
Shell Oil Company	State "A" No. 7H	19,000
Shell Oil Company	State "B" No. 6 C	1,691 -
Pool Total: 17 wells.		150,200

No. wells in pool w/GOR greater than 2000/1 : 11 or 64.7% total wells.

No. wells in pool w/GOR greater than 3000/1 : 9 or 52.9% total wells

No. wells in pool w/GOR greater than 6000/1 : 8 or 47% total wells.

*GOR's taken from Proration Schedule for July and August 1972.

$\frac{150\,200}{17} = 8830$

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Pennzoil EXHIBIT NO. 8
CASE NO. 4816
Submitted by S. J. Talley
Hearing Date 9-13-72

HOBBS DRINKARD POOL

PRODUCTION DATA

1969

	Oil Bbls.	Gas MCF	Water Bbls.	GOR
June	280	-	-	
July	2,606	6,949	643	2600-1
August	4,607	28,849	1,179	6300-1
September	12,934	48,849	3,179	3800-1
October	15,796	62,810	2,908	3950-1
November	19,790	63,439	3,669	3200-1
December	22,741	89,313	3,711	3900-1
	78,744	300,209	15,289	

1970

	Oil Bbls.	Gas MCF	Water Bbls.	GOR
January	20,921	77,729	4,476	4100-1
February	20,776	64,760	3,691	3100-1
March	22,625	81,394	4,099	3600-1
April	21,251	79,134	3,758	3750-1
May	20,202	80,382	4,008	4000-1
June	17,891	79,583	2,858	4450-1
July	18,454	80,776	2,989	4400-1
August	18,709	95,130	2,938	5100-1
September	15,970	82,228	2,503	5200-1
October	18,184	87,254	1,977	4800-1
November	14,237	75,915	1,814	5300-1
December	13,380	76,081	1,928	5700-1
	222,600	960,366	37,039	

Hobbs Drinkard Pool
Production Data, Cont'd.
Page 2

1971

	Oil Bbls.	Gas MCF	Water Bbls.	GOR
January	14,587	84,138	1,491	5800-1
February	12,871	82,931	1,525	6400-1
March	13,515	92,794	1,612	6850-1
April	14,752	101,462	2,016	6800-1
May	14,360	105,348	1,897	7350-1
June	14,745	105,832	1,766	7200-1
July	14,356	113,986	2,621	8000-1
August	19,196	131,825	1,736	6800-1
September	13,725	108,986	2,001	8000-1
October	14,281	125,870	2,215	8800-1
November	17,443	158,443	1,826	9100-1
December	16,418	156,248	1,563	9510-1
	180,249	1,367,863	22,269	

1972

	Oil Bbls.	Gas MCF	Water Bbls.	GOR
January	16,682	169,097	2,325	10,000-1
February	14,060	131,235	2,011	9,400-1
March	15,503	151,776	1,884	9,800-1
April	15,884	125,881	1,932	7,900-1
May	17,779	114,237	2,177	6,450-1
June	18,765	111,259	1,724	6,000-1

PHILLIPS PETROLEUM COMPANY
ODESSA, TEXAS 79760
PHILLIPS BUILDING, FOURTH & WASHINGTON

EXPLORATION & PRODUCTION DEPARTMENT

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Penroc EXHIBIT NO. 9
CASE NO. 4816
Submitted by S. J. Talley
Hearing Date 9-13-72

September 5, 1972

New Mexico Oil Conservation Commission
Case No. 4816--Application of Penroc
Oil Corporation to Increase Gas-Oil
Ratio Limitation in Hobbs Drinkard Pool

File: W4-Ro-31-72

New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

It has been noted that Penroc Oil Corporation has filed an application with the New Mexico Oil Conservation Commission to increase the limiting gas-oil ratio for the Hobbs Drinkard Pool to 6000 cubic feet of gas per barrel of oil produced. Phillips Petroleum Company is neither an operator nor an interest owner in any well producing from the Hobbs Drinkard Pool; therefore, we have no comment on the merits of this application in relation to the potential effect, if any, on the oil producing reservoir. As the operator of the Hobbs Gasoline Plant, which receives all gas sold from the Hobbs Drinkard Pool, we do have a direct interest in the volume of gas expected to be produced, and our comments are limited to this phase of the case.

In a letter to the Commission under date of April 28, 1972, we commented on a similar application by Penroc that was set for hearing as Case No. 4702. At that time Penroc had requested an increase to 10,000-1 for the gas-oil ratio of the Hobbs Drinkard Pool. The application was withdrawn, but our forecast of gas volumes for our Hobbs Plant indicated that had this request been granted that the capabilities of our plant would have been exceeded by the additional gas produced into our system. Since we were approaching the summer months when gas received at the plant normally increases, we did express concern to the Commission. We did state, however, that we foresaw 1972 as the year of peak gas production into our Hobbs Plant. Our continuing review of the Hobbs gas situation supports the repeating of this prediction.

Because we are now approaching the fall and winter months when our gas supply normally decreases, and because we foresee lower average plant loads for the year 1973, we believe the situation that may be created by affirmative action on Case No. 4816 is different than that expected from such action on Case No. 4702 with the request for a 10,000-1 ratio. For

those reasons we feel that we can now properly advise the Commission that should it see fit to approve the application made in Case No. 4816, that our Hobbs Gasoline Plant does have the nominal capability to receive and process, without flaring, all legal volumes of gas that may be produced from the Hobbs Drinkard Pool. Variation in rates of flow are important considerations to any gas processing plant, and our indication of capability assumes that gas will be received from oil produced in accordance with New Mexico Oil Conservation Commission Rule No. 502. Receipt of the additional gas that may be produced will not affect the ability of our plant to render effective service to producers from the Hobbs Pool and other pools connected to our facility.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

F. F. Lovering

F. F. Lovering, Manager
Southwestern District

WCR:ps

cc: New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Messrs. C. G. Eaheart
C. G. Mitchell

Amerada Division - Amerada Hess Corp.
Drawer 817, Seminole, Texas 79360

Amoco Production Company
Box 68, Hobbs, New Mexico 88240

Continental Oil Company
Box 460, Hobbs, New Mexico 88240

Getty Oil Company
Box 1231, Midland, Texas 79701

Humble Oil & Refining Co.
Box 1897, Andrews, Texas 79714

Marcum Drilling Co.
Box 5094, Midland, Texas 79701

Penroc Oil Corporation (2)
P. O. Drawer 831, Midland, Texas 79701

Shell Oil Company
Box 1509, Midland, Texas 79701

JASON W. KELLAHIN
ROBERT E. FOX

W. THOMAS KELLAHIN

KELLAHIN AND FOX
ATTORNEYS AT LAW
500 DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

August 7, 1972

TELEPHONE 982-4315
AREA CODE 505

Case 4816

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

Gentlemen:

Enclosed is the application of Penroc Oil Corporation for approval of a change in pool rules for the Hobbs-Drinkard Pool, Lea County, New Mexico.

It is requested that this application be set for the earliest available hearing of the Commission or one of its examiners.

Yours very truly,

Jason W. Kellahin

Jason W. Kellahin

JWK:brs
Enclosure: as stated

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF PENROC OIL CORPORATION FOR A SPECIAL GAS-OIL RATIO FOR THE HOBBS-DRINKARD POOL, LEA COUNTY, NEW MEXICO

Case 4816

A P P L I C A T I O N

Comes now Penroc Oil Corporation and applies to the Oil Conservation Commission of New Mexico for an amendment to the Special Pool Rules for the Hobbs-Drinkard Pool. Lea County, New Mexico, being Order No. R-3811, as amended, to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil, and in support thereof would show the Commission:

1. Under the provisions of Order No. R-3811, as amended by Order No. R-3811-B, the Hobbs-Drinkard Pool is operating under a limiting gas-oil ratio of 3,000 to 1.

2. The pool can be efficiently and economically produced and operated with a limiting gas-oil ratio of 6,000 to 1, and waste will not occur, and correlative rights will be protected under such a producing ratio.

3. Gas produced with oil from the Hobbs-Drinkard Pool is presently being marketed, and there is a market available in the event gas production from this pool is increased as a result of the amendment of the Commission orders regarding the gas-oil ratio for the pool, and sufficient pipeline capacity will be available to handle such gas without waste.

4. The adoption of such a limiting ratio will

result in the ultimate recovery of oil that would not otherwise be recovered, and waste will not occur.

5. Order No. R-3811, as amended, should be further amended to provide for a limiting gas-oil ratio of 6,000 to 1, and in all other respects should remain as the present rules.

WHEREFORE applicant prays that this matter be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law the Commission enter its order amending the pool rules for the Hobbs-Drinkard Pool, to include a provision for a limiting gas-oil ration of 6,000 to 1, and for such other and further orders as may be proper in the premises.

Respectfully submitted,

PENROC OIL CORPORATION

By Jason W. Kellahin

KELLAHIN & FOX
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

DRAFT

DSN/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. 4816

Order No. R-3811-C

APPLICATION OF PENROC OIL CORPORATION FOR A SPECIAL GAS-OIL RATIO LIMITATION INCREASE, LEA COUNTY, NEW MEXICO.

11-9-72

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 13, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of November, 1972, 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, Penroc Oil Corporation, is the operator of certain wells in the Hobbs-Drinkard Pool, Lea County, New Mexico.

(3) That the Commission, by Order No. R-3811, dated August 14, 1969, promulgated special rules and regulations for the Hobbs-Drinkard Pool, including a special gas-oil ratio limitation of 4,000 cubic feet of gas per barrel of oil produced.

(4) That the Commission, by Order No. R-3811-B, dated November 10, 1970, amended the previously promulgated special rules for the Hobbs-Drinkard Pool to provide a limiting gas-oil ratio for said pool of 3,000 cubic feet of gas per barrel of oil produced.

(5) That the applicant, Penroc Oil Corporation, seeks the further amendment of the special rules to provide a limiting gas-oil ratio for the Hobbs-Drinkard Pool of 6,000 cubic feet of gas per barrel of oil produced.

(6) That there are wells completed in and producing from the Hobbs-Drinkard Pool with test ratios, as well as daily producing ratios, which are well within the presently assigned limiting ratio of 3,000 to one.

(7) That to adapt a limiting gas-oil ratio of 6,000 to one may give to wells producing with a high ratio of gas to oil an undue share of the reservoir energy, causing waste and violating correlative rights.

(8) That the adoption of a limiting gas-oil ratio for the Hobbs-Drinkard Pool of 5,000 cubic feet of gas per barrel of oil produced will not cause waste nor violate correlative rights, but will ensure the operator of each well in the pool the opportunity to produce without waste his just and equitable share of the oil and gas in the pool.

IT IS THEREFORE ORDERED:

(1) That Rule 7 of the Special Rules and Regulations for the Hobbs-Drinkard Pool, Lea County, New Mexico, is hereby amended to read in its entirety as follows:

"RULE 7. The limiting gas-oil ratio shall be 5,000 cubic feet of gas for each barrel of oil produced."

(2) That the effective date of this order shall be 7:00 A.M. December 1, 1972.

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

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

CASE 4817: Appli. of PHILLIPS PETROLEUM CO. FOR A NSL COMPLETION, EDDY COUNTY, NEW MEXICO.