

**CASE 5130: Application of MESA
PETROLEUM FOR THE AMENDMENT OF
ORDER NO. R-4658, LEA COUNTY.**

*Order to
App. 13th*

*Order
R-4658-A*

CASE No.

5/30

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 13, 1974

EXAMINER HEARING

IN THE MATTER OF:)
)
)

Application of Mesa Petroleum)
Company for the amendment of)
Order No. R-4658, Lea County,)
New Mexico.)
)
)

Case No. 5130

BEFORE: Richard L. Stanets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

William F. Carr, Esq.
Legal Counsel for the Com-
mission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:

Clarence Hinkle, Esq.
HINKLE, BONDURANT, COX &
EATON
Hinkle Building
Roswell, New Mexico

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E X H I B I T S

	<u>Marked</u>	<u>Admitted</u>
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MR. STAMETS: Call the next case, 5130.

MR. CARR: Case 5130. Continued from the January 3, 1974, Examiner Hearing. Application of Mesa Petroleum Company for the amendment of Order No. R-4658, Lea County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant, Cox and Eaton, appearing on behalf of Mesa Petroleum Company. We have one witness we would like to have sworn.

MR. STAMETS: Any other appearances in this case?

(Witness sworn.)

MR. HINKLE: Five Exhibits. These are the official marked ones. Here's another copy.

R. C. WILLIAMSON, JR.

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

DIRECT EXAMINATION

BY MR. HINKLE:

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

A I'm R. C. Williamson, Junior, from Midland, Texas, and I'm president of the consulting firm of Sipes, Williamson and Acox.

Q Have you been employed by Mesa Petroleum Company

WILLIAMSON-DIRECT

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in this case?

A Yes, I have.

Q Did you make a study of the area which is involved in the case?

A I have.

Q Have you previously testified before the Commission?

A Yes, I have.

Q Qualified as a petroleum engineer?

A Yes.

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

A Yes, they are.

MR. HINKLE: Qualifications sufficient?

MR. STAMETS: They are.

BY MR. HINKLE:

Q Are you familiar with the Application of Mesa in this case?

A Yes.

Q What is Mesa seeking to accomplish?

A Mesa is seeking to ammend the North Shœ Bar-Strawn temporary rules to provide for an increase in the gas-oil ratio from 2,000 to 4,000 cubic feet per barrel of oil.

Q Have you prepared or has there been prepared under

WILLIAMSON-DIRECT

your direction, Exhibits for introduction in this case?

A Yes.

Q And the ones you have prepared are Exhibits 1 through

4?

A That is correct.

Q Referring to Exhibit No. 1, explain what this is

and what it shows?

A Exhibit No. 1 is a structure map contoured on top of the Strawn pay and the Strawn contour interval is the light blue lines. The sort of aqua-blue lines are the isopach contours for the Strawn "B" Lease, which is the interval in which the Hillburn and Lister wells in Section 13 of 1635 are completed. The isopach intervals you can see range from zero up to 75 feet and the contour intervals then are through Section 13 around minus 7,300 feet.

The Hillburn and Lister wells in Section 13 are drilled and outfitted by Mesa Petroleum.

Q Mesa owns all of Section 13?

A Yes.

Q Any further comments in respect to this Exhibit?

A No, sir.

Q I refer to Exhibit No. 2, explain what this shows.

A Okay. Exhibit No. 2 is a data sheet on the potential

WILLIAMSON-DIRECT

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production and pressure data that are available for Hillburn No. 1 and Lister No. 1. These wells are currently shut in and are waiting a gas connection so there has been no production other than for testing to date.

The Hillburn No. 1 is potentialled October the 5th, 1973, for 1,872 barrels of oil and a gas-oil ratio of approximately 1,857.

The Lister No. 1 was potentialled November the 7th, 1973, for 884 barrels of oil at a gas-oil ratio of 2,163.

The Hillburn No. 1 was productive tested from the period September 28th to October the 7th, 1973, and produced 3,718 barrels of oil during this test period.

The Lister No. 1 was tested from November the 8th through the 13th and produced 1,305 barrels of oil. Pressure maintenance, both wells were drill-stem tested, pressure maintenance for the Hillburn were 4,274 and the Lister were 4,236 psig. The Hillburn, then, had a 72-hour pressure build-up test and the well was shut in, the pressure was then again measured at the end of this shut-in period and then the well was opened for flow tests for productivity index data to be obtained and then subsequent to that a 30-hour pressure build-up test was taken. The Lister had no further bottom-hole

WILLIAMSON-DIRECT

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pressure or production test done on the well.

Q Refer to Exhibit 3 and explain that.

A The Exhibit No. 3 is a productivity index data taken from the Hillburn No. 1 Well. This data consists of producing the well at various rates and measuring the bottom-hole pressure with a bomb during this test period. The data then are reduced to the right-hand column which is a productivity index and barrels of oil per day per psi of pressure drop and this pressure drop is between the initial shut-in pressure of 4,110 and the measured flowing bottom-hole pressure at the various rates. We can see by these data that the productivity index stabilized at a rate of somewhere around three plus barrels of oil per day per psi which indicates that this well does have very good producing ability.

The average gas-oil ratio during this test period was 2,206 cubic feet of gas per barrel of oil.

Q Refer to Exhibit No. 4 and explain that.

A Exhibit No. 4 are selected sheets from the reservoir fluid sample data obtained from the Hillburn No. 1 and this reservoir apparently is slightly under saturated. The initial pressure --

Q What is the character of the reservoir's gas solution?

A It is a solution of gas-dry reservoir from all data that we have available to date.

The initial reservoir pressure was somewhat above the calculated ball point pressure of 3,970 psig and you will note on Page 1 of this Exhibit that the original gas installation was 2,528 cubic feet per barrel, which is above the limiting gas-oil ratio of 2,000 cubic feet per barrel of oil.

The other pages are merely graphical representations of formation volume factor, pressure data, that were obtained on this sample.

Q Do you anticipate that when these wells are put on production and after some time that the gas-oil ratio will increase?

A Yes, with the fluid sample showing that the initial gas in the solution was 2,828 cubic feet per barrel, we can see that the initial testing showed gas-oil ratio somewhat below this, but I contribute this to the fact that there has been pressure drawn out around the well bore below the bubble point and that some gas is coming out of the solution and forming an immobile gas saturation currently around the well bore and as soon as this saturation reaches a critical point, I would expect this gas-oil ratio to come back to the 2,528

WILLIAMSON-DIRECT

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cubic feet per barrel and then indeed to increase after that point.

Q Do you have any further comments with respect to this Exhibit No. 4?

A No, sir.

Q I believe you testified that it did not have a pipeline connection at the present time for either oil or gas?

A That is correct.

Q Why have they not been selling oil, have they been waiting on the gas pipeline connection?

A Yes. They have been waiting on the gas connection and they now have contracted with Tipperary Oil Corporation who will buy the gas.

Q Referring to Exhibit 5, explain that.

A Okay. This is a letter from Tipperary Corporation to the New Mexico Oil Conservation Commission stating that Tipperary has contracted to purchase the gas from Mesa's wells in this area. They are currently in the process of contributing the right-of-way to lay the lines to tie this gas into their existing gasoline plant gathering system. They state that they are sizing this line so it will be capable of handling the gas that would be produced from Mesa's well to

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4,000 to one gas-oil ratio.

Q When do they anticipate that this pipeline may be available?

A They anticipate between April 1st and April 15th.

Q Special pool rules have been adopted for this pool, were they on a temporary basis?

A Yes, they were.

Q For one year?

A Correct.

Q That's under Order R-4658?

A Yes.

Q That was adopted in November of 1973?

A Correct.

Q Is Mesa in this case simply asking amendment of these temporary rules to provide for gas-oil ratio up to 4,000 to one?

A That is correct.

Q But therefore would be on a temporary basis subject to review when the special pool rules come up for review a year from November?

A That is correct. The data today indicates that this is a solution gas-dry reservoir and therefore the recovery would be independent of the rate at which it is

WILLIAMSON-DIRECT

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produced, but after these wells are put on production, test data will be obtained to determine exactly what the mechanism is and if any restriction of rates or any further change of the gas-oil ratio limit would be advised.

I might further state that with the fluid sample taken, that the separator tests were made under varying conditions and therefore, Mesa plans to utilize this data as a means of minimizing the amount of gas that will be produced. In other words, maximizing their oil recovery, minimize the gas recovery by separation techniques. So, they are trying to do everything possible to conserve the gas.

Q In your opinion, if this Application is approved, will it be in the interest of conservation, in the prevention of waste and tend to protect correlative rights?

A Yes, it will.

MR. HINKLE: We offer Exhibits 1 through 5.

MR. STAMETS: Any objection to admission of these Exhibits? They will be so admitted.

(Whereupon, Applicant's Exhibits
Nos. 1 through 5 were admitted
in evidence.)

MR. HINKLE: That's all we have.

WILLIAMSON-CROSS

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CROSS EXAMINATION

BY MR. STANETS:

Q Mr. Williamson, what is the temporary maximum allowable for these wells?

A I believe it's 680 barrels per day. I believe that is correct, 680 or 682.

Q And 2,000 to one, that would be one -- let's do my math here.

A Would be 1.2 million per day, I believe.

Q That's about what I figured.

A 1.36.

Q And at 4,000 that would be roughly two-and-a-half million per day?

A Correct.

Q Would these rates of oil and gas production at 4,000 to one injure the formation and cause a lower ultimate recovery from this reservoir?

A In my opinion, it would not. The data that we have to date, the productivity index indicate this well is capable of producing at a very high rate. For instance, with the three barrels of psi drop, we would only have to have 250 pounds draw down into the well bore to produce the allowable rate.

WILLIAMSON-CROSS

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Q What is the depth of the Strawn in this area?

A Oh, let's see, it's about -- it's approximately 10,000 feet. Approximately, 10,000 feet.

Q Is this field fully developed?

A No, it isn't. One of the primary reasons that Mesa will spend quite a bit of effort in the study of these wells, because there is initial reef bank trend as indicated by the current geological interpretation. Once they determine what the recovery from these wells will be, there will be a definite additional development.

Q At the present time, Mesa is the only operator in the field? In the pool rather?

A There is another well in Section 15 that is producing from the reef bank and I think that has been recompleted in another zone, so, I believe, that today, that Mesa is the only operator.

Q Have you made any calculations of the ultimate recovery to the economical limit as to gas-oil ratio limitations of 2,000 and 4,000?

A Well, sir, I haven't. I have made a volumetric calculation of the oil that would be recovered from these wells assume net pay thickness indicated by the log assuming an areal drainage of 160 acres. I further attempted for this

WILLIAMSON-CROSS

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Hearing, I ran some ~~total~~ material balance completion calculations, but without good relative permeability data, I had quite a range of expected recoveries anywhere from three percent to 35 percent of the oil in place, depending on KGKO data that I did use.

Mesa has indicated that after or as these wells are produced, they will get field derived KGKO curve. This will aid in predicting when depletion performance from these wells will be.

Q This is the sort of information that can be better developed after the wells get on the stream?

A Correct. We're just basing all of this on what we see today and that's why we have temporary rules until we can observe the producing characteristics under actual producing conditions. But with the initial producing ratio above 2,000, you certainly expect this reservoir initially to certainly produce above the 2,000 limit gas-oil ratio.

Q Has re-injection of the produced gas been considered?

A Not at this time, with only two wells in the field, it would be rather impossible to have good injection program, but with further development and further study of the reservoir, this certainly could be a consideration.

Q Would Mesa Petroleum have any objection to a

requirement for a consideration of reinjection and the development of these with recovery calculations that we discussed here before the temporary rules are considered again?

A I would think they would be glad to do that.

MR. STAMETS: Anything further of this witness?

MR. HINKLE: That's all I have.

MR. STAMETS: You may be excused.

(Witness excused.)

MR. STAMETS: Anyone else have anything additional in this case? Take the case under advisement.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Richard L. Nye
RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 5130,
heard by me on Feb 13, 19 74.
Richard L. Hunt, Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 962-0336

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 3, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Mesa Petroleum
Company for the amendment of
Order No. R-4658, Lea County,
New Mexico.

Case No. 5130

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For New Mexico Oil Conservation
Commission:

William Carr, Esq.
Legal Counsel for the Com-
mission
State Land Office Bldg.
Santa Fe, New Mexico

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

MR. NUTTER: We will call the next case, No. 5130.

MR. CARR: Case 5130. Application of Mesa Petroleum Company for the amendment of Order No. R-4658, Lea County, New Mexico.

Mr. Examiner, the Commission has received a letter from Mesa Petroleum Company requesting this case be continued to the Examiner's Hearing on February 13th.

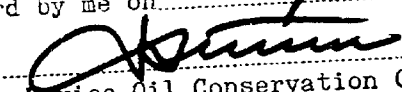
MR. NUTTER: Case No. 5130 will be continued to the Examiner Hearing scheduled to be held at the Oil Conservation Commission Conference Room, State Land Office Building, Santa Fe, New Mexico, at 9:00 A.M., February 13th, 1974.

STATE OF NEW MEXICO)
COUNTY OF SANTA FE) ss.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.


COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5139, heard by me on 1/3, 1970.


Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2068 - SANTA FE
87501

February 22, 1974

I. R. TRUJILLO
CHAIRMAN

**LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER**

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

Re: CASE NO. 5168 and 5130

ORDER NO. R-4733 and R-4658-A

Applicant:

Silver Monument and Mesa Pet.

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

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
Artesia OCC x (R-4733)
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. 5130
Order No. R-4658-A

APPLICATION OF MESA PETROLEUM
COMPANY FOR AN AMENDMENT TO
THE TEMPORARY SPECIAL POOL
RULES, NORTH SHOE BAR-STRAWN
POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 13, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 21st day of February, 1974, 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, Mesa Petroleum Company, seeks the amendment of the temporary special pool rules, North Shoe Bar-Strawn Pool, Lea County, New Mexico, to provide for a limiting gas-oil ratio of 4,000 cubic feet of gas per barrel of oil produced.

(3) That the applicant has completed two wells in the subject pool.

(4) That neither well has been produced, except for testing, pending the completion of casinghead gas gathering facilities to serve the wells.

(5) That the test information available indicates that wells completed in said pool will produce with gas-oil ratios in excess of 2000 to 1.

(6) That the evidence currently available indicates that wells in said pool may be produced without waste under a limiting gas oil ratio of 4000 to 1.

(7) That the applicant has made no determination of ultimate recovery of hydrocarbons from the subject pool to the economic limit at limiting gas-oil ratios of 2000 to 1 and 4000 to 1 or under conditions of gas reinjection or pressure maintenance.

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CASE NO. 5130
Order No. R-4658-A

(8) That such estimates of recovery should be made and presented at an examiner hearing in November, 1974, at which time the operators in the North Shoe Bar-Strawn Pool are to appear and show cause why said pool should not be developed and produced in accordance with statewide oil well spacing and production rules.

(9) That applicant's request for an amendment to the temporary special pool rules for the North Shoe Bar-Strawn Pool to provide for a limiting gas-oil ratio of 4000 to 1 should be approved.

IT IS THEREFORE ORDERED:

(1) That the Order R-4658 is hereby amended by the addition of Rule No. 7 to the special pool rules of the North Shoe Bar-Strawn Pool as set out below:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH SHOE BAR-STRAWN POOL

RULE 7. A limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil produced is hereby established for the pool.

IT IS FURTHER ORDERED:

(1) The applicant shall prepare estimates of recovery from the North Shoe Bar-Strawn Pool under the gas-oil ratios and conditions set out in Finding (7) of this order for presentation at the examiner hearing to be held in November, 1974, as required by Commission Order No. R-4658.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman


ALEX J. MARTINEZ, Member


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

SEAL

jr/

Memo

From

R. L. STAMETS
Technical
Support Chief

To

Projection of Total
Recovery to economic
limit with 2,000 to
4000 & ~~7000~~
repressuring
Repress possible?

How many wells
one well ST is
per schedule

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 13, 1974

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for March, 1974, from fourteen prorated pools in Lea, Eddy, Roosevelt, and Chaves 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 March, 1974.

CASE 5130: (Continued from the January 3, 1974, Examiner Hearing)

Application of Mesa Petroleum Company for the amendment of Order No. R-4658, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4658, which order promulgated special pool rules for the North Shoe Bar-Strawn Pool, Lea County, New Mexico. Applicant seeks the amendment of said rules to provide for a special gas-oil ratio limitation of 4000 to one.

CASE 5165: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Western States Equipment Company, The Travelers Indemnity Company and all other interested parties to appear and show cause why the Hutcherson Com Well No. 1 located in Unit C of Section 27, Township 9 South, Range 34 East, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5166: Application of Skelly Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of its South Salt Lake Unit Well No. 1 at a point 660 feet from the North and West lines of Section 21, Township 21 South, Range 32 East, Lea County, New Mexico. Applicant further seeks establishment of an administrative procedure for the approval of additional unorthodox locations in said South Salt Lake Unit Area without hearing.

CASE 5167: Application of Fluid Power Pump Company and Petro-Lewis Corporation for compulsory pooling, Sandoval County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests underlying two non-standard proration units in Township 19 North, Range 3 West, Media-Entrada Oil Pool, Sandoval County, New Mexico, described as follows:

Unit No. 1, the S/2 SW/4 of Section 14 and N/2 NW/4 of Section 23, dedicated to applicants' Media Well No. 1 located in Unit M of said Section 14; and

(Case 5167 continued from Page 1)

Unit No. 2, the S/2 SE/4 of Section 15 and N/2 NE/4 of Section 22, to be dedicated to applicants' Media Well No. 2 located in Unit P of said Section 15.

CASE 5168: Application of Silver Monument Minerals, Inc. for an unorthodox oil well location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its proposed Humble-Tucker Well No. 5 at an unorthodox location 1315 feet from the South and West lines of Section 25, Township 7 South, Range 32 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 5169: Application of Atlantic Richfield Company for an unorthodox oil well location and the amendment of Order No. R-3011, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 1200 feet from the South line and 1250 feet from the West line of Section 24, Township 17 South, Range 32 East, Johns Waterflood Project, Maljanar Pool, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-3011 which authorized said project to provide for administrative approval of additional infill locations in said project.

CASE 5173: Application of Mobil Oil Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 3, Township 23 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to its Maude Rickman Com Well No. 1 located in Unit L of said Section 3. 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 applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5170: Application of Monsanto Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 16, Township 19 South, Range 25 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location in the NE/4 of said Section 16. 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 applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5171: Application of Coquina Oil Corporation for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests of Pennsylvanian age and older underlying the N/2 of Section 16, Township 19 South, Range 25 East, Eddy County, New Mexico, to be dedicated to a well proposed to be drilled at an unorthodox location 990 feet from the North and East lines of said Section 16. 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 applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5140: (Continued from the January 16, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for compulsory pooling, Vada-Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Vada-Pennsylvanian Pool underlying the NW/4 of Section 24, Township 9 South, Range 33 East, Lea County, New Mexico, to be dedicated to the King Resources Sheridan Well No. 1-A located in Unit C of said Section 24. Also to be considered is designation of the applicant as operator of the NW/4 of said Section 24 and the well located thereon, provision for allocation of actual operating costs and charges for supervision, and allocation of costs for reworking said well including a 200% charge attributable to any non-consenting working interest owner's pro rata share of said workover costs, for the risk involved in said workover.

CASE 4956: (Reopened) (Continued from the January 16, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for a determination of well costs, Lea County, New Mexico. Applicant, as operator of the Sheridan Well No. 1 located in Unit M of Section 13, Township 9 South, Range 33 East, Lea County, New Mexico, to which well is dedicated the SW/4 of said Section 13, all mineral interests in the Vada-Pennsylvanian Pool thereunder having been pooled by Commission Order No. R-4560, seeks the determination of reasonable well costs attributable to applicant and to King Resources, including, but not limited to, the costs of reworking and placing said Sheridan Well No. 1 back on production and attorneys fees in connection therewith. Applicant further seeks an order assessing, as a charge for the risk involved in the reworking of the well, 120% of the pro rata share of the reasonable well costs attributable to the working interest of King Resources.

CASE 5124: (Continued from the January 16, 1974, Examiner Hearing)

Application of Belco Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests

(Case 5124 continued from Page 3)

underlying the S/2 of Section 30, Township 20 South, Range 33 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 1300 feet from the East line of said Section 30. 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 applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5172: Southeastern New Mexico nomenclature case calling for the creation, abolishment, contraction and extension of certain pools in Lea, Eddy, and Chaves Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Upper Pennsylvanian production and designated as the Avalon-Upper Pennsylvanian Gas Pool. The discovery well is Atlantic Richfield Company, State 80 Com No. 1 located in Unit G of Section 15, Township 21 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM
Section 15: N/2

(b) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Rocky Arroyo-Atoka Gas Pool. The discovery well is the El Paso Natural Gas Company Patterson No. 1 located in Unit H of Section 30, Township 22 South, Range 22 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM
Section 30: E/2

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and designated as the Rocky Arroyo-Canyon Gas Pool. The discovery well is the El Paso Natural Gas Company Rocky Arroyo C No. 1 located in Unit F of Section 8, Township 22 South, Range 22 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM
Section 8: W/2

(d) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Winchester-Strawn Gas Pool. The discovery well is the Hillin Production Company JCW State Com No. 1 located in Unit C of Section 2, Township 20 South, Range 28 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 2: N/2

(e) Create a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the Indian Draw-Delaware Pool, and to consider the assignment of 16,300 barrels of oil discovery allowable to the discovery well, the Amoco Production Company Old Indian Draw Unit Well No. 1, located in Unit J of Section 18, Township 22 South, Range 28 East, Eddy County, New Mexico. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 28 EAST, NMPM
Section 18: SE/4

(f) Abolish the East Weir-Tubb Pool in Lea County, New Mexico, described as:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM
Section 12: E/2 and S/2 SW/4
Section 13: N/2

(g) Extend the Monument-Tubb Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM
Section 11: E/2 SE/4
Section 12: E/2 and SW/4
Section 13: N/2

(h) Contract the Wantz-Abo Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 1: SE/4 SW/4
Section 12: NW/4 NE/4

(i) Contract the Winchester-Wolfcamp Pool in Eddy County, New Mexico, by the deletion of the following described area:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM
Section 35: S/2 SE/4

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 2: W/2 NE/4

(j) Extend the West Atoka-Cisco Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM
Section 11: S/2

(k) Extend the West Atoka-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM
Section 18: N/2

(l) Extend the Cabin Lake-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 30 EAST, NMPM
Section 35: W/2

TOWNSHIP 22 SOUTH, RANGE 30 EAST, NMPM
Section 2: N/2

(m) Extend the Catclaw Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM
Section 20: All

(n) Extend the Cato-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 30 EAST, NMPM
Section 25: SW/4
Section 26: SE/4

TOWNSHIP 20 SOUTH, RANGE 30 EAST, NMPM
Section 29: All

(o) Extend the Burton Flats-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 33: E/2
Section 34: N/2

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM
Section 4: Lots 1, 2, 7, 8, 9, 10, 15 and 16

(p) Extend the Burton Flats-Strawn Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 34: S/2

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM
Section 3: Lots 1 through 16

(q) Extend the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 31: S/2

(r) Extend the Fren Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM
Section 15: W/2 SW/4

(s) Extend the Grayburg-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 28: S/2

(t) Extend the Golden Lane-Strawn Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM
Section 5: Lots 3, 4, 5, 6, 11, 12,
13 and 14

(u) Extend the Logan Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM
Section 27: All

(v) Extend the North Morton-Permo Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM
Section 25: S/2
Section 36: NE/4

(w) Extend the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, to include therein.

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM
Section 30: N/2

(x) Extend the Quail Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM
Section 17: E/2

(y) Extend the Red Lake-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM

Section 7: S/2

Section 8: W/2

(z) Extend the Rocky Arroyo-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 22 EAST, NMPM

Section 33: S/2

TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM

Section 4: N/2

Section 5: All

Section 8: W/2

(aa) Extend the South Salt Lake-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 33 EAST, NMPM

Section 32: S/2

Section 33: W/2

(bb) Extend the West Sawyer-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM

Section 23: NW/4

(cc) Extend the Scharb-Bone Springs Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM

Section 2: S/2

(dd) Extend the North Shoebar-Strawn Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM

Section 13: NE/4

(ee) Extend the Square Lake Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM

Section 9: NE/4

(ff) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM

Section 1: NW/4

Section 15: N/2 SW/4

(gg) Extend the Vada-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM

Section 2: SW/4

(hh) Extend the Washington Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 24 EAST, NMPM

Section 28: S/2

(ii) Extend the White City-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 26 EAST, NMPM

Section 30: All

(jj) Extend the Winchester-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM

Section 34: W/2

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. G. MARTIN
PAUL J. KELLY, JR.
ANDREW ALLEN

LAW OFFICES
HINKLE, BONDURANT, COX & EATON

600 HINKLE BUILDING

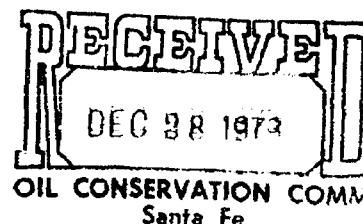
POST OFFICE BOX 10

ROSWELL, NEW MEXICO 88201

December 27, 1973

TELEPHONE (505) 622-6510

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) 683-4691



Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 5130
January 3, 1974

Gentlemen:

This will confirm my telephone conversation yesterday with Ida Rodriguez in which it was requested that the above case be continued from the January 3 setting until the examiner's hearing on February 13 in order to allow Mesa Petroleum Co. to obtain further information.

We certainly appreciate your cooperation in this matter.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

By Charlotte Sandry
Charlotte Sandry, Secretary

cc: Mr. Les Carnes
Mesa Petroleum Co.

DOCKET MAILED

Date 1-31-74

DOCKET: EXAMINER HEARING - THURSDAY - JANUARY 3, 1974

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:

CASE 5000: (Continued from the June 20, 1973, Regular Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Aztec Oil and Gas Company and United States Fidelity and Guaranty Company and all other interested parties to appear and show cause why the Aztec Totah Unit Wells Nos. 17 and 18, located in Unit E of Section 20, and Unit H of Section 19, respectively, Township 29 North, Range 13 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5006: (Continued from the June 20, 1973, Regular Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Aztec Oil and Gas Company and United States Fidelity and Guaranty Company and all other interested parties to appear and show cause why the Southeast Cha Cha Unit Well No. 1 located in Unit M of Section 32, Township 29 North, Range 13 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5128: Application of Gulf Oil Corporation for a non-standard gas proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the NE/4 SW/4 and W/2 SE/4 of Section 28 and the NW/4 NE/4 of Section 33, both in Township 21 South, Range 37 East, Blinbry Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its J. N. Carson Wells Nos. 4 and 9 located in Units O and K, respectively, of Section 28.

CASE 5129: Application of Dorchester Exploration Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling all mineral interests in the Wilson-Pennsylvanian Pool underlying the E/2 of Section 13, Township 21 South, Range 34 East, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location in Unit I of said Section 13. 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 applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5130: Application of Mesa Petroleum Company for the amendment of Order No. R-4658, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4658, which order promulgated special

(Case 5130 continued from Page 1)

pool rules for the North Shoe Bar-Strawn Pool, Lea County, New Mexico. Applicant seeks the amendment of said rules to provide for a special gas-oil ratio limitation of 4000 to one.

CASE 5131: Application of Jake Hamon for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation through the perforated interval from 12,935 feet to 12,946 feet and the open-hole interval from 12,960 feet to 13,023 feet in his Getty State L-736 Well No. 1 located in Unit D of Section 32, Township 16 South, Range 36 East, East Shoe Bar-Devonian Pool, Lea County, New Mexico.

CASE 5132: Application of American Quasar Petroleum Company of New Mexico for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the White City Unit Area comprising 5,120 acres, more or less, of Federal, State and fee lands in Township 25 South, Ranges 25 and 26 East, Eddy County, New Mexico.

CASE 5133: Application of Atlantic Richfield Company for four non-standard gas proration units and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the following 320-acre non-standard gas proration units in Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico:

The N/2 of Section 34 to be dedicated to its Curran Jones Wells Nos. 1 and 10 located in Units A and C, respectively, of Section 34;

McDonald State Lease:

The N/2 of Section 14 to be dedicated to Wells Nos. 11 and 25 both located in Unit D of Section 14;

The E/2 of Section 26 to be dedicated to Wells Nos. 22, 9, and 8 located in Units A, G, and P, respectively, of Section 26;

The W/2 of Section 24 to be dedicated to Wells Nos. 26 and 12 located in Units D and M, respectively, of Section 24.

CASE 5134: Application of Atlantic Richfield Company for simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of four wells to a standard 640-acre unit comprising all of Section 15, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, said wells being applicant's McDonald State WN Wells Nos. 23, 14, 15, and 13, located in Units C, G, L, and P, respectively, of Section 15.

CASE 5135: Application of Atlantic Richfield Company for the amendment of Order No. R-4549, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Rule 1 of the Special Rules for the Empire-Abo Pressure Maintenance Project as promulgated by Order No. R-4549 to expand the project area as defined therein to include the

(Case 5135 continued from Page 2)

SW/4 SE/4 of Section 27 and the S/2 SE/4 of Section 34, both in Township 17 South, Range 28 East, and the NW/4 NE/4 and the SE/4 SW/4 of Section 6, Township 18 South, Range 28 East, Empire-Abo Pool, Eddy County, New Mexico.

Applicant further seeks the amendment of Rules 3 and 4 of said special rules to provide that effective January 1, 1974, the maximum allowable for the project area be 33,000 barrels per day rather than 30,000 as presently provided.

CASE 5136: Application of Coastal States Gas Producing Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox oil well location of its McGuffin Well No. 2 at a point 1980 feet from the North line and 660 feet from the West line of Section 29, Township 9 South, Range 33 East, Flying "M"-San Andres Pool, Lea County, New Mexico.

CASE 5137: Application of Skelly Oil Company for two unorthodox locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill two producing wells at two unorthodox locations, one 2630 feet from the North line and 1330 feet from the West line and the other 1330 feet from the South line and 10 feet from the West line, both in Section 22, Township 17 South, Range 31 East, Grayburg-Jackson Pool, Eddy County, New Mexico.

CASE 5138: Application of Skelly Oil Company for a waterflood project and four dual completions, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Seven Rivers formation, Fren Pool, through six injection wells in its Skelly Unit Area in Sections 21, 22 and 28, Township 17 South, Range 31 East, Eddy County, New Mexico, three of which wells would be dually completed for injection into the Seven Rivers formation and the existing Grayburg-Jackson waterflood project. Applicant further seeks authority to dually complete its Skelly Unit Well No. 76 located in Unit 0 of said Section 21 as a dual completion to produce from the Fren Seven Rivers Pool and the Grayburg-Jackson Pool through parallel strings of tubing.

CASE 5139: Application of Skelly Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formation through three wells on its Lea "C" Lease in Section 11, Township 17 South, Range 31 East, Grayburg-Jackson Pool, Eddy County, New Mexico.

CASE 5141: Application of David Fasken for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter an existing well, the unorthodox surface location of which is 660 feet from the South and West lines of Section 7, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico,

(Case 5141 continued from Page 3)

and to directionally drill said well in such a manner as to bottom the well in the Morrow formation at a point 915 feet from the South line and 660 feet from the West line of said Section 7.

CASE 5142: Application of Amoco Production Company for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Black River-Pennsylvanian Gas Pool, Eddy County, New Mexico, including a provision for 320-acre drilling and proration units. In the absence of objection, this pool will be placed on the standard 320-acre spacing for Pennsylvanian gas pools rather than the present 160-acre spacing.

CASE 5140: (This case will be continued to January 16, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for compulsory pooling, Vada-Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Vada-Pennsylvanian Pool underlying the NW/4 of Section 24, Township 9 South, Range 33 East, Lea County, New Mexico, to be dedicated to the King Resources Sheridan Well No. 1-A located in Unit C of said Section 24; Also to be considered is designation of the applicant as operator of the NW/4 of said Section 24 and the well located thereon, provision for allocation of actual operating costs and charges for supervision, and allocation of costs for reworking said well including a 200% charge attributable to any non-consenting working interest owner's pro rata share of said workover costs, for the risk involved in said workover.

CASE 4956: (Reopened) (This case will be continued to January 16, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for a determination of well costs, Lea County, New Mexico. Applicant, as operator of the Sheridan Well No. 1 located in Unit M of Section 13, Township 9 South, Range 33 East, Lea County, New Mexico, to which well is dedicated the SW/4 of said Section 13, all mineral interests in the Vada-Pennsylvanian Pool thereunder having been pooled by Commission Order No. R-4560, seeks the determination of reasonable well costs attributable to applicant and to King Resources, including, but not limited to, the costs of reworking and placing said Sheridan Well No. 1 back on production and attorneys fees in connection therewith. Applicant further seeks an order assessing, as a charge for the risk involved in the reworking of the well, 120% of the pro rata share of the reasonable well costs attributable to the working interest of King Resources.

EXHIBIT NO. 2

DATA SHEET FOR
 MESA PETROLEUM COMPANY - HILBURN NO. 1 AND LISTER NO. 1
 NORTH SHOEBAR (STRAWN) FIELD - LEA COUNTY, NEW MEXICO

	Hilburn No. 1	Lister No. 1
Initial Potential:		
Date	10-5-73	11-7-73
Duration of Test Hours	18	6
Extrapolated Test, Hours	24	24
Choke Size, Inches	20/64	20/64
Flowing Tubing Pressure, psig	1,245	1,360
Oil, BBL	872	884
Water, BBL	0	0
Gas, MCF	1,169	1,313
GOR, Ft. ³ /BO	1,857	2,163
Production Data:		
Oil, BBLS	3,718	1,305
Water, BBLS	0	0
Gas, MCF	---	2,855
GOR, Ft. ³ /BO	---	2,188
Period of Production	9-28-73 to 10-7-73	11-8-73 to 11-13-73
Pressure Measurements:		
1. Drill Stem Test, psig at (-7,342)	4,274	4,236
2. 72-Hour Pressure Buildup Test		
Date	10-10-73	Well CI
Measured Pressure, psig	3,833	No Further
Extrapolated Pressure, psig	4,248*	Testing
3. Measured Pressure After CI		
1,368 Hours From		
10-10-73, psig	4,110	
4. Flow Tests and Fluid Samples		
Taken 12-4-73 through 12-6-73	(See Exhibits No. 3 and 4 for test data)	
5. 30-Hour Pressure Buildup Test		
Date	12-6-73	
Measured Pressure, psig	4,077	
Extrapolated Pressure, psig	4,110	

* Pressure still increasing - extrapolation variable.

SIPES, WILLIAMSON & AYCOCK, INC.
 1100 GHLS TOWER WEST MIDLAND, TEXAS 79701
 ROY C. WILLIAMSON, JR., P. E./lm 2-12-74

BEFORE EXAMINER STAMETS
 OIL CONSERVATION COMMISSION

EXHIBIT NO. 2

CASE NO. 5130

Submitted by Mesa

Hearing Date 2-13-74

EXHIBIT NO. 2

EXHIBIT NO. 3

PRODUCTIVITY INDEX DATA
MESA PETROLEUM COMPANY - HILBURN NO. 1
NORTH SHOEBAR (STRAWN) FIELD
LEA COUNTY, NEW MEXICO

<u>Producing Oil Rate, B/D</u>	<u>BHP at 11,322 (-7,342)</u>	<u>Productivity Index BO/Day/psi</u>
(CI 1,388 hrs.)	4,110.0	---
97.44	4,098.0	8.12
113.64	4,095.0	7.60
64.91	4,091.0	3.40
56.80	4,086.0	2.40
162.24	4,077.0	4.90
186.60	4,067.0	4.30
170.40	4,061.0	3.50
186.60	4,055.0	3.40
194.76	4,049.0	3.20

8 Hr. Avg. 184.59 BO/D, 407.15 MCF/D, GOR = 2,206 Ft.³/BO

SIPES, WILLIAMSON & AYCOCK, INC.
1100 GIBBS TOWER WEST MIDLAND, TEXAS 79701
ROY C. WILLIAMSON, JR., P. E./lm 2-12-74

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
<u>G.A.</u> EXHIBIT NO. <u>3</u>	
CASE NO. <u>5130</u>	
Submitted by <u>Mesa</u>	
Hearing Date <u>2-13-74</u>	

EXHIBIT NO. 3

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS 75207

Page 3 of 12
File RFL 73565
Well Hilburn No. 1

Reservoir Fluid SAMPLE TABULAR DATA

PRESSURE PSI GAUGE	PRESSURE-VOLUME RELATION @ 179 °F., RELATIVE VOLUME OF OIL AND GAS, V/V _{sat} .	VISCOSITY OF OIL @ 179 °F., CENTIPOISES	DIFFERENTIAL LIBERATION @ 179 °F.		
			GAS/OIL RATIO LIBERATED PER BARREL OF RESIDUAL OIL	GAS/OIL RATIO IN SOLUTION PER BARREL OF RESIDUAL OIL	RELATIVE OIL VOLUME, V/V _R
5000	0.9713	0.205			2.390
4700	0.9784	0.200			2.407
4500		0.197			
4400	0.9866				2.427
4300	0.9896	0.193			2.435
4200	0.9926				2.442
4100	0.9956	0.190			2.450
4000	0.9989				2.458
3970	1.0000	0.188	0	2528	2.460
3888	1.0063				
3850		0.192	222	2306	2.330
3753	1.0178				
3700		0.206	440	2088	2.205
3559	1.0368				
3500		0.222	666	1862	2.078
3320	1.0654				
3200		0.246	921	1607	1.940
3071	1.1036				
2900		0.271	1123	1405	1.832
2779	1.1614				
2500		0.305	1346	1182	1.719
2497	1.2387				
2189	1.3550				
2100		0.351	1535	993	1.625
1904	1.5105				
1700		0.407	1704	824	1.542
1627	1.7248				
1316	2.1008				

**BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION**

CH EXHIBIT NO. 4
CASE NO. 5130

Submitted by J. M. ...
Hearing Date 2-13-74

V = Volume at given pressure
V_{sat} = Volume at saturation pressure and the specified temperature.
V_R = Residual oil volume at 14.65 PSI absolute and 60° F.

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS 75207

Page 4 of 12
File RFL 73565
Well Hilburn No. 1

Reservoir Fluid SAMPLE TABULAR DATA

PRESSURE PSI GAUGE	PRESSURE-VOLUME RELATION @ 179 °F. RELATIVE VOLUME OF OIL AND GAS, V/V _{sat} .	VISCOSITY OF OIL @ 179 °F. CENTIPOISES	DIFFERENTIAL LIBERATION @ 179 °F.		
			GAS/OIL RATIO LIBERATED PER BARREL OF RESIDUAL OIL	GAS/OIL RATIO IN SOLUTION PER BARREL OF RESIDUAL OIL	RELATIVE OIL VOLUME, V/V _r
1300		0.478	1859	669	1.467
1027	2.6852				
900		0.578	2006	522	1.395
758	3.6507				
500		0.731	2154	374	1.321
180			2302	226	1.235
0		1.173	2528	0	1.061
				@ 60°F. = 1.000	

Gravity of residual oil = 41.8° API @ 60°F.

V = Volume at given pressure
V_{sat} = Volume at saturation pressure and the specified temperature.
V_r = Residual oil volume at 14.65 PSI absolute and 60° F.

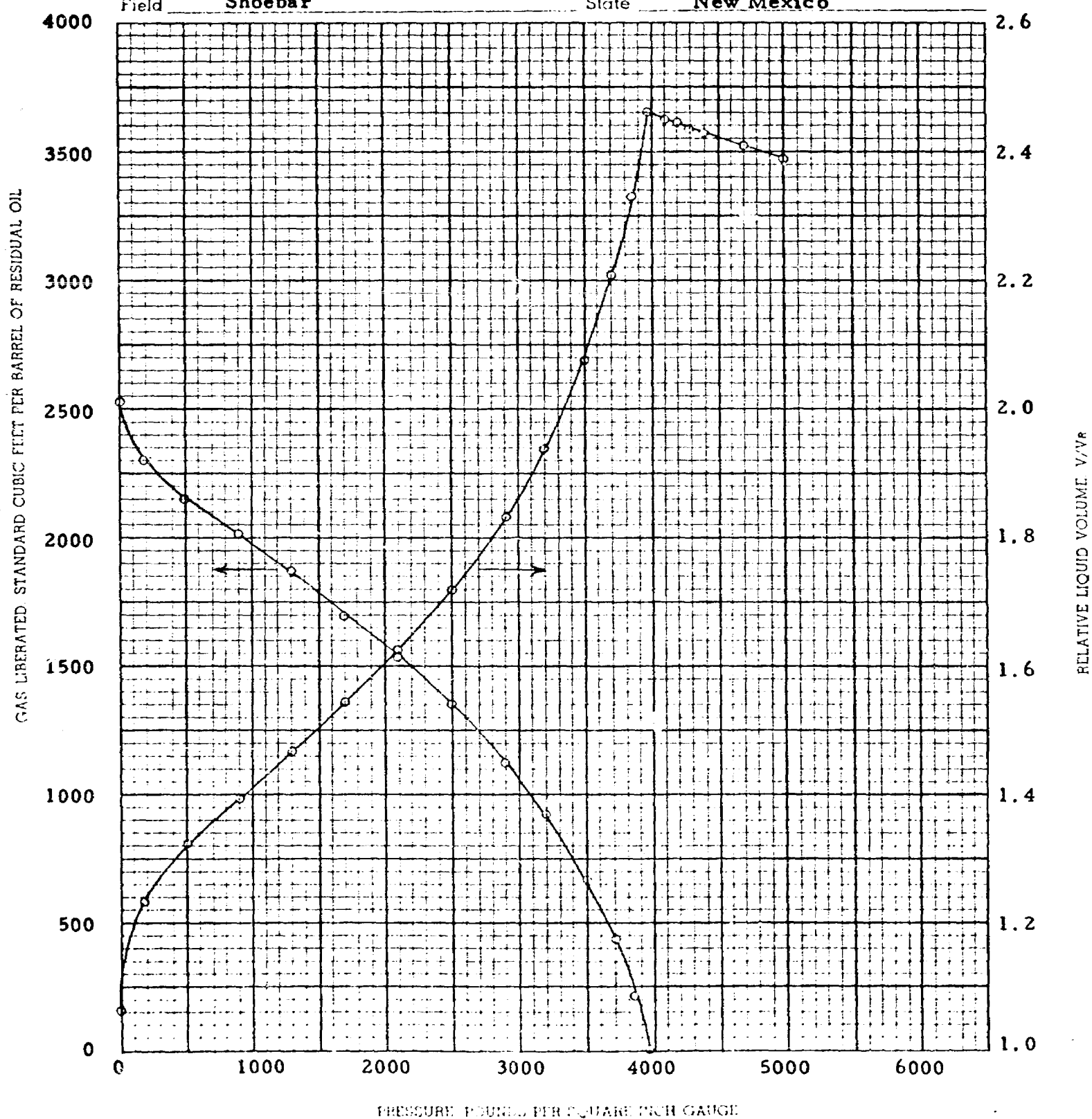
These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

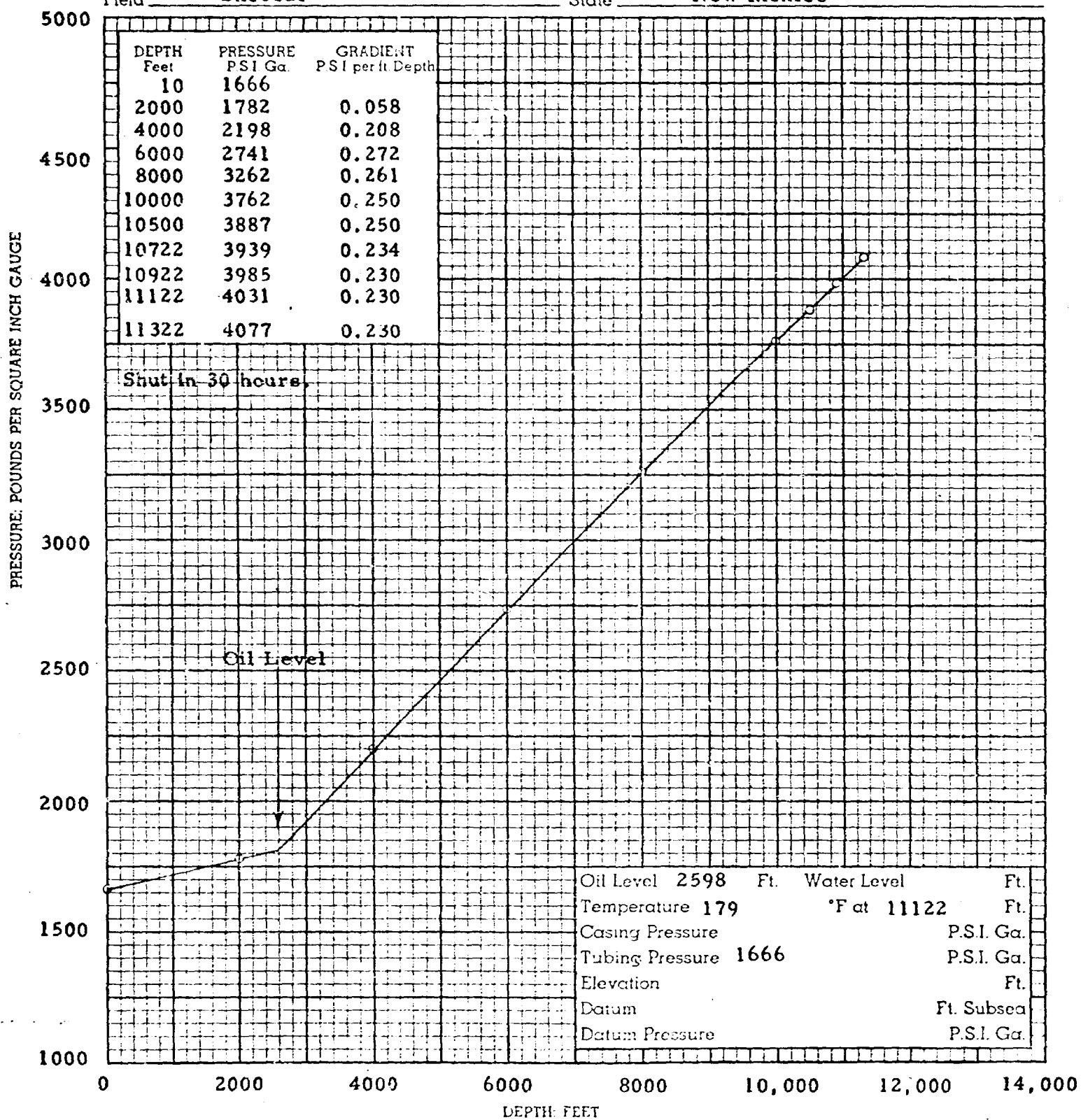
Page 10 of 12
File RFL 73565

DIFFERENTIAL VAPORIZATION OF RESERVOIR FLUID

Company Mesa Petroleum Company Formation Strawn
Well Hilburn No. 1 County Lea
Field Shoebar State New Mexico



Company Mesa Petroleum Company Formation Strawn
Well Hilburn No. 1 County Lea
Field Shoebar State New Mexico



TIPPERARY
CORPORATION
500 WEST ILLINOIS
Midland, Texas 79701

February 11, 1974

Phone (915) 684-7151
Telex 743414

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

Attention Mr. Dan Nutter

Gentlemen:

Re: Mesa Petroleum Company
Lea County, New Mexico

Tipperary Corporation has contracted to purchase the gas from the recently completed wells of Mesa Petroleum Company southwest of Lovington, Lea County, New Mexico. We are currently in the process of securing the necessary right-of-way to lay the lines to tie this gas into our existing Denton Gasoline Plant Gathering System.

We are sizing this line so that it will be capable of handling the gas which might be produced from Mesa's wells under a 4000-1 gas-oil ratio and we plan to take all of this gas for processing in our plant.

Yours very truly,

Ben D. Gould
Ben D. Gould

BDG:gh

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	5
CASE NO.	5130
Submitted by	Mesa
Hearing Date	2-13-74

Case 5130

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. O. MARTIN
PAUL J. KELLY, JR.

~~ANDREW ALLEN~~

LAW OFFICES
HINKLE, BONDURANT, COX & EATON

600 HINKLE BUILDING

POST OFFICE BOX 10

ROSWELL, NEW MEXICO 88201

December 18, 1973

TELEPHONE (505) 622-8510

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) 683-4691

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

We enclose herewith in triplicate application of Mesa Petroleum Co. to amend the temporary pool rules adopted for the North Shoe Bar-Strawn Pool to provide for a limiting gas/oil ratio of 4,000 to 1.

I have previously discussed this matter with Dan Nutter and understand that it will be placed on the January 3, 1974 docket.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

By Clarence E. Hinkle
CH

CEH:cs
Enc.

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF MESA PETROLEUM CO.
TO AMEND THE TEMPORARY POOL RULES
ADOPTED FOR THE NORTH SHOE BAR-
STRAWN POOL IN ORDER R-4658, CASE
NO. 5082, TO PROVIDE FOR A LIMITING
GAS/OIL RATIO OF 4,000 CUBIC FEET
OF GAS TO EACH BARREL OF OIL PRO-
DUCED.

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Comes Mesa Petroleum Co., acting by and through the under-
signed attorneys, and hereby makes application to amend the temporary
pool rules adopted for the North Shoe Bar-Strawn Pool in Order R-4658,
Case No. 5082, to provide for a limiting gas/oil ratio of 4,000 cubic
feet of gas to each barrel of oil produced, and in support thereof
respectfully shows:

1. Under date of November 16, 1973 the Commission issued
Order R-4658 in Case No. 5082 adopting special rules and regulations
for the North Shoe Bar-Strawn Pool, including 160 acre spacing and
proration units.

2. The special rules and regulations above referred to
did not change the statewide rule 506 limiting the gas/oil ratio to
2,000 cubic feet of gas for each barrel of oil produced. It appears
that some of the wells being completed in the North Shoe Bar-Strawn
Pool have a gas/oil ratio in excess of 2,000 cubic feet of gas for
each barrel of oil produced, but that the characteristics of the
reservoir are such that it will not be injurious to said wells or
the reservoir to produce said wells at a gas/oil ratio in excess of
2,000 to 1. Furthermore, all of the oil and gas which can be pro-
duced without waste needs to be produced because of the energy shortage.


3. Applicant believes that it will be in the interest of
conservation, the prevention of waste and the protection of correlative
rights to amend the North Shoe Bar-Strawn Pool rules to provide for
a limiting gas/oil ratio of 4,000 cubic feet of gas for each barrel
of oil produced.

4. Applicant requests that this matter be set down for hearing at the examiner's hearing to be held on January 3, 1974.

Respectfully submitted,

MESA PETROLEUM CO.

By


HINKLE, BONDURANT, COX & EATON
Attorneys for Applicant
P.O. Box 10
Roswell, New Mexico 88201

DRAFT

jr/

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. 5130

Order No. R-4658-A

APPLICATION OF MESA PETROLEUM
COMPANY FOR AN AMENDMENT TO THE
TEMPORARY SPECIAL POOL RULES,
NORTH SHOE BAR-STRAWN POOL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 13, 1974,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of February, 1974 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, Mesa Petroleum Company, seeks the
amendment of the temporary special pool rules, North Shoe Bar-Strawn
Pool, Lea County, New Mexico, to provide for a limiting gas-oil
ratio of 4,000 cubic feet of gas per barrel of oil produced.

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CASE NO. 5130
Order No. R-4658-A

(3) That the applicant has completed two wells in the subject pool.

(4) That neither well has been produced, except for testing, pending the completion of casinghead gas gathering facilities to serve the wells.

(5) That the test information available indicates that wells completed in said pool will produce with gas-oil ratios in excess of 2000 to 1.

(6) That the evidence currently available indicates that wells in said pool may be produced without waste under a limiting gas oil ratio of 4000 to 1.

(7) That the applicant has made no determination of ultimate recovery of hydrocarbons from the subject pool to the economic limit at limiting gas-oil ratios of 2000 to 1 and 4000 to 1 or under conditions of gas reinjection or pressure maintenance.

(8) That such estimates of recovery should be made and presented at an examiner hearing in November, 1974, at which time the operators in the North Shoe Bar-Strawn Pool are to appear and show cause why said pool should not be developed and produced in accordance with statewide oil well spacing and production rules.

(9) That applicant's request for an amendment to the temporary special pool rules for the North Shoe Bar-Strawn Pool to provide for a limiting gas-oil ratio of 4000 to 1 should be approved.

IT IS THEREFORE ORDERED:

(1) That the Order R-4658 is hereby amended by the addition of Rule No. 7 to the special pool rules of the North Shoe Bar-Strawn Pool as set out below:

-3-
CASE NO. 5130
Order No. R-4658-A

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH SHOE BAR-STRAWN POOL

RULE 7. A limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil produced is hereby established for the pool.

IT IS FURTHER ORDERED:

(1) The applicant shall prepare estimates of recovery from the North Shoe Bar-Strawn Pool under the gas-oil ratios and conditions set out in Finding (7) of this order for presentation at the examiner hearing to be held in November, 1974, as required by Commission Order No. R-4658.

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