CASE 5122: Application of SUN OIL COMPANY FOR CREATION OF A NEW OIL POOL AND POOL RULES, LEA COUNTY.

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CASE No.
5122

Application,

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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico May 12, 1976

EXAMINER HEARING

IN THE MATTER OF:

Case 5122 being reopened pursuant to the provisions of Order No. R-4693-A, which order extended the special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico.

5122

(Reopened)

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission:

William F. Carr, Esq.

Legal Counsel for the Commission State Land Office Building

Santa Fe, New Mexico

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MR. NUTTER: We will call now, Case Number 5122.

MR. CARR: Case 5122, in the matter of Case 5122

being reopened pursuant to the provisions of Order No. R-4693-,
which order extended the special pool rules for the East LuskWolfcamp Oil Pool, Lea County, New Mexico, including a
provision for one-hundred-and-sixty-acre proration units and
a limiting oil-gas ratio of four thousand to one.

MR. NUTTER: Are there any appearances in Case Number 5122? If not we will take the case under advisement with a recommendation to the Commission that the pool revert to the state-wide spacing pattern and that the GOR revert to the state-wide GOR rule.

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand 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.

Sidney F. Morrish, C.S.R.

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New Mexico Oil Conservation Cormission

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NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico February 19, 1975

EXAMINER HEARING

IN THE MATTER OF:

Case 5122 being reopened pursuant to the provisions of Order No. R-4693, which order established temporary special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and a limiting gas-oil ratio of 4000 to 1.

Case No. 5122

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission:

Thomas Derryberry, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

Thomas Kellahin, Esq. KELLAHIN & FOX 500 Don Gaspar Santa Fe, New Mexico

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EXHIBIT	Marked	Admitted
Applicant's Exhibits Nos. 1 through 5		16

MR. DERRYBERRY: Case 5122. In the matter of Case 5122 being reopened pursuant to the provisions of Order No. R-4693, which order established temporary special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, including a provision for 160-acre spacing and provation units and a limiting gas-oil ratio of 4000 to 1.

MR. KELLAHIN: Tom Kellahin of Kellahin & Fox, Santa Fe, New Mexico, appearing on behalf of Sun Oil Company and I have two witnesses to be sworn.

(Witnesses sworn.)

KENNETH W. LARSON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Please state your name, by whom you are employed, and in what capacity?
- A Kenneth W. Larson, I'm employed as the Staff
 Professional Geologist by the Sun Oil Company, Production
 Department, Dallas Region, Dallas, Texas.
 - Q Mr. Larson, have you previously testified before

this Commission and had your qualifications as an expert geologist accepted and made a matter of record?

- A Yes, I have.
- Q And were you the expert witness that testified in the original hearing of this case held on November 28th, 1973?
 - A Yes, I was.

MR. KELLAHIN: If the Examiner please, are the Witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

BY MR. KELLAHIN:

- Q Mr. Larson, would you please refer to what has been marked as Applicant Exhibit No. 1, identify it, and state briefly what Sun Oil is requesting?
- A The Sun Oil Company is seeking to make permanent the temporary pool rules for the East Luks-Wolfcamp Oil Pool established by Order No. 4693, including a provision for 160-acre spacing and proration units in a limiting gas-oil ratio of 4000 to 1. In support of this request I have prepared two geological exhibits for presentation at this hearing.
- Q Please refer to Exhibit 1 now and tell me what information it contains?

A Exhibit 1 is a structure map of the East Lusk Wolfcamp Oil Pool and adjacent areas at a scale of one inch equals 1000 feet. The mapping datum is at top of the Wolfcamp limestone and the conture interval is 50 feet. The control points are color coded in red and blue, the blue denoting wells which have or are presently producing from the Wolfcamp limestone while the red denotes Wolfcamp penetrations. In areas of little or no well controls seismic data was utilized. On the right side of the map is a portion of the bore hole compensated sonic log gamma ray of the Sun Oil Company sharing Federal No. 1, which represents the type log for the pool. This well is marked by a red arrow on the map. The line of cross section AA' and the proposed 160-acre proration unit is also posted on the map.

Q Please refer to what has been marked as Exhibit No. 2 and identify the information contained on it.

A Exhibit G-2 is stratographic cross section AA' the datum of which is at top of the Wolfcamp limestone. The vertical scale is one inch equals 42; there is no horizontal scale. The drill stem test and perforations are posted on the logs. As shown on Exhibit No. 1, it extends from west to east. The Superior Oil Company

State No. 1-C in the southwest quarter of Section 16 is the well to the left or west of the cross section. The drill stem test of the Wolfcamp from 10,716 to 10,745 had gas to the surface in 51 minutes and recovered 90 feet of heavy oil and gas-cut mud and 1255 feet of heavy gas and slightly oil-cut mud. There was no completion attempt and the test was plugged and abandoned on December 21st, 1964. The cross section then extends eastward to the Cleve Rock No. 1 Pedco State in the southeast quarter of Section 16. This well was completed in the Wolfcamp limestone with a flowing potential of 42 barrels of oil plus 7 barrels of water in 24 hours on September 28th, 1974. It was recompleted in the Bone Springs as a gas well on December 7th, 1974, after producing 341 barrels of oil in the Wolfcamp limestone. The next well to the east is the Sun Oil Company Sharon Federal No. 1, which was originally completed in the Morrow on May 8th, 1972, with a potential of 2321 mcf with a gas-oil ratio of Upon the depletion of the Morrow it was re-5780 to 1. completed in the Wolfcamp on October 25th, 1973, with a flowing potential of 556 barrels of oil per day with a GOR of 1700 to 1. As of January 1st, 1975, it

had produced 103,985 barrels of oil plus 189,823 mcf of gas. It is currently producing at a rate of 165 barrels of oil per day. The cross section then extends to the northeast to the Sun Oil Company's No. 1 Jennings Federal, which was perforated in the Wolfcamp and after acid it tested between 40 and 50 barrels of oil per day.

The Bone Springs indicated a better porosity development, therefore a retrievable bridge plug was placed at 10,027 and a successful completion has been made in the Bone Springs.

It is apparent from Exhibits Nos. 1 and 2 that the Wolfcamp limestone is of considerable areal extent and underlies the area of interest.

MR. KELLAHIN: If the Examiner please, that concludes our direct examination of this Witness. We have a second witness to present the engineering.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Larson, apparently the Cleve Rock Well didn't amount to much in the Wolfcamp; your well up here, your Jennings Federal though, it had a potential of 40 to 50 barrels a day in the Wolfcamp you say?

A We did not potential it, Mr. Examiner, it was

tested, and inasmuch as the log analysis and the sample description indicated a potential zone in the Bone Springs. Sun Oil deemed it advisable to test it based on the premise that a 500 barrel of oil per day is better than the 50 barrel of oil per day.

- But there will be an opportunity to go back into the Wolfcamp later?
- Oh, certainly, Mr. Examiner. Now, with respect to the Cleve Rock Well, without appearing to be critical of the completion attempt, I might point out that the well was perforated over an interval of 182 feet and the entire section was acidized with 20,000 gallons. Now, in my opinion, I think that a more selective acid treatment would have resulted in a better completion.
- Now, did I understand you correctly to say when it was recompleted in the Bone Spring it only had 341 barrels of oil from the Wolfcamp?
- That is correct, it was only produced for a Α period of one month.
- I see. And your symbol up at the top shows it to be a gas well?
- That is true, Mr. Examiner, that is its current -- it is currently a gas well in the Bone Springs.

Possibly I should have put an abandoned oil well symbol underneath that, but I did not.

- Q Well, now, is your well over here, this Jennings Well, in the Bone Springs? Is it a gas well or an oil well?
 - A An oil well.
 - Q How much does it make from the Bone Springs?
- A The well was potentialed on January 30, 1975, with a flowing potential of 669 barrels of oil plus one barrel of water in 24 hours; on a 1664 inch choke a gasoil ratio of 674 to 1; a flowing tubing pressure of 950 to 850 and the gravity of the oil is 41.4 api.
- Q Now, is the gas from your Sharon Federal Well being sold?
- A Yes, it has, Mr. Nutter. We are presently getting 23.86 per mcf and the price for the oil is the free market of \$11.16 per barrel.
- Q And it is the only Wolfcamp well around here that is producing, is it not?
 - A That is correct.

MR. NUTTER: I believe that is all from that Witness. Are there further questions of this Witness? He may be excused.

MR. KELLAHIN: Just a moment. Do you have anything further you would like to add, Mr. Larson?

MR. LARSON: Well, it should be pointed out that the production zone of the Bone Springs in the Cleve Rock Petko State No. 1 is structurally lower than a completion interval in the Bone Springs in the Sun Oil Company Jennings Federal No. 1.

MR. NUTTER: Okay.

(Witness previously sworn.)

HERBERT A. SEIDEL, JR.

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Please state your name and by whom you are employed and in what capacity.
- My name is Herbert A. Seidel, Jr., I work for Sun Oil Company as a Reservoir Engineer in the Dallas Region.
- Have you previously testified before this Commission and had your qualifications as an expert witness accepted and made a matter of record?
 - Yes, sir, I have.

MR. KELLAHIN: Are the Witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

BY MR. KELLAHIN:

- Q Please refer to what has been marked as Applicant Exhibit No. 3 and summarize briefly the information contained on that Exhibit.
- A Yes, sir. This is a tabulation of the monthly production of oil, gas, and water, for the three wells that have been completed in the Wolfcamp East Lusk Field. At the bottom of the Exhibit we also have the potential information, which has already been introduced by Mr. Larson.
- Q All right. Would you refer to Exhibit No. 4 and identify the information contained?
- A This is a production performance history of the one producer in the field. Beginning at the bottom of the graph we have four sections. The bottom section is the average rate of barrels of oil per day; the maximum production is on the order of 300 barrels per day for the first nine months of production. We have in December, 1973, a low production, which was brought about by the wells being shut-in for our combining of three porosity zones

production point in May of 1974 which was caused by a long-term shut-in test for bottomhole pressure, which resulted in a bottomhole pressure measurement of 2506 pounds at 10,746 feet or 7108 feet subsea. The last 6 months' production has declined pretty rapidly and, as mentioned by Mr. Larson, our production in December, 1974, was 165 barrels of oil per day. Moving on up to the next section we have a water-cut, which, for the first 3 months of 1974 was about 15 percent and for the last three months of '74 increasing up to 28 percent. This is approximately 50 barrels of water per day. We don't feel that this is evidence of any even weak water drive; we're probably combing water in one of the zones that we're perforated in.

- Q How did you reach that conclusion?
- A The bottomhole pressure that I mentioned earlier of 2500 pounds; the initial pressure in the reservoir, by the way, is 4137 pounds.

MR. NUTTER: What was that figure?

MR. SEIDEL: 4137.

BY MR, KELLAHIN:

Q All right. Please continue.

A All right. Moving on up to the third tier from the bottom we have gas-oil ratio plotted, cubic feet per barrel; initial GOR is on the order of 1700 cubic feet per barrel and it is steadily increased up to a value of 3450 cubic feet per barrel in December, 1974.

- Q Let me ask you some questions with regard to your GOR here. Do you anticipate that the present limiting GOR ratio of 4000 to 1 is adequate and will continue to be adequate for this pool?
 - A Yes, sir, I do.
- Q And do you feel that you will continue to need a limiting GOR ratio in excess of the statewide 2000 to 1?
- A Yes, sir, I do, and this is based on the future plans of our running the hydraulic pump and pumping the water on higher rates; we would have higher gas rates as a result of that, hopefully.
 - Q Please continue.

A Thank you. The top tier is a plot of the flowing tubing pressure versus time, and I will point out an error in this Exhibit. We have a pressure point in October of '73; that point should have been plotted in -- I'm sorry, it is in September -- it should have been plotted for October; so those top two points of 1400 and

1300 pounds should be moved over one month, and the third point plotted in November deleted. That part of the Exhibit would be correct. The initial pressure that I mentioned around 1400 tubing pressure declined in December to about 175 pounds. Our studies through well modeling of this one well indicate that the drainage volume connected to the well is on the order of 160 acres if the average net pay is assumed to be on the order of 54 feet, which we see in this well. However, we observed something on the order of 16 feet in that pay in Sun's Jennings Federal No. 1 and 34 feet in the Cleve Rock Well. So, if the net pay averages 32 feet we're talking about something on the order of 270 acres of drainage or 22 feet of net pay something on the order of 390 acres.

- In your opinion then this well is draining at lease in the area of 160 acres?
 - Yes, sir, it is.
- You don't have any information that would lead you to a different conclusion?
- None whatsoever. Our well-modeling work using permeability of .76 to oil millidarcies, stratification

- of .73 indicates a pretty good match for the history that we have observed to date.
- Q Do you have anything else you would like to add with regard to Exhibit No. 4?
 - A No, sir.
- Q Please refer to Exhibit No. 5 and summarize the information contained on it.

This is an economic comparison of our well drilled on 80-acres spacing versus one which would be drilled on 160-acre spacing. This is for Sun's 87.5 percent working interest, or 74.06 income interest in the area. The successful cost to drill, complete, and equip a well in the field is \$470,000 for Sun's 87.5 percent interest, or \$537,000 for the 100 percent working interest. This includes \$102,000 of surface equipment, which includes \$70,000 for artificial lift. Expected reserves for 8/8ths barrels were 100 percent successory, such as we found in Sun's Sharon Federal No. 1, would result in 217,000 barrels ultimate recovery on 80-acre spacing or 433,000 barrels on 160-acre spacing, which is 18 percent of the oil in place. Probability of success ranging on down to 4 tenths, which is equivalent to 22 feet of pay, we'd have an ultimate recovery of 87,000 barrels on 80-acre spacing

versus 173,000 barrels for the 160-acre space. Carrying this on into our economics -- again I point out that this is for Sun's 87.5 percent working interest -- of primary importance here, however, is the profit per dollar invested, which is the third line from the bottom, for success ratio .4, .6, we find that value less than a dollar, which is really not satisfactory profitability for this type of operation.

- Q That would be on 80-acre space?
- A For the 80-acre spacing. For the 160-acre spacing we have values ranging around \$2.00 and up for the different probabilities we have investigated. Life for the 80-acre space would be 8 years; for the 160-space, 18 years. We feel that economics just do not justify development of this reservoir on 80-acre spacing.
- Q You would therefore recommend that the temporary rules as they now exist for the East Lusk-Wolfcamp Oil Pool be made permanent?
 - A Yes, sir, I do.
 - Q Were Exhibits 3, 4, and 5 prepared by you?
 - A Yes, sir, they were.
- Q In your opinion will the approval of this

 Application be in the best interests of conservation and

SEIDEL-DIRECT CROSS

CASE 5122

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prevention of waste and the protection of correlative rights?

A Yes, sir.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits 1 through 5.

MR. NUTTER: Exhibits 1 through 5 will be admitted into evidence.

(Whereupon, Applicant's

Exhibits Nos. 1 through 5 were admitted into evidence.)

MR. KELLAHIN: That concludes our direct examination.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Seidel, at the previous hearing in this
Case was anything offered to show what that net feet of
pay is in the reservoir here?

A I don't believe there was, Mr. Examiner, not that I can recall.

Q But you were referring to what you talk about as net feet of pay but we don't have anything to see what the net feet of pay is in the reservoir. What is your criterion -- we've got a log here -- what is your criterion

for net feet of pay?

A We had a porosity cut-off on the order of 3 percent; we came up with average porosity for the Sharon Federal No. 1 Sun Well of 9 percent and estimated water saturation of 30 percent.

Q Why hasn't all that been prepared in the form of an Exhibit?

A We just thought we could enter it in verbal testimony.

Q It is pretty hard to look at it in verbal form.

A Yes, sir.

MR. NUTTER: Are there any further questions of this Witness? He may be excused. Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 5122? We will take the Case under advisement and call Case 5423.

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.

RICHARD L. NYE, Court Reporter

a complete record of the proceedings in the Examiner hearing of Case No. 5722 heard by me on 2/3

New Mexico Oil Conservation Commission

CASE	5122
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BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico January 22, 1975

EXAMINER HEARING

IN THE MATTER OF:

Case 5122 being reopened pursuant to the provisions of Order No. R-4693, which order established temporary special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and a limiting gas-oil ratio of 4000 to 1. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing and propation units with a limiting gas-oil ratio of 2000 to 1.

CASE NO. 5122

BEFORE: Daniel S. Nutter, Examiner.

For the New Mexico Oil Conservation Commission:

Thomas Derryberry, Esq.
Legal Counsel for the
Commission
State Land Office Building
Santa Pe, New Mexico

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

MR. NUTTER: The next case, 5122.

MR. DERRYBERRY: In the matter of Case 5122 being reopened pursuant to the provisions of Order Number R-4693,
which order established temporary special pool rules for
the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico,
including a provision for 160-acre spacing and proration
units and a limiting gas-oil ratio of 4000 to 1. All
interested parties may appear and show cause why said pool
should not be developed on 40-acre spacing and proration
units with a limiting gas-oil ratio of 2000 to 1.

We have received a letter from the original applicant in that case requesting that the case be continued until a month from today.

MR. NUTTER: Case No. 5122 will be continued to the Examiner Hearing scheduled to be here in the same place at 9:00 o'clock a.m., Pebruary 19th, 1975.

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 8750:
TEL. 1505) 902-0386

CASE 5122 Page 3

STATE OF NEW MEXICO)

COUNTY OF SANTA FE)

REPORTER'S CERTIFICATE

I, Sally Walton Boyd, Notary Public and General Court Reporter, Santa Fe, New Mexico, DO HEREBY CERTIFY that the 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.

Sally Walton Boyd
Notary Public and General Court
Reporter

My Commission expires: 10 September 1975

I do nereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5/22 neard by me on 122 1975.

New Mexico Oil Conservation Commission

THE NYE REPORTING SERTICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

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MR. STAMETS: Case 5122.

MR. CARR: Case 5122: Application of Sun Oil Company for the creation of a new oil pool and special pool rules, Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin, of Kellahin and Fox, appearing on behalf of the applicant, Sun Oil Company. We have one witness to be sworn.

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

(No response)

KENNETH W. LARSON,

was called as a witness, and after being duly sworn according to law, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Will you please state your name, by whom you are employed, and in what capacity?
- A Kenneth W. Larson, and I am employed by Sun Oil Company as a staff professional geologist in the production department, Dallas Region, Dallas, Texas.
- Q Hr. Larson, have you previously testified before the Commission or one of its Hearing Examiners?
- A No, I have not.
 - Q Would you please state briefly what your education and

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employment background has been?

I attended the University of Wisconsin and the University of Utah, and graduated with a bachelor of science and master of science degree in geology.

I have twenty-two years of experience with Sun Oil Company; four years in prorationing, and sixteen years in development.

- Q What experience have you had in Southeastern New Mexico?
 - Development, drilling, recompletion work. New Mexico is under the jurisdiction of the Dallas production department, and I = a staff member of that department.
- Are you familiar with the facts surrounding this particular application by Sun Oil Company?
- I am.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. STAMETS: They are.

- (By Mr. Kellahin) Will you state briefly what the applicant is seeking in this case?
- Sun Oil Company seeks the creation of a new oil pool for Molfcamp production for its Shern Mederal Well Mo. 1 located in Unit M of Section 15, Township 19 South, Range 32 Hast, Lusk Field, Lea County, New Mexico, and the promulgation of special pool rules therefore including a provision for 160-acre spacing and proration units

dearnley, meier & associates

209 SIMMS BLDG.• P.O. BOX 1082•PHONE 243•6691•ALBUQUERQUE, NEW MEXICO 87103 1216 First national bank blog. East•Albuquerque, new mexico 87108 Mr. Larson, please refer to what has been marked as

Applicant's Exhibit One and identify it.

Exhibit One is an index map of the oil and gas fields

and a special limiting gas-oil ratio of 4000 to 1.

which fall adjacent to the yellow outlined acreage which comprises the actual map area to be later introduced at this hearing.

The scale of the map is one inch equals 4000 feet. The oil producing fields are outlined in green, and the gas producing fields are outlined in red.

Please refer to what has been marked as Exhibit Number
Two and identify it.

Exhibit Two is a production index map which has been color coded to denote the various producing horizons.

The map area includes all of 19 South, Range 32 East, with the exceptions indicated by the legend. There are six zones that either have been or are being presently produced in this area. Sun's proposed 160 acre unit comprises the Southwest quarter of Section 15 as outlined with black dashes.

The well for the proposed unit is indicated by the red arrow. Although the Shern Federal is shown to be in the pool, the Morrow gas horizon has been completed and abandoned, and it is presently producing only from the Molfcamp.

1 Q What are the proposed horizonal limits for the new pool,
2 Mr. Larson?
3 A They are outlined with the dark black line.

Q Will you please refer to Exhibit Number Three and identify it?

Exhibit Three is a structure map of the eastern portion of the Lusk Field at a scale of 1 inch equaling 1000 feet. The mapping datum is on the top of the Wolfcamp limestone at contour intervals of 50 feet. The mapping control points are underlined in red. In areas of little or no well control, seismic information was utilized. At the right side of the map is a section of the Wolfcamp limestone and the Shern Federal No. 1 is a Wolfcamp completion.

in blue. The McFarland Corporation No. 1 located in the East quarter of Section 5 was completed on June 20th, 1964, and abandoned in 1966 after producing 6378 barrels of oil. The Sun Shern Federal located in the Southwest quarter of Section 15 was completed during October of 1973, and is currently being produced under state-wide rules. The PanAm Unit Federal No. 5 located in the Southeast quarter of Section 28 was recompleted in the Wolfcamp on December 1st, 1966, and produced 1323 barrels of oil before being abandoned in 1968. The McFarland

		PAGE 6
1		No. 1-5 and the PanAm No. 5 were produced under state-wide
2		rules.
3	Q	Apart from the Sun Oil Company well in the Southwest
4		quarter of Section 15, the other Wolfcamp production in
5		the area has been abandoned, has it not?
6	A	That's correct.
7	Q	Mr. Larson, to your knowledge, has the Wolfcamp production
8		ever been designated in a pool established by the Oil
9		Conservation Commission for those wells?
10	Α	No, it has not.
11	Q	Apart from the three wells you have mentioned, is there
12		any other Wolfcamp production within a radius of three
13		miles from this Sun Oil Company well?
14	A	No, sir.
15	Q	Please refer to Exhibit Number Four and identify it.
16	A	Exhibit Four is a gamma ray neutron log for the Shern
17		No. 1. The Wolfcamp perforation is at 10,732 to 10,759.
18		These are marked in red. The vertical extent of the
19		Wolfcamp limestone extends from a log depth of 10,460
20		and 10,947.
21	δ	Will you please state for me again the proposed vertical
22		limits for the pool?
23	7.	They extend from a log depth of 10,460 to 10,947.
24	Q	Will you please refer to what has been marked as Exhibit
25		Number Five and identify it?

dearnley, meier & associates

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SIMMS BLOC. P.O. BOX 1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO 87103	V FXICO 87108
ERQUE,	CE. NEW
43-6691 • ALBUQU	AST . ALBUQUERO
PHONE	810G. E.
30X 1092	IL BANK
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Exhibit Five is a copy of Commission Form C-104, on
which is shown under item 5 the test data for the Shern
Federal No. 1. Although the form is already on file,
it is submitted for the convenience of the Examiner.
The well potentialed on October 5th, 1973 flowing at a
rate of 556 barrels of oil in twenty-four hours with a
1494 tubing pressure on a 19/64th inch choke with a
gas rate of 945.2 MCF.
Will you please refer to what has been marked as Exhibi

- Will you please refer to what has been marked as Exhibit Six and identify it?
- Exhibit Six is a copy of a static flowing bottomhole pressure tabulation of the Shern Federal No. 1 prepared by A and A Engineering Services of Midland. The well was shut in for a pressure build-up test at 7476 feet on October 20th, 1973. The initial bottomhole pressure on that date was 4082 pounds. After being shut in for a forty-eight hour period of time, the bottomhole pressure was 4114 pounds.
- Mr. Larson, do you have an opinion with regard to the ability of this particular well to drain a 160-acre unit?

 A From my knowledge, I believe this pool should be given the opportunity to be developed on 160-acre spacing units for a temporary period of one year. During this period, additional information will be obtained so to more fully evaluate the reservoir.

dearnley, meier & associates

Q

NEW MEXICO 87103	MEXICO 87108
209 SIMMS BLOG. P.O. BOX 1092 PHONE 249-6691 ALBUQUERQUE. NEW MEXICO 87103	1218 FIRST NATIONAL BANK BLDG, EAST . ALBUQUERQUE, NEW MEXICO 87108

Does Sun Oil Company anticipate developing this acreage
on less than 160-acre spacing?
No, because of the economic situation. The cost of
drilling and completing a well to the Wolfcamp is \$369,000
We estimate the recoverable reserves underlying the
proposed unit to be 156,400 barrels of oil, which when
multiplied by Sun's net per barrel of \$3.68, the total
is \$575,555. On an 80-acre unit, Sun's net income would
be \$287,777, or a loss of \$81,223 per well.
That loss would occur if you were dealing with this
acreage on a basis of an 80-acre proration unit?
That's correct.
Now, Sun Oil Company, in its application, has requested
a special limiting GOR of 4000 to 1. In your opinion,
why has Sun Oil Company requested a limiting GOR of
4000 to 1?
Sun's experience with carbonate reservoirs is one of
rapidly rising GOR's within a relatively short period
of time. The recommended 4000 to 1 gives us sufficient
latitude to produce this well should the GOR exceed
4000 to 1. The GOR requested is also consistent with
the Strawn pool adjacent, which is being developed on
160-acre spacing with a GOR of 4000 to 1.
Mould approval of Sun Oil Company's application prevent.

waste and result in the recovery of hydrocarbons that

209 SIMMS BLDG. • P.O. BOX 1002 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103 1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

25

otherwise would not be recovered? Yes. A In your opinion, does the granting of this application Q seek to protect the correlative rights of others? A Yes. 5 Were Exhibits One through Six either prepared by you or Q 6 under your direct supervision? 7 They were. 8 MR. KELLAHIN: We move for the introduction of 9 Exhibits One through Six. 10 MR. STAMETS: Without objection, they will be 11 admitted. 12 (Whereupon Applicant's Exhibits One through Six were 13 admitted in evidence.) 14 15 CROSS EXAMINATION 16 BY MR. STAMETS: 17 I believe the copy of the 104 shows the well to have a 18 gas connection, is this correct? 19 It does. 20 So any gas produced will be sold? 21 That's correct. 22 Do you have a proposed name for the field, like the East 23 Lusk Wolfcamp? 24 The Lusk Wolfcamp would containly be Cavorable to us

dearnley, meier a associates

2 Q

. NEW MEXICO 87103	W MEXICO 87108
HMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103	218 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

I would amend my last statement to the East Lusk Wolfcamp.
I see that the GOR has risen somewhat from the initial
completion. At that time, it was something less than
1000 to 1, and now it is up above 2000 to 1. That was
based on your October 22nd test. So this does prove out
what you said about the rising GOR?
Yes, sir. We experienced this throughout the Southwest
in Texas and New Mexico. It is an unhappy history, but
one we have to live with.

Q If the gas-oil ratio were maintained at a level of 2000 to 1, this would have a tendency to depress the well's allowable as the GOR increased. Do you think this would result in any significant increase of overall production from this well?

If I understood your question correctly, Mr. Examiner, if this well were limited to 2000 to 1, I think it would result in more limited production of the well, because, as I say, we do anticipate it going upwards from 2000 to 1.

I was referring to ultimate recovery by keeping the GOR low and the production rate low, there might be less of a tendency for the gas to break out in the well at the well bore.

That may be true, but at that point in time, we would have sufficient production information to determine that.

23

24

25

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PAGE 11
 1 Q
        Do you have information indicating that the recovery
 2
        would be significantly greater?
 3
        No, I do not.
             MR. STAMETS: Are there any other questions of this
        witness?
 5
              (No response)
             MR. KELLAHIN: I have nothing further.
 7
             MR. STAMETS: The witness may be excused.
 8
              (Witness excused.)
 9
             MR. STAMETS: Is there anything further in this case?
10
             MR. KELLAHIN: No, sir.
11
             MR. STAMETS: Case 5122 will be taken under
12
        advisement.
13
14
15
16
17
18
19
20
21
22
```

dearnley, meier & associates

S BLOG. * P.O. BOX 1092 * PHONE 245.4601 * ALBUQUERQUE. NEW MEXICO 87103 First vational dank blog. East * Albuquerque, new Mexico 87108

CERTIFICATE

I, RICHARD E. McCORMICK, Certified Shorthand
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.

CERTIFIED SHORTHAND REPORTER

Richard I Thumb

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	7										
	5 Cross Examination by Mr. Stamets										
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INDEX

WITNESS

3 KENNETH W. LARSON

dearnley, meier & associates



DIRECTOR

JOE D. RAMEY

OIL CONSERVATION COMMISSION

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

87501

PHIL R. LUCERO May 20, 1976



STATE GEOLOGIST
EMERY C. ARNOLD

Mr. Tom Kellahin Kellahin & Fox Attorneys at Law	Re:	CASE NC ORDER NO
Post Office Box 1769 Santa Fe, New Mexico	87501	Applicant:

OCC (Sum Oil Company)

5122

NO. R-4693-B

Dear Sir:

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

JOE D. RAMEY
Director

JDR/fd
Copy of order also sent to:
Hobbs OCC X
Artesia OCC

Aztec OCC

Other____

Dockets Nos. 6-75 and 7-75 are tentatively set for hearing on March 5 and March 19, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 19, 1975

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for March, 1975, from seventeen prorated pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for March, 1975, from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
 - (3) Consideration of purchaser's nominations for the one-year period beginning April 1, 1975, for both of the above areas.

CASE 5402: (Continued from the January 22, 1975 Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Tyra & Tyra, Fidelity and Deposit Company of Maryland and all other interested parties to appear and show cause why the Tyra & Tyra BTA Lulu Well No. 1 located in Unit C of Section 22, Township 9 South, Range 35 East, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

- CASE 5415: Application of Burk Royalty Co. for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Double L Queen Unit Area, comprising 2670 acres, more or less, of Federal, State, and fee lands in Townships 14 and 15 South, Ranges 29 and 30 East, Chaves County, New Mexico.
- CASE 5416: Application of Tesoro Petroleum Corporation for a unit agreement, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Coal Creek Unit Area comprising 11,225 acres, more or less, of State and Federal lands in Township 23 North, Ranges 12 and 13 West, San Juan County, New Mexico.

CASE 5409: (Continued from the February 5, 1975, Examiner Hearing)

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

- CASE 5417: Application of Atlantic Richfield Company for a non-standard gas proration unit, two unorthodox locations, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 640-acre non-standard gas proration unit comprising the S/2 of Section 24 and the N/2 of Section 25, both in Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its McDonald State WN Wells Nos. 12 and 24, located, respectively, at unorthodox locations in Unit M of Section 24, and in Unit E of Section 25.
- CASE 5418: Application of Joel B. Burr, Jr. and William J. Cooley for permission to flare casinghead gas, McKinley County, New Mexico. Applicants, in the above-styled cause, seek an exception to Order No. R-4070, to permit the flaring of casinghead gas produced by their Coleman Well No. 2, located in Unit C of Section 8, Township 17 North, Range 8 West, Lone Pine Dakota D Oil Pool, McKinley County, New Mexico.
- CASE 5419: Application of J. Gregory Merrion & Robert L. Bayless for downhole commingling, Rio Arriba County, New Mexico. Applicants, in the above-styled cause, seek authority to commingle Cavilan-Pictured Cliffs and Blanco-Mesaverde production in the wellbore of their North Lindrith Unit Com Well No. 1, located in Unit M of Section 20, Township 26 North, Range 2 West, Rio Arriba County, New Mexico.
- CASE 5420: Application of Texaco, Inc., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to convert its New Mexico "DM" State (NCT-1) Well No. 1, located in Unit N of Section 21, Township 13 South, Range 33 East, Lazy J Pennsylvanian Pool, Lea County, New Mexico, to dispose of produced salt water into the Pennsylvanian formation through the perforated interval from approximately 9742 to 9792 feet.
- CASE 5421: Application of Texaco, Inc., for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Justis Tubb-Drinkard and North Justis-Fusselman production in the wellbore of its G. L. Erwin "B" Federal Well No. 3, located in Unit I of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 5422: Application of Hilliard Oil and Gas, Inc., for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of temporary special rules for the EK-Bone Springs Pool, in Township 18 South, Range 34 East, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
- CASE 5122: (Reopened) (Continued from the January 22, 1975, Examiner Hearing)

 In the matter of Case 5122 being reopened pursuant to the provisions of Order No. R-4693, which order established temporary special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and a limiting gas-oil ratio of 4000 to 1. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing and proration units with a limiting gas-oil ratio of 2000 to 1.

- CASE 5423: Application of Cities Service 0il Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in formations of Pennsylvanian age or older underlying the W/2 of Section 29, Township 2l South, Range 27 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an orthodox location within the spacing unit. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of the applicant as the operator of the well and a charge for the risk involved in drilling said well.
- CASE 5424: Application of Cities Service Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Dark Canyon Unit Area, comprising 2560 acres, more or less, of State lands in Township 23 South, Range 25 East, Eddy County, New Mexico.
- CASE 5425: Application of Continental Oil Company for an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a non-standard 480-acre gas proration unit comprising the W/2 of Section 13 and the E/2 $\Sigma/2$ of Section 14, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to its Lockhart B Wells Nos. 4 and 8, located at unorthodox locations in Units H and P, respectively, of Section 13, and to its Lockhart B Well No. 7, at an unorthodox location in Unit D of said Section 14. Applicant further seeks approval for the simultaneous dedication of a 320-acre non-standard gas proration unit comprising the S/2 of Seccion 12, Township 19 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to its State KN-12 Wells Nos. 1 and 2, located at unorthodox locations in Units P and N, respectively, of said Section 12.
- CASE 5426: Application of Continental Oil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Bell Lake Unit Well No. 16 to be drilled 660 feet from the North and East lines of Section 7, Township 24 South, Range 34 East, South Bell Lake-Morrow Gas Pool, Lea County, New Mexico, the N/2 of said Section 7 to be dedicated to said well.
- CASE 5427: Application of Penroc Oil Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Allied B Com Well No. 1, located in Unit K of Section 27, Township 20 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce oil from the Bone Springs formation through tubing and gas from the Morrow formation through the casing-tubing annulus by means of a cross-over assembly.

Examiner Hearing - Wednesday - February 19, 1975

Docket No. 5-75 -4-

CASE 5428: Application of Amax Chemical Corporation for the extension of the Potash-Oil Area, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks the extension of the Potash-Oil Area in Eddy County, New Mexico, as defined by Order No. R-11-A, as amended, by the addition of the following described lands:

TOWNSHIP 19 SOUTH, RANGE 29 EAST

Section 13: S/2 SE/4

Section 14: W/2 SW/4 Section 23: N/2 NW/4, SE/4 NW/4, S/2 NE/4 Section 24: NW/4, W/2 NE/4, NE/4 NE/4

TOWNSHIP 19 SOUTH, RANGE 30 EAST

Section 14: W/2 NE/4 Section 18: SW/4

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

JASON W. KELLAHIN ROBERT E. FOX W. THOMAS KELLAHIN OIL CONSERVATION OF

TELEPHONE 982-4315 Area Code 505

January 15, 1975

Mr. Daniel S. Nutter New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Re: Case No. (5122) East Lusk-Wolfcamp Oil Pool (Reopened)

Dear Dan:

Confirming my telephone request, Sun Oil Company is presently completing and testing a well in this pool, information from which will be of considerable benefit in determining proper spacing for the pool.

For that reason Sun Oil Company requests that this case, presently set for hearing January 22, 1975, be continued to the Examiner hearing on February 19, 1975.

Your consideration of this request will be appreciated.

Sincerely,

Jason W. Kellahin

JWK:ks

cc: Mr. H. k. Huey

DOCKET MAILED

Jan 2-19-75

Dockets Nos. 4-75 and 5-75 are tentatively set for hearing on February 5 and February 19, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 22, 1975

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

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

CASE 5394: (Continued and Readvertised)

Application of Walter Duncan Oil Properties for amendment of special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Rule 2 of the Special Rules and Regulations for the Slickrock-Dakota Oil Pool to allow wells to be drilled to within 25 feet of a quarter-quarter section when the offset acreage is owned by the operator of the well; also to allow drilling to within 165 feet of a well producing from the same pool.

CASE 5401: Application of Burma Oil and Gas Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Willow Lake Unit Area, comprising 4800 acres, more or less, of Federal, State, and fee lands in Township 24 South, Range 28 East, Eddy County, New Mexico.

CASE 5402: In the matter of the hearing called by the 0il Conservation Commission on its own motion to permit Tyra & Tyra, Fidelity and Deposit Company of Maryland and all other interested parties to appear and show cause why the Tyra & Tyra BTA Lulu Well No. 1 located in Unit C of Section 22, Township 9 South, Range 35 East, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission approved plugging program.

CASE 5122: (Reopened)

In the matter of Case 5122 being reopened pursuant to the provisions of Order No. R-4693, which order established temporary special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and a limiting gas-oil ratio of 4000 to 1. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing and proration units with a limiting gas-oil ratio of 2000 to 1.

CASE 4969: (Reopened)

In the matter of Case 4969 being reopened pursuant to the provisions of Order No. R-4557-B, which order temporarily extended the special depth bracket allowable for the Tocito Dome-Pennsylvanian "D" Oil Pool, San Juan County, New Mexico. All interested parties may appear and show cause why the temporary special depth bracket allowable should remain in effect.

Docket No. 3-75

CASE 5403: In the matter of the hearing called by the Oil Conservation Commission on its own motion to further consider the subject matter of Case No. 5377, namely to permit all interested parties to appear and show cause why the continued injection of water for secondary recovery or disposal purposes into any formation from the surface of the ground down to and including the Drinkard formation should be permitted in the following described area in Lea County, New Mexico:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM Sections 13 through 36: All

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM Sections 1 through 12: All

Further to consider requiring temperature surveys and cement bond logs on all wells in the above-described area; and to consider requiring that any well in said area indicating any leakage, surface or subsurface, or inadequate cementing, should be repaired, recemented, or plugged.

. .



OIL CONSERVATION COMMISSION

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

December 11, 1973

GOVERNOR BRUCE KING CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

Re	e :	Case No	5122	
Mr. Tom Kellahin Kellahin & Fox		Order No.	R-4693	
Attorneys at Law		Applicant:		
Post Office Box 1769 Santa Fe, New Mexico				
•		SUN OIL CO	MPANY	
DOCKET MAILEI	D			
Date	7	5-		

Dear Sir:

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

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. 5122 (Reopened) Order No. R-4693-B

IN THE MATTER OF CASE 5122 BEING REOPENED PURSUANT TO THE PROVISIONS OF ORDER NO. R-4693-A, WHICH ORDER EXTENDED THE SPECIAL POOL RULES FOR THE EAST LUSK-WOLFCAMP OIL POOL, LEA COUNTY, NEW MEXICO, INCLUDING A PROVISION FOR 160-ACRE PRORATION UNITS AND A LIMITING GAS-OIL RATIO OF 4000 TO 1.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 12, 1976, at Santa Fe, New Mexico, before Examiner, Daniel S. Nutter.

NOW, on this $18 \, \mathrm{th}$ day of May, 1976, 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 Order No. R-4693-A, dated April 29, 1975, extended the Special Pool Rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, which rules provided for 160-acre proration units and a limiting gas-oil ratio of 4000 to 1.
- (3) That Order No. R-4693-A provided that Case No. 5122 would be reopened in May of 1976 to allow operators in the subject pool to appear and show cause why the pool should not be developed on less than 160-acre spacing with a limiting gasoil ratio of 2000 to 1.
- (4) That no operator appeared to offer evidence to establish that the pool should be developed on other than 40-acre spacing with a gas-oil ratio limitation of 2000 to 1.
- (5) That the Temporary Special Rules and Regulations for the East Lusk-Wolfcamp Oil Pool should be rescinded and said pool should be governed by the Statewide Rules for oil pools in the State, effective June 1, 1976.

-2-Case No. 5122 (Reopened) Order No. R-4693-B

IT IS THEREFORE ORDERED:

- (1) That effective June 1, 1976, the Temporary Special Rules and Regulations for the East Lusk-Wolfcamp Oil Pool, promulgated by Order No. R-4693-A, dated April 29, 1975, are hereby rescinded and the pool is placed under the Statewide Rules for oil pools in the State.
- (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

PHIL R. LUCERO, Chairman

EMBRY & ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL



OIL CONSERVATION COMMISSION

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

April 29, 1975

I. R. TRUJILLO CHAIRMAN

LAND COMMISSIONER
PHIL R. LUCERO
MEMBER

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

	Re:	CASE NO	5122
Mr. Tom Kellahin Kellahin & Fox		ORDER NO	R-4693-A
Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico		Applicant:	
		OCC (Sun	Oil Co.)

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

_

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. 5122 (REOPENED) Order No. R-4693-A

NOMENCLATURE

IN THE MATTER OF CASE 5122 BEING REOPENED PURSUANT TO THE PROVISIONS OF ORDER NO. R-4693, WHICH ORDER ESTABLISHED TEMPORARY SPECIAL POOL RULES FOR THE EAST LUSK-WOLFCAMP OIL POOL, LEA COUNTY, NEW MEXICO, INCLUDING A PROVISION FOR 160-ACRE SPACING AND PRORATION UNITS AND A LIMITING GAS-OIL RATIO OF 4000 TO 1.

ORDER OF THE COMMISSION

BY THE COMMISSION:

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

NOW, on this 29th day of April, 1975, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-4693, dated December 11, 1973, temporary special rules and regulations were promulgated for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, establishing temporary 160-acre spacing units and proration units, and a limiting gas-oil ratio of 4000 to 1.
- (3) That pursuant to the provisions of Order No. R-4693, this case was reopened to allow the operators in the subject pool to appear and show cause why the East Lusk-Wolfcamp Oil Pool should not be developed on 40-acre spacing units and a limiting gas-oil ratio of 2000 to 1.
- (4) That the evidence establishes that one well in the East Lusk-Wolfcamp Oil Pool can efficiently and economically drain and develop 160 acres.

-2-Case No. 5122 (Reopened) Order No. R-4693-A

- (5) That the Special Rules and Regulations promulgated by Order No. R-4693 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil and gas in the pool.
- (6) That this case should be reopened at an examiner hearing in May, 1976, at which time the operators in the subject pool should appear and show cause why the East Lusk-Wolfcamp Oil Pool should not be developed on less than 160-acre proration units with a limiting oil-gas ratio of 2000 to 1.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the East Lusk-Wolfcamp Oil Pool, promulgated by Order No. R-4693, shall remain in full force and effect for an additional period of one year.
- (2) That this case shall be reopened at an examiner hearing in May, 1976, at which time the operators in the subject pool shall appear and show cause why the East Lusk-Wolfcamp Oil Pool should not be developed on less than 160-acre proration units with a limiting oil-gas ratio of 2000 to 1.
- (3) That jumisdiction 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 herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I R. TRUJILLO, Chairman

Pull R. MCERO Member

L. PORTER, Jr., Member & Secretary

SEAL

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. 5122 Order No. R-4693

NOMENCLATURE

APPLICATION OF SUN OIL COMPANY FOR THE CREATION OF A NEW OIL POOL AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 28, 1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>llth</u> day of December, 1973, 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, Sun Oil Company, seeks the creation of a new oil pool for Wolfcamp production in Lea County, New Mexico, and the promulgation of temporary special rules and regulations governing said pool, including provisions for 160-acre spacing and proration units and a special limiting gas-oil ratio of 4000 to 1.
- (3) That the applicant further seeks to have such temporary special pool rules apply to its Shern Federal Well No. 1 located in Unit L of Section 15, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico.
- (4) That Sun Oil Company's Shern Federal Well No. I has discovered a separate and common source of supply which should be designated the East Lusk-Wolfcamp Oil Pool, that the vertical limits of said pool should be the Wolfcamp formation and that the horizontal limits of said pool should be the SW/4 of said Section 15.
- (5) That the evidence presently available indicates that one well in the East Lusk-Wolfcamp Oil Pool can efficiently and economically drain and develop 160 acres with a limiting gas-oil-ratio of 4000 to 1.

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- (6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 160-acre spacing units should be promulgated for the East Lusk-Wolfcamp Oil Pool.
- (7) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (8) That the temporary special rules and regulations for the East Lusk-Wolfcamp Oil Pool should apply only to wells located within the horizontal limits of said pool.
- (9) That this case should be reopened at an examiner hearing during the month of January, 1975, at which time operators in the East Lusk-Wolfcamp Oil Pool should appear and show cause why said pool should not be developed on 40-acre spacing.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production, is hereby created and designated as the East Lusk-Wolfcamp Pool, consisting of the following described area:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM Section 15: SW/4

(2) That, effective December 15, 1973, Temporary Special Rules and Regulations for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, are hereby promulgated as follows:

TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE EAST LUSK-WOLFCAMF POOL____

- RULE 1. Each well completed or recompleted in the East Lusk-Wolfcamp Pool or in the Wolfcamp formation within one mile thereof, and not nearer to or within the limits of another designated Wolfcamp oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.
- RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a

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variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

- RULE 4. Each well shall be located no nearer than 660 feet to the outer boundary of the proration unit nor nearer than 330 feet to any governmental quarter-quarter section line nor nearer than 1320 feet to the nearest well drilling to or capable of producing from the same pool.
- RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.
- RULE 6. A standard proration unit (158 through 162 acres) shall be assigned a 160-acre depth bracket allowable of 560 barrels, subject to the market demand percentage factor, for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

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

IT IS FURTHER ORDERED:

- (1) That the locations of all wells presently drilling to the East Lusk-Wolfcamp Oil Pool are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before January 1, 1974.
- (2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the East Lusk-Wolfcamp Oil Pool shall have dedicated thereto 16) acres in accordance with the foregoing pool rules; or, pursuant to Faragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing

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or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the East Lusk-Wolfcamp Oil Pool shall receive no more than one-fourth of a standard allowable for the pool.

- (3) That this cause shall be reopened at an examiner hearing during the month of January, 1975, at which time the operators in the East Lusk-Wolfcamp Oil Pool may appear and show cause why said pool should not be developed on 40-acre spacing with a gas-oil ratio of 2000 to 1.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

AVEX J. MMIJO Hember

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

SEAL

Docket No. 14-76

Dockets Nos. 15-76 and 16-76 are tentatively set for hearing on May 26 and June 9, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 12, 1976

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for June, 1976, from seventeen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for June, 1976, from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 5676: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal GC Com Well to be drilled 660 feet from the South and East lines of Section 32, Township 17 South, Range 25 East, Eddy County, New Mexico, to test the Morrow formation, the E/2 of said Section 32 to be dedicated to the well.
- CASE 5677: Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the Dunken Nose Unit Area comprising
 6393 acres, more or less, of State and Fee lands in Township 17 South, Ranges 18 and 19 East,
 Chaves County, New Mexico.
- CASE 5678:

 Application of Amoco Production Company for directional drilling, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks authority to deviate its State "E" Tract 18 Well

 No. 15, the surface location of which is 330 feet from the North line and 2310 feet from the

 West line of Section 1, Township 17 South, Range 36 East, Lovington-Abo Pool, Lea County, New

 Mexico, by directionally drilling said well and bottoming it in the Abo formation within 100

 feet of a point 600 feet from the North line and 2310 feet from the West line of said Section 1.
- Application of Amoco Production Company for approval of an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Empire South Deep Unit Well No. 9 to be drilled 660 feet from the North line and 990 feet from the West line of Section 5, Township 18 South, Range 29 East, South Empire-Morrow Gas Pool, Eddy County, New Mexico, the W/2 of said Section 5 to be dedicated to the well.
- Application of Amoto Production 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 W/2 of Section 21, Township 20 South, Range 25 East. Cemetery-Norrow Gas Pool, Eddy County, New Mexico, to be dedicated to David Fasken's Cemetery Federal Com Well No. 1 located in Unit L of said Section 21. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of David Fasken as operator of the well and a charge for the risk involved in drilling said well.
- CASE 5681: Application of A. H. Rains for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates formation through the open-hole interval from approximately 550 feet to 561 feet in his Pure State Well No. 1, located in Unit J of Section 15, Township 21 South, Range 27 East, Magruder-Yates Pool, Eddy County, New Mexico.
- CASE 5098: (Reopened)

In the matter of Case 5098 being reopened pursuant to the provisions of Order No. R-4682, which order established special rules for the Red Tank-Morrow Gas Pool, Lea County, New Mexico, including a provision for 640-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing.

CASE 5473: (Reopened)

In the matter of Case 5473 being reopened pursuant to the provisions of Order No. R-5029, which order established special rules and regulations for the West Knowles-Drinkard Pool, Lea County, New Mexico, including a provision for 80-acre spacing and provation units. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 5682: Application of Champlin Petroleum Company for three non-standard gas proration units, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the three following described 160-acre non-standard gas proration units in Township 22 South, Range 27 East, East Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico:

the NW/4 of Section 1 to be dedicated to applicant's Pecos-Federal Well No. 1, located in Unit C of said Section 1;

the NE/4 of Section 1 to be dedicated to applicant's Wilson Gas Com Well No. 1, located in Unit G of said Section 1; and \cdot

the NE/4 of Section 2 to be dedicated to applicant's Nix-Yates Well No. 1, located in Unit G of said Section 2.

CASE 5122: (Reopened)

In the matter of Case 5122 being reopened pursuant to the provisions of Order No. R-4693-A, which order extended the special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, including a provision for 160-acre proration units and a limiting oil-gas ratio of 4000 to 1. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre spacing and why the special oil-gas ratio should remain in effect.

CASE 5670: (Continued from the April 28, 1976 Examiner Hearing)

Application of Read & Stevens, Inc. for an unorthodox location and directional drilling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to deviate its Harris-Federal Well No. 3, the surface location of which is 660 feet from the South line and 1980 feet from the East line of Section 27. Township 15 South, Range 28 East, Chaves County, New Mexico, by directionally drilling said well from a kick-off point at approximately 6000 feet and bottoming it at an unorthodox location in the Pennsylvanian formation within 250 feet of a point 990 feet from the South line and 1650 feet from the East line of said Section 27, the S/2 of the Section to be dedicated to the well.

CASE 5683: Southeastern Nomenclature case calling for the creation and extension of certain pools in Lea and Roosevelt Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the West Jal-Wolfcamp Pool. The discovery well is the Skelly Oil Company West Jal "B" Well No. 1 located in Unit J of Section 17, Township 25 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 25 SOUTH, RANGE 36 EAST, NMPM Section 17: SE/4

(b) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the North Lusk-Morrow Gas Pool. The discovery well is the Petroleum Development Corporation McKay West Federal Well No. 1 located in Unit F of Section 34, Township 18 South, Range 32 East, NOPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM Section 34: All

TOWNSHIP 19 SOUTH, EANGE 32 EAST, NORTH Section 3: W/2

(c) CREATE a new pool in Roosevelt County, New Mexico, classified as an oil peel for Fusselman production and designated as the Peterson-Fusselman Pool, and assign 39,205 barrels of discovery allowable to the discovery well, Amoco Production Company Swearingen "C" Well No. 1 located in Unit N of Section 18, Township 5 South, Range 33 East, MSPM. Said pool would comprise:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM Section 18: SW/4

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Queen production and designated as the East Shugart-Queen Pool. The discovery well is the Martindale Petroleum Corporation W. H. Peckham Well No. 1 located in Unit G of Section 6, Township 19 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, MMFM Section 6: NE/4

Examiner Hearing - Wednesday - May 12, 1976

Docket No. 14-76

(e) EXTEND the North Bagley-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 32 EAST, NMPM Section 1: NE/4

(f) EXTEND the Blinebry Oil and Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM Section 34: NE/4

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM Section 31: S/2 Section 32: W/2

(g) EXTEND the Bluitt-Wolfcamp Gas Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 37 EAST, NMPM Section 34: NW/4

TOWNSHIP 8 SOUTH, RANGE 37 FAST, NMPM Section 3: SE/4 Section 4: All Section 9: N/2

(h) EXTEND the Corbin-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM Section 26: SE/4

(i) EXTEND the Flying "M" Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM Section 10: S/2

(j) EXTEND the Garrett-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 38 EAST, NMPM Section 29: NE/4

(k) EXTEND the Gladiola-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 38 EAST, NMPM Section 5: NE/4

(1) EXTEND the West Jal-Fusselman Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 36 EAST, NMFM Section 17: E/2

(m) EXTEND the Maljamar-Grayburg San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, MMPM Section 11: SM/4

(n) EXTEND the North Mescalero-Cisco Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM Section 11: SW/4

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

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM Section 26: SE/4

(p) EXTEND the Peterson-Pennsylvanian Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM Section 17: SW/4

(q) EXTEND the Tulk-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 32 EAST, NMPM Section 27: SW/4

Examiner Hearing - Wednesday - May 12, 1976

Docket No. 14-76

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

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM Section 35: SW/4

(a) EXTEND the North Vacuum-Morrow Cas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM Section 8: W/2 and SE/4 Section 17: E/2

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

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM Section 26: N/2 Section 27: NE/4

(u) EXTEND the Wantz-Granite Wash Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM Section 30: NE/4

(v) EXTEND the Warren-Tubb Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM Section 28: SW/4

Application by for

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DOCKET: COMMISSION HEARING - TUESDAY - NOVEMBER 27, 1973

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

CASE 5063: (De Novo)

Application of Shell Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its Sanger Well No. 6Y to be located 1220 feet from the North line and 180 feet from the West line of Section 27, Township 18 South, Range 38 East, Hobbs Pool, Lea County, New Mexico.

Upon application of Samedan Oil Corporation, this case will be heard <u>De Novo</u> pursuant to the provisions of Rule 1220.

Docket No. 36-73

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 11, 1973

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for January, 1974, from lifteen 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 January, 1974.

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 28, 1973

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 5115: Application of Mobil Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Corral Draw Unit Area comprising 19,199 acres, more or less, of Federal and State lands in Townships 25 and 26 South, Range 29 East, Eddy County, New Mexico.
- CASE 5116: Application of Mobil Oil Corporation for a pressure maintenance project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project by the injection of water and/or gas into the Middle Pennsylvanian formation of its Bridges State Well No. 147 located in Unit F of Section 13, Township 17 South, Range 34 East, Vacuum-Middle Pennsylvanian Pool, Lea County, New Mexico, the W/2 of said Section 13 to be the initial project area. Applicant further seeks the promulgation of rules for said project including a provision for administrative approval for expansion thereof.
- CASE 5117: Application of Roger C. Hanks for creation of a new pool and special rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Dagger Draw-Cisco Canyon Oil Pool in Sections 24, 25, and 36, Township 19 South, Range 24 East, Sections 18, 19, 30 and 31, Township 19 South, Range 25 East, and Section 1, Township 20 South, Range 24 East, Eddy County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 320-acre spacing and proration units and specified well locations.
- CASE 5118: Application of Shell Oil Company for an extension of Order No. R-4289, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the indefinite extension of Order No. R-4289, which order as extended authorized temporary downhole commingling of the Morrow Pennsylvanian and Devonian production in the wellbore in its Antelope Ridge Well No. 2 located in Unit B of Section 4, Township 24 South, Range 34 East, Antelope Ridge Field, Lea County, New Mexico.
- CASE 5119: Application of Getty Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Stock Unit Area comprising 5,760 acres, more or less, of State lands in Township 21 South, Range 33 East, Lea County, New Mexico.
- CASE 5120: Application of Lone Star Producing Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water by

(Case 5120 continued from Page 1)

injection into the San Andres formation through the annulus between 5 1/2-inch and 8 5/8-inch casing strings of its New Mexico State 80 Well No. 1 located in Unit B of Section 33, Township 14 South, Range 34 East, Tres Papalotes-Pennsylvanian Pool, Lea County, New Mexico, and to produce oil from said pool through 2 3/8-inch tubing installed within the 5 1/2-inch casing.

- CASE 5121: Application of Texaco Inc. for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the SE/4 of Section 25, Township 20 South, Range 32 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to its Audie Richards Well No. 1 located in Unit P of said Section 25.
- CASE 5122: Application of Sun Oil Company for the creation of a new oil pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Wolfcamp production for its Shern Federal Well No. 1 located in Unit M of Section 15, Township 19 South, Range 32 East, Lusk Field, Lea County, New Mexico, and the promulgation of special pool rules therefor including a provision for 160-acre spacing and proration units and a special limiting gas-oil ratio of 4000 to 1.
- CASE 5123: Application of Consolidated Oil & Gas Inc. for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle gas production from the Flora Vista-Gallup Gas Pool and the Basin Dakota-Gas Pool in the wellbore of its Clayton Well No. 1-2 located in Unit N of Section 2, Township 30 North, Range 12 West, San Juan County, New Mexico.
- CASE 5124: 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 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 5126: Application of Atlantic Richfield Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Avalon Deep Unit Area comprising 10, 117 acres, more or less, of fee, Federal, and State lands in Township 21 Souti, Ranges 26 and 27 East, Eddy County, New Mexico.

CASE 5127: Application of Skelly Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Salt Lake South Unit Area comprising 7080.12 acres, more or less, of State and Federal lands in Township 21 South, Range 32 East, Les County, New Mexico.

- CASE 5125: Northwestern nomenclature case calling for the creation and extension of certain pools in McKinley, San Juan, Rio Arriba and Sandoval Counties, New Mexico:
 - (a) Create a new pool in McKinley County, New Mexico, classified as an oil pool for Mesaverde production and designated as the Blackeye-Mesaverde 0il Pool. The discovery well is the K & W Oil Co. #55-Y Jaco located in Unit D of Section 32, Township 20 North, Range 9 West, NMPM. Said pool would comprise:

TOWNSHIP 20 NORTH, RANGE 9 WEST, NMPM Section 29: W/2 SW/4 Section 30: SE/4 NE/4 and NE/4 SE/4

Section 32: NW/4 NW/4

(b) Create a new pool in McKinley County, New Mexico, classified as an oil pool for Dakota production and designated as the Blackeye-Dakota Oil Pool. The discovery well is the Colorado Plateau Geological Services, Inc. #1 Blackeye located in Unit M of Section 29, Township 20 North, Range 9 West, NMPM. Said pool would comprise:

> TOWNSHIP 20 NORTH, RANGE 9 WEST, NMPM Section 29: SW/4 SW/4

(c) Create a new pool in McKinley County, New Mexico, classified as a gas pool for Dakota A production and designated as the Lone Pine-Dakota A Pool. The discovery well is the Tenneco Oil Co. #2 SFPRR located in Unit L of Section 13, Township 17 North, Range 9 West, NMPM. Said pool would comprise:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM

Section 13: SW/4 Section 23: NE/4 Section 24: NW/4

(d) Create a new pool in San Juan County, New Mexico, classified as a gas pool for Fruitland production and designated as the Mt. Nebo-Fruitland Pool. The discovery well is the Amoco Production Co. #1 Keys Gas Com E located in Unit D of Section 27, Township 32 North, Range 10 West, NMPM. Said pool would comprise:

TOWNSHIP 32 NORTH, RANGE 10 WEST, NMPM

Section 27: NW/4Section 28: NE/4 (e) Extend the Angels Peak-Gallup Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 9 WEST, NMPM Section 6: N/2

Section 7: SW/4
Section 8: All
Section 9: W/2

Section 18: W/2 & SE/4

Section 23: W/2

TOWNSHIP 26 NORTH, RANGE 10 WEST, NMPM

Section 3: SW/4 & S/2 SE/4

Section 11: S/2 Section 12: A11 Section 13: N/2

(f) Extend the Aztec-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANCE 8 WEST, NMPM Section 18: W/2

TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM

Section 18: S/2 Section 20: SW/4

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM

Section 12: SW/4

TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM

Section 18: SE/4 Section 21: SW/4 Section 28: SE/4 Section 31: E/2 Section 32: SW/4

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM

Section 2: N/2 Section 3: NE/4

(g) Extend the Ballard-Pictured Cliffs Pool in Rio Arriba, Sandoval and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 22 NORTH, RANGE 2 WEST, NMPM

Section 6: N/2 & SE/4

Section 7: NE/4 Section 8: W/2

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM

Section 15: S/2 Section 16: S/2 Section 21: All

Section 22: All

Section 23: All Section 26: N/2 Section 27: N/2 & SE/4 Section 28: NE/4

TOWNSHIP 23 NORTH, RANGE 4 WEST, NMPM

Section 24: NE/4

TOWNSHIP 23 NORTH, RANGE 5 WEST, NMPM

Section 14: NW/4

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM

Section 17: SW/4

Section 20: N/2

(h) Extend the Blanco-Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM

Section 8: E/2 Section 9: All

Section 10: W/2

Section 14: N/2

TOWNSHIP 27 NORTH, RANGE 9 WEST, NMPM Section 9: SE/4 Section 34: S/2

TOWNSHIP 28 NORTH, RANGE 9 WEST, NMPM Section 7: All (Partial) Section 18: All

Section 19: All

Section 31: W/2

TOWNSHIP 28 NORTH, RANGE 10 WEST, NMPM

Section 13: E/2

(i) Extend the Blanco-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM

Section 30: SW/4

Section 31: W/2

Section 25: W/2 & SE/4

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Section 8: S/2
                          Section 26: E/2
Section 14: N/2
                          Section 33: W/2
Section 15: S/2
                          Section 34: NE/4
Section 16: S/2
                          Section 35: N/2
Section 17: S/2 & NE/4 Section 36: N/2
Section 23: SE/4
TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM Section 6: S/2
Section 7: All
Section 18: NE/4
TOWNSHIP 30 NORTH, RANGE 9 WEST, NMPM
Section 14: NE/4
TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM
Section 2: All
Section 5: SE/4
                     Section 14: NE/4
Section 15: SW/4
Section 6: NE/4
                     Section 16: N/2 & SE/4
Section 9: NE/4
                     Section 22: SE/4
                     Section 23: S/2
Section 10: N/2
Section 11: All
                     Section 24: SW/4
                     Section 25: All
Section 12: SW/4
Section 13: All
                     Section 26: NE/4
TOWNSHIP 31 NORTH, RANGE 9 WEST, NMPM
Section 31: S/2
TOWNSHIP 31 NORTH, RANGE 10 WEST, NMPM
Section 18: SW/4 Section 32: E/2
Section 29: SE/4
                     Section 35: S/2
Section 31: S/2
                     Section 36: S/2
TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM
Section 3: All
Section 4: All
                          Section 12: All
                          Section 13: E/2
Section 5: N/2 & SE/4 Section 14: N/2
Section 8: SW/4
                          Section 17: N/2
                          Section 23: W/2
Section 25: SW/4
Section 9: N/2
Section 10: N/2
Section 11: All
TOWNSHIP 32 NORTH, RANGE 11 WEST, NMPM
Section 21: E/2
Section 22: SW/4
                            Section 32: All
                            Section 33: All
Section 27: All
                           Section 34: All
Section 28: All
                            Section 35: S/2
Section 29: N/2 & SE/4
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TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM Section 5: SE/4 Section 25:

(j) Extend the South Blanco-Pictured Cliffs Pool in Rio Arriba, Sandoval and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 23 NORTH, RANGE 1 WEST, NMPM Section 8: SE/4

TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 9: E/2 Section 16: NE/4

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM Section 17: NE/4

TOWNSHIP 28 NORTH, RANGE 6 WEST, NMPM Section 26: SW/4 Section 35: W/2 Section 27: E/2 Section 36: NW/4

TOWNSHIP 28 NORTH, RANGE 7 WEST, NMPM Section 16: E/2

 TOWNSHIP 28 NORTH, RANGE 8 WEST, NMPM

 Section 8:
 All (Partial)
 Section 18:
 E/2

 Section 9:
 All (Partial)
 Section 19:
 NE/4

 Section 14:
 W/2 & SE/4
 Section 20:
 NW/4

 Section 15:
 N/2
 Section 23:
 NE/4

 Section 16:
 NE/4
 Section 24:
 W/2 & SE/4

 Section 17:
 All
 Section 25:
 N/2

(k) Extend the Choza Mesa-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANCE 4 WEST, NMPM Section 23: W/2

(1) Extend the Flora Vista-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 30 NORTH, RANGE 12 WEST, NMPM Section 1: SW/4
Section 2: S/2
Section 3: SE/4

(m) Extend the South Gallegos-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM Section 1: SW/4

(n) Extend the Gonzales-Mesaverde Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM
Section 4: SW/4 Section 9: NW/4
Section 5: SE/4

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM Section 29: SW/4 Section 32: W/2

Section 31: S/2

(o) Extend the Hospah-Dakota Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM
Section 5: SW/4 SW/4 Section 7: N/2 NE/4
Section 6: SE/4 SE/4

(p) Extend the Kutz-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM Section 13: W/2

(q) Extend the Largo-Chacra Pool in Rio Arriba & San Juan Counties, New Mexico, to include therein:

TOWNSHIP	27	NORTH,	KANGE	8 WEST,	NMPM	
Section 1	0:	NE/4		Section	16:	s./?
Section 1	1:	A11		Section	17:	SE i
Section 1	.3:	W/2 &	SE/4	Section	23:	N/2
Section 1	4:	A11		Section	25:	W/2
Section 1	.5:	s/2		Section	26:	E/2

(r) Extend the South Lindrith-Gallup Dakota Oil Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 4 WEST, NMPM Section 21: SE/4 Section 28: N/2 & SW/4

(s) Extend the Lone Pine-Dakota D Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM
Section 7: S/2 NE/4 Section 8: W/2 NW/4

(t) Extend the North Los Pinos-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 32 NORTH, RANGE 8 WEST, NMPM Section 13: SE/4

(u) Extend the Otero-Chacra Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP	25	NORTH,	RANGE	5	WEST,	NMP	1	
Section	2:	SW/4			Sec	tion	12:	W/2
Section	3:	SE/4			Sec	tion	14:	NW/4
Section .	10:	SE/4			Sec	tion	15:	NE/4
Section	11.	S/2 &	NF/4					

EXAMINER HEARING - WEDNESDAY - NOVEMBER 28, 1973

Docket No. 35-73

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM Section 31: W/2 Section 32: SW/4

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM

 Section 21: SW/4
 Section 33: E/2

 Section 26: NW/4 & SE/4
 Section 34: All

 Section 27: All
 Section 36: S/2

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM Section 11: N/2

(v) Extend the Pinon-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM Section 8: All (Partial) Section 9: All (Partial)

(w) Extend the Tapacito-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 3 WEST, NMPM Section 21: NE/4

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM Section 6: SE/4 Section 27: N/2 Section 15: SE/4

(x) Extend the Tocito Dome-Pennsylvanian D 0il Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 18 WEST, NMPM Section 26: NW/4 Section 27: NE/4

(y) Extend the Ute Dome-Dakota Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM Section 10: All Section 11: All

TOWNSHIP 32 NORTH, RANGE 14 WEST, NMPM Section 25: $\mathbb{E}/2$

(z) Extend the Ute Dome-Paradox Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM Section 10: All

TOWNSHIP 32 NORTH, RANGE 14 WEST, NMPM Section 25: All

DOCKET: COMMISSION HEARING - TUESDAY - NOVEMBER 27, 1973

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

CASE 5063: (De Novo)

Application of Shell Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its Sanger Well No. 6Y to be located 1220 feet from the North line and 180 feet from the West line of Section 27, Township 18 South, Range 38 East, Hobbs Pool, Lea County, New Mexico.

Upon application of Samedan Oil Corporation, this case will be heard De Novo pursuant to the provisions of Rule 1220.

Docket No. 36-73

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 11, 1973

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for January, 1974, from fifteen 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 January, 1974.

Docket No. 35-73

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 28, 1973

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 5115: Application of Mobil Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Corral Draw Unit Area comprising 19,199 acres, more or less, of Federal and State lands in Townships 25 and 26 South, Range 29 East, Eddy County, New Mexico.
- CASE 5116: Application of Mobil Oil Corporation for a pressure maintenance project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project by the injection of water and/or gas into the Middle Pennsylvanian formation of its Bridges State Well No. 147 located in Unit F of Section 13, Township 17 South, Range 34 East, Vacuum-Middle Pennsylvanian Pool, Lea County, New Mexico, the W/2 of said Section 13 to be the initial project area. Applicant further seeks the promulgation of rules for said project including a provision for administrative approval for expansion thereof.
- CASE 5117: Application of Roger C. Hanks for creation of a new pool and special rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Dagger Draw-Cisco Canyon Oil Pool in Sections 24, 25, and 36, Township 19 South, Range 24 East, Sections 18, 19, 30 and 31, Township 19 South, Range 25 East, and Section 1, Township 20 South, Range 24 East, Eddy County, New Mexico, and the promulgation of special pool rules therefor, including a provision for 320-acre spacing and proration units and specified well locations.
- CASE 5118: Application of Shell Oil Company for an extension of Order No. R-4289, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the indefinite extension of Order No. R-4289, which order as extended authorized temporary downhole commingling of the Morrow Pennsylvanian and Devonian production in the wellbore in its Antelope Ridge Well No. 2 located in Unit B of Section 4, Township 24 South, Range 34 East, Antelope Ridge Field, Lea County, New Mexico.
- CASE 5119: Application of Getty Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Stock Unit Area comprising 5,760 acres, more or less, of State lands in Township 21 South, Range 33 East, Lea County, New Mexico.
- CASE 5120: Application of Lone Star Producing Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water by

(Case 5120 continued from Page 1)

injection into the San Andres formation through the annulus between 5 1/2-inch and 8 5/8-inch casing strings of its New Mexico State 80 Well No. 1 located in Unit B of Section 33, Township 14 South, Range 34 East, Tres Papalotes-Pennsylvanian Pool, Lea County, New Mexico, and to produce oil from said pool through 2 3/8-inch tubing installed within the 5 1/2-inch casing.

- CASE 5121: Application of Texaco Inc. for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the SE/4 of Section 25, Township 20 South, Range 32 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to its Audie Richards Well No. 1 located in Unit P of said Section 25.
- CASE 5122: Application of Sun Oil Company for the creation of a new oil pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Wolfcamp production for its Shern Federal Well No. 1 located in Unit M of Section 15, Township 19 South, Range 32 East, Lusk Field, Lea County, New Mexico, and the promulgation of special pool rules therefor including a provision for 160-acre spacing and provation units and a special limiting gas-oil ratio of 4000 to 1.
- CASE 5123: Application of Consolidated Oil & Gas Inc. for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle gas production from the Flora Vista-Gallup Gas Pool and the Basin Dakota-Gas Pool in the wellbore of its Clayton Well No. 1-2 located in Unit N of Section 2, Township 30 North, Range 12 West, San Juan County, New Mexico.
- CASE 5124: Application of Belco Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicanc, in the above-styled cause, seeks an order pooling all mineral interests underlying the S/2 of Section 30, Tourship 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 5126: Application of Atlantic Richfield Company for a unit greement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approved of the Avalon Deep Unit Area comprising 10, 117 acres, more or less, of fee, Federal, and State lands in Township 21 South, Ranges 26 and 27 East, Eddy County, New Mexico.

- CASE 5127: Application of Skelly Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Salt Lake South Unit Area comprising 7080.12 acres, more or less, of State and Federal lands in Township 21 South, Range 32 East, Lea County, New Mexico.
- CASE 5125: Northwestern nomenclature case calling for the creation and extension of certain pools in McKinley, San Juan, Rio Arriba and Sandoval Counties, New Mexico:
 - (a) Create a new pool in McKinley County, New Mexico, classified as an oil pool for Mesaverde production and designated as the Blackeye-Mesaverde Oil Pool. The discovery well is the K & W Oil Co. #55-Y Jaco located in Unit D of Section 32, Township 20 North, Range 9 West, NMPM. Said pool would comprise:

TOWNSHIP 20 NORTH, RANGE 9 WEST, NMPM

Section 29: W/2 SW/4

Section 30: SE/4 NE/4 and NE/4 SE/4

Section 32: NW/4 NW/4

(b) Create a new pool in McKinley County, New Mexico, classified as an oil pool for Dakota production and designated as the Blackeye-Dakota Oil Pool. The discovery well is the Colorado Plateau Geological Services, Inc. #1 Blackeye located in Unit M of Section 29, Township 20 North, Range 9 West, NMPM. Said pool would comprise:

TOWNSHIP 20 NORTH, RANGE 9 WEST, NMPM Section 29: SW/4 SW/4

(c) Create a new pool in McKinley County, New Mexico, classified as a gas pool for Dakota A production and designated as the Lone Pine-Dakota A Pool. The discovery well is the Tenneco Oil Co. #2 SFPRR located in Unit L of Section 13, Township 17 North, Range 9 West, NMPM. Said pool would comprise:

TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM

Section 13: SW/4 Section 23: NE/4 Section 24: NW/4

(d) Create a new pool in San Juan County, New Mexico, classified as a gas pool for Fruitland production and designated as the Mt. Nebo-Fruitland Pool. The discovery well is the Amoco Production Co. #1 Keys Gas Com E located in Unit D of Section 27, Township 32 North, Range 10 West, NMPM. Said pool would comprise:

TOWNSHIP 32 NORTH, RANGE 10 WEST, NMPM

Section 27: NW/4 Section 28: NE/4

(e) Extend the Angels Peak-Gallup Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 9 WEST, NMPM Section 6: N/2

Section 7: SW/4

Section 8: All

Section 9: W/2

Section 18: W/2 & SE/4

Section 23: W/2

TOWNSHIP 26 NORTH, RANGE 10 WEST, NMPM Section 3: SW/4 & S/2 SE/4

Section 11: S/2

Section 12: All

Section 13: N/2

(f) Extend the Aztec-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 8 WEST, NMPM

Section 18: W/2

TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM

Section 18: S/2

Section 20: SW/4

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM

Section 12: SW/4

TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM

Section 18: SE/4

Section 21: SW/4

Section 28: SE/4

Section 31: E/2

Section 32: SW/4

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM

Section 2: N/2

Section 3: NE/4

(g) Extend the Ballard-Pictured Cliffs Pool in Rio Arriba, Sandoval and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 22 NORTH, RANGE 2 WEST, NMPM

Section 6: N/2 & SE/4

Section 7: NE/4
Section 8: W/2

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TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM
Section 15: S/2
Section 16: S/2
Section 21: All
Section 22: All
Section 23: All
Section 26: N/2
Section 27: N/2 & SE/4
Section 28: NE/4

TOWNSHIP 23 NORTH, RANGE 4 WEST, NMPM
Section 24: NE/4

TOWNSHIP 23 NORTH, RANGE 5 WEST, NMPM
Section 14: NW/4

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM
Section 17: SW/4
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Section 20: N/2

(h) Extend the Blanco-Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

Section 8: E/2 Section 9: A11 Section 10: W/2 Section 14: N/2 TOWNSHIP 27 NORTH, RANGE 9 WEST, NMPM Section 9: SE/4 Section 34: S/2 TOWNSHIP 28 NORTH, RANGE 9 WEST, NMPM Section 7: A11 (Partial) Section 18: A11 Section 19: A11 Section 31: W/2 TOWNSHIP 28 NORTH, RANGE 10 WEST, NMPM Section 13: E/2

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM

(i) Extend the Blanco-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM Section 30: SW/4
Section 31: W/2

Section 5: SE/4

W/2 & SE/4

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Section 8: S/2
                         Section 26: E/2
Section 14: N/2
                         Section 33: W/2
Section 15: S/2
                         Section 34: NE/4
Section 16: S/2 Section 35: N/2 Section 17: S/2 & NE/4 Section 36: N/2
Section 23: SE/4
TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM
Section 6: S/2
Section 7: All
Section 18: NE/4
TOWNSHIP 30 NORTH, RANGE 9 WEST, NMPM
Section 14: NE/4
TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM
Section 2: All
                     Section 14: NE/4
Section 5: SE/4
                     Section 15: SW/4
                     Section 16: N/2 & SE/4
Section 6: NE/4
Section 9: NE/4
                     Section 22: SE/4
Section 10: N/2
                     Section 23: S/2
Section 11: All
                     Section 24: SW/4
Section 12: SW/4
                     Section 25: All
Section 13: All
                     Section 26: NE/4
TOWNSHIP 31 NORTH, RANGE 9 WEST, NMPM
Section 31: S/2
TOWNSHIP 31 NORTH, RANGE 10 WEST, NMPM
Section 18: SW/4
                     Section 32: E/2
                     Section 35: S/2
Section 29: SF/4
Section 31: S/2
                     Section 36: S/2
TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM
                          Section 12: All
Section 3: All
Section 4: All Section 5: N/2 & SE/4
                          Section 13: E/2
                         Section 14: N/2
Section 8: SW/4
                         Section 17: N/2
Section 9: N/2
                         Section 23: W/2
Section 10: N/2
                         Section 25: SW/4
Section 11: All
TOWNSHIP 32 NORTH, RANGE 11 WEST, NMPM
Section 21: E/2
                            Section 32: All
Section 22: SW/4
Section 27: All
                            Section 33: All
                            Section 34:
                                         A11
Section 28: All
                            Section 35: S/2
Section 29: N/2 & SE/4
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TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM

Section 25:

(j) Extend the South Blanco-Pictured Cliffs Pool in Rio Arriba, Sandoval and San Juan Counties, New Mexico, to include therein:

> TOWNSHIP 23 NORTH, RANGE 1 WEST, NMPM Section 8: SE/4

> TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 9: E/2 Section 16: NE/4

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM Section 17: NE/4

TOWNSHIP 28 NORTH, RANGE 6 WEST, NMPM Section 26: SW/4 Section 35: W/2 Section 27: E/2 Section 36: NW/4

TOWNSHIP 28 NORTH, RANGE 7 WEST, NMPM Section 16: E/2

TOWNSHIP 28 NORTH, RANGE 8 WEST, NMPM Section 8: All (Partial) Section 18: E/2 Section 9: All (Partial) Section 19: NE/4 Section 14: W/2 & SE/4 Section 20: NW/4 Section 15: N/2 Section 23: NE/4 Section 16: NE/4 Section 24: W/2 & SE/4 Section 17: All Section 25: N/2

(k) Extend the Choza Mesa-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 4 WEST, NMPM Section 23: W/2

(1) Extend the Flora Vista-Fruitland Pool in San Juan County, New Mexico, to include therein:

> TOWNSHIP 30 NORTH, RANGE 12 WEST, NMPM Section 1: SW/4 Section 2: S/2 Section 3: SE/4

(m) Extend the South Gallegos-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM Section 1: SW/4

(n) Extend the Gonzales-Mesaverde Pool in Rio Arriba County, North Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM Section 4: SW/4 Section 9: NW/4 Section 5: SE/4

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM Section 32: W/2 Section 29: SW/4

Section 31: S/2

(o) Extend the Hospah-Dakota Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM Section 5: SW/4 SW/4 Section 7: N/2 NE/4 Section 6: SE/4 SE/4

(p) Extend the Kutz-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM Section 13: W/2

(q) Extend the Largo-Chacra Pool in Rio Arriba & San Juan Counties, New Mexico, to include therein:

TOWNSHIP 27 NORTH, RANGE 8 WEST, NMPM Section 16: S/2 Section 10: NE/4 Section 17: SE/4 Section 11: All Section 13: W/2 & SZ/4 Section 23: N/2Section 25: W/2 Section 14: All Section 26: E/2 Section 15: S/2

(r) Extend the South Lindrith-Gallup Dakota Oil Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 4 WEST, NMPM Section 21: SE/4 Section 28: N/2 & SW/4 Section 21: SE/4

(s) Extend the Lone Pine-Dakota D Oil Pool in McKinley County, New Mexico, to include therein:

TOWNSHIP 17 NORTH, RANGE 8 WEST, NMPM Section 7: S/2 NE/4 Section 8: W/2 NW/4

(t) Extend the North Los Pinos-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 32 NORTH, RANGE 8 WEST, NMPM Section 13: SE/4

(u) Extend the Otero-Chacra Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM Section 12: W/2 Section 2: SW/4 Section 14: NW/4 Section 3: SE/4 Section 15: NE/4 Section 10: SE/4 Section 11: S/2 & NE/4

Docket No. 35-73 -9-

TOWNSHIP 26 NORTH, RANGE 5 WEST, NMPM Section 31: W/2 Section 32: SW/4

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM Section 21: SW/4 Section 26: NW/4 & SE/4 Section 27: All Section 33: E/2

Section 34: A11 Section 36: S/2

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM Section 11: N/2

(v) Extend the Pinon-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM

Section 8: All (Partial) Section 9: All (Partial)

(w) Extend the Tapacito-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

> TOWNSHIP 26 NORTH, RANGE 3 WEST, NMPM Section 21: NE/4

> TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM Section 6: SE/4 Section 27: N/2 Section 15: SE/4

(x) Extend the Tocito Dome-Pennsylvanian D Oil Pool in San Juan County, New Mexico, to include therein:

> TOWNSHIP 26 NORTH, RANGE 18 WEST, NMPM Section 26: NW/4 Section 27: NE/4

(y) Extend the Ute Dome-Dakota Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 14 WLST, NMPM Section 10: All Section 11: All

TOWNSHIP 32 NORTH, RANGE 14 WEST, NMPM Section 25: E/2

(z) Extend the Ute Dome-Paradox Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM Section 10: All

TOWNSHIP 32 NORTH, RANGE 14 WEST, NMPM Section 25: All

SUN OIL CO MONTHLY PRODUCTION AND E. LUSK (WOLFCA LEA COUNTY, N

	BEFORE EXAMINER NUTTER
COMPANY	OIL CONSERVATION COMMISSION
ND COMPLETION DATA	SUN EXHIBIT NO. 3
NEW MEXICO	CASE NO. 5/22
	2/19/25

YEAR		IN OIL COMPAN ARN FEDERAL			CLEVE	ROCK ENERG	Y CORP.
MONTH	01L	GAS	WATER		OIL	GAS	WATER
1973							
OCT	4,376	6,201	0		341	2,000	0
NOV	8,740	18,198	0		*	0	0
DEC	3,949	5,774	0		0	0	0
TOTAL	17,065	30,173	0		341	2,000	0
1974							
JAN	8,740	237	1,395		0	Ö	0
FEB	7,375	139	1,260		0	0	0
MAR	9,255	1,442	1,395		0	0	0
APR	8,916	136	300		0	9	0
MAY	4,914	1,962	152		0	0	0
JUN	9,073	20,780	240		0	0	0
JUL	7,986	23,864	248		û	Û	û
AUG	7,060	22,334	248		0	0	0
SEP	6,664	22,528	240		0	0	0
OCT	5,906	21,338	840		0	0	0
NOV	5,917	21,903	1,530		0	0	0
DEC	5,114	22,987	1,984		0	0	0
TOTAL	86,920	159,650	9,832	•	0	0	0
CUMULATIVE	103.985	189,823	9,832		341	2,000	0

SHEARN FEDERAL #1

POT. 556 BOPD, GOR 1700-1, 46° API, TP 1494, PERFS. 10732 - 10759' 10/25/73

CLEVEROCK-PEDCO STATE #1

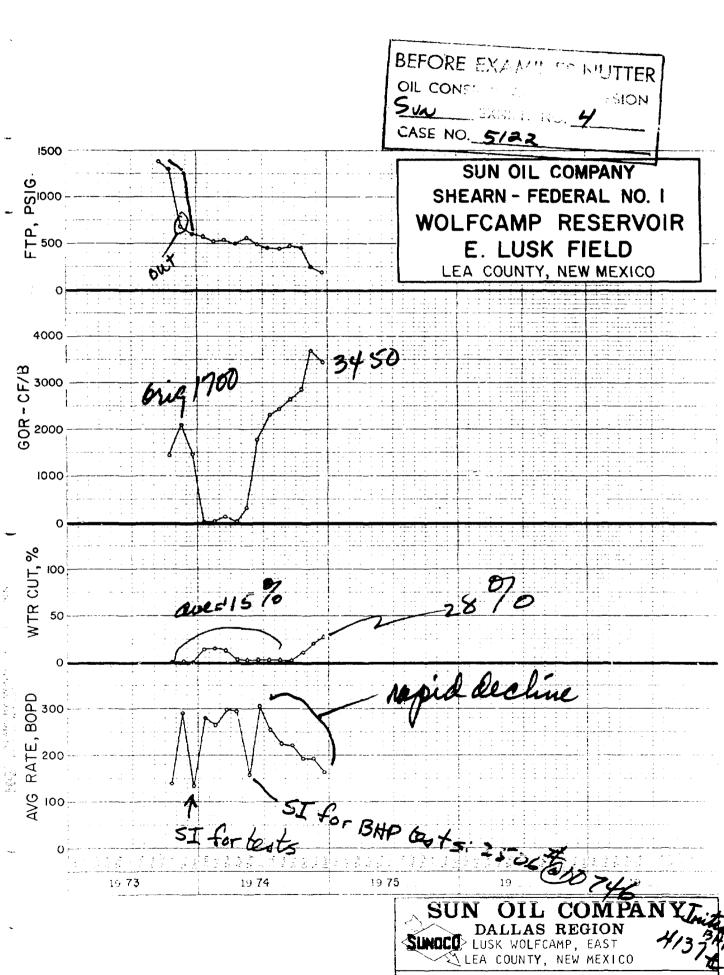
POT. 42 BOPD + 7 BW, GOR 6667-1, 47.8° API TP 100 - 20#, PERFS. 10531.5 - 10668' 1078/74

*RECOMPLETED IN BONE SPRINGS

SUN OIL COMPANY DALLAS REGION
LUSK WOLFCAMP, EAST
LEA COUNTY, NEW MEXICO
PRODUCTION HISTORY

February 19, 1975 Case No. 5122

Exhibit No.



PERFORMANCE HISTORY

February 19, 1975 Case No. 5122

Exhibit No.

SUN OIL COMPANY ECONOMIC COMPARISON 80-ACRE VS. 160-ACRE SPACING E. LUSK (WOIFCAMP) FIELD LEA COUNTY, NEW MEXICO

<u>nar o</u>	80-ACRE	160-ACRE
TOTAL COST: SUCCESSFUL, DC & E UNSUCCESSFUL	\$470,000 272,000	\$470,000 272,000
PROB. OF SUCCESS = 1.0 (54') PROB. OF SUCCESS = 0.6 (32') PROB. OF SUCCESS = 0.4 (22')	217,000 130,000 87,000	433,000 260,000 173,000
PROFITABILITY - S.R.: NET CASH FLOW RATE OF RETURN, % 10% NET PRESENT VALUE COST - \$/BBL. PROFIT - \$/\$ PAYOUT, YEARS LIFE, YEARS	0.4 0.6 207,000 386,000 43 50+ 132,000 274,000 5.50 4.09 0.59 0.98 1.5 1.1	0.4 0.6 693,000 1,116,000 50+ 50+ 421,000 707,000 2.77 2.07 1.95 2.81 1.3 1.0

BEFORE EXAMINER NUTTE	
OIL CONSERVE FEET - FEETON	1
Sunt TANAMENO. 5	-
CASE No. 5/22	_

SUN OIL COMPANY
DALLAS REGION
LUSK WOLFCAMP, EAST
LEA COUNTY, NEW MEXICO

ECONOMIC COMPARISON

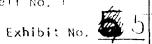
February 19, 1975 Case No. 5122

Exhibit No.

	1760	1	
DISTRIBUTIO			
SANTA FE	SANTA FE		
FILE			
U.S.G.S.			
LAND OFFICE	LAND OFFICE		
IRANSPORTER	OIL	I	
IRANSPORTER	GAS		I -
OPERATOR			
PRORATION OF		T -	
Operator			
Sun O	ii Ço	mpa	ny
Address			
Box 1	861,	Hid	lan

DISTRIBUTION SANTA FE FILE U.S.G.S.	REQUEST	NEW MEXICO OIL CONSERVATION COMMISSION REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GA			
LAND OFFICE I RANSPORTER OIL GAS OPERATOR	AUTHORIZATION TO TR	ANSPORT UIL AND NATUR	RAL GAS		
1. PRORATION OFFICE			5		
Sun Dil Company		Control	5/82		
Resson(s) for f-ling (Check proper box New Well Recompletion Change in Ownership	Change in Transporter of:	≓ ≒ 1	V) tag	de de Section de la Section de Se	
If change of ownership give name and address of previous owner					
1. DESCRIPTION OF WELL AND	LEASE. Well No.; Pool Name, Including	Contraction Kind o	f Lease	Lease No.	
Shearn Federal Com.	l Undesignated	i	Federal or Fee Federal	NM063530	
Unit Letter L ; 6	60 Feet From The West Li	ne and 1980 Feet	From The South		
Line of Section 15 To	ownship 19-\$ Range	32-E , NMEM,	Lea	County	
II. DESIGNATION OF TRANSPOR None of Authorized Transporter of Or		As Aidress (Give address to which	approved copy of this form is	to be sent) .	
The Permian Corporat Name of Authorized Transporter of Co	ion ratinghead Gas 💥, or Dry Gas 📑	Box 1183, Houston, Address Give address to which	Texas 77001 approved copy of this form is	to be sent)	
Phillips Petroleum C If well produces oil or liquids, give location of tanks.	Ompany Twp. Ege. 1 15 19-5 32-6	Frank Phillips Bld Is gas actually connected? Yes	Bartlesville. When Oct 1973	Okla.	
If this production is commingled w	ith that from any other lease or pool		PT:		
Designate Type of Completi	, X ;	New Well Workover Deep	x !	Diff. Restv.	
Dote Suspex Work Began 10-9-73	Date Compl. Ready to Prod.	Total Depth	P.B.T.D. 13.030-CIBP. (o 10850	
Elevations (DF, RKB, RT, GR, etc., RKB 3638 Perforations	Name of Producing Formation Wolfcamp	Tep Oil/Gas Pay	Tubing Depth 10495 (2-7 Depth Casing Shoe		
	0,46,49,54,59	ID CEMENTING RECORD	13,252		
HOLE SIZE	CASING & TUBING SIZE	CEPTH SET	SACKS CE	MENT	
17211		330.00	450 sx.		
15"	13-3/8"	2682.55	1000 sx.		
124"	9-5/8"	7353.33		775 sx.	
V. TEST DATA AND REQUEST F	7-5/8" Liner FOR ALLOWABLE (Test must be	after recovery of total volume of lo	ead oil and must be equal to o		
OII, WELL Date First New Oil Run To Tanks	Date of Test	lepth or be for full 24 hours) Producing Method (Flow, pump.	. sas lift, etc.)		
10-17-73	10-25-73				
Length of Test	Tubing Pressure	Casing Pressure	Choke Size		
24 hours	1494	Pkr.	19/64"		
Actual Prod. During Te-	556.0	Water - Bitle.	945.2	Gas-MCF	
GAS WELL Actual Prod. Test-MCF/D	Length of Test	Bble. Condens ste/MMCF	Gravity of Condensa		
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Caetag Pressure (Shut-in)	Choke Sixe		
VI. CERTIFICATE OF COMPLIAN	NCE	OIL CONS	ERVATION COMMISSI	NC	
Commission have been complied	regulations of the Oil Conservation with and that the information given he best of my knowledge and belief.				
711	! .				
Proration Clerk		DA	OIL COMP.	ANY	
10-30-73	Title)	l	LUSK AREA C-104 Potential arn-Fed. Well No.		

Case No. 5122 November 28, 19**7**3



A & A ENGINEERING SERVICE

MIDLAND, TEXAS

PHONE MU 2-1006

BOX 5633

STATIC-FLOWING-B. H. PRESSURES

Well & No. Shearn Federal No. 1 COMPANY Sun Oil Company FIELD _ Date 10-20 to 22, 1973 Instrument No.___ SHP PSIG @ DATE STATUS TIME MIN 10.746 0ct.20, 1973 Well Flowing On 16/64 09:15 43:00 1531 At Rate Of 750 MCF Instrument @ 10,046 10:05 Instrument @ 10,446 10:40 Instrument @ 10,746 1524 4082 11:15 46:00 1524 4082 Well Shut In 12:15 Build Up Started 12:15 :00 4101 :06 1547 12:21 :15 1552 4103 12:30 12:45 :30 1557 4105 :45 13:00 1564 4107 1572 13:15 1:00 4107 1588 4109 13:45 1:30 14:15 2:00 1601 4110 4111 1619 15:15 3:00 1631 4111 16:15 4:00 4112 17:15 5:00 1639 18:15 6:00 1646 411,2 10:00 4113 22:15 4113.5 Oct.21, 1973 03:15 15:00 4114 08:15 20:00 4114 18:15 30:00 4114 40:00 Oct.22,1973 04:15 12:15 48:00 4114

Prior To Shut In Well Had Made 670 Barrells Of Fluid;

Water - 25 Barrells

0il -645 Barrells

Well Had Produced 1,384 MCF Gas Prior To Shut In G O R Ratio 2106 Cubic Feet Gas To 1 Barrell Oil

Well Was Making 15 Barrells Oil Per Hour

BEFORE EXAMINER STANCES

CASE NO. 5122

EX.

Nov. 28,1973

KELLAHIN AND FOX
ATTORNEYS AT LAW
BOO DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO B7501

JASON W. KELLAHIN ROBERT E. FOX W. THOMAS KELLAHIN

TELEPHONE 982-4315 AREA CODE 505

October 25, 1973

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

Gentlemen:

Enclosed, in triplicate, is the application of Sun Oil Company for the creation of a new pool and the adoption of pool rules for Wolfcamp Production in the Lusk Field, Lea County, New Mexico.

It is requested that this application be set for hearing at the regular examiner hearing on November 28, 1973.

Yours very iruly,

Jason W. Kellahan

JWK:ks

Enclosure

DOCKET MAILED

Date 11-16-23

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SUN OIL COMPANY FOR CREATION OF A NEW POOL AND ADOPTION OF POOL RULES, LEA COUNTY, NEW MEXICO

Care 5/22

APPLICATION

COMES NOW Sun Oil Company and applies to the Oil Conservation Commission of New Mexico for the creation of a new pool for production of oil from the Wolfcamp formation and for the adoption of pool rules, including a provision for 160-acre spacing and proration units, and a limiting gas-oil ratio of 4000 mcf of gas to one barrel of oil, and in support thereof would show the Commission:

- 1. Applicant has recompleted its Shern Federal Well No. 1, located 980 feet from the South line and 660 feet from the West line of Section 15, Township 19 South, Range 3 East, N.M.P.M., Lea County, New Mexico, in an undesignated Wolfcamp pool in the Lusk field. The Wolfcamp formation lies between 10,448 and 10,948 feet at the site of the well.
- 2. Present information available indicates that one well will economically and efficiently drain and develop a proration unit of not less than 160 acres, and in order to properly evaluate the formation, and to prevent waste, spacing and proration units of 160 acres should be adopted by the Commission for this pool for a temporary period of one year.

the J Deson of he said Rongs 32

- 3. The pool can be efficiently and economically produced with a limited gas-oil ratio of 4000 mcf of gas to one barrel of oil and the adoption of such a gas-oil ratio will not result in waste.
- 4. The Lusk-Strawn pool in the vicinity of this well is spaced on 160 acre spacing for the Wolfcamp formation will possibly result in more rapid and efficient development of the pool.

WHEREFORE applicant requests that this application 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 creating a new pool for Wolfcamp production and the adoption of pool rules as proposed.

Respectfully submitted, SUN OIL COMPANY

KELLAHIN & FOX P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

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 CONSUDERING:

CASE No. 5122 (Re-Opens

Order No. R- 4693-A

NOMENCLATURE

IN THE MATTER OF CASE 5122 BEING REOPENED PURSUANT TO THE PROVISIONS OF ORDER NO. k-4693, WHICH ORDER ESTABLISHED TEMPORARY SPECIAL POOL RULES FOR THE EAST LUSK-WOLFCAMP OIL POOL, LEA COUNTY, NEW MEXICO, INCLUDING A PROVISION FOR 160-ACRE SPACING AND PRORATION UNITS AND A LIMITING GAS-OIL RATIO OF 4000 TO 1.

ORDER OF THE COMMISSION

BY THE COMMISSION :

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

1975, the Commission, a __day of _____ quorum being present, having considered the testimony, the record. and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-4693, dated December 11, 1973, temporary special rules and regulations were promulgated for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, establishing temporary 160-acre spacing units and proration units, and a limiting gas-oil ratio of 4000 to 1.

-2-Case No. 5122 (Reopened) Order No. R-4693-A

- (3) That pursuant to the provisions of Order No. R-4693, this case was reopened to allow the operators in the subject pool to appear and show cause why the East Lusk-Wolfcamp Oil Pool should not be developed on 40-acre spacing units and a limiting gas-oil ratio of 2000 to 1.
- (4) That the evidence establishes that one well in the East Lusk-Wolfcamp Oil Pool can efficiently and economically drain and develop 160 acres.
- (5) That the Special Rules and Regulations promulgated by Order No. R-4693 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just $\frac{c_1/c_0}{c_2}$ and equitable share of the gas in the pool.
- (6) That this case should be reopened at an examiner hearing in May, 1976, at which time the operators in the subject pool should appear and show cause why the East Lusk-Wolfcamp Coll Pool should not be developed on 40 acre proration units with a limiting oil-gas ratio of 2000 to 1.

IT IS THEREFORE ORDERED:

- (1) That the Special Rules and Regulations governing the East Lusk-Wolfcamp Oil Pool, promulgated by Order No. R-4693, shall remain in full force and effect for an additional period of one year.
- (2) That this case shall be reopened at an examiner hearing in May, 1976, at which time the operators in the subject pool shall appear and show cause why the East Lusk-Wolfcamp less than 160-acc.

 Oil Pool should not be developed on 19-acce provation units with a limiting oil-gas ratio of 2000 to 1.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

dr/

W

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

CASE NO. 5122 (Reopened)

Order No. R-4693-B

IN THE MATTER OF CASE 5122 BEING REOPENED PURSUANT TO THE PROVISIONS OF ORDER NO. R-4693-A, WHICH ORDER EXTENDED THE SPECIAL POOL RULES FOR THE EAST LUSK-WOLFCAMP OIL POOL, LEA COUNTY, NEW MEXICO, INCLUDING A PROVISION FOR 160-ACRE PRORATION UNITS AND A LIMITING OIL-GAS RATIO OF 4000 to 1.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 12

19 76, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this day of May , 19 76 , 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 Order No. R-4693-A, dated Fobruary 19, 1975, Extended the special pool rules for the East Lusk-Wolfcamp Oil Pool, Lea County, New Mexico, which rules provided for 160-acre proration units and a limiting oil-gas ratio of 4000 to 1.

- (3) That Order No. R-4693-A provided that Case No. 5122 would be reopened in May of 1976 to allow operators in the subject pool to appear and show cause why the pool should not be developed on less than 160-acre spacing with a limiting pas-oil relie of 2000 \$\frac{1}{2}\$ (... \frac{1}{2}\$ (... \frac
- (4) That no operator is offered evidence to establish that the pool should be developed on other than 160-acre spacing with
- (5) That the Temporary Special Rules and Regulations for the East Lusk-Wolfcamp Oil Pool should be rescinded and said pool should be governed by the Statewide Rules for oil pools in the State, effective June 1, 1976.

IT IS THEREFORE ORDERED:

- (1) That effective June 1, 1976, the Temporary Special Rules and Regulations for the East Lusk-Wolfcamp Oil Pool, promulgated by Order No. R-4693-A, dated February 15, 1975, are hereby rescinded and the pool is placed under the Statewide Rules for oil pools in the State.
- (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.

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO



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

1 Du

CASE NO. 5122

Order No. R-769

APPLICATION OF SUN OIL COMPANY FOR THE CREATION OF A NEW OIL POOL AND SPECIAL POOL RULES, LEA COUNTY,

NEW MEXICO.

NOMENCLATURE

*

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 28, 1973 at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this <u>day of December</u>, 193, 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, Sun Oil Company, seeks the creation of a new oil pool for Wolfcamp production in Lea County, New Mexico, and the promulgation of temporary special rules and regulations governing said pool, including provisions for 160-acre spacing and proration units and a special limiting gas-oil ratio of 4000 to 1.

- (3) That the applicant further seeks to have such temporary special pool rules apply to its Shern Federal Well No. 1 located in Unit of Section 15, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico.
- (4) That Sun Oil Company's Shern Federal Well No. 1 has discovered a separate and common source of supply which should be designated the East Lusk-Wolfcamp Oil Pool; that the vertical limits of said pool should be the Wolfcamp formation and that the horizontal limits of said pool should be the Sulfamp of said Section 15.
- one well in the East Lusk-Wolfcamp Oil Pool can efficiently and economically drain and develop 160 acres which a limited (6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 160-acre spacing units should be promulgated for the East Lusk-Wolfcamp Oil Pool.
- (7) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.
- (8) That the temporary special rules and regulations for the East Lusk-Wolfcamp Oil Pool should apply only to wells located within the norizontal limits of said pool.
- (9) That this case should be reopened at an examiner hearing during the month of January, 1975, at which time operators in the East Lusk-Wolfcamp Oil Pool should appear and show cause why said pool should not be developed on 40-acre spacing.

-3-Case No. 5122 Order No. R-

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production, is hereby created and designated as the East Lusk-Wolfcamp Pool, consisting of the following described area:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM Section 15: 5w/4

TEMPORARY SPECIAL RULES AND REGULATIONS
FOR THE
EAST LUSK-WOLFCAMP

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

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of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

-4-Case No. 5122 Crder No. R-

RULE 4. Each well shall be located no nearer than 530 feet to the outer boundary of the proration unit of to any governmental quarter-quarter section line nor nearer than 660 feet to the nearest well drilling to or capable of producing from the same pool.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

shall be assigned a 160-acre depth bracket allowable of 560 barrels, for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

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

Y ~ .

well in Unit M of Section 15, Township 19 South, Range 32 East, NMPM, as a Wolfcamp oil well, said rules shall be applicable thereto prior to extension of the horizontal limits of the pool to include said well.

-!-Case No. 5122 Order No. R-

IT IS FURTHER DROGRED:

(2) That the locations of all wells presently drilling to the East Lusk-Wolfcamp Oil Pool are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before

(3) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing wells in the East Lusk-Wolfcamp Oil Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 160 acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the East Lusk-Wolfcamp Oil Pool shall receive no more than one-fourth of a standard allowable for the pool.

(A) That this cause shall be reopened at an examiner hearing during the month of January, 1975, at which time the operators in the East Lusk-Wolfcamp Oil Pool may appear and show cause why said pool should not be developed on 40-acre spacing with a gast oil ratio of 2500 % 1.

entry of such further orders as the Commission may deem necessary.

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