CASE 4117: Application of EASTERN PETROLEUM CO. FOR SPECIAL POOL RULES FOR RATTLESNAKE-DAKOTA POOL.

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dearnley-meier reporting service, inc.

BEFORE THE

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NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

May 7, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Eastern Petroleum Company for special pool rules, San) Juan County, New Mexico.)

Case 4117

BEFORE: ELVIS A. UTZ, Examiner



TRANSCRIPT OF HEARING

MR. UTZ: Case 4117.

MR. HATCH: Case 4117, continued from the April 23, 1969, Examiner Hearing. Application of Eastern Petroleum Company for special pool rules, San Juan County, New Mexico.

MR. McDERMOTT: W. H. McDermott, appearing for the Applicant, Eastern Petroleum Company, and I have one witness I would like to have sworn in.

(Thereupon, Applicant's Exhibits 1 thru 4 were marked for identification.)

ROBERT E. LAUTH,

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

DIRECT EXAMINATION

BY MR. McDERMOTT:

MR. UTZ: Any other appearances? You may proceed.

- Q State your name, please?
- A Robert E. Lauch.
- Q Where are you located?
- A In Durango, Colorado.
- Q What is your occupation?
- A I am a Geological Consultant.

- Q Are you presently employed by Eastern Petroleum Company?
 - A Yes.
- Q Would you state for the Examiner your education and your brief working experience?

A I am a graduate geologist out of the University of Minnesota, B. A. in 1951. I have been a Consultant in Durango in the Four Corners area for fourteen years, and I worked for various companies and individuals, banks, estates throughout the area.

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

MR. UTZ: Yes, they are.

- Q Are you acquainted with the application of Eastern Petroleum Company in Case 4117 here before the Examiner?
 - A Yes.
- Q Are you acquainted with the Rattlesnake Field in San Juan County, New Mexico?
 - A Yes.
- Q Have you had an opportunity in the past to study this particular field?
 - A Yes, I made a study on the thing back in 1966,

and on the results of the report in there, did interest Eastern Petroleum Company into taking a farm-out on it from Continental Oil Company.

- Q Do you have your report on which you make certain statements as to production in this area?
 - A Yes.
 - Q Do you have that report with you?
 - A Yes.
- Q Would you just limit your comments from the report as to the geological situation in the Rattlesnake Field?
- A The Rattlesnake Field is a really interesting field. It was discovered in 1924, and has been producing since that time, almost a period of forty-five years.

 The oil is a very low viscosity, high gravity oil on the order of about 74 -- 71 to 74 API gravity. The Rattlesnake structure is anticlinal -- I will just go back a ways -- is anticlinal, and the production comes from the Dakota beds at about six to seven feet in depth. And the wells, Continental has taken about four and a half million barrels out of the field up through 1967; and in the early thirty's in the north part of the field, they took and pulled on the wells pretty heavy, and it comed some of the water

in. The gravity of the oil in relationship to water, once this pulls in, is gone. So at the time Eastern took over, it is my contention that Continental probably got the field in 1930 to 1940 in the north part of the field, it was my contention that during those twenty years time, that due to the good relationship of the oil to water, viscositywise, that the oil was seeking the higher portions of the field again.

Q Now, has this been proven out by drilling that's been done?

A Yes. A lot of the drilling has established what is the present water level in the area, then to go ahead and find the cleaner portions of the sand, so that it was what we were trying to do at the time was so ahead and cap the cleanest portion of the sand in each particular bench.

Q How many producing wells are in the field at the present time?

- A There are eight producing wells.
- Q What is the daily production?
- A 53 barrels.
- Q For the total eight?
- A For the total eight.

Two of them are in various stages.

I call your attention to what has been marked as Exhibit No. 1, or entitled "Rattlesnake Field Map No. 1," a structure map, and I wonder if you would explain this to the Examiner?

map No. 1, this is a structure map. The solid curved lines on top of the first bench of the Dakota; the dotted lines with the yellow color are termed main distributing channels and inter-distributor channels which in essence is just a marine channel in a marine type environment and the intervening mud flats.

Would you explain what has been marked as Exhibit

This is the same thing as the first, except it is No. 2? on the second bench of the Dakota, and shows the same thing.

And Exhibit No. 3, which is Map No. 3?

Map No. 3 shows the same thing on the third bench of the Dakota. The Dakota is divided into three benches about sixty-five feet think, and there is a little fault through there about thirty feet in displacement. There is no third bench production south of that fault.

- Q Does Eastern Petroleum Company own the rights down to the third bench?
 - A Yes.
- Q Is that where all the production is from, from these three benches?
 - A At the present time, yes.
- Q In the application, Eastern Petroleum seeks twoand-a-half acre spacing. Would you explain to the Examiner the purpose and the necessity for this type of spacing in this area?
- A It is more or less to locate on structure, and the structures are a series of little highs, and in conjunction with the sand channel, the highest structural position to go ahead and produce that well. We found out if you produce the wells very heavy at all, you will cone the water in. So Eastern has been holding the production down to between ten and fifteen barrels a day, and trying to pop into the high structural position in each little channel.
- Q Would the application as stated, whereby no well would be located nearer than 50 feet to the outer boundary of the quarter quarter section and no nearer than 160 feet to another well producing from the same pool, produce the results that you are asking for here?

A Yes. The way the rule reads is now 330 feet from each legal subdivision line, and with these little channels as narrow as they are, even on the maps in there, they show the main distributary channels, within those distributary channels there is much variation, and if you stay 330, you leave a big gap and you can miss a channel completely.

What Eastern would like to do is drill 50 feet, no closer than 50 feet from each legal subdivision boundary in there within the limits of the acreage in the inside portion of their acreage, not on the outside portion.

Q Calling your attention to Exhibit No. 4, lease information, does Continental own any rights in the boundary which you have here colored in?

A It is orange. They have all the deep rights in there. But Eastern has an operating agreement with them for the rights down to the base of the Dakota or 1,200 feet, in case the Dakota is not there. The reason there are two colors on that lease information map is the first original agreement with Continental Oil Company covered the acreage that is outlined in orange, and accepted the 560 acres as outlined in green, and then a subsequent deal with Eastern took over the entire portion

so they have all within the limits of the orange at the present time. It is 2,400 plus 560 acres.

- Q Do you feel that this type of spacing is necessary for the further production in this field?
 - A Very definitely.
- Q Do you feel that it will serve conservation purposes by having this kind of an exception allowed?'
- A I do. I think it is just all attic oil. It has been in the stripper stage for many years now.
- Q Will any correlative rights of other parties be damaged?
 - A No.
- Q Did you have these Exhibits prepared by yourself or did you supervise these?
 - A Yes, I did.

MR. McDERMOTT: At this time, I would like to move for the admission of the exhibits.

MR. UTZ: Without objection, Exhibits 1, 2, 3 and 4 will be entered into the records of this Case.

(Thereupon, Applicant's Exhibits 1, 2, 3 and 4 were admitted in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Lauth, are you familiar with the pool rules over in the little two-and-a-half acre spaced pools to the east of this area, in Shiprock, and some others?

A Yes.

Q Are the rules that you are questioning here the same as those rules?

A Yes, with one exception, that is the 50 foot from your legal subdivision boundary.

Q You mean 40-acre legal subdivision down there?

A Yes. Rattlesnake is a lot different as far as the sands are concerned, than at Shiprock. In the first bench, there is much more variation due to your extreme channels. It is closer to your source of deposition; so the environment is a lot different.

Q There is no offsetting production to this anticline at all, is there?

A No, sir. Shiprock, the little Shiprock is over to the east, and it is off the acreage, way of the map here.

Q And do you control the entire structure?

A Yes, sir.

Q Are there any Pennsylvanian wells producing there?

A I think there are probably six or seven wells.

They are in about the last stages of production on that, too. I think they are down to about 40 barrels a day for the six or seven wells.

Q Now, how do you intend to complete these little wells?

A Set surface casing probably about one joint of 7 inch, drill on down to the top of the pay, and set 4 1/2 inch casing on a production packer, and core into it. If it is in the sand, if we get a well in there, we will go ahead and cement the casing, say, from the outside, or probably run a string of tubing on the outside. But we found in there that cement next to the sand damages it, so that once you cement it, you never get it back. The wells are low productivity; they are about 10 barrels a day average.

Q Where are you going to set the 4 1/2?

A On top of the pay, and just drill into the pay.

If, say, the first bench is not productive, then unloosen
the packer, pull the casing out, and drill on down and
check the second bench, and set the packer again, and then
for the third.

Q Are you going to leave the 4 1/2 in?

A Yes.

- Q Just landed, or going to cement?
- A Going to cement it from the outside.
- Q With tubing down the outside?
- A With tubing down the outside, yes.
- Q Do you have any idea about the pressures in this?
- I can read is about between 270 and 300 pounds, and that was one of the interesting things about it. There is a water encroachment in the area, and the pressure now has built up to about 291 pounds. We are going to have the original pressure and everything else, just like it was a new field, of much smaller size.

MR. UTZ: Any other questions of the witness?

You may be excused. Any statements? The case will be taken under advisement.

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WITNESS

ROBERT E. LAUTH		
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EXHIBITS	MARKED	ADMITTED IN EVIDENCE
Applicant's Exhibits 1, 2, 3, and 4	2	9

STATE OF NEW MEXICO)
) SS,
COUNTY OF BERNALILLO)

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

My Commission expires:

December 6, 1972.

the Executive hearing of Case No. 1869.

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BEFORE THE

NFW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico
April 23, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Eastern Petroleum Company for special pool rules, San Juan County, New Mexico.

Case No. 4117

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BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



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

1120 SIXMS BLDG. • P. O. BOX 1092 • PRONE 243-6691 • ALBUQUEROUE, NEW MEXICO

MR. UTZ: Case 4117.

MR. HATCH: Case 4117. Application of Fastern Petroleum Company for special pool rules, San Juan County, New Mexico.

The Commission has received a request from the applicant that it be continued to May seventh.

MR. UTZ: Case 4117 will be continued to May seventh.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, GLENDA BUPKS, Notary Public 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.

Witness my Hand and Seal this 30th day of April, 1969.

Denda Burks NOTARY PUBLIC

My Commission Expires:

March 12, 1973.

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501 GOVERNOR DAVID F. CARGO CHAIRMAN

LAND COMMISSIONER ALEX J. ARMIJO MEMBER

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

May 14, 1969

Mr. W. H. McDermott	Re:	Case No.	4117	
Attorney at Law		Order No.	R-3751	
Post Office Box 1143		Applicant:		
Lincoln Building Santa Fe, New Mexico		Eastern	Petroleum	Co
Detter se' New Wexten				- 4.

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.

Secretary-Director

ALP/ir	•	
Copy of order also sent to:		
Hobbs OCCX		
Artesia OCC		
Aztec OCC X	,	
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. 4117 Order No. R-3751

APPLICATION OF EASTERN PETROLEUM COMPANY FOR SPECIAL POOL RULES, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 7, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NCW, on this 14th day of May, 1969, the Commission, a quorum being present, having considered the testimary, 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, Eastern Petroleum Company, seeks the establishment of special rules and regulations for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, to permit the drilling of wells on 2 1/2-acre spacing, provided that no well be located nearer than 50 feet to the outer boundary of the quarter-quarter section and no nearer than 165 feet to another well producing from the same pool, and provided further, that a 40-acre proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.
- (3) That the evidence presented indicates that wells may need to be drilled nearer than 50 feet to the outer boundary of the quarter-quarter section and/or nearer than 165 feet to another well producing from the same pool in order to efficiently and economically drain the subject reservoir.

-2-CASE No. 4117 Order No. R-3751

- (4) That in order to afford operators in the subject pool the opportunity to produce their just and equitable share of the oil in the pool, and to otherwise prevent waste and protect correlative rights, special rules and regulations providing for 2 1/2-acre spacing units should be promulgated for the Rattlesnake-Dakota Pool.
- (5) That a 40-acre proration unit in the subject pool should not receive more than a 40-acre top unit allowable for wells in the 0-4999 foot depth range in Northwest New Mexico, regardless of the number of wells on the 40-acre unit.

IT IS THEREFORE ORDERED:

That Special Rules and Regulations for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE RATTLESNAKE-DAKOTA POOL

- RULE 1. Each well completed or recompleted in the Rattle-snake-Dakota Pool or in the Dakota formation within one mile thereof, and not nearer to or within the limits of another designated Dakota oil pool, shall be spaced drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULB 2. Bach well shall be located on a 2 1/2-acre tract and shall be located no nearer than 25 feet to the outer boundary of the quarter-quarter section on which it is located; provided however, that in no event shall said well or wells be completed or recompleted nearer than 165 feet to the boundary of acreage owned by an offset operator.

That nothing contained herein shall be construed as prohibiting the location of a well because of its nearness to a previously drilled well.

RULE 3. The Secretary-Director of the Commission shall have authority to grant exceptions to Rule 2 without notice and hearing where an application therefor has been filed in due form and the necessity for the exception is based on topographical conditions.

-3-CASE No. 4117 Order No. R-3751

All operators owning acreage within 165 feet of 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 owning acreage within 165 feet of the proposed location or if no such operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 4. A 40-acre proration unit shall not produce in excess of the 40-acre top unit allowable for wells in the 0-4999 foot depth range in Northwest New Mexico, regardless of the number of wells on the unit.

IT IS FURTHER ORDERED:

- (1) That the locations of all wells presently drilling to or completed in the Rattlesnake-Dakota Pool or in the Dakota formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before June 1, 1969.
- (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 CONSERWATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J ARMIJO Member

L. PORTER, Jr., dember & Secretary

agr/Villa

esr

LINCOLN BUILDING

W. H. McDERMOTT

TELEPHONE 983-7836 RESIDENCE 983-9367

ATTORNEY-AT-LAW

P. D. BOX 1143

SANIATE, NEW MEXICO

April 14, 1969

DU

Mr. George Hatch New Mexico Oil Conservation Comm. P. O. Box 2088 Santa Fe, New Mexico 87501

RE: Application of Eastern
Petroleum Company for
Special Rool Rules,
San Juan County, New Mexico

Dear Mr. Hatch:

Reference is made to the Docket Call of April 23, 1969, and to Case # 4117, in re: Application of Eastern Petroleum Company.

I would appreciate it if this matter could be continued until May 7, 1969, as I have a conflict of schedule, and I must be out of town on that day.

Yours very truly,

W. H. McDERMOTT

WHMcD/lr

DOCERT MAREO

Date 4-23-69

Cuse 4117 Heurd 5-7-69 Rec. 5-8-69. strant Zastem Pet Co., & special spacing order for the Rottlefonke 1 Dakete Port 5 S. Co. This is a sure sure of the well to be located and the located and the sure of the sure o to a 40 Ac. subdirección boundry and not neuren them \$1651 from amporter, well in the sool. The Skipwich- Hallys order 12-1438 are ar type ordero

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 7, 1969

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

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

- CASE 4119: Application of Union Oil Company of California to directionally drill, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Owens Well No. 1 located 1980 feet from the North and East lines of Section 34, Township 14 South, Range 35 East, Lea County, New Mexico. Said well was drilled to a total depth of 11,199 feet and plugged back to approximately 9,000 feet. Applicant proposes to set a whipstock at approximately 9,000 feet and to directionally drill to a depth sufficient to bottom said well in the Lower Hueco formation at a point approximately 2298 feet from the North line and 1662 feet from the East line of said Section 34 (approximately 450 feet Southeast of the surface location.)
- CASE 4120: Application of Sam Boren for the creation of a new gas pool, promulgation of special rules for the pool, a dual completion, and commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp gas pool for his Crowley State "A" Well No. 1 located in Unit L of Section 5, Township 12 South, Range 33 East, Lea County, New Mexico, and for the promulgation of special rules therefor, including a provision for 320-acre proration units. Applicant also seeks approval of the dual completion of said well to produce gas through the casing-tubing annulus from the aforesaid Wolfcamp pool and oil through tubing from the North Bagley-Lower Pennsylvanian Pool, commingling the liquid hydrocarbons from said pools on the lease. Applicant further seeks authority to commingle in the well-bore sufficient Wolfcamp gas to gas lift the Pennsylvanian oil.
- CASE 4121: Application of Roger C. Hanks for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Bar U-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.
- CASE 4122: Application of Roger C. Hanks for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian

Docket No. 13-69
Examiner Hearing - May 7, 1969

(Case 4122 continued)

formation in the interval from approximately 12,878 feet to 13,011 feet in his Atlantic Tebworth Well No. 1 located in the SW/4 SW/4 of Section 25, Township 8 South, Range 36 East, Allison Field, Roosevelt County, New Mexico.

- CASE 4123: Application of Kersey and Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Premier and Lovington sands of the Grayburg formation through its Dublin Well No. 3 located in the NW/4 NE/4 of Section 3, Township 17 South, Range 29 East, Square Lake Pool, Eddy County, New Mexico.
- CASE 3405: (Reopened) TO BE CONTINUED TO MAY 21 1969

In the matter of Case No. 3405 being reopened pursuant to the provisions of order No. R-3081, which order established 640-acre spacing for the North Indian Hills-Morrow Gas Pool, Eddy County, New Mexico, for a period of one year after first pipe-line connection in the pool. All interested parties may appear and show cause why said pool should or should not be developed on 320-acre spacing units.

- CASE 4124: Application of Amerada Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the State H "A" COM Unit Area comprising 1,281 acres, more or less, of State lands in Sections 18, 19, and 30 of Township 14 South, Range 35 East, Lea County, New Mexico.
- CASE 4125: Application of Continental Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a water flood project by the injection of water into the San Andres formation through ten wells in Sections 34 and 35, Township 16 South, Range 29 East, Forest-San Andres Pool, Eddy County, New Mexico.
- CASE 4126: Application of Curtis Hankamer for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for the applicant's wells located in Sections 12, 13, 14, and 24, Township 26 South, Range 29 East, Brushy-Draw Delaware Pool, Eddy County, New Mexico. Applicant seeks

Docket No. 13-69 Examiner Hearing - May 7, 1969

CASE 4118:

(Case 4126 continued) authority to continue to dispose of salt water produced by said wells in four unlined surface pits.

- CASE 4127:

 Application of Curtis Hankamer for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's two wells located in Section 11, Township 24 South, Range 32 East, Double X-Delaware Pool, Lea County, New Mexico. Applicant seeks authority to continue to dispose of salt water produced by said wells in two unlined surface pits.
- CASE 4128: Application of C. O. Fulton for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Premier and Lovington sands of the Grayburg formation through one well located in Unit D of Section 2, and two wells in Units D and P of Section 3, Township 17 South, Range 29 East, Square Lake Pool, Eddy County, New Mexico.
- CASE 4117: (Continued from the April 23, 1969 Examiner Hearing)
 Application of Eastern Petroleum Company for special pool rules,
 San Juan County, New Mexico. Applicant, in the above-styled
 cause, seeks the promulgation of special rules for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, permitting the
 drilling of wells on 2½-acre spacing provided that no well be
 located nearer than 50 feet to the outer boundary of the quarterquarter section and no nearer than 165 feet to another well producing from the same pool, and provided further, that a 40-acre
 proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.

(Continued from the April 23, 1969 Examiner Hearing)

Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle gas production from undesignated Fruitland and Pictured Cliffs gas pools in the well-bore of its Federal "I" Well No. 4, located in the NE/4 NW/4 of Section 1, Township 29 North, Range 14 West, San Juan County, New Mexico.

Docket No. 13-69
Examiner Hearing - May 7, 1969

CASE 4129: Application of Redfern Development Corporation for gas commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Devils Fork-Gallup gas and Basin-Dakota gas after separately metering the Dakota gas and determining the Gallup production by means of the subtraction method. Said production is from the dually completed Largo Spur Well No. 1 located in Unit J of Section 18, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 23, 1969

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

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

- CASE 4079; (Continued from the March 26, 1959, Examiner Hearing)
 Application of Robert B. Holt for the creation of a new pool, assignment of a discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Middle Pennsylvanian oil pool for his Aztec State Well No. 2 located in Unit A of Section 26, Township 13 South, Range 32 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 48,715 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 160-acre proration units and the assignment of 80-acre allowables.
- CASE 4106: Application of Southland Royalty Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Permo-Pennsylvanian formation in the perforated interval from approximately 9485 feet to 9713 feet in its Guye Well No. 4 located in Unit F of Section 12, Township 11 South, Range 33 East, Inbe Permo-Pennsylvanian Pool, Lea County, New Mexico.
- CASE 4107: Application of Coastal States Gas Producing Company for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the West Sawyer-San Andres Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
- CASE 4108: Application of Humble Oil & Refining Company for the rededication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to recomplete its New Mexico "V" State Well No. 5, a non-commercial Wantz-Abo oil producer, to a Tubb gas producer and to consolidate the 40 acres presently dedicated to said well with the 120 acres presently dedicated to its New Mexico "V" State Well No. 11, a Tubb gas producer, to form a standard 160-acre proration unit comprising the SW/4 of Section 10, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.
- CASE 4109: Application of Humble Oil & Refining Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Lea Unit Area comprising 8,324.16 acres, more or less, of State, Federal, and Fee lands in Township 26 South, Range 36 East, Lea County, New Mexico.

- CASE 4110: Application of Atlantic-Richfield Company for a waterflood project and unorthodox injection well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project by the injection of water into the Queen formation through one well to be drilled at an unorthodox location 100 feet from the North and West lines of Section 23, Township 18 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.
- CASE 4111: Application of Tenneco Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Morton Federal Well No. 1, located in Unit A of Section 12, Township 9 South, Range 35 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Vada-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres, Abo and possibly other formations in the open-hole interval from approximately 4050 feet to 8120 feet.
- CASE 4112: Application of P-M Drilling Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the perforated interval from approximately 5062 feet to 5100 feet in its James Federal Well No. 1 located in Unit A of Section 35, Township 23 South, Range 32 East, Triste Draw-Delaware Pool, Lea County, New Mexico.
- CASE 4113: Application of Texas Pacific Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to substitute its State "D" A/c-1 Well No. 1 located in Unit A of Section 2, Township 12 South, Range 33 East, in lieu of its State "C" A/c-1 Well No. 1 located in Unit B of said Section 2 as the producing well for the proration unit comprising the N/2 NE/4 of said Section 2, Bagley-Siluro-Devonian Pool, Lea County, New Mexico.
- CASE 4114: Application of Gulf Oil Corporation for two unorthodox oil well locations and amendment to Order No. R-2729, Lea County, New Mexico.

 Applicant in the above-styled cause, seeks authority to drill two producing oil wells at unorthodox locations in Township 19 South, Range 35 East, as infill wells in the West Pearl Queen Unit Waterflood Project, Pearl Queen Pool, Lea County, New Mexico, said wells to be located as follows:

West Pearl Queen Unit Well No. 164 to be located 1325 feet from the North line and 2635 feet from the West line of Section 32;

West Pearl Queen Unit Waterflood Well No. 165 to be located 1420 feet from the South line and 1325 feet from the West line of Section 29;

(Case 4114 continued)

Applicant also seeks the amendment of Order No. R 2729, which order authorized the aforesaid waterflood project; to establish a procedure whereby additional injection wells and producing wells at unorthodox infill locations, as may be necessary to complete an efficient injection and producing pattern, may be approved administratively.

CASE 4115:

Application of Southern Union Production Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the W/2 of Section 16, Town ship 29 North, Range 9 West, Basin-Dakota Pool, San Juan County, New Mexico. Said acreage to be dedicated to a well to be drilled at a standard location in the W/2 of said Section 16. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4116;

Application of Tesoro Petroleum Corporation for the amendment of Order No. R-2797 and for the extension of the South Hos pah-upper Sand Pool, McKinley County, New Mexico. Applicant, in the abovestyled cause, seeks the amendment of Order No. R-2797, which order approved the Hospah Unit Agreement, to delete from said unit agreement 233.87 acres in the Southeast portion of Section 1, Township 17 North, Range 9 West, McKinley County, New Mexico. Applicant also seeks the extension of the South Hospah-Upper Sand Pool to include a portion of the Southeast quarter of said Section 1.

CASE 4117:

Application of Eastern Petroleum Company for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, permitting the drilling of wells on 25-acre spacing provided that no well be located pearer than 50 feet to the outer boundary of the quarter-quarter section and no nearer than 165 feet to another well-producing from the same pool, and provided further, that a 40-acre proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.

CASE 4118:

Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle gas production from undesignated Fruitland and Pictured Cliffs gas pools in the well-bore of its Federal "I" Well No. 4, located in the NE/4 NW/4 of Section 1, Township 29 North, Range 14 West, San Juan County, New Mexico. (Continued from the April 3, 1969, Examiner Hearing)

CASE 4096;

Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority

to institute a waterflood project by the injection of water into the Seven Rivers formation through four wells located in Units C, D, and F of Section 25, Township 17 South, Range 28 East, Aid (Yates-Seven Rivers) Pool, Eddy County, New Mexico.

CASE 4078: (Continued from the April 9, 1969, Examiner Hearing)

Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Devils Fork-Gallup Pool and an undesignated Mesaverde oil pool in the well-bore of his NCRA State Well No. 3 located in Unit L of Section 16, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.

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. 4117 Order No. R-3751

APPLICATION OF EASTERN PETROLEUM COMPANY FOR SPECIAL POOL RULES, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 7, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 14th day of May, 1969, 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, Eastern Petroleum Company, seeks the establishment of special rules and regulations for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, to permit the drilling of wells on 2 1/2-acre spacing, provided that no well be located nearer than 50 feet to the outer boundary of the quarter-quarter section and no nearer than 165 feet to another well producing from the same pool, and provided further, that a 40-acre proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.
 - (3) That the evidence presented indicates that wells may need to be drilled nearer than 50 feet to the outer boundary of the quarter-quarter section and/or nearer than 165 feet to and economically drain the subject reservoir.

-2-CASE No. 4117 Order No. R-3751

- (4) That in order to afford operators in the subject pool the opportunity to produce their just and equitable share of the oil in the pool, and to otherwise prevent waste and protect correlative rights, special rules and regulations providing for 2 1/2-acre spacing units should be promulgated for the Rattlesnake-Dakota Pool.
- (5) That a 40-acre proration unit in the subject pool should not receive more than a 40-acre top unit allowable for wells in the 0-4999 foot depth range in Northwest New Mexico, regardless of the number of wells on the 40-acre unit.

IT IS THEREFORE ORDERED:

That Special Rules and Regulations for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE RATTLESNAKE-DAKOTA POOL

- RULE 1. Each well completed or recompleted in the Rattle-snake-Dakota Pool or in the Dakota formation within one mile thereof, and not nearer to or within the limits of another designated Dakota 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 2 1/2-acre tract and shall be located no nearer than 25 feet to the outer boundary of the quarter-quarter section on which it is located; provided however, that in no event shall said well or wells be completed or recompleted nearer than 165 feet to the boundary of acreage owned by an offset operator.

That nothing contained herein shall be construed as prohibiting the location of a well because of its nearness to a previously drilled well.

RULE 3. The Secretary-Director of the Commission shall have authority to grant exceptions to Rule 2 without notice and hearing where an application therefor has been filed in due form and the necessity for the exception is based on topographical conditions.

-3-CASE No. 4117 Order No. R-3751

All operators owning acreage within 165 feet of 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 owning acreage within 165 feet of the proposed location or if no such operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 4. A 40-acre proration unit shall not produce in excess of the 40-acre top unit allowable for wells in the 0-4999 foot depth range in Northwest New Mexico, regardless of the number of wells on the unit.

IT IS FURTHER ORDERED:

- (1) That the locations of all wells presently drilling to or completed in the Rattlesnake-Dakota Pool or in the Dakota formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before June 1, 1969.
- (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.

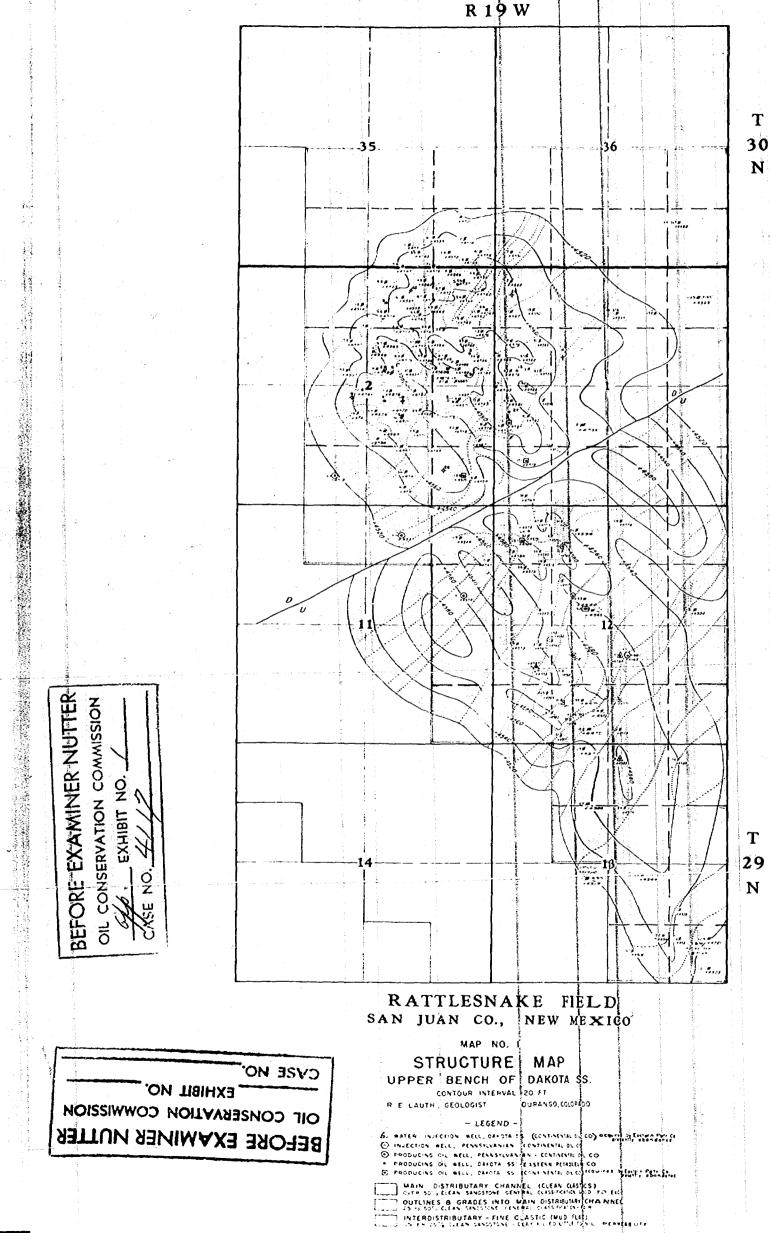
STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

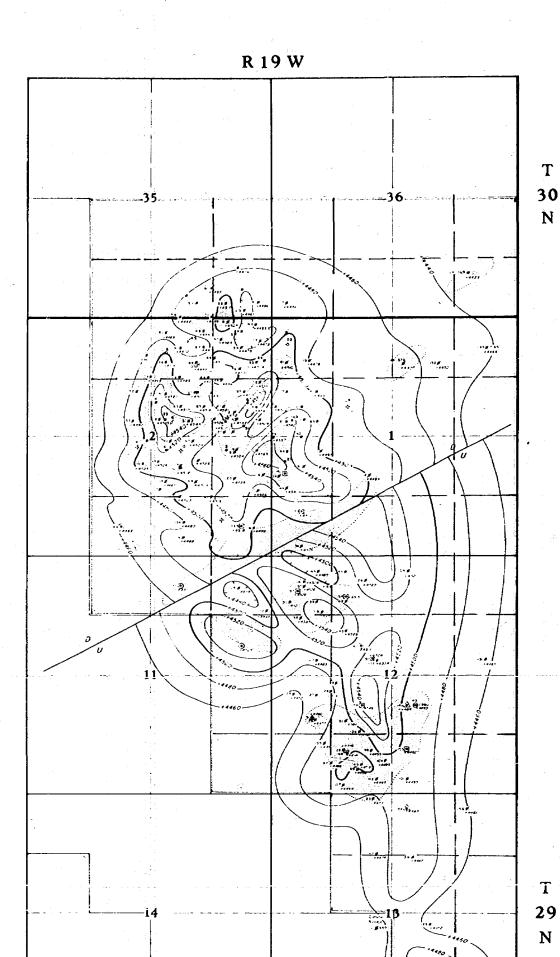
DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

SEAL

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





RATTLESNAKE FIELD SAN JUAN CO., NEW MEXICO

BEFORE EXAMINER NUTTER OIL CONSERVATION CONTROL AND EXHIBIT NO. 2

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S. PRODUCING OIL MELL, PENNSYLVANIAN - CONTINENTAL CIL CO.

* PRODUCING OIL MELL, DANOTA SS. LASTERN PETROLEUM CO.

S. PROCUCING OIL MELL, CANOTA SS. (CONTINENTAL CIL CO) SCHOOL SE ELICAPPIC CO.

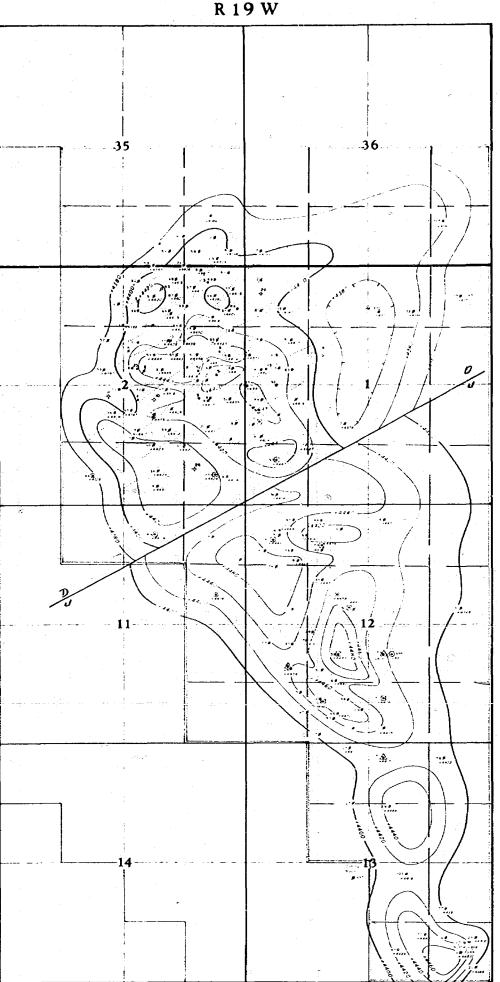
S. PROCUCING OIL MELL, CANOTA SS. (CONTINENTAL CIL CO) SCHOOL STEELERS

AREA OF OIL PRODUCTION OR INDICATED OIL SHOWS

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RATTLESNAKE FIELD SAN JUAN CO., NEW MEXICO

MAP NO. 3 STRUCTURE MAP

LOWER BENCH OF DAKOTA SS.

CONTOUR INTERVAL ZO FEET DURANGO, COLORADO R E LAUTH, GEOLOGIST

- LEGEND -

MAIN DISTRIBUTARY CHANNEL (CLEAN CLASTICS)

INTERDISTRIBUTARY - FINE CLASTICS (MUD FLATS) NOTE INDICATED OIL MATER CONTACT ORIGINALLY AT +4400" WITH FOSSIBLE SUISHT TILT TO NORTHEAST

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BEFORE EXAMINER NUTTER OIL CONSERVATION C

R 19 W \mathbf{T} 30 N \mathbf{T} 29 N RATTLESNAKE FIELD JAN JUAN CO., NEW MEXICO MAP NO. 5 LEASE INFORMATION

RELOKE	EXAMINER NUTTER
CIL CONS	ERVATION COMMISSION
app.	EXHIBIT NO. 4
	11/1/10

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EASTERN	PETROLEUM	COMPANY	"AREA	٠.

NOTE . The above performs to rights, down to the Morrison in

LINCOLN BUILDING

W. H. McDERMOTT

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TELEPHONE 983-7836 RESIDENCE 983-9367

ATTORNEY-AT-LAW P. D. 80X 1143 SANTA FE, NEW MEXICO

March 28, 1969

Case 4117

Mr. A. L. Porter, Jr. Secretary-Treasurer New Mexico Oil Conservation Comm. P. O. Box 2088 Santa Fe, New Mexico 87501

> Application of Eastern Petroleum Company for Special Pool Rules, San Juan County, New Mexico

Dear Mr. Porter:

Attached to this letter you will find an Application for Eastern Petroleum Company in regards to an Order for creating a new oil and gas pool in the Rattlesnake Field in San Juan County, New Mexico.

I would appreciate it if this matter would be placed on the Docket for the next regular hearing of the 0il Conservation Commission.

If there is anything else that you need in regards to this Application, or if this Application is deficient in any way, I will be happy to correct same, or furnish any additional information to your office.

A copy of this Application is being sent to the parties as shown below.

Yours very truly,

W. H. McDERMOTT

WHMcD/lr

CC: Mr. Jess Edwards Eastern Petroleum Co. P. O. Box 291 Carmi, Illinois

Mr. P. T. McGrath P. O. Box 959

Farmington, New Mexico 87401

Mr. A. L. Porter, Jr. New Mexico Oil Conservation Comm. March 28, 1969

Page 2

Continental Oil Company 1755 Glenarm Place Denver, Colorado

Attn: Mr. Chet Ferguson

Mr. Robert E. Lauth P. O. Box 776 Durango, Colorado 81301 Mr Emery Arnold 1000 Rio Brazos Road Aztec, New Mexico 87410

APPLICATION

IN RE: Application of Eastern Petroleum Company for an order creating a new oil and gas pool for Dakota formations in the Rattlesnake Field, San Juan County, New Mexico, to permit the drilling of wells of 2½ acre spacing and for an order allowing an exception to Rule 104-C-I.

Case 4117

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COMES NOW, the Applicant, by this Application to the New Mexico Oil Conservation Commission and states and alleges as follows:

- 1. The Applicant requests an order to allow drilling on a 2½ acre spacing in the Rattlesnake Field, due to the fact that the Field is now in a stripper stage.
- 2. The Applicant will drill no wells deeper than the 3rd Bench of the Dakota formation or 1200 feet, whichever is the lesser depth. Such pooling sought by the Applicant will permit the distributive channels to be intersected in maximum structural position depth.
- 3. The pool sought by the Applicant will prevent waste and possible water coning and will result in the maximum economic return to the Lessor, the Navajo Indians.
- 4. The applicant is the owner and operator of the entire Rattlesnake Field to a depth of 1200 feet, and such spacing will not affect any correlative rights on the outer limits where no well will be located nearer than 330 feet to outer boundary lines.
- 5. That none of the other operators will be directly affected by the granting of this Application.

WHEREFORE, Applicant prays for a Hearing whereby the following order will be granted:

1. An order creating specific rules and regulations for a special pool to permit the drilling of wells on 2½ acre spacing, and that no well will be located nearer than

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50 feet to the outer boundary of a quarter-quarter section, and no nearer than 165 feet to another well producing from the same pool.

- 2. An order granting that a 40 acre proration unit would be subject to a 40 acre allowable, regardless of the number of wells on the unit.
 - 3. An order granting an exception to Rule 104-C-I.

EASTERN PETROLEUM COMPANY

2/1/hain

Attorney-in-fact

DRAFT

GMH/esr May 9, 1969

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

(1)

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

RECORDS CENTER

CASE No. _

Order No. R- 375/

4117

APPLICATION OF EASTERN PETROLEUM COMPANY FOR SPECIAL POOL RULES, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 7, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz

NOW, on this <u>day of May</u>, 1969, the Commission, a guorum 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, Eastern Petroleum Company, seeks the establishment of special rules and regulations for the Rattlesnake-Dakota Pool, San Juan County, New Mexico, to permit the drilling of wells on 2 1/2-acre spacing, provided that no well be located nearer than 50 feet to the outer boundary of the quarter-quarter section and no nearer than 165 feet to another well producing from the same pool, and provided further, that a 40-acre proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.
- (3) That the evidence presented indicates that wells may need to be drilled nearer than 50 feet to the outer boundary

of the quarter-quarter section and/or nearer than 165 feet to another well producing from the same pool in order to efficiently and economically drain the subject reservoir.

- (4) That in order to afford operators in the subject pool the opportunity to produce their just and equitable share of the oil in the pool, and to otherwise prevent waste and protect correlative rights, special rules and regulations providing for 2 1/2-acre spacing units should be promulgated for the Rattlesnake-Dakota Pool.
- (5) That a 40-acre proration unit in the subject pool should not receive more than a 40-acre top unit allowable for wells in the 0-4999 foot depth range in Northwest New Mexico, regardless of the number of wells on the 40-acre unit.

IT IS THEREFORE ORDERED:

That Special Rules and Regulations for the Rattlesnake-Dakota

Pool, San Juan County, New Mexico, are hereby promulgated as

follows:

SPECIAL RULES AND REGULATIONS FOR THE RATTLESNAKE-DAKOTA POOL

- RULE 1. Each well completed or recompleted in the Rattle-snake-Dakota Pool or in the Dakota formation within one mile thereof, and not nearer to or within the limits of another designated Dakota 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 2 1/2-acre tract and shall be located no nearer than 25 feet to the outer boundary of the quarter-quarter section on which it is located; provided however, that in no event shall said well or wells be completed or recompleted nearer than 165 feet to the boundary of acreage owned by an offset operator.

That nothing contained herein shall be construed as prohibiting the location of a well because of its nearness to a previously drilled well.

RULE 2. The Secretary-Director of the Commission shall have authority to grant exceptions to Rule 2 without notice and hearing where an application therefor has been filed in due form and the necessity for the exception is based on topographical conditions.

All operators owning acreage within 165 feet of 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 owning acreage within 165 feet of the proposed location or if no such operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 4. A 40-acre proration unit shall not produce in excess of the 40-acre top unit allowable for wells in the 0-4999 foot depth range in Northwest New Mexico, regardless of the number of wells on the unit.

IT IS FURTHER ORDERED:

- or completed in the Rattlesnake-Dakota Pool or in the Dakota formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before June 1, 1969.
- (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.