Entered May 9.1961 Off

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. 2255 Order No. R-1958

APPLICATION OF TENNECO CORPORATION FOR APPROVAL OF THE KEMNITZ-WOLFCAMP UNIT AGREEMENT, FOR A PRESSURE MAIN-TENANCE PROJECT THEREIN, AND FOR SPECIAL RULES GOVERNING THE OPERATION OF SAID PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m., on April 19, 1961, at Santa Fe, New Mexico, before A. L. Porter, Jr., Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this <u>28th</u> day of April, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, A. L. Porter, Jr., 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, Tenneco Corporation, seeks the approval of the Kemnitz-Wolfcamp Unit Agreement which unit embraces 4,520 acres of State lands in Lea County, New Mexico, consisting of the following-described acreage:

LEA COUNTY, NEW MEXICO

NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 16 SOUTH, RANGE 33 EAST Section 24: E/2 and SW/4 Section 25: N/2 Section 26: E/2 E/2 -2-Case No. 2255 Order No. R-1958

> TOWNSHIP 16 SOUTH, RANGE 34 EAST Section 19: All Section 20: W/2 and SE/4 Section 21: All Section 28: W/2 Section 29: All Section 30: All

(3) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.

(4) That the applicant further seeks an order authorizing it to institute a pressure maintenance project in said Kemnitz-Wolfcamp Unit Area by the injection of gas into the Wolfcamp formation through 5 wells initially, all of which wells are within said Unit Area.

(5) That special rules and regulations for the operation of the Kemnitz-Wolfcamp Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project in any proportion, provided that no well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply should be allowed to produce in excess of two times top unit allowable for the Kemnitz-Wolfcamp Pool.

IT IS THEREFORE ORDERED:

(1) That the Kemnitz-Wolfcamp Unit Agreement embracing the following-described lands within the Kemnitz-Wolfcamp Unit is hereby approved:

LEA COUNTY, NEW MEXICO

NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 16 SOUTH, RANGE 33 EAST Section 24: E/2 and SW/4 Section 25: N/2 Section 26: E/2 E/2 -3-Case No. 2255 Order No. R-1958

> TOWNSHIP 16 SOUTH, RANGE 34 EAST Section 19: All Section 20: W/2 and SE/4 Section 21: All Section 28: W/2 Section 29: All Section 30: All

comprising 4,520 contiguous acres, more or less.

(2) That the unit area may be enlarged as provided in the Kemnitz-Wolfcamp Unit Agreement.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the Kemnitz-Wolfcamp Unit Agreement within 30 days after the effective date thereof.

(4) That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same. The unit operator shall file with the Commission within 30 days an original of any such counterpart or ratification.

(5) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico, and shall terminate <u>ipso facto</u> upon the termination of said unit agreement. The last unit operator shall immediately notify the Commission in writing of such termination.

(6) That the applicant is hereby authorized to institute a Pressure Maintenance Project in the Kemnitz-Wolfcamp Unit Area by the injection of gas into the Wolfcamp formation through the following-described wells:

> Tennessee Gas Transmission Company State Western "A" Well No. 1: SW/4 SE/4 of Section 20, Township 16 South, Range 34 East, NMPM

> Tennessee Gas Transmission Company State "A" Well No. 1: SW/4 SW/4 of Section 20, Township 16 South, Range 34 East, NMPM

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> Sinclair Oil & Gas Company State Lea "381" Well No. 2: SW/4 SE/4 of Section 19, Township 16 South, Range 34 East, NMPM

> Sinclair Oil & Gas Company Seaman Unit Well No. 4: SW/4 SW/4 of Section 19, Township 16 South, Range 34 East, NMPM

> Sinclair Oil & Gas Company Seaman Unit Well No. 5: SW/4 SE/4 of Section 24, Township 16 South, Range 33 East, NMPM

all in Lea County, New Mexico.

(7) That special rules and regulations governing the operation of the Kemnitz-Wolfcamp Pressure Maintenance Project, are hereby promulgated as follows, effective upon the date of the approval of the Kemnitz-Wolfcamp Unit Agreement by the Commissioner of Public Lands for the State of New Mexico:

SPECIAL RULES AND REGULATIONS FOR THE KEMNITZ-WOLFCAMP PRESSURE MAINTENANCE PROJECT

<u>RULE 1.</u> The project area of the Kemnitz-Wolfcamp Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise all of the area included within the Kemnitz-Wolfcamp Unit.

<u>RULE 2.</u> The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

<u>RULE 3.</u> The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the Kemnitz-Wolfcamp Pool, whichever is less; the allowable assigned to each injection well in the Project shall be the top unit allowable for the Kemnitz-Wolfcamp Pool. -5-Case No. 2255 Order No. R-1958

<u>RULE 4.</u> An allowable may be assigned to any well which is curtailed or shut-in because of high gas-oil ratio, pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressure or changes in characteristics of reservoir liquids or progress of sweep.

<u>RULE 5.</u> The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 4 above shall be determined by a 24-hour test at a stabilized rate of production which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2000 : 1) for the Kemnitz-Wolfcamp Pool shall be waived during such tests. The project operator shall notify the Commission and all operators offsetting the well of the exact time such tests are to be conducted in order that the tests may be witnessed.

<u>RULE 6.</u> The project allowable may be produced from any well or wells in the project area, provided that any producing well in the project area which directly or diagonally offsets a well outside the project area producing from the same common source of supply shall not produce in excess of two times the top unit allowable for the Kemnitz-Wolfcamp Pool, and, provided further that the allowable assigned to any well in the North Section of the unit, as defined in the Kemnitz-Wolfcamp Unit Agreement, shall not be transferred to or produced from any well in the South Section of the unit, and conversely.

<u>RULE 7.</u> Each producing well shall be subject to the limiting gas-oil ratio (2000 : 1) for the Kemnitz-Wolfcamp Pool, except that any well within the project area producing with a gas-oil ratio in excess of 2000 cubic feet of gas per barrel of oil may be produced on a "net" gas-oil ratio basis, which net gasoil ratio shall be determined by applying credit for daily average gas injected into the Kemnitz-Wolfcamp Pool within the project area to such well. The daily adjusted oil allowable for any well receiving gas injection credit shall be determined in accordance with the following formula:

$$A_{adj} = \frac{TUA \times F_a \times 2000}{\frac{P_g - I_g}{P_o}}$$

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where:

A adj	= the well's daily adjusted allowable
TUA	= top unit allowable for the pool
Fa	= the well's acreage factor
Pg	= average daily volume of gas produced by the well during the preceding month, in cubic feet
Ig	= the well's allocated share of the daily average gas injected during the preceding month, in cubic feet
Po	= average daily volume of oil produced by the well during the preceding month

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio, $\frac{P_q - I_q}{P_q}$, to be less than 2000 : 1.

<u>RULE 8.</u> Each month the project operator shall, within three days after the normal unit allowable for Southeast New Mexico has been established, submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total Project allowable. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

<u>RULE 9.</u> The conversion of producing wells to injection, the drilling of additional wells for injection, and expansion of the project area shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the project operator shall file application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall include the following: -7-Case No. 2255 Order No. R-1958

(1) A plat showing the location of proposed injection wells, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depth showing that the injection of gas will be confined to the Wolfcamp formation.

(3) A letter stating that all offset operators to the proposed injection well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed injection well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

IT IS FURTHER ORDERED:

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

EDWIN L. MECHEM, Chairman

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

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