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

CASE NO. 601 ORDER NO. R-391

THE MATTER OF THE APPLICATION OF STANOLIND OIL AND GAS COMPANY FOR A TEMPORARY ORDER ESTABLISHING UNIFORM 320-ACRE SPACING PATTERN AND 320-ACRE PRORATION UNITS IN THE COMMON SOURCE OF SUPPLY DISCOVERED IN THE STANOLIND OIL AND GAS COMPANY'S, STATE *AB*, WELL NO. 1, NW/4 SE/4, SECTION 29, TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

TEMPORARY ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 28,1953, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to asthe "Commission".

NOW, on this day of Newenber, 1953, the Commission, asquorum being present, having considered the testimony adduced and exhibits received at said hearing, 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.

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(2) That a common source of Supply was discovered by the Stanolind Oil and Gas Company's, No. 1, State "AB", located 1980 feet from the South and East Lines of Section 29, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico; the well being completed at a plugged-back depth of 10,270 feet through casing perforations 10,102 to 10,127 in a basal Pennsylvanian sand, the well having an initial open-flow potential of 30 millions cubic feet of gas per day.

(3) That geological and engineering data now available to the Commission indicate that one well will apparently drain 320 acres, and that this common source of supply should be developed on 320-acre proration units for a further period of 18 months or until 5 wells have been completed, whichever date is sooner.

(4) That the common source of Supply discovered by the aforementioned well should be named Empire-Pennsylvanian, and should cover the following described area in Eddy County, New Mexico:

TOWN SHIP 17 South, Range 28 East, NMPM.

S/2 Section 19, S/2 Section 20, S/2 Section 21, S/2 Section 22. All Sections 27, 20, 10, Inclusive TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

N/2 Section 3, N/2 Section 4, N/2 Section 5, N/2 Section 6.

(5) That certain rules should be adopted to adequately protect fresh water zones in the area and the shallow producing horizons now productive in the Empire, Red Lake and Aresia Pools.

(6) That operators in the pool should submit certain Geological and engineering data upon completion of each well in the pool.

IT IS THEREFORE ORDERED:

That the application of Stanolind Oil and Gas Company be, and the same hereby is in part approved, as follows:

(1) That a new pool be, **g** and the same hereby is created, designated for gas production, denominated the Empire-Pennsylvanian Pool, Eddy County, New Mexico, and described as follows:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM.

S/2 Section 19, S/2 Section 20, S/2 Section 21, S/2 Section 22, All Sections 27 thru 34, inclusive.

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM.

N/2 Section 3, N/2 Section 4, N/2 Section 5, N/2 Section 6.

(2) That effective on the date of this order, the following rules and regulations shall apply to wells hereafter drilled, or completed or recompleted by the Empire-Pennsylvanian Pool, defined herein, in addition to the Commission's applicable rules, regulations and orders heretofore or hereafter adopted to the extent not to conflict herewith:

 $S \equiv CTION(A)$. No well shall be drilled or completed or recompleted and no Notice of Intention to Drill or Drilling Permit shall be approved, unless,

(a) Such well be located on a designated drilling unit of not less than three hundred twenty (320) acres of land, more or less, according to legal subdivision of the United States Land Surveys, in which unit all the interests are consolidated by pooling agreement or otherwise and on which no other well is completed, or approved for completion, in the pool;

(b) Such drilling unit be in the shape of a rectangle except for normal variations in legal subdivisions of the United States Land Surveys, the north half, south half, east half or west half of each section of land constituting a drilling unit; 990

(c) Such well shall be located feet from the control of either the northwart or southwart quarter of the section, subject to variation of 200 feet for topographic conditions. Further tolerance shall be allowed by the Commission only in cases of extremely rough terrain where compliance would necessarily increase drilling costs. Section 2 Proration Units: The proration unit shall consist of 320 acres or 2 a legal United States General Land Office Survey half-section, and the approximate 320 acre unit shall follow the usual legal subdivision of the General Land Office Section Surveys, and (e) where prodution units lie along the edge of field boundaries described in Section 1 above, exceptions shall be permissible in that contiguous tracts of approximately 320 serves, following regular United States General Land Office subdivisions may be classed as presention units.

(a) The pooling of properties or parts thereof shall be permitted, and if not agreed upon may be required in any case when and to the extent that the smallness or shape of a separately owned tract would, under the enforcement of the uniform spacing plan of proration units, otherwise deprive or tend to deprive the owner of such tract of the opportunity to recover his just and equitable share of the crude petrolectroil and natural gas in the Pool; provided, that the owner of any trace that is smaller than the drilling unit establishment for the field, shall not be deprived of the right to drill on and produce from such tract if same can be done without waste; but in such case the allowable production from such tract, as compared with the allowable production therefrom if such tract were a full unit, shall

be in the ratio of such tract to the area of a full unit of 320 acres.

SECTION C. CASING REPEAKING AND CEMENTING PROGRAM:

(a) Surface Pipe:

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The Surface pipe shall be set through all shallow potable waterbearing beds and a sufficient amount of cement shall be used to circulate the cement behind the pipe to the bottom of the cellar.

(b) Intermediate String:

The intermediate string of casing shall be set through the shallow oil-producing beds in the area and in no event shall be set higher than the top of the San Andres formation and a sufficient amount of cement used to **REFINE** circulate the cement to the base of the surface casing.

(c) Production String:

The production string shall be set no higher than the top of the **preducing** formation and **shall be used** to circulate the cement to a sufficient amount of cement shall be used to circulate the cement to a point above the top of the Wofcamp producing formation encountered in the area at an approximate depth of 7000 feet. An alternate cementing method may be employed using a two-stage tool, prodvided that the method is satisfactory to the **SilvannixSasxinsparter** District Oil and Gas Inspector.

SECTION D. GEOLOGICAL AND ENGINEERING DATA:

(a) Inxaddiiianxhaxanyxxmparkaynrikashaxpresentxxxekixhashaxandxforms presentlyxxmquiredxbyxthexRudesx

Upon completion of each well within the defined limits of the Empire-Pennsylvanian pool each operator shall submit to the District Office of the Commission at Artesia, two copies of either an electric log or sample log showing thereon the estimated formation tops as encountered in the well. In the event that the Froducing formation is cored in the well and a core analysis made, awo copies of this analysis shall also be submitted to the Commission.

Provided, However, that the above Rules and Regulations shall remain in full force and effect for a period of at least 18 months or until five wells are drilled to the Producing formation of the Empire-Pennsylvanian pool.

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. 601 ORDER NO. R-391

THE MATTER OF THE APPLICATION OF STANOLIND OIL ANDGAS COMPANY FOR A TEMPORARY ORDER ESTABLISHING UNIFORM 320-ACRE SPACING PATTERN AND 320-ACRE PRORATION UNITS IN THE COMMON SOURCE OF SUPPLY DISCOVERED IN STANOLIND'S STATE 'AB', WELL NO. 1, NW/4 SE/4 SECTION 29, TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

TEMPORARY ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 28, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 25 day of November, 1953, the Commission, a quorum being present, having considered the testimony adduced and exhibits received at said hearing, 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 a common source of supply of gas was discovered by the Stanolind Oil and Gas Company's No. 1, State 'AB', located 1980 feet from the south and east lines of Section 29, Township 17 South, Range 28 East, NMPM, Eddy County, New Maxico; the well being completed at a plugged-back depth of 10,270 feet through casing perforations 10,102 to 10,127 in a basal Pennsylvanian sand, the well having an initial open-flow potential of 30 million cubic feet of gas per day.

(3) That geological and engineering data now available to the Commission indicate that one well will apparently drain 320 acres, and that this common source of supply should be developed on 320-acre proration units for a period of 18 months from date of entry of this order, or until five wells shall have been completed, whichever date is sooner.

(4) That the common source of supply discovered by the aforementioned well should be designated as the <u>Empire-Pennsylvanian</u> Gas Pool, and should cover the fellowing described area in Eddy County, New Mexico:

> Township 17 South, Range 28 East, NMPM S/2 Section 19, S/2 Section 20, S/2 Section 21, S/2 Section 22, all Sections 27 through 34, incl.

Township 18 South, Range 28 East, NMPM N/2 Section 3, N/2 Section 4, N/2 Section 5, N/2 Section 6

(5) That certain rules should be adopted to adequately protect freshwater zones in the area, and the shallow oil-producing horizons now productive in the Empire, Red Lake and Artesia Pools.

(6) That operators in the pool should submit certain geological and engineering data upon completion of each well in the pool.

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IT IS THEREFORE ORDERED:

That the application of Stanolind Oil and Gas Company be, and the same hereby is in part approved, as follows:

(1) That a new pool be, and the same hereby is created, designated for gas production, denominated the Empire-Pennsylvanian Pool, Eddy County, New Mexico, and described as follows:

> Township 17 South, Range 28 East, NMPM S/2 Section 19, S/2 Section 20, S/2 Section 21, S/2 Section 22, all Sections 27 thru 34, incl.

> Township 18 South, Range 28 East, NMPM N/2 Section 3, N/2 Section 4, N/2 Section 5, N/2 Section 6

(2) That effective on the date of this order, the following rules and regulations shall apply to wells hereafter drilled, completed or recompleted in the Empire-Pennsylvanian Gas Pool, defined herein, in addition to the Commission's applicable rules, regulations and orders heretofore or hereafter adopted to the extent not in conflict herewith:

SPECIAL POOL RULES EMPIRE-PENNSYLVANIAN GAS POOL

SECTION A. No well shall be drilled or completed or recompleted, and no Notice of Intention to Drill or drilling permit shall be approved, unless,

(a) Such well be located on a designated drilling unit of not less than 320 acres of land, more or less, according to legal subdivision of the United States Land Surveys, in which unit all the interests are consolidated by pooling agreement or otherwise and on which no other well is completed, or approved for completion, in the pool;

(b) Such drilling unit be in the shape of a rectangle except for normal variations in legal subdivisions of the United States Land Surveys, the north half, south half, east half or west half of each section of land constituting a drilling unit;

(c) Such well shall be located 990 feet from the outerrboundary of either the northwest or southeast quarter of the section, subject to variation of 200 feet for topographic conditions. Further tolerance shall be allowed by the Commission only in cases of extremely rough terrain, where compliance would necessarily increase drilling costs.

SECTION B. Proration Units: The proration unit shall consist of 320 acres or a legal United States Land Office Survey half-section, and the approximate 320-acre unit shall follow the usual legal subdivision of the General Land Office Section Surveys.

(a) The pooling of properties of parts thereof shall be permitted, and if not agreed upon may be required in any case when and to the extent that the smallness or shape of a separately owned tract would, under the enforcement of the uniform spacing plan of proration units, otherwise deprive or tend to deprive the owner of such tract of the opportunity to recover his just and equitable share of the natural gas in the pool; provided that the owner of any tract that is smaller than the drilling unit establishment for the field shall not be deprived of the right to drill on and produce from such tract if same can be done without waste; but in such case the allowable production from such tract, as compared with the allowable production therefrom if such tract were a full unit, shall be in the ratio of such tract to the area of a full unit of 320 acres.

SECTION C. Casing and Cementing Program.

(a) Surface Pipe:

The surface pipe shall be set through all shallow potable water-bearing beds, and a sufficient amount of cement shall be used to circulate the cement behind the pipe to the bottom of the cellar.

(b) Intermediate String:

The intermediate string of casing shall be set through the shallow oil-producing beds in the area, and in no event shall be set higher than the top of the San Andres formation and a sufficient amount of cement used to circulate the cement to the base of the surface casing.

(c) Production String:

The production string shall be set no higher than the top of the producing formation, and a sufficient amount of cement shall be used to circulate the cement to a point above the top of the Wolfcamp producing formation encountered in the area at an approximate depth of 7,000 feet. An alternate cementing method may be employed using a two-stage tool, provided that the method is satisfactory to the District Oil and Gas Inspector.

SECTION D. Geological and Engineering Data.

(a) Upon completion of each well within the defined limits of the Empire-Pennsylvanian Gas Pool, each operator shall submit to the District Office of the Commission at Artesia two copies of either an electric log or sample log showing thereon the estimated formation tops as encountered in the well. In the event that the producing formation is cored in the well and a core analysis made, two copies of this analysis shall also be submitted to the Commission.

PROVIDED, HOMEVER, That the above rules and regulations shall remain in full force and effect for a period of at least 18 months, or until five wells are drilled to the producing formation of the Empire-Pennsylvanian Pool.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

E. S. Walker, Member Member and Secretary R. R. Spurrier

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