

Entered September 2, 1981

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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 7318  
Order No. R-6767

APPLICATION OF PHILLIPS PETROLEUM  
COMPANY FOR SALT WATER DISPOSAL,  
ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 29, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 2nd day of September, 1981, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Phillips Petroleum Company, is the owner and operator of the Peterson "H" Well No. 1, located in Unit M of Section 29, Township 5 South, Range 33 East, NMPM, South Peterson Field, Roosevelt County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Wolfcamp formation, with injection into the perforated interval from approximately 7332 feet to 7341 feet.
- (4) That the offset operator to the West, Enserch Exploration, Inc., objected to utilization of the proposed disposal interval and well.
- (5) That said objection was predicated upon the potential for hydrocarbon production from such interval in its Lambirth Well No. 7 located in Unit P of Section 30 and its Lambirth Well No. 3 located in Unit G of Section 31, both in Township 5

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South, Range 33 East, and its Lambirth Well No. 11 located in Unit M of Section 1, Township 6 South, Range 33 East, NMPM, Lea County, New Mexico.

(6) That while the protestant presented evidence to demonstrate that the proposed disposal zone was productive of gas approximately five to six miles to the South, there were no drill stem tests nor any other definitive evidence presented from which a reasonable determination could be made that any of said wells could produce hydrocarbons from the proposed disposal zone.

(7) That the proposed disposal zone in said Peterson "H" Well No. 1 exhibits greater apparent permeability, porosity, and thickness than other wells in the area, including those listed in Finding No. (5) above, it is structurally lower than said wells, and is productive of water only.

(8) That while there is no substantial evidence of the same, hydrocarbons could conceivably be found up dip from said Peterson "H" Well No. 1 in the proposed disposal interval.

(9) That reasonable projections of disposal volumes and calculations of the radius of encroachment of the injected fluid in the zone indicate that the injected fluid will not move off applicant's lease for three years nor intercept protestant's closest well for approximately seven years.

(10) That these time periods will permit the protestant to more fully evaluate the disposal interval under its properties in said field and develop evidence as to the productive potential of the proposed disposal zone.

(11) That the protestant should be permitted to return and renew its objection to the use of the proposed disposal well at any time within the next seven years, when and if, substantial evidence of such hydrocarbon production potential is available.

(12) That the injection should be accomplished through 2 7/8-inch plastic lined tubing installed in a packer set at approximately 7300 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(13) That the injection well or system should be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1466 psi.

(14) That the Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Wolfcamp formation.

(15) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(16) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(17) That approval of the subject application with the provision for permitting reopening of protestant's objection, will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is hereby authorized to utilize its Peterson "H" Well No. 1, located in Unit M of Section 29, Township 5 South, Range 33 East, NMPM. South Peterson Field, Roosevelt County, New Mexico, to dispose of produced salt water into the Wolfcamp formation, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 7300 feet, with injection into the perforated interval from approximately 7332 feet to 7341 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 1446 psi.

(3) That the Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Wolfcamp formation.

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(4) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(5) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

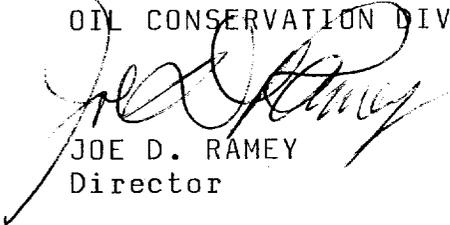
(6) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 706 and 1120 of the Division Rules and Regulations.

(7) That the Division may reopen this case at any time within the next seven years upon application and demonstration by the protestant of substantial evidence that there is hydrocarbon production potential in its wells from the Wolfcamp disposal zone which may be affected by the continued disposal of water into said Peterson "H" Well No. 1.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



JOE D. RAMEY  
Director

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