Entered November 14, 19>8

#### 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. 6356 Order No. R-5855

APPLICATION OF AMOCO PRODUCTION COMPANY FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

# ORDER OF THE DIVISION

# BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 25, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this  $14 \, \mathrm{th}$  day of November, 1978, 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, Amoco Production Company, is the owner and operator of the State "E" Tract 18 Well No. 21, located in Unit B of Section 2, Township 17 South, Range 36 East, NMPM, Lovington-Abo Pool, Lea County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Abo formation, with injection into the open-hole interval from approximately 8391 feet to 9100 feet.
- (4) That the injection should be accomplished through 3 1/2-inch plastic lined tubing installed in a packer set at approximately 8350 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.

-2-Case No. 6356 Order No. R-5855

- (5) That the injection well or system should be equipped with a pop-off valve or other acceptable device which will limit the wellhead pressure on the injection well to no more than 1675 psi.
- (6) That the subject well is presently equipped with 13 3/8-inch surface casing set at 269 feet with cement circulated to the surface; 9 5/8-inch intermediate casing set at 3300 feet and cemented with 300 sacks, calculated top of cement being at 2800 feet; and 7-inch long string set at 8391 feet and cemented with 550 sacks, with top of cement being at 8250 feet.
- (7) That the above-described casing and cementing program leaves the San Andres and Paddock formations open without any protective cement opposite these formations around the long string of casing in the subject well.
- (8) That secondary recovery water injection operations are currently being conducted in both the San Andres and Paddock formations within one-half mile of the subject well.
- (9) That in order to prevent the subject well from becoming an avenue of escape for waters injected into the San Andres and Paddock formations in nearby wells, or into the Abo formation in the subject well, it (the subject well) should be recemented from the present top of cement on the long string to a point well above the top of the San Andres formation.
- (10) That prior to its use as a salt water disposal well, the subject well should be recemented in such a manner as to cause cement around the 7-inch casing to come from the present top of cement at 8250 feet to a point at least 300 feet above the top of the San Andres formation.
- (11) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of recementing operations on the subject well and also of the installation of disposal equipment so that the same may be witnessed and/or inspected.
- (12) 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.
- (13) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

-3-Case No. 6356 Order No. R-5855

### IT IS THEREFORE ORDERED:

(1) That the applicant, Amoco Production Company, is hereby authorized to utilize its State "E" Tract 18 Well No. 21, located in Unit B of Section 2, Township 17 South, Range 36 East, NMPM, Lovington-Abo Pool, Lea County, New Mexico, to dispose of produced salt water into the Abo formation, injection to be accomplished through 3 1/2-inch tubing installed in a packer set at approximately 8350 feet, with injection into the openhole interval from approximately 8391 feet to 9100 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 other acceptable device which will limit the wellhead pressure on the injection well to no more than 1675 psi.
- (3) That upon conversion to salt water disposal, applicant shall recement the 7-inch casing in the subject well in such a manner as to cause cement to come from the present top of cement at 8250 feet back up to a point at least 300 feet above the top of the San Andres formation.
- (4) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the recementing operations on the subject well and also of installation of disposal equipment.
- (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 704 and 1120 of the Division Rules and Regulations.
- (7) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-4-Case No. 6356 Order No. R-5855

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

STATE OF NEW MEXICO OLL CONSERVATION DIVISION

JOE D. RAMEY Director

•

fd/

S E A L