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. 8761 Order No. R-8163

APPLICATION OF CHAVEROO OPERATING COMPANY FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on November 21, 1985, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>3rd</u> day of March, 1986, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Chaveroo Operating Company, seeks the authority to utilize the Apollo Energy, Inc. State G-36 Well No. 1, located 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 36, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Vacuum Grayburg-San Andres Pool, with injection into the perforated interval from approximately 4804 feet to 5212 feet.
- (3) The operator of said well 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 either by the proposed injection well or via surrounding injection, production, and/or plugged and abandoned wells.
- (4) The following described previously abandoned wells are located within one-half mile of said State G-36 Well No. 1 and may not be plugged in such a manner that will assure that

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they will not serve as channels for disposed water to migrate from the injection interval to other formations or to the surface:

WELL NAME AND NO.	FOOTAGE LOCATION	SECTION
Phillips Petroleum Co. (Mac Jones) St. Well #2	990' FN & EL (Unit A)	35
Texas Petroleum Oil Co. State "AB" Well #1	1980'FNL-660'FWL (Unit E)	36

Both wells in Township 17 South, Range 36 East, NMPM, Lea County, New Mexico.

- (5) The Cities Service Oil and Gas Corporation State "BJ" Well No. 1, located 2310 feet from the South line and 990 feet from the East line (Unit I) of said Section 35, is presently completed in the Vacuum-Abo Reef Pool and is located within one-half mile from the subject injection well.
- (6) The evidence presented at the hearing and data on file with the Oil Conservation Division indicates that said State "BJ" Well No. 1 does not have adequate cement across, above, and below the proposed injection interval to assure that injected fluid will remain within said interval.
- No disposal of salt water should be permitted into the Vacuum Grayburg-San Andres Pool through said Apollo Energy Inc. State G-36 Well No. 1 until the operator has demonstrated that the wells described in Finding Paragraph No. (4) above have either been re-plugged or have been previously plugged and abandoned in such a manner as to ensure that they do not provide an avenue of escape for waters from the proposed injection zone and in accordance with a program that is satisfactory to the supervisor of the Division's district office at Hobbs; and the operator should also demonstrate that the Vacuum-Abo Reef producing well described in Finding Paragraph No. (5) above either has adequate cement across, above, and below the proposed injection interval or has been re-cemented through such interval all in accordance with a program to be approved by the supervisor of the Division's district office at Hobbs.
- (8) Prior to commencing injection operations, the casing in the proposed injection well should be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

- (9) The injection should be accomplished through 2 3/8-inch plastic lined tubing installed in a packer set at approximately 4780 feet; the casing-tubing annulus should be filled with an inert fluid; and 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.
- (10) At the request of the applicant the disposal well will be taking water on gravity injection and at no time should said well be injecting water under positive surface pressure.
- (11) The operator should give advance notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- (12) 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) Approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Chaveroo Operating Company, is hereby authorized to utilize the Apollo Energy, Inc. State G-36 Well No. 1, located 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 36, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the Vacuum Grayburg-San Andres Pool, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4780 feet, with injection into the perforated interval from approximately 4804 feet to 5212 feet;

PROVIDED HOWEVER THAT, the tubing shall be plastic-lined; the casing-tubing annulus shall be filled with an inert fluid; and 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.

PROVIDED FURTHER THAT, injection into the proposed injection well shall not commence until the wells described in Finding Paragraph No. (4) of this Order have either been re-plugged or are shown to have been adequately plugged and abandoned in a manner that is satisfactory to the supervisor of

the Division's district office at Hobbs; nor until the Cities Service Oil and Gas Corporation State "BJ" Well No. 1 located 2310 feet from the South line and 990 feet from the East line (Unit I) of Section 35, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, has either been shown to have adequate cement across, above, and below the proposed injection interval or has been re-cemented across, above, and below such injection interval in a manner that is satisfactory to the supervisor of the Division's district office at Hobbs.

- The injection well or system shall be limited to gravity injection only.
- (3) The operator shall notify the supervisor of the Hobbs district office of the Division in advance of the date and time of the installation of disposal equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- 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.
- The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708, and 1120 of the Division Rules and Regulations.
- 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 OLL CONSERVATION DIVISION

R. L. STAMETS,

Director