# 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. 8876 Order No. R-8163-A

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APPLICATION OF CHAVEROO OPERATING COMPANY FOR AMENDMENT OF DIVISION ORDER NO. R-8163, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 16, 1986, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>9th</u> day of May, 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) By Division Order No. R-8163, dated March 3, 1986, the applicant, Chaveroo Operating Company, was given authorization to utilize its 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, subject to the following conditions:

(a) The applicant shall either replug or demonstrate to the supervisor of the Division's district office at Hobbs that the Phillips Petroleum Company State Well No. 2 located in Unit A of Section 35 and the Texas Petroleum Oil Company State "AB" Well No. 1 located in Unit E of Section 36, both in Township 17 South, Range 36 East, NMPM, -2-Case No. 8876 Order No. R-8163-A

> have previously been plugged in such a manner as to ensure that they do not provide an avenue of escape for waters from the proposed injection zone.

(b) 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, be adequately cemented by the applicant across, above, and below the proposed injection interval to assure that injected fluid will remain within said interval.

(3) The applicant has satisfactorily demonstrated to the supervisor of the Division's Hobbs district office that the wells described in Finding No. 2(a) above are adequately plugged and abandoned.

(4) The applicant seeks the deletion of that portion of Ordering Paragraph No. 1 of Division Order No. R-8163 concerning the cementing of the Cities Service Oil and Gas Corporation State "BJ" Well No. 1.

(5) Evidence presented by the applicant at the hearing showed that Rice Engineering and Operating Company operates a commercial salt water disposal well, their G-35 Well located 2310 feet from the North line and 990 feet from the East line of said Section 35.

(6) The Rice Engineering G-35 Well is located approximately the same distance from the Cities Service State "BJ" Well No. 1 as the applicant's Apollo Energy, Inc. State G-36 Well No. 1.

(7) A portion of the injection interval in the Rice Engineering G-35 Well overlaps the proposed injection interval in the applicant's Apollo Energy, Inc. State G-36 Well No. 1.

(8) From March, 1967 through November, 1985, cumulative water injection into the Rice Engineering G-35 Well totaled more than 19 million barrels.

(9) The substantial amount of injected water into the Rice Engineering G-35 Well has apparently had no adverse effects on the Cities Servie "BJ" Well No. 1.

(10) The applicant proposes to dispose of approximately 300 barrels per day into the Apollo Energy, Inc. State G-36 Well No. 1.

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(11) This volume of water is insignificant compared to the volume that has been and is currently being injected into the Rice Engineering G-35 Well.

(12) The injection of water into the Apollo Energy, Inc. State G-36 Well No. 1 should not pose any danger to any fresh water through the wellbore of the Cities Service State "BJ" Well No. 1.

(13) That portion of Ordering Paragraph No. (1) of Division Order No. R-8163 requiring Chaveroo Operating Company to recement the Cities Service State "BJ" Well No. 1 should be deleted.

(14) At the time of the hearing on April 16, 1986, Southwestern Inc., an offset operator, appeared and objected to the applicant's proposed disposal well.

(15) Southwestern Inc. contends that the notification sent to them by the applicant prior to the November 21, 1985 hearing was incorrect as to the location of the proposed disposal well and therefore did not adequately apprise them of the impact on their well.

(16) Southwestern Inc. further contends that testimony given by the applicant at the original hearing concerning their State "VC" Well No. 1 was incorrect.

(17) Although Southwestern Inc. was not a party to the original hearing held November 21, 1985, sufficient cause existed to allow Southwestern Inc. to present evidence and testimony at this time and to reconsider the disposal authority granted by Order No. R-8163.

(18) Southwestern Inc. owns and operates the State "VC" Well No. 1 located 2050 feet from the South line and 589 feet from the West line of Section 36, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, which is currently a producing Abo well.

(19) The State "VC" Well No. 1 is located approximately 100 feet from the applicant's Apollo Energy, Inc. G-36 disposal well.

(20) Testimony by Southwestern Inc. indicated that the interval from approximately 5094 feet to 6046 feet in their State "VC" Well No. 1 does not have cement behind the 5 1/2-inch casing.

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(21) The proposed injection interval in the applicant's Apollo Energy, Inc. G-36 Well is approximately 4804 feet to 5212 feet.

(22) At least ll8 feet of casing in the State "VC" Well No. 1 would be exposed to salt water that would be injected into the applicant's proposed disposal well.

(23) Movement of water in the proposed injection formation could present a significant corrosion problem in that portion of the State "VC" Well No. 1 not protected by cement which could eventually result in casing leaks.

(24) 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 demonstrates that the producing well described in Finding Paragraph No. (18) above has been recemented across the proposed injection interval.

# IT IS THEREFORE ORDERED THAT:

(1) That portion of Ordering Paragraph No. (1) of Division Order No. R-8163 concerning the recementing of the Cities Service Oil & Gas Corporation State "BJ" Well No. 1 located 2310 feet from the South line and 990 feet from the East line of Section 35, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, is hereby <u>deleted</u>.

(2) Prior to commencing injection operations into 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, Chaveroo Operating Company shall demonstrate to the supervisor of the Division's Hobbs district office that the Southwestern Inc. State "VC" Well No. 1 located 2050 feet from the South line and 589 feet from the West line (Unit L) of Section 36, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico, has been recemented across the proposed injection interval.

(3) Injection into the Apollo Energy, Inc. State G-36 Well No. 1 <u>shall not commence</u> until the provision contained in Paragraph No. (2) above has been complied with.

(4) All other provisions set forth in said Order No. R-8163 shall remain in full force and effect.

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(5) 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

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Director

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