

me 5762

LAW OFFICES

HINKLE, BONDURANT, COX & EATON

TELEPHONE (505) 622-6510

CLARENCE E. HINKLE
W. E. BONDURANT, JR. (1914-1973)
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.

600 HINKLE BUILDING

MR. ISBELL LICENSED
IN TEXAS ONLY

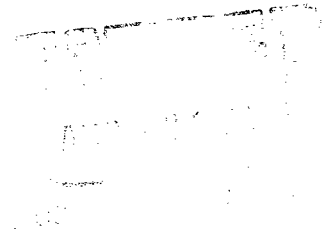
POST OFFICE BOX 10

ROSWELL, NEW MEXICO 88201

August 12, 1976

MIDLAND, TEXAS OFFICE
521 MIDLAND TOWER
(915) 683-4691

JAMES H. BOZARTH
RONALD G. HARRIS
JAMES H. ISBELL
DOUGLAS L. LUNSFORD
PAUL M. BOHANNON



Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

We enclose herewith in triplicate two applications by Atlantic Richfield, one for approval of the State Vacuum Unit Agreement embracing 800 acres of land of the State of New Mexico in Township 17 South, Range 34 East, Lea County, and the other for a waterflood project in connection with said unit.

We would like to have these applications set for hearing on the examiner's docket for September 15.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

CEH:cs

Enc.

cc: Phillips Petroleum Company
cc: Texaco Inc.
cc: Sohio Petroleum Company

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF ATLANTIC RICHFIELD
COMPANY FOR APPROVAL OF A WATERFLOOD
PROJECT IN CONNECTION WITH THE PRO-
POSED UNIT AGREEMENT FOR THE OPERATION
AND DEVELOPMENT OF THE STATE VACUUM
UNIT AREA EMBRACING 800 ACRES OF LANDS
OF THE STATE OF NEW MEXICO IN TOWNSHIP
17 SOUTH, RANGE 34 EAST, LEA COUNTY.
APPLICANT PROPOSES TO INJECT WATER
INTO THE GRAYBURG-SAN ANDRES FORMATION
THROUGH 11 INJECTION WELLS. APPLICANT
ALSO SEEKS ESTABLISHMENT OF A PROJECT
ALLOWABLE AND AN ADMINISTRATIVE PROCEDURE
WHEREBY THE LOCATION OF THE INJECTION
WELLS MAY BE CHANGED.

Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Comes now Atlantic Richfield Company, acting by and through the undersigned attorneys, and hereby makes application for approval of a water flood project in connection with the proposed Unit Agreement for the Operation and Development of the State Vacuum Unit Area embracing 800 acres of lands of the State of New Mexico in Township 17 South, Range 34 East, Lea County. Applicant proposes to inject water into the Grayburg-San Andres formation through 11 injection wells. Applicant also seeks establishment of a project allowable and an administrative procedure whereby the location of the injection wells may be changed. In support of this application, applicant respectfully shows:

1. Applicant is in the process of forming a unit agreement to be known as the State Vacuum Unit in which the Grayburg-San Andres formation will be unitized as to the following described lands in Lea County:

Township 17 South, Range 34 East, N.M.P.M.
Section 29 - SW $\frac{1}{4}$ SW $\frac{1}{4}$
Section 31 - E $\frac{1}{2}$ E $\frac{1}{2}$
Section 32 - W $\frac{1}{2}$, SE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$
containing 800 acres, more or less

2. It is contemplated that applicant will be the unit operator under the terms of the unit agreement and the primary objective of the unit will be to formulate and put into effect a secondary recovery project in order to effect additional recovery of unitized substances, prevent waste and conserve natural resources consistent with good engineering practices.

3. There is attached hereto as Exhibit No. 1 a plat showing the outlines of the proposed unit area, the location of all wells producing from the proposed unitized formation within the unit area and all other wells within a radius of two miles thereof and the formations from which the same are producing. This exhibit also indicates the ownership of the respective leases and the 11 proposed injection wells within the unit or project area.

4. There are filed herewith logs of the respective injection wells and also diagrammatic sketches of each injection well showing all casing strings including diameters and setting depths, quantities used and tops of cement and perforated intervals, tubing strings including diameters and setting depths, and the type and location of packers. There is attached as Exhibit "A" a list of the names and locations of the proposed injection wells. All of these wells except one are producing wells which will be converted to injection wells. It is proposed to drill one well for injection purposes, which will be located approximately 330 feet from the south line and 2,310 feet from the west line of Section 32, Township 17 South, Range 34 East. The proposed completion of this well is also shown by one of the diagrammatic sketches.

5. Applicant proposes to inject water into the unitized formation through the 11 injection wells referred to above. It is anticipated that the injection of water will be started in all the injection wells at approximately the same time and it is estimated that the initial rate of injection will be approximately 5,500 barrels per day. The water will be obtained from the City of Carlsbad water supply system which obtains water from the Ogallala supply wells in Lea County. It is also anticipated that produced water from the project will be injected as it becomes available.

6. Applicant has made application for approval of the State Vacuum Unit Agreement above referred to.

7. Applicant also seeks the establishment of a project allowable in accordance with the provisions of Rule 701 of the Commission and also the establishment of an administrative procedure for any changes which may prove necessary in connection with the injection wells.

8. Applicant requests that this matter be heard before an examiner and included on the first available examiner's docket.

Respectfully submitted,

ATLANTIC RICHFIELD COMPANY

By 

HINKLE, BONDURANT, COX & EATON
P.O. Box 10
Roswell, New Mexico 88201
Attorneys for Applicant

EXHIBIT "A"

Unit Well No. 1 (Phillips Lea No. 21) - 660' FSL and 680' FWL
Section 29, T. 17 S., R. 34 E.

Unit Well No. 2 (Sohio Hale-State No. 2) - 990' FNL and 330' FEL
Section 31, T. 17 S., R. 34 E.

Unit Well No. 4 (A.R.Co. State "B" TG No. 4) - 990' FNL and
1650' FWL Section 32, T. 17 S., R. 34 E.

Unit Well No. 7 (A.R.Co. State "B" TG No. 3) - 1980' FNL and
660' FWL Section 32, T. 17 S., R. 34 E.

Unit Well No. 9 (Texaco New Mexico "D" State NCT-2 No. 3)-
1980' FNL and 1980' FEL Section 32, T. 17 S., R. 34 E.

Unit Well No. 11 (Texaco New Mexico "AO" State No. 1 -
2310' FSL and 330' FEL Section 31, T. 17 S., R. 34 E.

Unit Well No. 1e (A.R. Co. State "C" TG No. 3) - 1980' FSL
and 1980 FWL Section 32, T. 17 S., R. 34 E.

Unit Well No. 15 (A.R. Co. State "C" TG No. 1) - 1980 FSL
and 660' FEL Section 32, T. 17 S., R. 34 E.

Unit Well No. 17 (A. R. Co. State "C" TG No. 8) - 990' FSL
and 990' FWL Section 32, T. 17 S., R. 34 E.

Unit Well No. 19 (A.R.Co. State "C" TG No. 5)- 990' FSL and
1650' FEL Section 32, T. 17 S., R. 34 E.