ase Number LT7Q2

Application Trascripts

Small Exhibits

ETC

### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 4782 Order No. R-4380

APPLICATION OF ATLANTIC RICHFIELD COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 26, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter and was continued to September 13, 1972.

NOW, on this <u>30th</u> day of August, 1972, the Commission, a quorum being present, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 4782 is hereby dismissed.

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



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STATE OF NEW MEXICO OIL CONSERVATION COMMISSION BRUCE KING Chairman ALEX J. ARMIJO, Member La:

A. L. PORTER, Jr., Member & Secretary

Examiner Hearing - Wednesday - July 26, 1972

(Case 4783 continued)

- A 240-acre unit comprising the NW/4 of Section 14 and the N/2 NE/4 of Section 15, to be dedicated to its State "A" A/1 Well No. 28;
- 3. A 320-acre unit comprising the N/2 of Section 23 to be dedicated to its State "A" A/1 Wells Nos. 26 and 27.

CASE 4747: (Continues from the June 22, 1972, Examinet Mearing)

Application of Union Texas Petroleum, a Division of Allied Chemical Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests below the base of the Devonian formation underlying the N/2 of Section 33, Township 25 South, Range 37 East, Crosby Field, Lea County, New Mexico. Said acreage to be dedicated to its well to be located 1650 feet from the North line and 2310 feet from the East line of said Section 33. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4773: Application of Union Texas Petroleum, a Division of Allied Chemical Corporation, a pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Cato-San Andres Pool by the injection of water into the San Andres formation through its Baskett Well No. 1 located in Unit K of Section 11, Township 8 South, Range 30 East, Chaves County, New Mexico.

> Applicant further seeks a procedure whereby additional injection wells and expansion of the project area may be approved without the necessity of notice and hearing.

CASE 4780:

4780: Application of Atlantic Richfield Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Robinson-Jackson Unit Area comprising 1160 acres, more or less, of Federal lands in Sections 27, 34, and 35, Township 17 South, Range 29 East, Grayburg-Jackson Pool, Eddy County, New Mexico.

CASE 4781:

L: Application of Atlantic Richfield Company for amendment of a waterflood order and dual completions, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3185, as amended by Order No. R-3185-A, to permit the dual completion of its Turner "A" SP Wells Nos. 15 and 35 located in Section 19 and its Turner "B" SP Wells Nos. 41 and 78 located in Section 20, Township 17 South, Range 31 East, Grayburg-Jackson Pool, Eddy County, New Mexico, in such a manner as to permit selective injection of water into the Grayburg and San Andres zones.

Application of Atlantic Richfield Company for a waterflood project,

Eddy County, New Mexico. Applicant, in the above-styled cause, seeks



(Case 4782 continued from page 4)

authority to institute a waterflood project in the Robinson-Jackson Unit Area, Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water through thirteen wells located in Sections 27, 34, and 35 of Township 17 South, Range 29 East, Eddy County, New Mexico.

CASE 4771: Application of Black River Corporation for a non-standard gas unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks applicant of a 402.22 and or less, non-standard gas unit adjacent to the Washington Ranch-Morrow Gas Pool, comprising the W/2 of Section 4, Township 26 South, Range 24 East, Eddy County, New Mexico, to be dedicated to a well to be located in the approximate center of Lot 5 (SE/4 NW/4) of said Section 4.

CASE 4772:

: Application of Black River Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all leasehold, mineral, and royalty interests underlying the W/2 of Section 4, Township 26 South, Range 24 East, adjacent to the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, comprising a 402.22-acre, more or less, non-standard gas unit. Said acreage to be dedicated to a well to be located in the approximate center of Lot 5 (SE/4 NW/4) of said Section 4.

Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4784:

34: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea, Roosevelt and Chaves Counties, New Mexico.

(a) Create a new pool in Lea County, New Mexico, classified as a gas pool for Fusselman production and designated as the Crosby-Fusselman Gas Pool. The discovery well is Union Texas Petroleum Corporation Crosby Deep No. 1 located in Unit N of Section 28, Township 25 South, Range 37 East, NMPM. Said pool described as:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM SECTION 28: S/2

(b) Create a new pool in Lea County, New Mexico, classified as a gas pool for San Andres production and designated as the North Eunice-San Andres Gas Pool. The discovery well is Sohio Petroleum Company, Alves "A" No. 2 located in Unit M of Section 8, Township 21 South, Range 37 East, NMPM.

> TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM SECTION 8: SW/4

(c) Create a new pool in Roosevelt County, New Mexico, classified

F. M. ROBINSON A NO. 10 660' FNL & 1980' FEL Sec. 34, T-17-S, R-29-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM



F.M. ROBINSON B NO.2

660' FNL & 1980' FEL Sec. 27, T-17-S, R-29-E-EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM



F.M. ROBINSON B NO.5 660' FNL & 1980' FEL Sec. 35, T-17-S, R-29-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM

2-3/8" O.D. tubing 2-3/8" Tubing 8-5/8" casing @ 431' w/50 sx cement. Cement top @ 73' (calculated) Perforations 2535-47', 2564-70' to be squeezed HSDL 7" dual packer @ 2580' (proposed) Metex perforations 2622-70' Plug back total depth 2669' C.I.B.P. @ 2678' to be drilled out (proposed) 7" casing @ 3008' w/100 sx cement. Baker 415-D packer @ 2700' Cement top @ 1786' (proposed) (Calculated) Total Depth 3162' Care 4782 EXHIBIT



F.M. ROBINSON B NO. 9 660'FSL & 1980'FWL Sec. 27, T-17-S, R-29-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM







F.M. ROBINSON B NO. 14 1980' FNL & 1980' FWL Sec. 27, T-17-S, R-27-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM

2-3/8" O.D. tbg. 2-3/8" O.D. tubing 8-5/8" casing @ 312' w/50 sx. cement Cement top @ surface (calculated) HSDL 7" dual packer @ 2300' (proposed-no log available) Perforations 2360-80' Metex (proposed-no log available) 7" casing @ 2625' w/100 sx. cement Baker 415-D packer @ 2550' Cement top @ 1403' (proposed-no log available) (calculated) Total Depth 2879' Can 4182 EXHIBIT

F.M. ROBINSON A NO. 8 1980' FSL & 1980' FEL Sec. 27, T-17-S, R-29-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM



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F.M. ROBINSON A NO. 6 1980 FNL & 660' FEL Sec. 34, T-17-S, R-29-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM

2-3/8" O.D. tubing 2-3/8" O.D. tubing 8-5/8" casing @ 464' Cemented W/50 sx. Cement top 106' (calculated) Perforations 2520-30' (to be squeezed) HSDL 7" dual packer @ 2550' (proposed) Perforations 2606-2624' 7" casing @ 3031' Cemented w/100 sx. Baker 415-D packer @ 2985' (proposed) Cement top 1809' (calculated) Plug Back Total Depth 3203' Total Depth 3234' Care 4782 EXHIBIT

F.M. ROBINSON A NO.3 660' FNL & 660' FWL Sec. 35, T-17-5, R-29-E EDDY COUNTY, NEW MEXICO INJECTION WELL DIAGRAM





**AtlanticRichfieldCompany** 

Legal Division

Post Office Box 1610 Midland, Texas 79701

June 30, 1972

Oil Conservation Commission P. 0. Box 2088 Santa Fe, New Mexico

Re:

In the Matter of the Application of Atlantic Richfield Company to Amend Existing Orders Approving the Sinclair Turner "A" Grayburg-Jackson Water Flood Project and the Sinclair Turner "B" Grayburg-Jackson Water Flood Project, Eddy County, New Mexico

OIL CONSERVATION COMM

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Case 4182-

Application of Atlantic Richfield Company for Approval of a Water Flood Project for the Robinson-Jackson Unit Area Comprising 1,160 Acres, more or less, of Federal Lands in Township 17 South, Range 29 East, N.M.P.M. by the Injection of Water into 13 Wells Completed in the Grayburg Jackson Pool

Application of Atlantic Richfield Company for Approval of the Robinson-Jackson Unit Agreement, Eddy County, New Mexico

#### Gentlemen:

Enclosed in triplicate are the subject Applications which we request be docketed and set for hearing before an examiner on the same date for the convenience of our New Mexico counsel and witnesses.

Very truly yours,

HURALL M. 15. Horace N. Burton Built Attorney

HNB:11 Encs. cc: Mr. Clarence E. Hinkle (encs.)



#### BEFORE THE OIL CONSERVATION COMMISSION

### STATE OF NEW MEXICO

ON CONTRACTION COMM. Santa Fo

APPLICATION OF ATLANTIC RICHFIELD COMPANY FOR APPROVAL OF A WATER FLOOD PROJECT FOR THE ROBINSON-JACKSON UNIT AREA COMPRISING 1,160 ACRES, MORE OR LESS, OF FEDERAL LANDS IN TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M. BY THE INJECTION OF WATER INTO 13 WELLS COM-PLETED IN THE GRAYBURG JACKSON POOL

CASE NO. 4782

Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

Comes Atlantic Richfield Company, acting by and through the undersigned attorneys, and hereby makes application for approval of a water flood project for the Robinson-Jackson Unit Area comprising 1,160 acres, more or less, of federal lands in Township 17 South, Range 29 East, N.M.P.M. by the injection of water into 13 wells completed in the Grayburg Jackson Pool, Eddy County, New Mexico, and in support thereof respectfully shows:

1. That applicant is the unit operator of the Robinson-Jackson Unit Agreement which comprises 1,160 acres of federal lands in Township 17 South, Range 29 East, N.M.P.M. Eddy County. Applicant seeks approval of the Commission of said Unit Agreement by separate application concurrently filed herewith.

2. That applicant seeks approval of a secondary recovery project covering all of the lands within the Robinson-Jackson Unit Area by the injection of water into 13 wells heretofore completed in the Grayburg Jackson Pool, said wells, all located in Township 17 South, Range 29 East, being as follows:

1. Robinson A No. 3 located 660 feet from the north line and 660 feet from the west line of Section 35.

2. Robinson A No. 5 located 660 feet from the south line and 660 feet from the east line of Section 27.

3. Robinson A No. 6 located 1980 feet from the north line and 660 feet from the east line of Section 34.

4. Robinson A No. 8 located 1980 feet from the south line and 1980 feet from the east line of Section 27.

5. Robinson A No. 10 located 660 feet from the north line and 1980 feet from the east line of Section 34.

6. Robinson B No. 2 located 660 feet from the north line and 1980 feet from the east line of Section 27.

7. Robinson B No. 5 located 660 feet from the north line and 1980 feet from the east line of Section 35.

8. Robinson B No. 7 located 1980 feet from the north line and 1980 feet from the west line of Section 35.

9. Robinson B No. 9 located 660 feet from the south line and 1980 feet from the west line of Section 27.

10. Robinson B No. 10 located 1980 feet from the north line and 660 feet from the east line of Section 35.

11. Robinson B No. 12 located 1980 feet from the north line and 660 feet from the east line of Section 27.

12. Robinson B No. 13 located 1980 feet from the south line and 1980 feet from the east line of Section 35.

13. Robinson B No. 14 located 1980 feet from the north line and 1980 feet from the west line of Section 27.

3. That there is attached hereto a plat showing the location of the proposed injection wells and the location of all other wells within a radius of 2 miles from said proposed injection wells and the formation from which said wells are producing or have produced. The plat also indicates the lease owners within a radius of 2 miles.

4. That there is also filed herewith logs of 6 of the proposed injection wells. The logs of the other 7 wells are not filed due to the fact that the logs are not available as these wells have been completed for a considerable length of time.

5. There is also filed herewith a diagrammatic sketch of each of the proposed injection wells showing all casing strings, including diameters and setting depths, quantities used and tops of cement, perforated or open hole intervals, tubing strings, including diameters and setting depths, and packers which will be used.

6. That applicant seeks to have assigned to the Robinson-Jackson Unit Area the maximum project allowable in accordance with Rule 701 of the Commission.

7. Applicant believes that the proposed water flood project for the Robinson-Jackson Unit Area is in the interest of conservation and the prevention of waste and will promote the greatest ultimate recovery of oil and gas from the project area.

Applicant requests that this matter be set down for hearing at the examiner's hearing.

Respectfully submitted,

ATLANTIC RICHFIELD COMPANY WAT

stau Horace N. Burton

P. O. Box 1610, Midland, Texas 79701

Clarence E. Hinkle HINKLE, BONDURANT, COX & EATON P. O. Box 10, Roswell, New Mexico 88201



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY WASHINGTON, D.C. 20242

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Sinclair Oil and Gas Company P. O. Box 1470 Midland, Texas 79701

#### Gentlemen:

Your undated application filed on September 5, 1968, with the Regional Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of the Robinson-Jackson unit area embracing 1,160 acres, more or less, of Federal land, Eddy County, New Mexico, as logically subject to operation under the unitization provisions of the Mineral Leasing Act, as amended.

Unitization is for the purpose of conducting secondary recovery operations by waterflooding and will be limited to the Grayburg formation and the upper portion of the San Andres formation, such stratigraphic interval being defined by Section 2(f) of the unit agreement. The proposed unit area has been developed by 42 wells that are now or have been completed in the formation to be unitized. Participation will be based 90 percent on ultimate primary production and 10 percent on surface acreage. You estimate that secondary recovery operations will result in the recovery of 2,709,582 barrels of additional oil.

The land outlined on your plat marked Exhibit A, Robinson-Jackson unit, Eddy County, New Mexico, is acceptable as a logical unit area for secondary operations. Your proposed form of unit agreement, which modifies the standard form to the extent necessary to cover conditions incidental to secondary recovery operations in a producing unit, will be acceptable if further modified in accordance with the marked form returned herewith.) The remaining marked copies of the proposed form of unit agreement are being retained for distribution to the appropriate offices of the Geological Survey.

In the absence of any type of land requiring special provisions or any objections not now apparent, a duly executed agreement conformed to the marked copy and approved by the appropriate officials of the State of New Mexico will be approved if submitted in approvable status within a reasonable period of time.) However, the right is reserved to deny approval of any executed agreement that, in our opinion, does not have the full commitment of sufficient lands to afford effective control of secondary recovery operations. Please include the latest status of all acreage when the executed agreement is submitted for final approval. The format of the sample exhibits attached to the 1961 reprint of the standard form should be followed closely in the preparation of Exhibits A and B.

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Sincerely yours,

Mulin, ABahin

Acting Director



## United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

CC: J. Walker LCH RDK Par posed K June 7, 1972 Care 4782

Atlantic Richfield Company P.O. Box 1610 Midland, Texas 79701

Attention: Mr. W. P. Tomlinson

Gentlemen:

Your letter of May 30 states that you are now actively working toward unitization of the proposed Robinson-Jackson unit, Eddy County, New Mexico, and inquires if the designation of such proposed unit area is still in effect.

Our records show that the Acting Director's letter of November 7, 1968, to Sinclair Oil and Gas Company designated the Robinson-Jackson unit area as logically subject to operation under the unitization provisions of the Mineral Leasing Act as amended. Inasmuch as Sinclair was merged into Atlantic in 1969, this office will consider an application for approval of the Robinson-Jackson unit agreement if submitted by Atlantic in accordance with the Acting Director's letter of November 7, 1968. All references to "Sinclair Oil and Gas Company" in the unit agreement should of course be replaced by "Atlantic Richfield Company." In addition, the format of the sample exhibits attached to the 1968 reprint of the Form of Unit Agreement for Unproved Areas should be followed closely in the preparation of exhibits A, B, and C.

Sincerely yours,

0. FREDERICK

Regional Oil and Gas Supervisor

DRAFT BEFORE THE OIL CONSERVATION COMMISSION GMH/dr OF THE STATE OF NEW MEXICO IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING: 4782 CASE No. Order No. R- 4380 APPLICATION OF ATLANTIC RICHFIELD COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO. ORDER OF THE COMMISSION BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 26, 1972 at Santa Fe, New Mexico, before Examiner Doniel I. Nutter and was Continued to deptember 13, 1972.

NOW, on this \_\_\_\_\_ day of <u>August</u>, 192, the Commission, a quorum being present, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

That the applicant's request for dismissal should be granted.

### IT IS THEREFORE ORDERED:

That Case No. <u>4782</u> is hereby <u>dismissed</u>.

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

CASE 47831 Application of TEXAS PACIFIC FOR 3 NON-STANDARD UNITS & REDEDICATION OF ACREAGE.

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