

ARCO Oil and Gas Company  
Central District  
Post Office Box 1610  
Midland, Texas 79702  
Telephone 915 688 5200

OIL CONSERVATION DIVISION  
RECEIVED



October 19, 1989

'89 OCT 25 AM 9 27

Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

RE: Administrative Approval of Non-Standard Oil Well Locations  
Seven Rivers Queen Unit #76, 77, & 78  
South Eunice Oil Pool  
Lea County, New Mexico

Dear Mr. LeMay,

ARCO Oil and Gas Company respectfully requests administrative approval to drill the Seven Rivers Queen Unit No. 76, 77, and 78, proposed producing wells in an active waterflood unit, at non-standard locations. The proposed locations are as follows:

#76:	2575' FNL & 1590' FEL	Unit Letter G
#77:	1570' FSL & 1650' FEL	Unit Letter J
#78:	160' FSL & 315' FEL	Unit Letter P

ALL IN SECTION 34, Township 22 South, Range 36 East  
Lea County, New Mexico

The wells are proposed to a total depth of 3850 ft to test the Seven Rivers and Queen formations within the vertical limits of the South Eunice (Seven Rivers/ Queen) Oil Pool.

In ARCO's opinion, completion of the wells at the proposed locations will provide an efficient production and injection pattern within the secondary recovery project. These wells are expected to recover unswept oil by increasing the amount of floodable pay and by increasing the injection efficiency due to increased continuity.

The proration units which offset these proposed wells are all within the Seven Rivers Queen Unit, and therefore, no offset operators are to be notified of this request. Wells # 77 & 78 lie on the same 40 acre tract as Meridian's Otis Jones #2 and #1, respectively. Therefore, they are being notified of this application by certified mail. A copy of the return receipt will be forwarded when received. Attached are plats showing the SRQU and the proposed wells' locations.

If you need any further information regarding this request, please call me at (915) 688-5546.

Thank you for your consideration.

Very truly yours,

Cindy W. Ellis  
Senior Engineer

CC: NMOC District 1 Office  
P.O. Box 1980  
Hobbs, New Mexico 88240

Meridian Oil Inc.  
21 Desta Drive  
Midland, TX 79705

The map displays the T22S and T23S regions, showing various oil fields, wells, and infrastructure. The map is divided into sections by dashed lines, with labels for different areas like HCW, Esmond, Marathon, Pennzoil, Shell, ARCO, McDonald State, Christmas, Tex Pacific, and Rasmussen. Numerous wells are marked with numbers and symbols, and some are circled or highlighted. The map also shows state boundaries and major roads.

**Key Features and Labels:**

- Regions and Fields:** HCW, Esmond, Marathon, Pennzoil, Shell, ARCO, McDonald State, Christmas, Tex Pacific, Rasmussen.
- Wells and Markers:** Numerous wells are marked with numbers (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100). Some wells are marked with symbols like stars or circles.
- Infrastructure:** Major roads (e.g., Owens, State, Gulf) and state boundaries are shown.
- Other Labels:** T22S, T23S, Marathon, Pennzoil, Shell, ARCO, McDonald State, Christmas, Tex Pacific, Rasmussen, Esmond, HCW, Gulf, State, Owens, Marathon, Pennzoil, Shell, ARCO, McDonald State, Christmas, Tex Pacific, Rasmussen, Esmond, HCW, Gulf, State, Owens.

By: CINDY ELLIS	Drawn By: LGA Date: 8/89
Date: 8-8-89	Revised By: Date:
Dept: NORTHWEST	Dwg No. NM22S36E

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

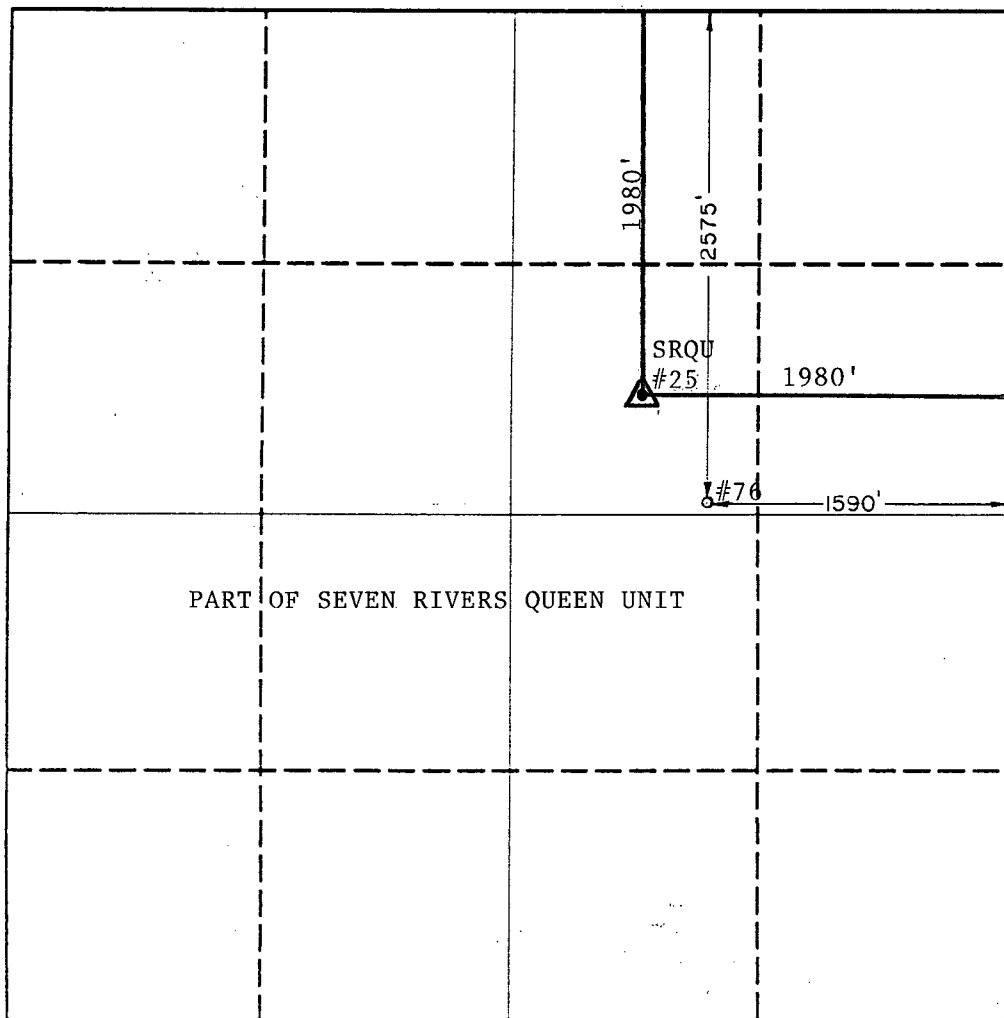
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ARCO Oil & Gas Company			Lease S.R.Q.U.		Well No. 76
Unit Letter G	Section 34	Township 22 South	Range 36 East	County Lea	
Actual Footage Location of Well: 2575 feet from the North line and 1590 feet from the East line					
Ground level Elev. 3510.0	Producing Formation Seven Rivers/Queen		Pool Eunice, South	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc?  
☒ Yes ☐ No If answer is "yes" type of consolidation Unitization  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Evelyn E. Gilson*  
Signature

Evelyn E. Gilson

Printed Name

Engr. Tech.

Position

ARCO Oil and Gas Company  
Company

October 20, 1989

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

October 10, 1989

Signature & Seal of  
Professional Surveyor

*John W. West*  
REGISTERED PROFESSIONAL SURVEYOR  
NO. 676  
JOHN W. WEST 676  
RONALD J. SIDSON 3239  
NEW MEXICO  
JOHN W. WEST

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

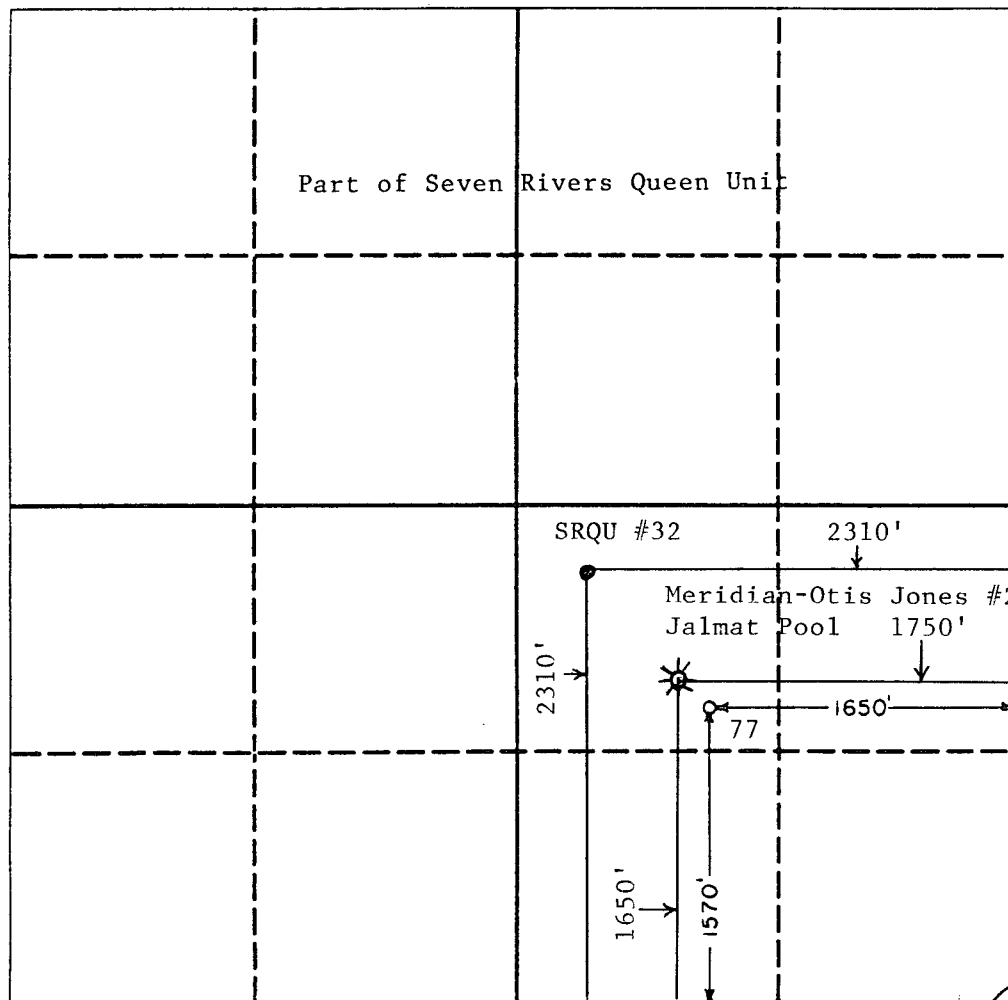
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ARCO Oil & Gas Company			Lease S.R.Q.U.		Well No. 77
Unit Letter J	Section 34	Township 22 South	Range 36 East	County Lea	
Actual Footage Location of Well: 1570 feet from the South line and 1650 feet from the East line					
Ground level Elev. 3513.9	Producing Formation Seven Rivers/Queen		Pool Eunice, S.	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc?  
☒ Yes ☐ No If answer is "yes" type of consolidation Unitization  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature Cindy W. Ellis  
Printed Name Cindy W. Ellis  
Position Senior Engineer  
Company ARCO  
Date 10-18-89

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
October 10, 1989

Signature & Seal of  
Professional Surveyor  
JOHN W. WEST  
Certificate No. 676  
NEW MEXICO  
JOHN W. WEST  
3239

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ARCO Oil & Gas Company			Lease S.R.Q.U.		Well No. 78
Unit Letter P	Section 34	Township 22 South	Range 36 East	County NMPM	Lea
Actual Footage Location of Well: 315 feet from the East line and 160 feet from the South line					
Ground level Elev. 3491.3	Producing Formation Seven Rivers/Queen		Pool Eunice, S.	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

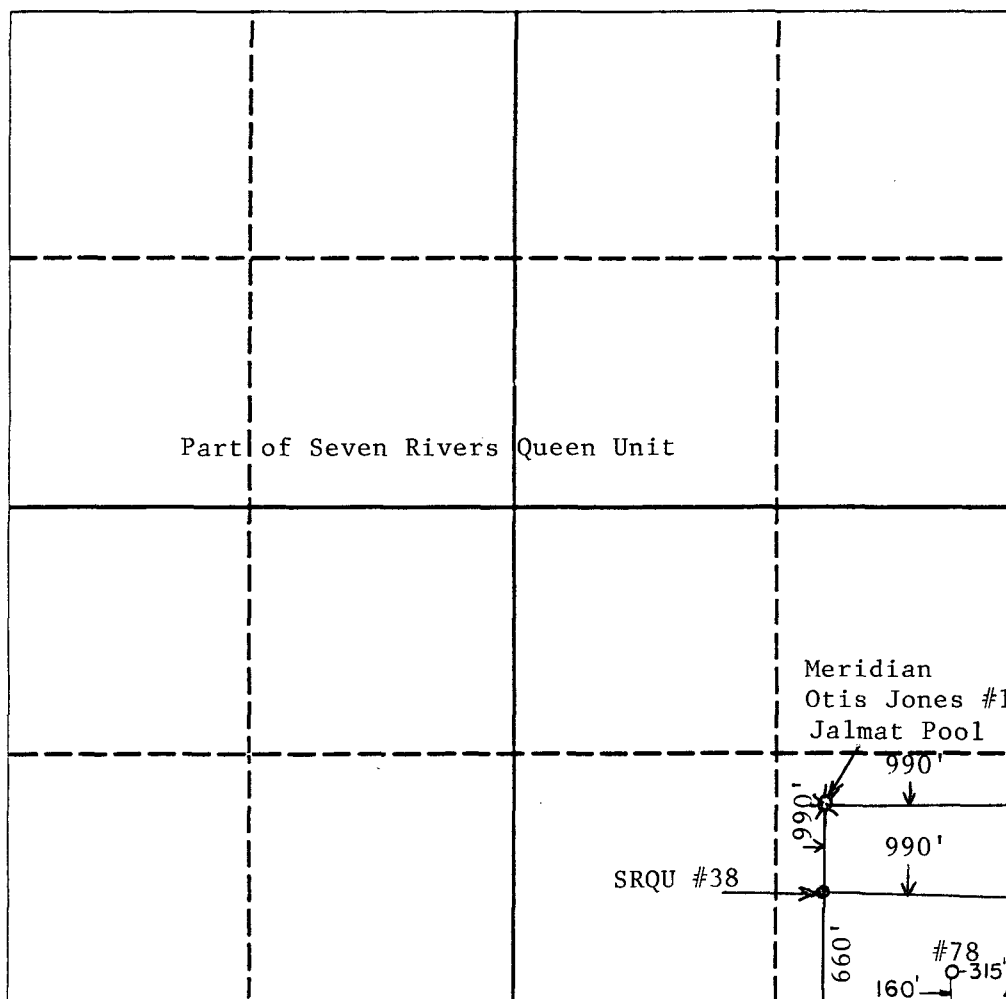
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☒ Yes ☐ No If answer is "yes" type of consolidation Unitization

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature <i>Cindy W. Ellis</i>
Printed Name Cindy W. Ellis
Position Senior Engineer
Company ARCO
Date 10-18-89

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed October 11, 1989
Signature & Seal of Professional Surveyor <i>John W. West</i>
Certificate No. 976 JOHN W. WEST REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO 3239

SOUTH EUNICE POOL  
LANGLIE MATTIX POOL  
(Atlantic Seven Rivers-Queen Unit Waterflood)  
Lea County, New Mexico

Order No. R-4589, Authorizing Atlantic Richfield Company to Institute a Waterflood Project in the Seven Rivers-Queen Unit Area in the South Eunice and Langlie Mattix Pools, Lea County, New Mexico, July 13, 1973.

Application of Atlantic Richfield Company for  
a Waterflood Project, Lea County, New Mexico.

CASE NO. 5017  
Order No. R-4589

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on June 27, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 13th day of July, 1973, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Atlantic Richfield Company, seeks authority to institute a waterflood project in the Seven Rivers-Queen Unit Area by the injection of water into the Seven Rivers and Queen formations through 28 injection wells in Sections 27, 34, and 35, Township 22 South, Range 36 East, NMPM, South Eunice Pool, and Sections 2 and 3, Township 23 South, Range 36 East, NMPM, Langlie Mattix Pool, Lea County, New Mexico.

(3) That applicant proposes to inject water through tubing, set in a packer into the Seven Rivers or Queen formation through perforations or the open hole; the annulus to be filled with inert fluid with a pressure gauge at the surface.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, Atlantic Richfield Company, is hereby authorized to institute a waterflood project in the Seven Rivers-Queen Unit Area, South Eunice and Langlie Mattix Pools, by the injection of water into the Seven Rivers and Queen formations through the following-described wells:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM

Well Name	Well No.	Location	Section
Gulf A. L. Christmas "A"	6	330' FNL & 990' FEL	27
ARCO Shipley "A"	5	660' FNL & 2080' FWL	27
ARCO Shipley "A"	3	1980' FNL & 660' FWL	27
Gulf A. L. Christmas "A"	4	1980' FNL & 1980' FEL	27
A. L. Christmas "A"	8	1980' FSL & 660' FEL	27
ARCO Mattie Shipley	3	1980' FSL & 1980' FWL	27
ARCO Mattie Shipley	4	660' FSL & 660' FWL	27
Gulf A. L. Christmas "A"	7	660' FSL & 1980' FEL	27
ARCO R. M. Jones	3	660' FNL & 1980' FWL	35
ARCO C. Jones	6	660' FNL & 660' FEL	34
ARCO C. Jones	3	660' FNL & 1980' FWL	34
ARCO C. Jones	9	1980' FNL & 660' FWL	34
ARCO C. Jones	8	1980' FNL & 1980' FEL	34
ARCO R. Jones	5	1980' FNL & 660' FWL	35
Gackle R. Jones	3	1980' FSL & 1980' FWL	35
ARCO O. L. Jones "C"	1	2310' FSL & 990' FEL	34
ARCO Hale	2	1980' FSL & 1980' FWL	34
ARCO Hale	5	660' FSL & 660' FWL	34
ARCO O. L. Jones "B"	2	990' FSL & 2310' FEL	34
Gackle R. Jones	4	660' FSL & 660' FWL	35

TOWNSHIP 23 SOUTH, RANGE 36 EAST, NMPM

Gulf Janda "I" State	4	660' FNL & 660' FEL	2
Gulf Janda "I" State	5	660' FNL & 1980' FWL	2
Gackle Sinclair State "B"	7	660' FNL & 660' FEL	3
Gackle Sinclair State "B"	6	660' FNL & 2310' FWL	3
Gackle Sinclair State "B"	9	1980' FNL & 660' FWL	3
Gackle Sinclair State "B"	11	1980' FNL & 1980' FEL	3
Gulf Janda "I" State	10	1980' FNL & 660' FWL	2
Janda "I" State	8	1980' FNL & 1980' FEL	2

(2) That the subject waterflood project is hereby designated the Seven Rivers-Queen Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

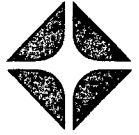
(3) That injection into each of the above-authorized water injection wells shall be through internally plastic-coated tubing set in a packer which shall be set as near as is practicable to the uppermost perforation or the casing-shoe, in open-hole completions. The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface.

(4) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

ARCO Oil and Gas Company  
Central District  
Post Office Box 1610  
Midland, Texas 79702  
Telephone 915 688 5200



October 30, 1989

Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

RE: Administrative Approval of Non-Standard Oil Well Locations  
Seven Rivers Queen Unit #76, 77, & 78  
South Eunice Oil Pool  
Lea County, New Mexico

Dear Mr. LeMay,

Attached please find a copy of the return receipt documenting notification of the captioned application to Meridian Oil, Inc. Meridian operates two wells in the Jalmat pool on the same 40 acre spacing unit as the SRQU #77 & 78.

This should complete our application.

If you need any further information, call me at (915) 688-5546.

Very truly yours,

Cindy W. Ellis  
Senior Engineer

CC: NMOCD District 1 Office  
P.O. Box 1980  
Hobbs, New Mexico 88240

Administrative Approval of Non-Standard Oil Well Locations  
Seven Rivers Queen Unit #76, 77, & 78  
South Eunice Oil Pool  
Lea County, New Mexico

<p><b>SENDER:</b> Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.</p> <p>1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. (Extra charge)      2. <input type="checkbox"/> Restricted Delivery (Extra charge)</p>	
<p>3. Article Addressed to:  Meridian Oil Inc.  21 Desta Drive  Midland, TX 79705</p>	<p>4. Article Number  P 046 661 754</p> <p>Type of Service:  <input type="checkbox"/> Registered      <input type="checkbox"/> Insured  <input checked="" type="checkbox"/> Certified      <input type="checkbox"/> COD  <input type="checkbox"/> Express Mail      <input type="checkbox"/> Return Receipt for Merchandise</p> <p>Always obtain signature of addressee or agent and DATE DELIVERED.</p>
<p>5. Signature — Address  X</p>	<p>8. Addressee's Address (ONLY if requested and fee paid)</p>
<p>6. Signature — Agent  X <i>[Signature]</i></p>	
<p>7. Date of Delivery  <i>10/25</i></p>	

PS Form 3811, Mar. 1988

\* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT





STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION

89 OCT 26 AM 9 57

10-24-89

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL X \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

<u>Arco Oil &amp; Gas Co.</u>	<u>Seven Rivers Queen Unit</u>	#76-G	34-22-36
Operator	Lease & Well No. Unit	#77-J	34-22-36
	S-T-R	#78-P	34-22-36

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton  
Supervisor, District 1

/ed