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



October 19, 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,

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,

Andy Willis Cindy W. Ellis Senior Engineer

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

Meridian Oil Inc. 21 Desta Drive Midland, TX 79705



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

۰.

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

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

State of New Mexico Energy, Minerals and Natural Resources Department

t

.

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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					Leas	8					W	ell No.	
ARCO	Oil	& Gas C	ompany			S.	R.Q.U.				i	76	
Unit Letter	Section	<u></u>	Township		Ran				1	County	h		
G	3	4	22 5	outh		36 E	last	N	MPM		Lea		
Actual Footage Loca	ution of W	ell:											
2575	feet from		orth	line an	nd	159	0	feet	from th	e	East	line	
Ground level Elev.		Producing	g Formation		Poo						De	dicated Acn	eage:
3510.0			<u>ivers/Que</u>				, South					40	Acres
2. If more	e than one	lease is dedi	I to the subject w icated to the well rerent ownership	l, outline each	and ident	ify the c	wnership ther	eof (both as to v	-		-	•	
		-pooling, etc	•							,		,	
X	Yes							<u>tization</u>					
			s and tract descri	ptions which h	ave actua	ily been	consolidated.	(Use reverse si	ide of				
this form No allows			o the well until a	Il interests hav	e been co	nsolidat	ed (by comm	mitization, uniti	zation.	forced-or	oling of	otherwise)	
			ninating such int					,,		····- [·			
	PART	COF SE	VEN RIVER	S QUEEN	UNIT		1980'	· · · · · · · · · · · · · · · · · · ·	bes Sig E Prin E Pos A Cor O Dat I h on act sup cor bel Sig	I her tained i tained i tained i tained i tained i ngr. attion RCO C mpany ctobe e SURV tereby ca this plai tervison, rect to tef. Octo gnature &	reby center in in providedg Tech Tech Dil at Tech Dil at Prevent refy the two prevent refy the refy the two prevent refy the refy the	tify that the and and belief Gilson Gilson and Gas 1989 CERTIF to the well Hoted from de by me at the san tof my 10, 198 SUA SUA NW. WEST	Company Company ICATION location shown field notes of or under my te is true and knowledge and 39
	er.249					3169				17	E HA	IALD + DO	3239
0 330 660	990 1	1320 1650	1980 2310 2	640 2	000	1000	1500	500 0		V	OHN V	V WEST	//

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

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

State of New Mexico Energy, Minerals and Natural Resources Department

T

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

perator			<u> </u>	Lease	,			Well No.	
-	0 0il & (Gas Company		S.R.	Q.U.			77	
Init Letter	Section	Township		Range	<u> </u>		County	1	
J	34	22 Sou	th	36	East	NMPM	Le	а	
ctual Footage Los	cation of Well:	<u> </u>	<u></u>	· <u> </u>			1		
1570	feet from the	South	line and	1650		feet from	the East	line	
iround level Elev.	P	roducing Formation		Pool	······			Dedicated Acr	cage:
3513.9	Se	ven Rivers/Que	een	Eunice	e, S.			40	Acres
1. Outlin	ne the acreage d	edicated to the subject we	I by colored per			t below.			
	_							L .	
2. If mo	re than one leas	e is dedicated to the well,	outline cach and		dermit p diereor	(OOUD BE TO MOLETI	ig interest and i	oyaty).	
unitiz X If answe this form	ation, force-poo Yes r is "no" list the n if neccessary.	No If an owners and tract descrip	newer is "yes" ty tions which have	pe of consolidation actually been of	on <u>Unit</u>	ization se reverse side of			
No allov or until a	vable will be all a non-standard u	nigned to the well until all unit, eliminating such inte	rest, has been ap	proved by the Di	vision.		, lorced-pooling	g, or otherwise)	
	1		1		· · · · · · · · · · · · · · · · · · ·		OPERAT	OR CERTIF	ICATION
	I I							certify that	
	i 1							n in true and ledge and belief.	
	l			1				ange wei veriej.	
	1			1		5	ignature /	1 10 1 11	.
		Part of Seven	Rivers Q	ueen Uni	E		lind	hi Wall.	2
						P	ninted Name /	1	·····
			<u> </u>				11	, W. Elli	s
			1]			DELLOR		
							Senio	or Engine	er
	1			1			ompany		
	1		Į	1			ARCO		
	. 1			1			ate		
	i	н. Н					10-	18-89	
	i								
			<u></u>		<u></u>		SURVEY	OR CERTIF	ICATIO
	i		SRQU #	 <u></u> <i></i> [‡] 32	2310'	, I.,	haraba cartif	that the well	langing .
	. 1 I				ŧ			as plotted from	
	1				n-Otis Jo	ones #2 4	ctual surveys	made by me	or unde
	1			Jalmat	Pool 1	/30 11		i that the san	
	1		i j	*				best of my	www.edge
	1		231	1	1650'		elief.		
	ļ			77			Date Surveyed		
			+-+			 } [_		ober 10,	1989
							Signature & Ser Professional St	d	
							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Contraction of the	11
							No.	AND SUR	8- N -
	1		50'				1130	17	JEN.
	Ì		165	1570			123	/NOy /	भूवा
	. i						XAM	1 stall	<u>[]]]</u>
	i			↓ i			qui en Na	JOHN W. W	\$ <u>\$</u>]]
See 6 The States	and the second s			an carried and the	Construction of a	E L		ONALD J EDE	ØN, // 3
330 660	990 1320	1650 1980 2310 2	540 20		1000	500 0	10h		
726 600	774 LUAN	TOTA 1200 7014 8			1000			A W. WE	<u> </u>

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

125630

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

DISTRICT II P.O. Drawer DD, Artesia, NM \$8210

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

State of New Mexico Energy, Minerals and Natural Resources Department

1

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

							es of the section			
erator					Lease				Well No.	
ARCO	0il &	Gas Co	mpany		S.	R.Q.U.			78	
1 Letter	Section		Township		Range			County	<u></u>	
Р	34		22 Sou	ith	36	East	NM	IPM L	.ea	
al Footage Loc	zuion of W	ell:								
315	feet from	the	East	line and	160		feet f	irom the Sout	h line	
nd level Elev.		Producing	Formation		Pool				Dedicated Acrea	ge:
3491.3		Seven	Rivers/Q	ueen	Euni	ce, S.			40	Acres
2. If mor 3. If mor	re than one re than one	lease is dedi	erent ownership i	, outline each an	d identify the o	whership the minterest of a	reof (both as to w all owners been or itization			
X	Yes			nswer is "yes" ty		1001				
			and tract descrip	tions which have	e actually been	consolidated	L (Use reverse sid	le of		
	if neccess:		the mail until a	l interests have b	ant consolida	ed (by come	unitization, unitiz	tion formed mod	ing of othersias)	
			insting such inte						ing, or ouserwise)	
				· · · · · · · · · · · · · · · · · · ·	<u> </u>			1		
	· · · · · · · · · · · · · · · · · · ·			1		1			TOR CERTIFIC	
						i			y certify that the	
									ein in true and co wledge and belief.	mpiele la
								Signature	ndy WEll	lin
								Printed Name	1	
— — — — —				†·		·		Position	ndy W. Ell	15
	i					1		Se Company	enior Engin	eer
	l			t i		1		AF	RCO	
	Part	of Sov	en Rivers	Queen Ur	.i+			Date	10-18-89	
	rait	OI SEV	en kivers	Queen or	110				YOR CERTIFIC	CATION
								I hereby cert	ify that the well h	ocation sl
	l					I			was plotted from . is made by me	
						1		supervison, a	nd that the same	is true
						Meri	dian	1	he best of my la	rowledge
	l						Jones #1	belief.		
				1		1	at Pool	Date Surveyer	1	
				+			<u>990'</u>		ber 11,-198	10
							1	Signature & S Professional S		
	1					6	990'	1/3	LAND SUR	
				SI	RQU #3 <u>8</u>	- ->	_¥	15	NO!	N.
						660'	#78 0-315	Ceruficate	Marken	
			·	<u> </u>		°	160'	Ceruficate No	RONGLO AT ENOS	
		10 10 10 10 10 10 10 10 10 10 10 10 10 1	1			i	1.3 ·		WILL C	
330 660	990 13:	20 1650	1980 2310 2	640 20	00 1500	1000	500 0		WWW WE	//

Page 448 New Mexico

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. Christma	.s		
''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. Christma	S		
"A"	4	1980' FNL & 1980' FEL	27
A. L. Christmas "A	'' 8	1980'FSL & 660'FEL	27
ARCO Mattie Shiple	v 3	1980' FSL & 1980' FWL	27
ARCO Mattie Shiple	v 4	660'FSL & 660'FWL	27
Gulf A. L. Christma			
"A"	7	660' FSL & 1980' FEL	27
ARCO R. M. Jones	3	660' FNL & 1980' FWL	35
ARCO C. Jones	6 3	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	9 8 5	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	I, RANGE 36 EAST, NMPM	1

anda ''I'' State 4 660' FNL & 660' FEL

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

'89 NOU 2 AM 10 06

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 10 Ellis

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

red, and complete items o do this will prevent this ne of the person delivered able. Consult postmaster estricted Delivery Extra charge)
ber 661 754 a: COD Return Receipt for Merchandise gnature of addressee TE DELIVERED.
s Address (ONLY if d fee paid)
,

STATE OF NEW MEXICO OIL CONSERVATION DIVISION ENERGY AND MINERALS DEPARTACHEMENT OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE 89 0CT 26 AM 9 57

10-24-89

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

#76-6 34-22-36

GARREY CARRUTHERS GOVERNOR

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

> RE: Proposed: МС DHC NSL NSP SWD WFX PMX

Gentlemen:

I have examined the a	application for the:	# 77-9	34-22.36
arco pil & Das	<u>-Co. Seres Rivers (</u> Lease & Well No. Unit	Usen Unit # 78-P	34-22-36
Operator	Lease & Well No. Unit	S-T-R	

and my recommendations are as follows:

Yours very truly Jerry Sexton Supervisor, District 1

/ed