January 19, 1994

New Mexico Oil Conservation Division Attn: Mr. Bill LeMay P.O. Box 2088 310 Old Santa Fe Trail Santa Fe, New Mexico, 87501

RE: Jicarilla 94 and 95 Lease

Jicarilla 94 #1A
Jicarilla 94 #5A
Jicarilla 94 #6A
Jicarilla 95 #3A
Jicarilla 95 #4A
Jicarilla 95 #5A
SE/4, Section 23, T27N, R03W
SE/4, Section 27, T27N, R03W
NW/4, Section 25, T27N, R03W
NW/4, Section 25, T27N, R03W
NW/4, Section 25, T27N, R03W

Rio Arriba County, New Mexico Downhole Commingling Request

Dear Mr. LeMay:

Meridian Oil Inc. is applying for an administrative downhole commingling order for the referenced wells in the Gavilan Pictured Cliffs and the Blanco Mesaverde fields. The ownership of the zones to be commingled is common. All offset interest owners shown on the attached plat and the Bureau of Land Management will receive notice of this commingling application.

The Mesaverde and Pictured Cliffs wells in this area are marginal economic producers based on current rates of 10-90 MCFD for each zone. A reserve study in the area predicts an ultimate recovery of 775 MMCF for the Mesaverde and 700 MMCF for the Pictured Cliffs wells. These reserves and the low current producing rates are uneconomic as separate zone projects. The projects are economic when commingled due to savings realized on surface facilities and tubulars. The only economical way to recover the Mesaverde and Pictured Cliffs reserves identified on the lease is to downhole commingle production from both zones in the wells proposed.

It is proposed to complete the Mesaverde formation and test its production. It is then proposed to set a bridge plug above the Mesaverde, perforate and stimulate the Pictured Cliffs, and test its production. The bridge plug will then be removed, and both zones produced through a single string of tubing. The reservoir characteristics of each of the subject zones are such that underground waste will not be caused by the proposed commingling. The fluids in the two reservoirs are compatible and no precipitates will be formed to cause damage to either reservoir (see attached fluid analyses and compatibility tests). The shut-in pressure for the Mesaverde and Pictured Cliffs are 550 and 490 psi, respectively.

The allocation of the commingled production will be calculated using flow tests from the Mesaverde and Pictured Cliffs during completion operations, and the surrounding production history from both producing intervals. Meridian will consult with the district supervisor of the Aztec NMOCD office for approval of the allocation.

Mr. Bill LeMay Page 2 January 19, 1994

Approval of this commingling application will allow for the prevention of wasted resources and the protection of correlative rights. The Mesaverde and Pictured Cliffs are commingled in four other wells in this township as per NMOCD Order #'s R-5350 (01/17/77), R-6004 (05/02/79), DHC-924 and DHC-925 (09/27/93). Two of these wells (DHC-924, 925) are completed, waiting on hook-up while two (R-5350, -6004) are producing with no adverse affects from the commingling. Included with this letter are plats showing ownership of offsetting leases for both formations, copies of letters to offset operators and the Bureau of Land Management, and a detailed report of fluid compatibility.

Sincerely,

Brian P. Ault

Production Engineer

BPA/rjp

Attachments

xc: Frank T. Chavez - NMOCD/Aztec

10/75 OJO HE- HE #2 15/120 33 10/75 OJO HE- HE #3 19/237	6/82 LA LEE ANN #3 6/32 DUGAN PROD.	5/83 DUGAN PROD. * 3/81 LA LEE ANN #2J * .5/3 LA LEE A N #1 9/126 28	21 5/82 DOME NAV AJO #3 47/10	DUGAN PRÓD	ō	
5/83 FED. 34 #1 44/376 JIC. 93 #12 2/34 34 8/78 FED. 34 #2 8/40 11/75 JIC. 93 #4 11/83 R-03-V	4/78 9/76 FED. 27 #6 FED. #3 2/239 35/293 JC. 94 WILLIAMS MAX D. WEBB FIELD SERVICE 4/78 JC.	MAX D. WEBB MERIDIAN 10/58 6/78 JIC. 94 #6 20/989 FED. 27 #7 5/112 27		WERIDIAN 9/58 JIC. 94 #1 24/388	15	
HIGH ROLL #4 36/458 5/78 5/78 HIGH ROLL #2 10/79 10/265 10/79 HIGH ROLL #1R 3/61	10/57 10/57 10/57 10. 95 # 5 # 10 10. 95 # 4 30/802 10. 94 # 4 30/1222 EBB MERRION OIL MERIDIAN 10. 95 # 24 5/78 10. 95 # 24 5/78 10. 95 # 24 5/78	38 * MERIDIAN 4 #6 89 26	9/56 9/56 JIC. 94 #5 74/1267	MERIDIAN , , , , , , , , , , , , , , , , , , ,	14	MERIDIAN 5/58 ** JIC. 89#5
JIC. 95 #1 20/1426 36 8/58 JIC. 9 5 #6 15/1304 BENGAL C #3 28/73 36 BENGAL C #5 5/210	MERIDIAN DUGAN PROD.	JC. 95 85A 25	24		13	
LEGEND COMPLETION DATE WELL NAME MCFD - CUM(MMCF)	·	Z	<u> </u>		LOCATION UNIT: SEC: TWN: 27N RNG: 03W	DATE: January 17,1994 NAME: JICARILLA 94, 95 LSE. FORM: PICTURED CLIFFS

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	FIELD SERV 10/82 JIC. 93 #1 74/424 0/1		Ĭ		JIC 94 #3 98/617		
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	8/58 • JIC. 95 #7 21/295 0/.1		10/56 IIC. 95 #2 17/350 0/.1				
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	7/57 8/76 8/58 JIC 95 #3 JIC 95 #1A JIC 95 #6 84/4556 4/11 1/1138 26/5/40 2	FIELD SERVICE JIC. 98 #3A 8,58 NA	10/56 10/56 10/56 10/57 11/76 11/76 11/791 11/791 11/791 11/791 10/7 WILLIAMS FIELD SERVICE 10/82 10/92 10/92 10/92 10/93 #2 10/93 #2 10/93 #2 10/93 #2 10/93 #2 10/93 #2 10/93 #2 10/95 #3 10/96 #3 10/9	11/77	1757 1058 1058 1058 1058 1058 1058 1058 1058 1058 1058 1055	1294 9959 1294 9959 100 9489 1	11/27 1/254 1/25

PICTURED CLIFFS/MESAVERDE COMMINGLE TOWNSHIP 27 NORTH, RANGE 3 WEST OFFSET OPERATORS

- Meridian Oil Inc.
 P.O. Box 4289
 Farmington, NM 87499-4289
- 2. Merrion Oil & Gas Corp. 610 Reilly Avenue Farmington, NM 87401
- 3. Dugan Production Co.
 P.O. Box 420
 Farmington, NM 87490420
- 4. Williams Field Service Inc. 295 Chipeta Way Salt Lake City, UT 84108
- 5. Max D. Webb 2705 1/2 E. Main Farmington, NM 87401

January 19, 1994

Max D. Webb 2705-1/2 East Main Street Farmington, NM 87401

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Rio Arriba County, New Mexico Downhole Commingling Request

Gentlemen:

Meridian Oil, Inc. is in the process of applying for an downhole commingling order for the referenced wells in Rio Arriba County, New Mexico, in the Gavilan Pictured Cliffs and the Blanco Mesaverde fields.

The purpose of this letter is to notify you of such action. If you have no objections to the proposed commingling order, we would appreciate your signing this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Sincerely,

Brian P. Ault
Production Engineering



January 19, 1994

Williams Field Service Inc. 295 Chipeta Way Salt Lake City, UT 84108

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Brian P. Ault

Production Engineering

BPA/rjp

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Date:

January 19, 1994

Dugan Production Corp. P.O. Box 420 Farmington, NM 87499-0420

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