MERIDIAN OIL

OIL CONSERVATION DIVISION
RECEIVED

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August 26, 1994

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

RE: Huerfano Unit #101
Unit F, Section 19, T27N, R10W
San Juan County, New Mexico
Downhole Commingling Request

Dear Mr. LeMay:

Meridian Oil Inc. is applying for an administrative downhole commingling order for the referenced well in the Angel Peak Gallup and the Basin Dakota fields. The ownership of the zones to be commingled is common. The offset operators to this well are Conoco, Inc., Amoco Production Company, States, Inc., BBL, Ltd., Bonnieville Fuels Corporation, Marathon Oil Company, Vastar Resources, Inc. and Amax Petroleum Corporation. The Bureau of Land Management and the above mentioned operators have received notification of this downhole commingle.

The Gallup and Dakota wells producing in this area operated by Meridian and others are becoming marginally productive. Based on offset production in this area, drilling of separate wells, dual completions, or major expensed repairs necessary to produce the Gallup and Dakota are no longer economically justified. The only economical way to recover the Gallup and Dakota reserves in this drill block is to downhole commingle production from both zones in this well.

It is proposed to remove all tubing and packers, repair casing failures and eliminate surface casing flows. Once this has been accomplished, a single string of tubing will be ran and both zones produced together. The reservoir characteristics of each of the subject zones are such that underground waste will not be caused by the proposed commingling. Neither producing interval makes oil, and only minimal amounts of similar water are produced in the offset wells. The shut-in pressures for the Dakota and Gallup are 428 and 274 psi, respectively.

The allocation of the commingled production will be calculated using the attached allocation formula. Testing and implementation of the allocation formula will be coordinated with the Aztec, NM office of the NMOCD. This formula is based on production testing of each horizon, and uses accepted Reservoir Engineering methods to allocate the production and reserves.

Approval of this commingling application will allow for the prevention of wasted resources and protection of correlative rights. Included with this letter are plats showing ownership of offsetting leases for both the Dakota and Gallup, a copy of letters to the BLM and offset operators, wellbore diagrams, pertinent data sheet, and an allocation formula.

Sincerely,

Arden Walker, Jr.

Arden L. Walker, Jr.
Regional Production Engineer

SBD:tdg
Attachments

cc: Frank T. Chavez - NMOCD/Aztec

MERIDIAN OIL

August 24, 1994

Bureau of Land Management
1235 La Plata Highway
Farmington, New Mexico 87401

RE: Huerfano Unit #101
Unit F, Section 19, T27N, R10W
San Juan County, New Mexico
Downhole Commingling Request

Gentlemen:

Meridian Oil Inc. is in the process of applying for a downhole commingling order from the New Mexico Oil Conservation Division (NMOCD) for the referenced well located in San Juan County, New Mexico. The approved application will commingle the Angel Peak Gallup and the Basin Dakota fields.

The purpose of this letter is to notify you of Meridian's application. If you have no objections to the NMOCD issuing a commingling order, we would appreciate your signing this letter and returning the original to Mr. LeMay at the following address with a copy to this office:

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

Your prompt attention to this matter would be appreciated.

Sincerely,

Scott B. Daves

Scott B. Daves
Production Engineer

The undersigned hereby waives objection to the referenced Downhole Commingle Request.

Company/Owner:_____

Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

Conoco, Inc.
10 Desta Drive
Suite 100 W
Midland, Texas 79702

RE: Huerfano Unit #101
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San Juan County, New Mexico
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MERIDIAN OIL

August 24, 1994

Amoco Production Company
P.O. Box 800
Denver, Colorado 80201

RE: Huerfano Unit #101
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Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

States, Inc.
P.O. Box 911
Breckenridge, Texas 76424

RE: Huerfano Unit #101
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San Juan County, New Mexico
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Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

BBL, Ltd
P.O. Box 911
Breckenridge, Texas 76424

RE: Huerfano Unit #101
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San Juan County, New Mexico
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Company/Owner:_____

Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

Bonneville Fuels Corporation
1660 Lincoln
Suite 1800
Denver, Colorado 80264

RE: Huerfano Unit #101
Unit F, Section 19, T27N, R10W
San Juan County, New Mexico
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Company/Owner:_____

Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

Marathon Oil Company
P.O. Box 552
Midland, Texas 79702

RE: Huerfano Unit #101
Unit F, Section 19, T27N, R10W
San Juan County, New Mexico
Downhole Commingling Request

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Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

Vastar Resources, Inc.
15375 Memorial Drive
Houston, Texas 77069

RE: Huerfano Unit #101
Unit F, Section 19, T27N, R10W
San Juan County, New Mexico
Downhole Commingling Request

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Title:_____

Date:_____

MERIDIAN OIL

August 24, 1994

Amax Petroleum Corporation
P.O. Box 297007
Houston, Texas 77297

RE: Huerfano Unit #101
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San Juan County, New Mexico
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Company/Owner:_____

Title:_____

Date:_____

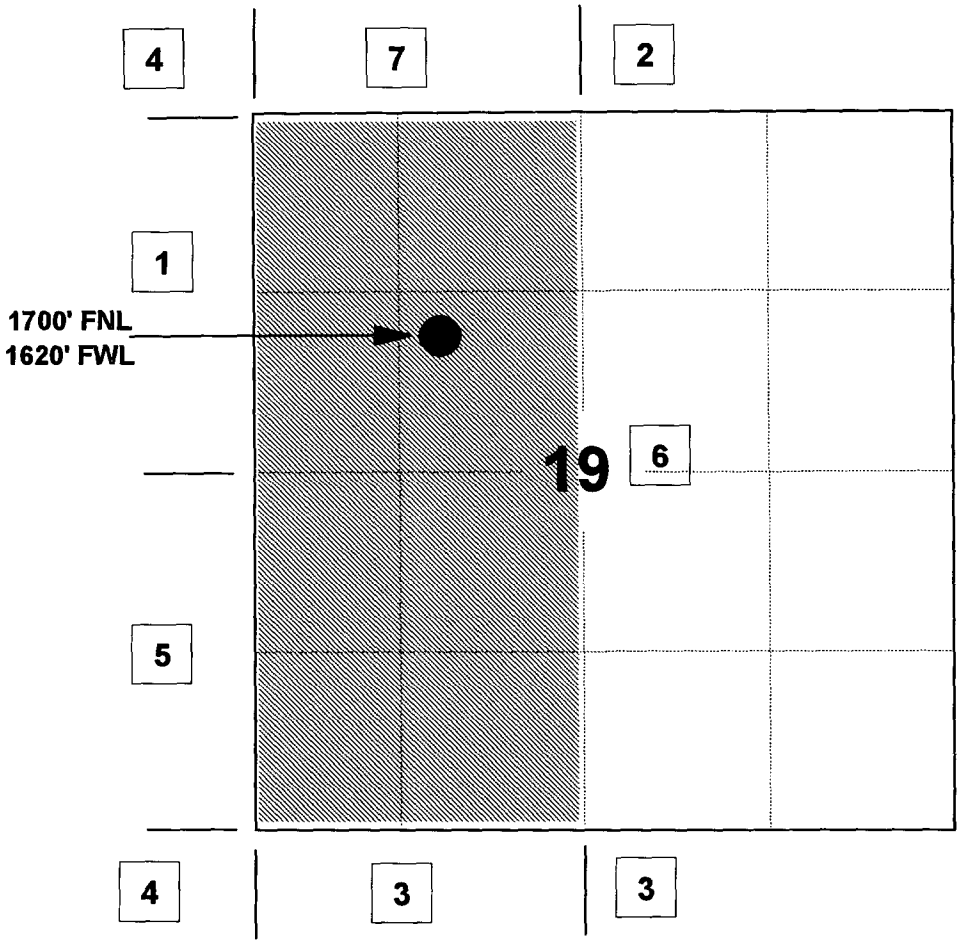
MERIDIAN OIL INC

HUERFANO UNIT #101

OFFSET OPERATOR \ OWNER PLAT

Dakota / Gallup Formation Commingle Well

Township 27 North, Range 10 West



1) Meridian Oil Inc. &
Conoco, Inc. 10 Desta Dr., Suite 100W, Midland, TX 79702
2) Meridian Oil Inc.,
Conoco, Inc. &
Amoco Production Company PO Box 800, Denver, CO 80201
3) Meridian Oil Inc.,
States, Inc. PO Box 911, Breckenridge, TX 76424 &
BBL, Ltd PO Box 911, Breckenridge, TX 76424
4) Meridian Oil Inc,
Bonneville Fuels Corporation 1660 Lincoln, Suite 1800, Denver, CO 80264 &
Conoco, Inc.
5) Bonneville Fuels Corporation &
6) Marathon Ol Company PO Box 552, Midland, TX 79702
7) Meridian Oil Inc.,
Vastar Resources, Inc 15375 Memorial Dr., Houston, TX 77069 ,
Amax Petroleum Corp. PO Box 297007, Houston, TX 77297 ,
Amoco Production Company, Conoco, Inc. & Marathon Oil Company

Gallup Formation

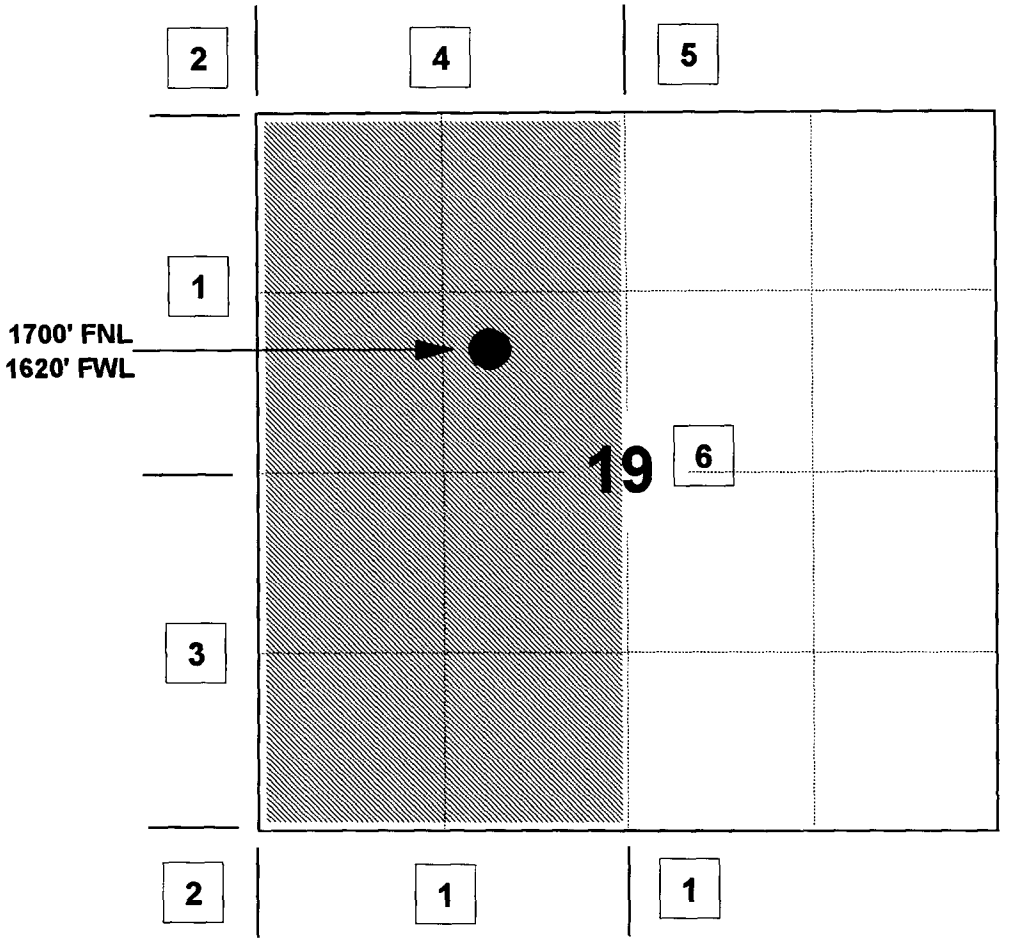
MERIDIAN OIL INC

HUERFANO UNIT #101

OFFSET OPERATOR \ OWNER PLAT

Gallup / Dakota Commingle Well

Township 27 North, Range 10 West



1) Meridian Oil Inc

2) Meridian Oil Inc &
Bonneville Fuels 1660 Lincoln, Suite 1800, Denver, CO 80264

3) Bonneville Fuels

4) Amax Petroleum PO Box 297007, Houston, TX 77297

5) Amoco Production Co PO Box 800, Denver, CO 80201

6) Marathon Oil Company PO Box 552, Midland, TX 79702

Dakota Formation

PERTINENT DATA SHEET

6/21/94

WELLNAME:	Huerfano Unit #101	**DP NUMBER:**	53048A Gallup 53048B Dakota
WELL TYPE:	Basin Dakota	**ELEVATION:**	GL: 5891' KB: 5903'
LOCATION:	1700' FNL 1620' FWL Sec. 19, T27N, R10W San Juan County, New Mexico	**INITIAL POTENTIAL:** **SICP:**	AOF 9,765 Mcf/D Dakota 1,000 Mcf/D Gallup 440 psi June, 1993
OWNERSHIP:	GWI: 61.8659% NRI: 46.8468%	**DRILLING:**	SPUD DATE: 10-03-60 COMPLETED: 10-17-60 TOTAL DEPTH: 6340' PBTD: 6291'

CASING RECORD:

HOLE SIZE	SIZE	WEIGHT	GRADE	DEPTH	EQUIP.	CEMENT		TOC
12 1/4"	9 5/8"	32.3#	H40	290'		172 sx		Surface-circ
					DV tool @ 1794'.			
8 3/4"	7"	23#	N80	6337'		240 sx	TS	1500'
					Baker Model D packer @ 5536'			
Tubing								
195 jts	2 3/8"	4.7#	J55	6172'	3' Perf jt@ 6137'-6140', SN @ 6136"	Dakota		
177 jts	2 3/8"	4.7#	J55	5508'	3' Perf jt @ 5474'-5477', SN @ 5473	Gallup		

FORMATION TOPS:

Ojo Alamo	609'	Point Lookout	4053'
Kirtland	700'	Mancos	4294'
Fruitland	1303'	Gallup	5144'
Pictured Cliffs	1621'	Graneros	6046'
Lewis	1707'	Dakota	6160'
Cliff House	3592'		
Menefee	3650'		

LOGGING: IES, S, GR, TS

PERFORATIONS Gallup: 5336'-5518' w/ 2 spf (total of 116 shots), Dakota: 6078'-6182' w/ 2 spf (total of 62 shots)

STIMULATION: Gallup: 45,474 gal oil, 60,000# 20/40 sand, Dakota: 48,560 gal oil, & 50,000# 20/40 sand.

WORKOVER HISTORY:

March 1989: Gallup swabbed one day. Report stated 200' mud plug in tbg.

June 1989: Gallup swabbed for 5 days. Well logged off soon after each run.

April 1994: Gallup tbg pulled. 3' perf jt removed. CO to top of packer. TIH w/ 2 3/8" tbg, landed @ 5489, SN @ 5456'. Dakota tbg could not be pulled. Tbg plug stuck in F nipple.

PRODUCTION HISTORY:	Gas	Oil
Cumulative as of May 94:	A: 2.155 Bcf	30 Mbbl
	B: 2.286 Bcf	27.6 Mbbl
Current:	0	0

DATE OF LAST PRODUCTION:		Gas	Oil
Gallup	June, 1989	8 Mcf	
	October, 1989		45 bbl
Dakota			
	April, 1994	14 Bbl	2289 Mcf

PIPELINE: EPNG

Huerfano Unit #101

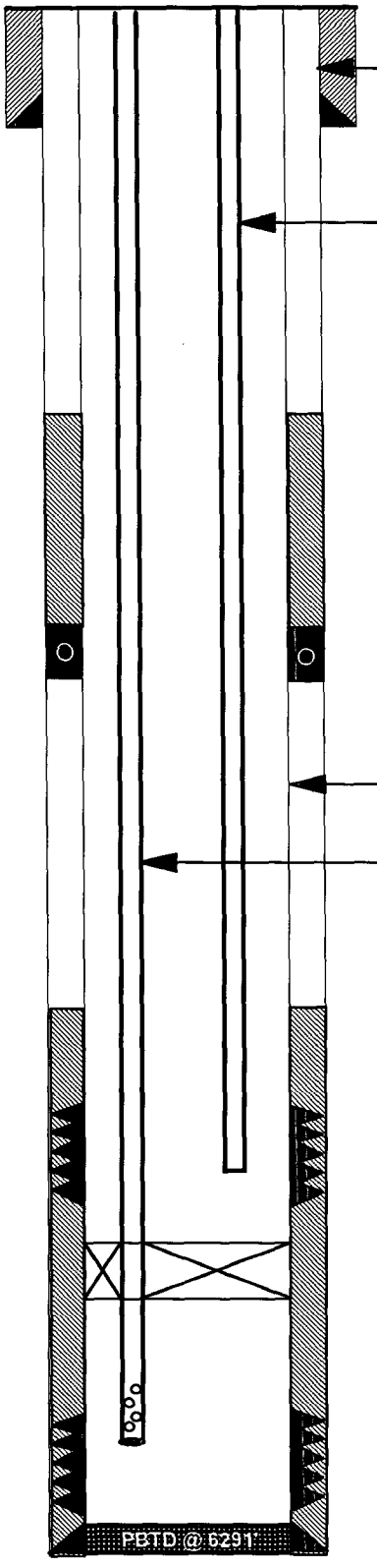
Current

Gallup / Dakota
DPNO 53048A, 53048B

1700' FNL,1620' FWL
Section 19,T27N, R10W, San Juan Co., NM

Spud:10-03-60

Completed :10-17-60



9 5/8", 32.3# surface csg.
Set @ 290', Cement circulated to surface.

Ojo Alamo @ 609'

Kirtland @ 700'

2 3/8", 4.7# Gallup tbg landed @ 5489'
Seating nipple @ 5456'

Fruitland @ 1303'

TOC @ 1500' (TS)

Picured Cliffs @ 1621'

Lewis @ 1707'

DV tool @ 1794'

Cliff House @ 3592'

Menefee @ 3650'

7", 23#, N80 csg set @ 6337'

Point Lookout @ 4053'

2 3/8", 4.7#, Dakota tbg landed @ 6172'
Perforated Sub @ 6137'-40', Seating nipple @ 6136'.

Mancos @ 4294'

TOC @ 4713 (Calc.- 75%)

Gallup @ 5144'

Gallup Perforations@ 5336'-48', 5404'-10', 5420'-36', 5444'-52', 5502'-18' (2 spf)

Graneros @ 6046'

Baker model D packer set @ 5536'

Dakota @ 6160'

Dakota Perforations @ 6078'-88', 6108'-14', 6167'-82' (2 spf)

PBTD @ 6291'

TD @ 6340'

Huerfano Unit #101

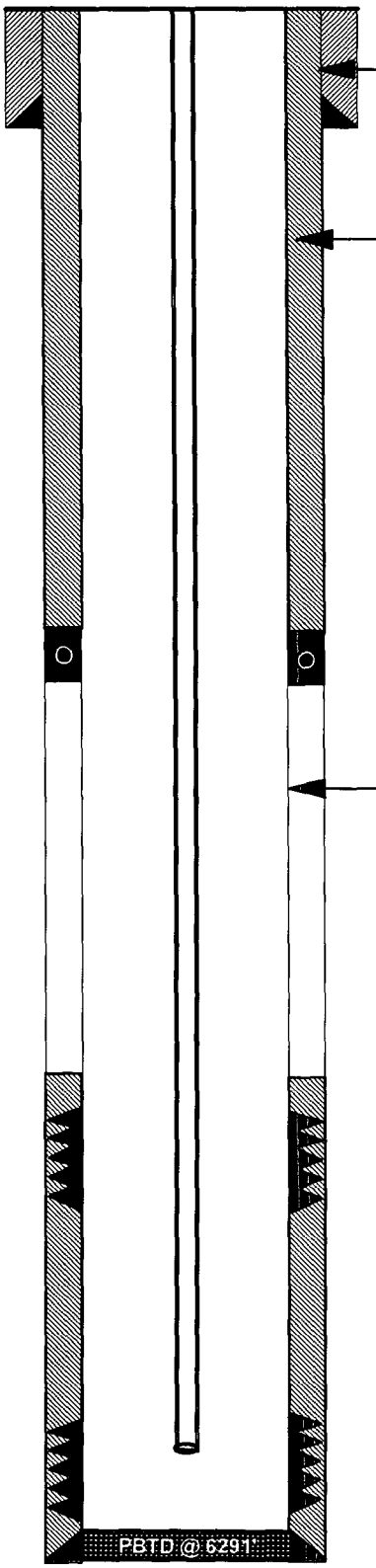
Proposed

Gallup / Dakota
DPNO 53048A, 53048B

1700' FNL,1620' FWL
Section 19,T27N, R10W, San Juan Co., NM

Spud:10-03-60

Completed :10-17-60



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Squeeze cement circulated to surface.

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Fruitland @ 1303'

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TD @ 6340'

HUERFANO UNIT #101

MONTHLY GAS PRODUCTION ALLOCATION FORMULA

GENERAL EQUATION

$$Qt = Qgp + Qdk$$

WHERE: Qt = TOTAL MONTHLY PRODUCTION {MCF, BO & BW}/MONTH)

Qgp = GALLUP (gp) MONTHLY PRODUCTION {MCF, BO, & BW}
Qdk = DAKOTA (dk) MONTHLY PRODUCTION {MCF, BO, & BW}

TESTING PROCEDURE:

$$Qgp = Qt \times q(gp) / (q(gp) + q(dk)$$

WHERE:

q(gp) = tested production rates from Gallup formation in MCF/D, BOPD, & BWPD

q(dk) = tested production rates from Dakota formation in MCF/D, BOPD, & BWPD

EACH FORMATION WILL BE TESTED FOR 24 HRS THROUGH A 3 PHASE SEPARATOR TO DETERMINE GAS OIL & WATER RATES UPON COMPLETION OF REMEDIAL OPERATIONS.

ALL PRODUCTION/EXPENSES FROM REDELIVERY UNTIL ABANDONMENT WILL BE ALLOCATED BASED UPON THE RESULTS OF THE PRODUCTION TESTS

MCF = 1000 SCF NATURAL GAS

BO = BARRELS OF OIL/CONDENSATE

BW = BARRELS OF WATER