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**OIL CONSERVATION** DIVISION

February 5, 2003

Mr. William Jones New Mexico Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

RE: **Application for Administrative Approval Downhole Commingling Basin Dakota and White Wash Mancos-Gallup Pools** Federal 29 No. 1 Section 29, T25N, R9W San Juan County, New Mexico

Dear Mr. Jones:

Merrion Oil & Gas (Merrion) requests administrative approval for downhole commingling of the Basin Dakota and the White Wash Mancos-Gallup Pools in the subject wellbore. The following information is provided in support of this application.

#### I. History and Justification

The Federal 29 No. 1 was drilled and completed in 1981 as a Dakota gas well. It has produced approximately 863,000 MCF. It currently produces about 55 MCFD. To extend the life of the well, Merrion proposes to complete the Mancos-Gallup interval and commingle it with the Dakota formation.

### II. Proposed Spacing Units

Exhibit 1 is the C-102 plat for the Basin Dakota Pool with a 320 acre spacing unit in the east half of Section 29. Exhibit 2 is the C-102 plat for the White Wash Mancos-Gallup Pool with a 40 acre spacing unit in the NW/4 NE/4 of Section 29.

#### III. Allocation Methodology

Exhibit 3 shows the Dakota production from the Federal 29 No. 1 while Exhibit 4 shows the production history of the Federal 28 No. 2E, an offset commingled White Wash Mancos-Gallup and Basin Dakota well (the upper zone was added in May 2003). The commingled production from the Federal 29 No. 1 should be similar to the offset well's production. The information on the C-107A application form is based on production from the Federal 28 No. 2E.

Merrion proposes to obtain stabilized production tests on each zone separately and use a fixed percentage to allocate future production between the two zones. If subsequent data indicate the need, additional testing may be done in the future to adjust the allocation percentages.

#### IV. Reservoir Fluid Compatibility

Water analyses are not available for wells in the immediate area. However, the waters of the Mancos and Dakota have been generally determined to be compatible across the basin based on other similar applications to the NMOCD.

#### V. Cross Flow Between Zones

The reservoir pressure of both zones is estimated to be 1500 psig. Therefore, crossflow is not anticipated to be a problem.

#### VI. Well Ownership Notification

The ownership of the two zones is identical, so no notification is necessary.

#### VII. Summary

Reserves for the Gallup zone are not sufficient to justify drilling a new well. Commingling the zones will maximize reserves and protect correlative rights. Therefore, we request your approval of this application.

If you have questions or need additional information, please call me at (505)327-9801 ext. 126.

Sincerely,

Connie S. Dinning Production Engineer

Cc: Steve Hayden, Aztec NMOCD BLM, Farmington Field Office

File: s/operate/workovers/huerfano area/Federal 20-1E Commingle Just.doc

State of New Mexico

Form C-107A Revised June 10, 2003

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

E-MAIL ADDRESS <u>cdinning@merrion.bz</u>

# Energy, Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION TYPE X\_Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE

## APPLICATION FOR DOWNHOLE COMMINGLING

\_X\_Yes \_\_\_No

Merrion Oil & Gas		e. Farmington, NM 87401							
Operator									
Federal 29 Lease	1 B, 29, 25N, 9 Well No. Unit Letter-	NW Section-Township-Range	San Juan County						
OGRID No. <u>014634</u> Property	Code_7787 API No30	0-045-25052 Lease Type: X	_FederalFee						
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE						
Pool Name									
Pool Code	64290	71599							
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	5336' – 5859'	6347' - 6385'							
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift						
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the	Not Required		Not Required						
Oil Gravity or Gas BTU	42		1284						
(Degree API or Gas BTU)  Producing, Shut-In or	New Zone		Producing						
New Zone  Date and Oil/Gas/Water Rates of  Last Production. (Note: For new zones with no production history,	Supporting Data from Fed 28-2E Date: December 2003	Date: December 2003							
applicant shall be required to attach production estimates and supporting data.)	Rates: 10 MCFD, 3 BOPD	Rates:	Rates: 55 MCFD, 0.5 BOPD						
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas						
than current or past production, supporting data or explanation will be required.)	86% 15%	% %	14% 85%						
	ADDITIO	NAL DATA							
Are all working, royalty and overriding f not, have all working, royalty and ove			Yes X No Yes No						
Are all produced fluids from all commit	ngled zones compatible with each	other?	Yes X No						
Vill commingling decrease the value of	f production?		Yes No_X_						
f this well is on, or communitized with or the United States Bureau of Land Ma			Yes_X No						
NMOCD Reference Case No. applicabl	e to this well:		_						
Attachments:  C-102 for each zone to be comming Production curve for each zone for For zones with no production histor Data to support allocation method of Notification list of working, royalty Any additional statements, data or committee the committee of the c	at least one year. (If not available, ry, estimated production rates and sor formula.  y and overriding royalty interests for	attach explanation.) supporting data. or uncommon interest cases.							
	PRE-APPRO	OVED POOLS							
If application is	to establish Pre-Approved Pools, the	he following additional information wil	ll be required:						
ist of other orders approving downhole ist of all operators within the proposed roof that all operators within the propositionshole pressure data.	d Pre-Approved Pools	••							
hereby certify that the information	above is true and complete to	the best of my knowledge and belie	ef.						
SIGNATURE	TITLE	Production Engineer D	PATE February 6, 2003						
TYPE OR PRINT NAME <u>Conni</u>	ie S. Dinning	TELEPHONE NO. (_505	) 327-9801 ext. 126						

<u>District I</u>

1625 N. French Dr., Hobbs, NM 88240

State of New Mexico Energy, Minerals & Natural Resources Department Form C-102 Revised August 15, 2000

District II

811 South First, Artesia, NM 88210

District III 1000 Rio Br District IV

1000 Rio Brazos Rd., Aztec, NM 87410

<sup>4</sup> Property Code 007786

> <sup>7</sup>OGRID No. 014634

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505 Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

AMENDED REPORT

6664' GR

2040 South Pacheco, Santa Fe, NM 87505

<sup>1</sup> API Number 30-045-25052

WE.	LL LOCATION AND ACR	EAGE DEDICATION PLAT	
	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name	
	71599	Basin Dakota	
<sup>5</sup> Property Name		Name	<sup>6</sup> Well Number
	Federal	29	1
	8 Operator	Name	<sup>9</sup> Elevation

<sup>10</sup> Surface Location

UL or lot no. Se	ction Townsh	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В 29	9 25N	9 W	NW NE	990	North	1780	East	San Juan

Merrion Oil & Gas

11 Bottom Hole Location If Different From Surface

Bottom Hole Location if Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 320	13 Joint of	r Infill 14	Consolidation C	Code 15 Oro	ler No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A
NON-STANDARD LINIT HAS BEEN APPROVED BY THE DIVISION

1,01,011	DARD UNIT HAS BEE	TOTAL TITLE OF THE PARTY OF THE	
16	.066 	1780'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief:  Connie S. Dinning Printed Name Production Engineer  Title February 4, 2004  Date  18 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 belief.  Date of Survey Signature and Seal of Professional Surveyor:
			·

District I

1625 N. French Dr., Hobbs, NM 88240

State of New Mexico Energy, Minerals & Natural Resources Department Form C-102 Revised August 15, 2000

District II

811 South First, Artesia, NM 88210

<u>District III</u>

1000 Rio Brazos Rd., Aztec, NM 87410

**District IV** 

2040 South Pacheco, Santa Fe, NM 87505

#### OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

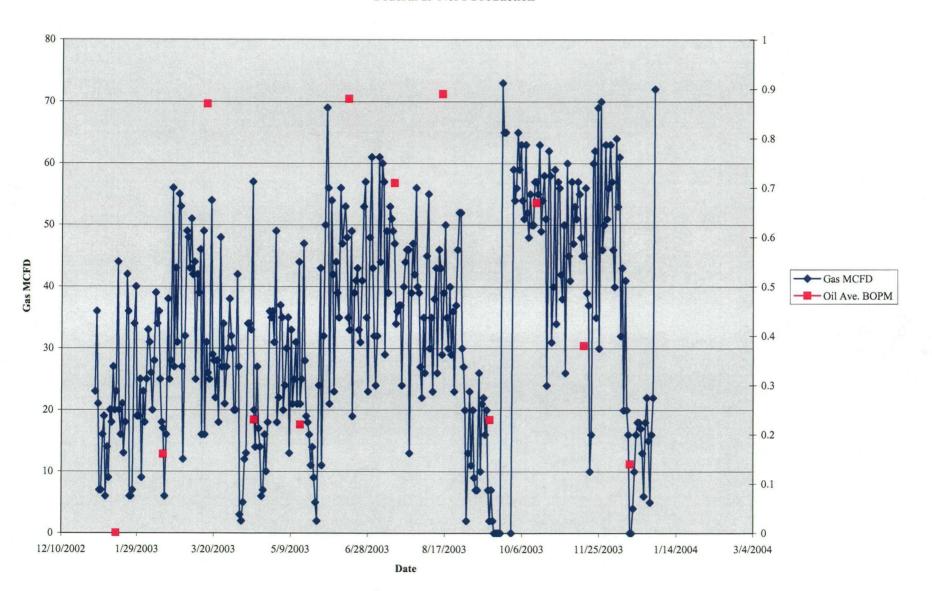
AMENDED REPORT

		V	VELL LO	OCATIO:	N AND ACR	EAGE DEDIC	ATION PLA	Τ			
1	API Number	•		<sup>2</sup> Pool Code <sup>3</sup> Pool Name							
30	-045-2505	2	64290 Whitewash Mancos Gallup								
4 Property	Code		_		<sup>5</sup> Property N	lame			<sup>6</sup> Well Number		
00778	6				Federal :	29		1		1	
<sup>7</sup> OGRID	No.				<sup>8</sup> Operator N	Name			9	Elevation	
01463	4				Merrion Oil	& Gas			6	664' GR	
					<sup>10</sup> Surface I	Location		······································			
UL or lot no.	Section	Township	Range	Lot Idn		North/South line	Feet from the	East/	East/West line Count		
В	29	25N	9 W	NW NE	990	North	1780	East San Juan		San Juan	
			11 Bo	ottom Ho	le Location If	Different Fron	n Surface	•••	·		
UL or lot no. Section Township Range Lot Idn Feet from the North		North/South line	Feet from the	East/	West line	County					
12 Dedicated Acre	s 13 Joint or	r Infill	Consolidation	Code 15 O	rder No.				•		
40											

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16			<sup>17</sup> OPERATOR CERTIFICATION  I hereby certify that the information contained herein
	6		is true and complete to the best of my knowledge and
	066		belief.
	<u> </u>		beneg.
	Federal 29 No. 1 SF-078309	1780'	Signature
	_		Connie S. Dinning Printed Name
			Production Engineer
			Title
			February 4, 2004
			Date
			<sup>18</sup> 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 belief.
			Date of Survey
			Signature and Seal of Professional Surveyor:
			· ·
			Certificate Number

Federal 29 No. 1 Production



Federal 28 No. 2E Production

