

DATE IN 82304	SUSPENSE	ENGINEER Jones	LOGGED IN 82404	TYPE DHC	APP NO. DSEM0423729083
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners**
- [B] ☐ Offset Operators, Leaseholders or Surface Owner**
- [C] ☐ Application is One Which Requires Published Legal Notice**
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO**
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,**
- [F] ☐ Waivers are Attached**

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

_____ Print or Type Name	_____ Signature	_____ Title	_____ Date
_____ e-mail Address			

MERRION

OIL & GAS

RECEIVED

AUG 20 2004

OIL CONSERVATION
DIVISION

August 16, 2004

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 20 No. 1R
Section 20, 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 20 No. 1R was drilled and completed in 1981 as a Dakota gas well. It has produced approximately 427,000 MCF. It currently produces about 17 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 20. Exhibit 2 is the C-102 plat for the White Wash Mancos-Gallup Pool with a 40 acre spacing unit in the NW/4 SE/4 of Section 20.

III. Allocation Methodology

Exhibit 3 shows the Dakota production from the Federal 20 No. 1R while Exhibit 4 shows the production history of the Federal 20 No. 1E, an offset commingled White Wash Mancos-Gallup and Basin Dakota well (the upper zone was added in May 2004). The commingled production from the Federal 20 No. 1R should be similar to the offset well's production. The information on the C-107A application form is based on production from the Federal 20 No. 1E.

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 505.324.5326.

Sincerely,



Connie S. Dinning
Production Engineer

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

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

District I
1625 N. French Drive, Hobbs, NM 88240
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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

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

APPLICATION TYPE
☒ Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Merrion Oil & Gas
Operator
610 Reilly Ave. Farmington, NM 87401
Address
Federal 20
Lease
1R
Well No.
J. 20, 25N, 9W
Unit Letter-Section-Township-Range
San Juan
County
OGRID No. 014634
Property Code
API No. 30-045-25012
Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Whitewash Mancos/Gallup <i>W/Upst</i> <i>OTL</i>		Basin Dakota <i>Pro-Gas</i>
Pool Code	64290		71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	5383' - 5901'		6405' - 6439'
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 depth of the top perforation in the upper zone)	Not Required		Not Required
Oil Gravity or Gas BTU (Degree API or Gas BTU)	42		1273
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Supporting Data from Fed 20-1E Date: May 2004 Rates: 63 MCFD, 6 BOPD	Date: Rates:	Date: July 2004 Rates: 17 MCFD, 0 BOPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 100 %	Gas 73%	Oil 0 % Gas 27%

ADDITIONAL DATA


Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?
Yes ☒ No ☐
Yes ☐ No ☐
Are all produced fluids from all commingled zones compatible with each other?
Yes ☒ No ☐
Will commingling decrease the value of production?
Yes ☐ No ☒
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?
Yes ☒ No ☐
NMOCD Reference Case No. applicable to this well: _____

Attachments:
C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
Production curve for each zone for at least one year. (If not available, attach explanation.)
For zones with no production history, estimated production rates and supporting data.
Data to support allocation method or formula.
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
Any additional statements, data or documents to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.
SIGNATURE  TITLE Production Engineer DATE August 16, 2004
TYPE OR PRINT NAME Connie S. Dinning TELEPHONE NO. (505) 324-5326
E-MAIL ADDRESS cdinning@merrion.bz

OIL CONSERVATION DIVISION

P. O. BOX 2088

Exhibit 1

Form C-107
Revised 10-1-NEW MEXICO
MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

All distances must be from the outer boundaries of the Section.

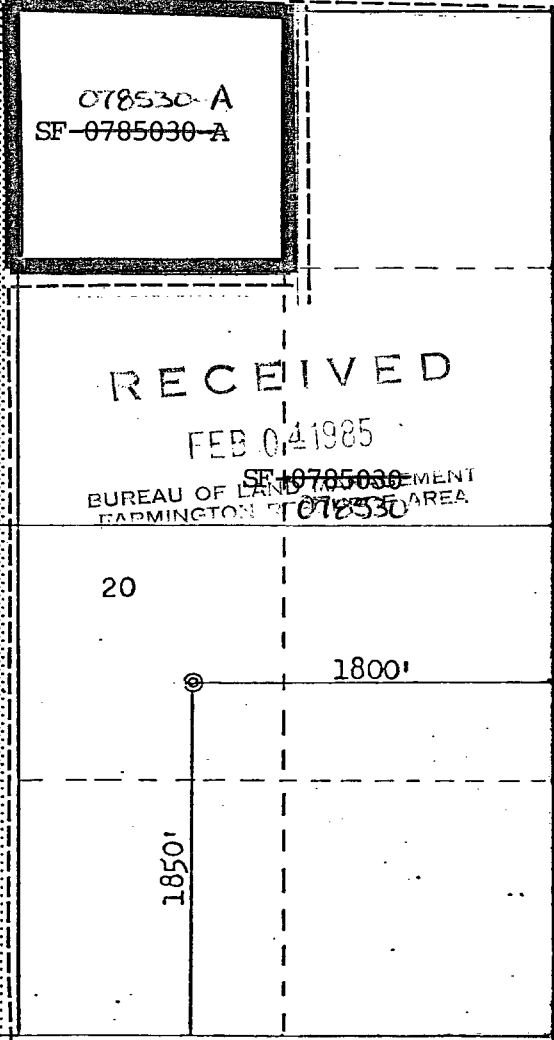
Operator M. J. BRANNON		Lease FEDERAL 20		Well No. 1R
Unit Letter J	Section 20	Township 25N	Range 9W	County San Juan
Actual Footage Location of Well:				
1850 feet from the South line and		1800 feet from the East line		
Ground Level Elev: 6675	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization Agreement
14-08-0001-7340 Dated 6/21/60

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 interests, has been approved by the Commission.

Sec.	20	1800'	1850'		CERTIFICATION
					<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. FOR: M. J. BRANNON ORIGINAL SIGNED BY: Name EWELL N. WALSH Ewell N. Walsh, P.E. Position President Company Walsh Engr. & Prod. Corp. Date 2/1/85</p> <p>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.</p> <p>Date Surveyed March 20, 1985 Registered Professional Engineer and Land Surveyor Fred B. Kerr, Jr. Certificate No. 3950</p>

Scale: 1"=1000'

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources DepartmentOIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505Form C-102
Revised August 15, 2000Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-25012		² Pool Code 64290		³ Pool Name White Wash Mancos-Gallup	
⁴ Property Code		⁵ Property Name Federal 20			⁶ Well Number 1R
⁷ OGRID No. 014634		⁸ Operator Name Merrion Oil & Gas			⁹ Elevation 6675' GR

¹⁰ Surface Location


UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	20	25N	9 W	NW SE	1850	South	1800	East	San Juan

¹¹ Bottom Hole Location If Different From Surface

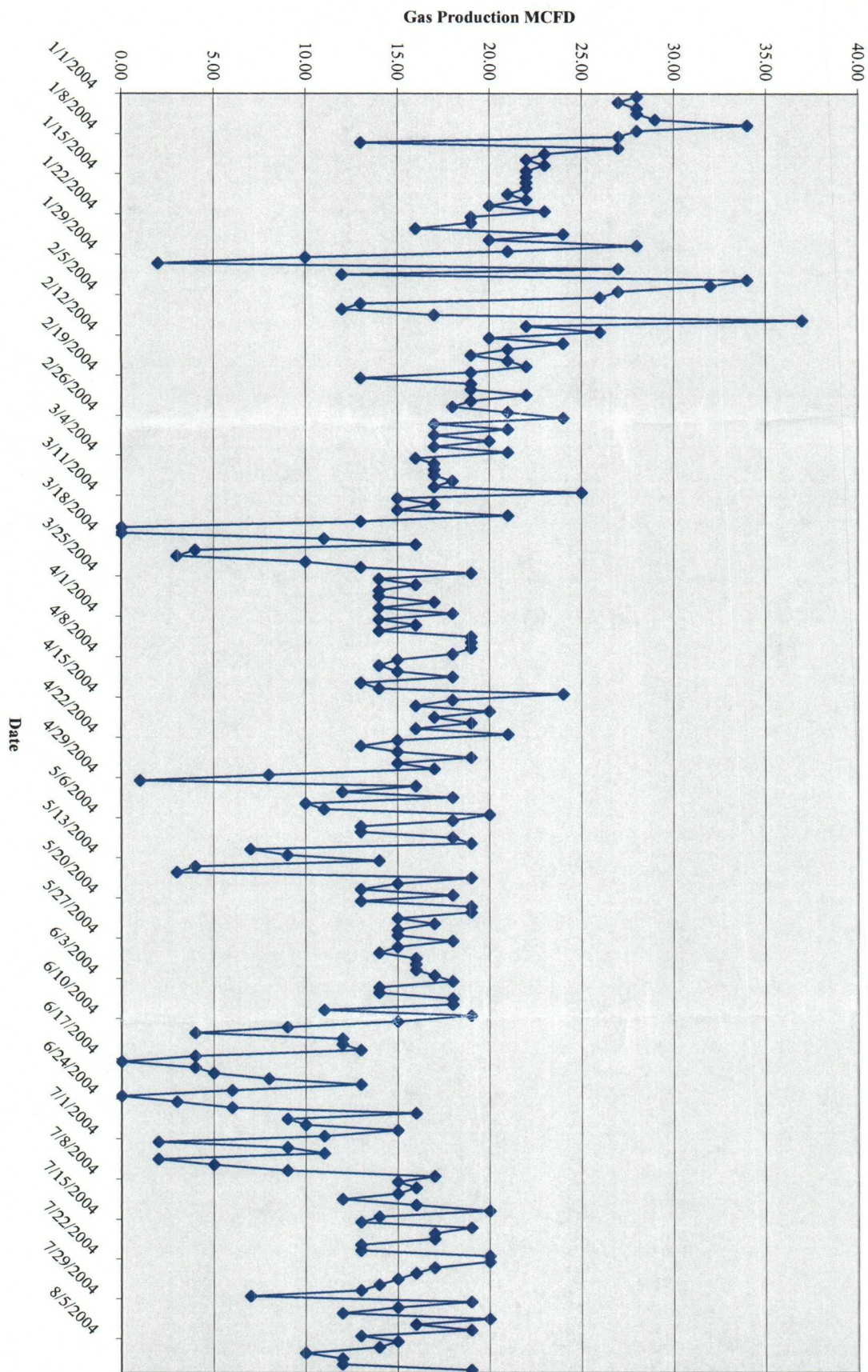
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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				¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature Connie S. Dinning Printed Name Production Engineer Title August 16, 2004 Date
		Federal 20 No. 1R SF-078530	1800'	¹⁸ SURVEYOR CERTIFICATION <i>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.</i> Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

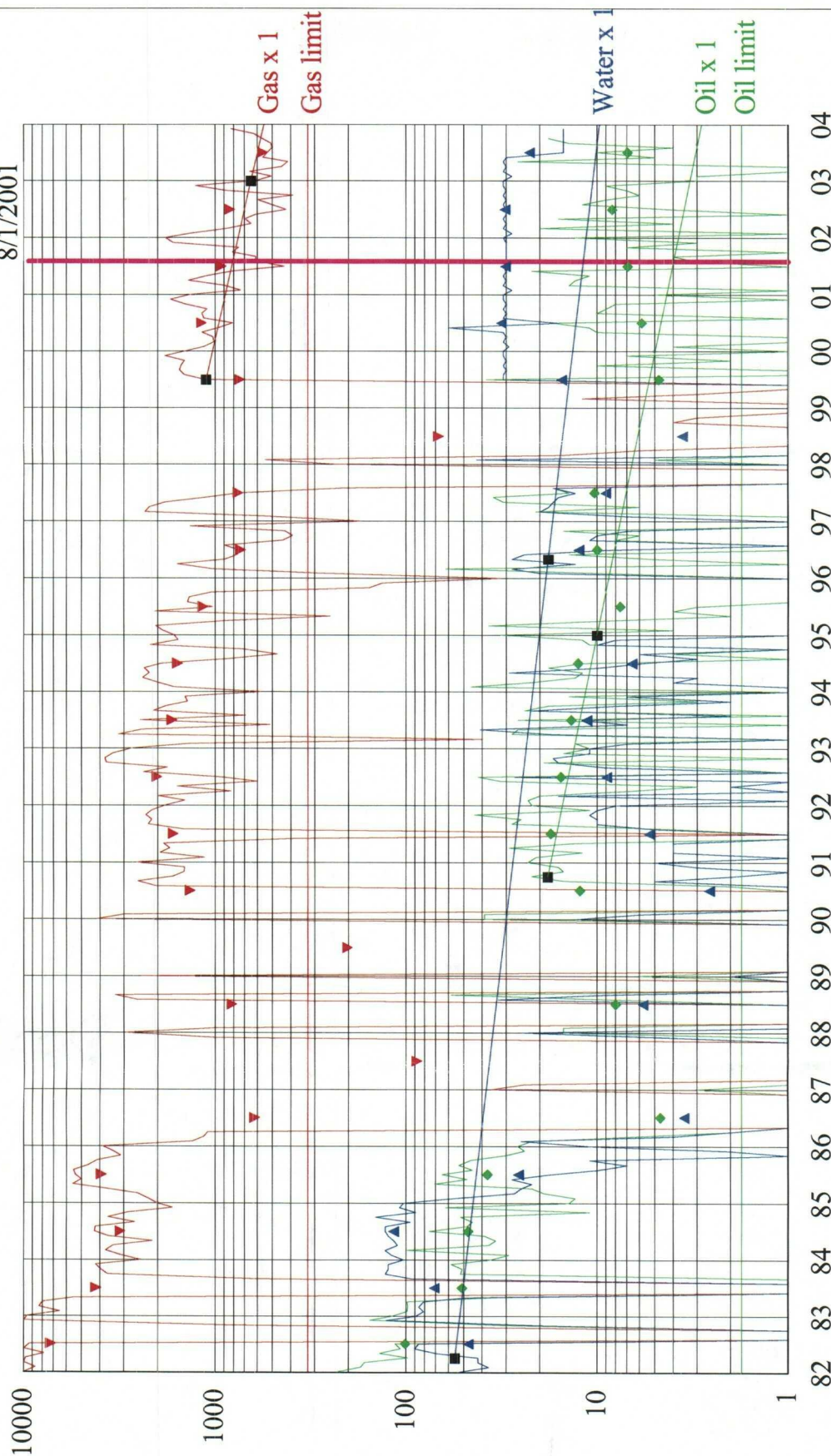
Federal 20-1R Production



PRODUCTION GRAPH

Federal 20-1R (1R - 100%), Basin DK

Effective Date
8/1/2001



25104525N09W20J00DK
Federal 20-1R (1R - 100%)
OLD
Basin DK
San Juan, NM

[3452512]
Basin DK
20J 25N 9W

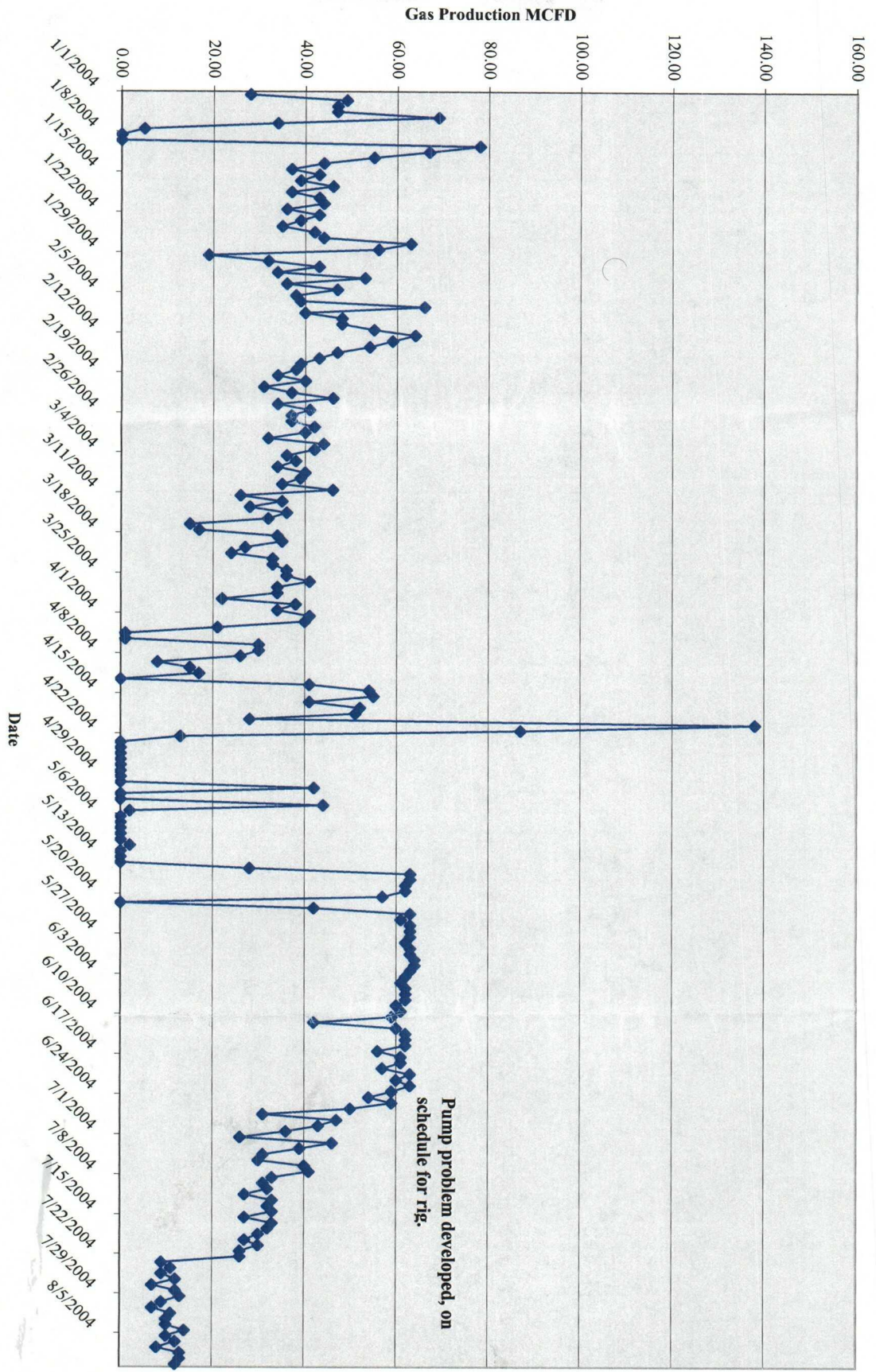
Cumulative:
Remaining:
Ultimate:

Oil (bbl)
4,596
185
4,781

Gas (mcf)
427,258
36,155
463,413

Water (bbl)
5,525
648
6,173

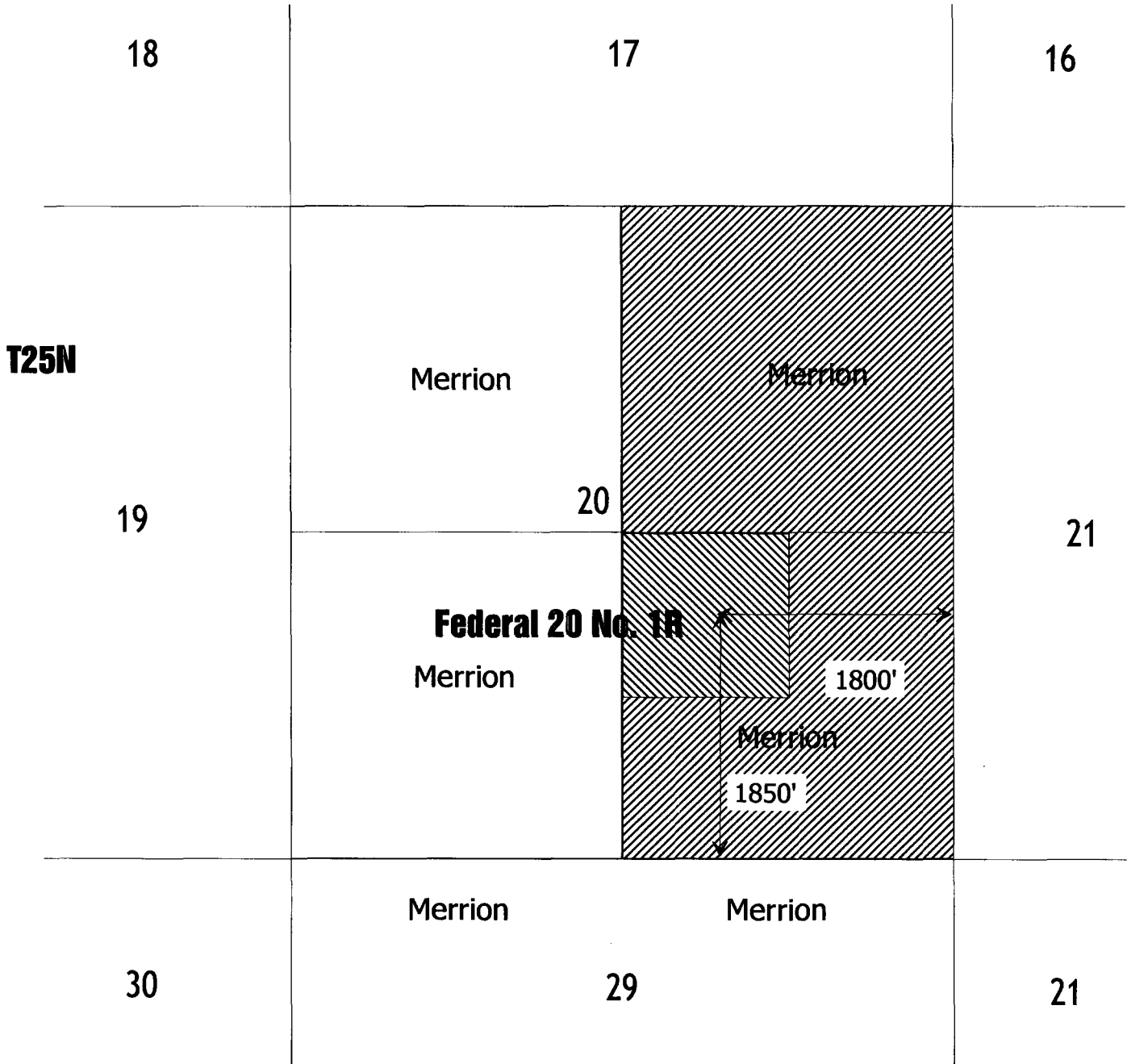
Federal 20-1E Production





Federal 20 No. 1R

Downhole Commingling Application

R9W



LEGEND

	Dakota Spacing Unit
	Mancos Spacing Unit