

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Well ☒ Well ☐ Other

2. Name of Operator

Merrion Oil & Gas Corporation (14634)

3. Address and Telephone No.

610 Reilly Avenue, Farmington, NM 87401-2634

(505) 327-9801

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1850' fsl & 1850' fel (nw se)

Section 20, T25N, R9W

5. Lease Designation and Serial No.

SF-078530

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Federal 20 No. 1R

9. API Well No.

30-045-25012

10. Field and Pool, or Exploratory Area

White Wash Mancos/Dakota

11. County or Parish, State

San Juan County,
New Mexico

12. CHECK APPROPRIATE BOX (s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice

TYPE OF ACTION

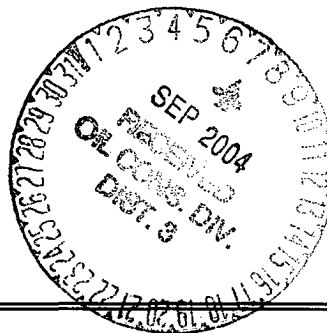
☐ Abandonment☐ Recompletion☐ Plugging Back☐ Casing Repair☐ Altering Casing☒ Other Add Perforations☐ Change of Plans☐ New Construction☐ Non-Routine Fracturing☐ Water Shut-Off☐ Conversion to Injection☐ Dispose Water(Note: Report results of multiple completion on
Completion or Recompletion Report and Log form.)

13. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Merrion Oil & Gas proposes to complete the White Wash Mancos-Gallup Pool in the subject well as detailed in the attached procedure. Production will be commingled downhole with the Basin Dakota Pool. The commingling application is attached as per the NMOCD notice requirement.

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations.



14. I hereby certify that the foregoing is true and correct

Signed

Connie S. Dinhing

Title Production EngineerDate 8/18/2004

(This space for Federal or State office use)

Approved By

Conditions of approval, if any:

Title

Petr. Eng

Date

9/1/04

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statement or representations as to any matter within its jurisdiction.

NMOCD

Merrion Oil & Gas Corporation

Workover Procedure

August 16, 2004

Well:	Federal 20 No. 1R	Field:	Whitewash Mancos/Dk
Location:	1850' fsl & 1800' fel Sec. 20, T25N, R9W, NMPM San Juan County, New Mexico	Elevation:	6,675' GR 6,689' KB
		By:	Connie Dinning

Procedure:

Note: All Fluids to be 2% KCl based.

Prior to Move In

1. Check wellsite for anchors.
2. Open tubing, flow plunger to surface and remove.
3. Haul pumping unit, engine and rods to Federal 20 No. 1R. Prepare material transfers for all equipment moved to well.
4. Haul in 10 jts. 2 3/8" tubing.
5. MI pump truck and test annulus to 1000 psi.
6. After casing tested and repaired if necessary, order in frac/test tank(s) w/ riser, working external gauges & two good 4" valves. Fill w/ 2% KCl city water or filtered water. Refer to frac job design for exact volume and number of tanks.

Pull Tubing, Log, and Isolate Dakota

1. MIRU workover rig, unset RCP and TOH w/ tbg.
2. RIH w/ 4 1/2" casing scraper to PBTD (CICR) at 6429' KB.
3. TOH w/ scraper & tubing.
4. MIRU wireline company. Run Gamma Ray Correlation Log from PBTD @ 6429' to 5200' KB or minimum depth run.
5. RIH w/ composite BP, set @ ±6000' KB.
6. Load hole with 2% KCl water and pressure test to 1000 psi.
7. If well does not pressure test, PU packer, isolate holes and squeeze as necessary (if test results indicate difficulty pumping in, consult Steve Dunn about using "300 PSI" chemical squeeze system).

Perf & Ball off Gallup

1. Perforate Gallup with 3 1/8" casing gun, w/ one select fire shot per foot per Federal 20 No. 1R Induction log dated 6/12/81 as follows:

5383', 5390', 5403', 5405', 5407', 5443', 5473', 5493', 5495', 5509', 5543', 5552', 5560',
5564', 5574', 5576', 5591', 5604', 5639', 5655', 5703', 5899', 5901', **23 total holes.**
2. TIH w/ 2 3/8" hydril tubing fracstring and packer.
3. Set just below DV tool @ 4712' KB.
4. Pump 300 gallons 15% HCl and 37 RCN ball sealers down tubing.

5. Attempt to ball off to 3500 psi.
6. Release packer and TIH to DBP @ 6000' to knock off balls.

Fracture Stimulation

1. RU frac crew. Fracture stimulate the Gallup formation with 70 Quality foam with 20# X-Linked base gel and a total of 100,000 lbs. of 20/40 mesh Brady sand (detail design to be provided).
2. Shut well in. RU flowback manifold to test tank. SI well for \pm 4 hrs to allow gel to break.
3. Blow back on 1/4" positive flow choke, and flow well to clean up.
4. TOH w/ fracstring and LD RCP.

Drill Out and Run Production String

1. RU air package. TIH w/ bit (or mill) and drill collars on 2-3/8" tbg, clean out sand using air to BP.
2. Drill out BP and continue cleaning out well down to CICR @ 6429'.
3. Drill out CICR and CO to PBTD @ 6545'KB.
4. Squeeze lower Dakota perms. WOC.
5. Drill out w/ air to PBTD.
6. TOH and lay down collars and bit.
7. Run production tubing string with mud anchor (open ended) w/ small hole near top and seating nipple. Land production tubing w/ top of MA below bottom Dakota perf at 6426' KB.
8. Nipple down BOPs. Pick up 1 1/4" pump and run in hole on rods as follows:

40 ea. 3/4" plain
 129 ea. 5/8" plain
 16 ea. 3/4" plain
 72 ea. 3/4" scraped

5. Load tbg w/ water and check pump action before RD.
6. RD & MOL. Report production for two weeks.

Merrion Oil & Gas Corporation Wellbore Schematic

Federal 20 No. 1R

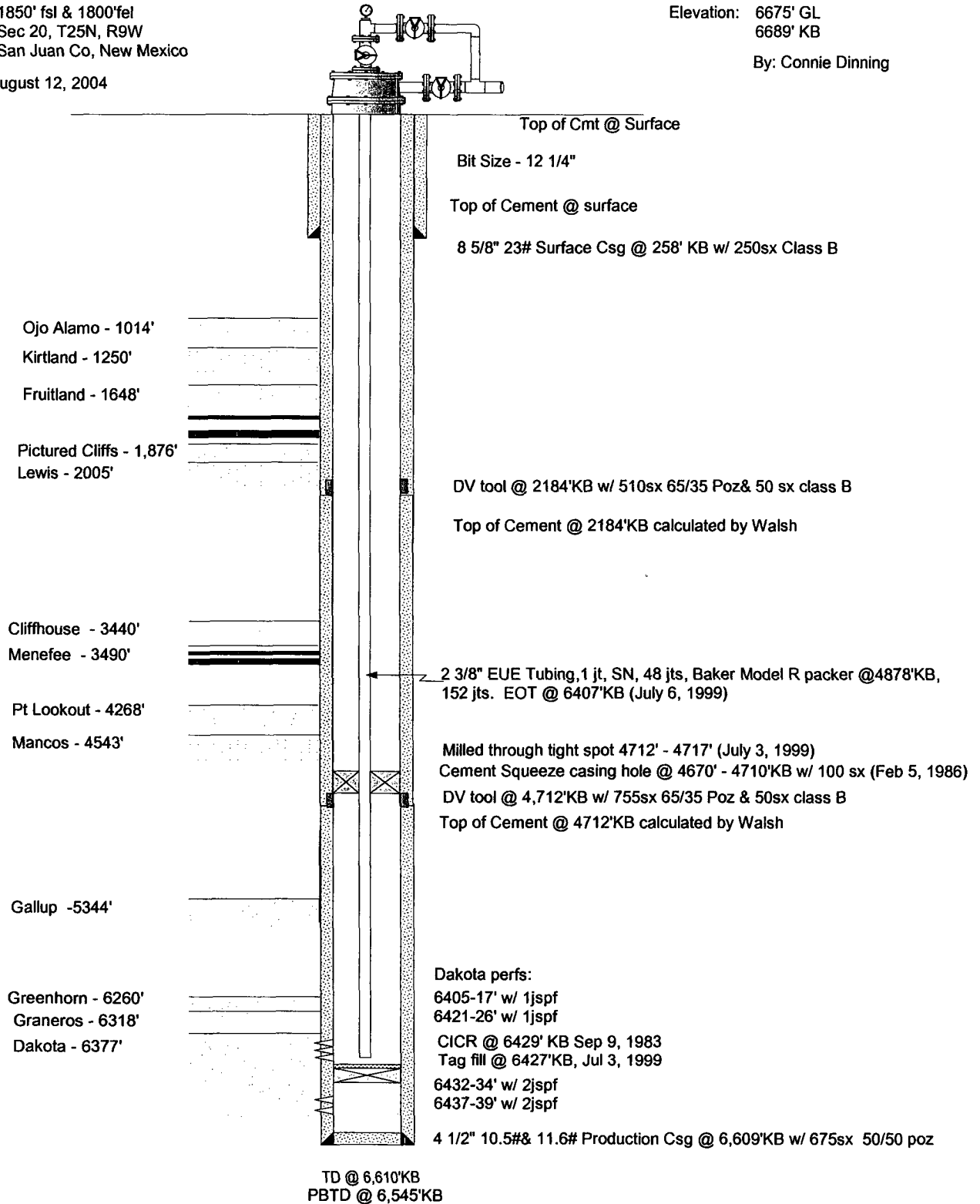
Current Wellbore Configuration

Location: 1850' fsl & 1800'fel
Sec 20, T25N, R9W
San Juan Co, New Mexico

Date: August 12, 2004

Elevation: 6675' GL
6689' KB

By: Connie Dinning





2004 AUG 19 PM 1 04
RECEIVED
070 FARMINGTON NM

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

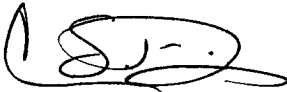
The ownership of the two zones is identical, so no notification is necessary.

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

610 Reilly Ave. Farmington, NM 87401

Operator

Address

Federal 20

1R

J, 20, 25N, 9W

San Juan

Lease

Well No.

Unit Letter-Section-Township-Range

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		Basin Dakota
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 Gas 100 % 73%	Oil Gas % %	Oil Gas 0 % 27%

OIL CONSERVATION DIVISION

P. O. BOX 2088

NEW MEXICO
MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

Exhibit 1

Form C-107
Revised 10-1-

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

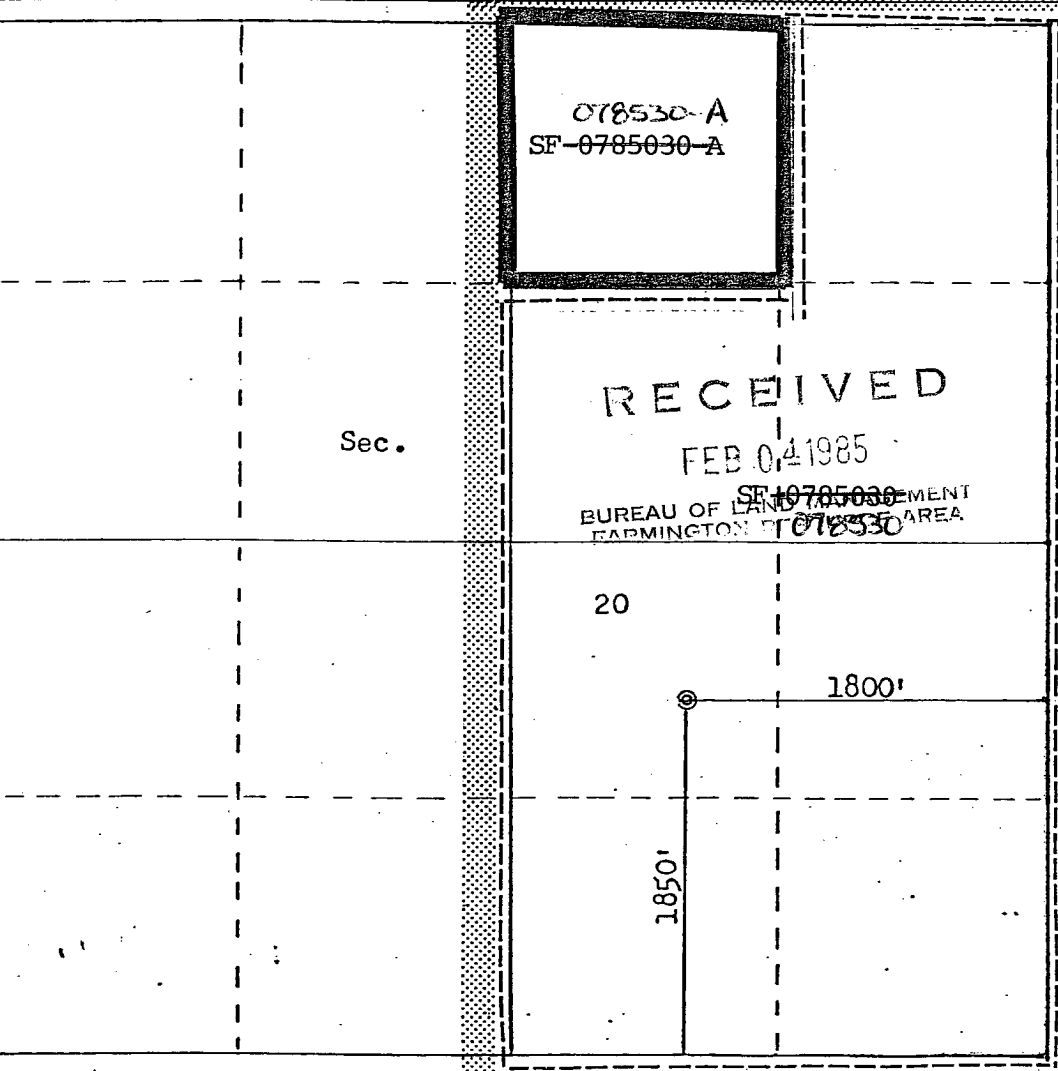
Operator M. J. BRANNON			Lease FEDERAL 20		Well No. 1R
Unit Letter J	Section 20	Township 25N	Range 9W	County San Juan	
Actual Footage Location of Well: 1850 feet from the South line and 1800 feet from the East line					
Ground Level Elev. 6675	Producing Formation Dakota		Pool Basin Dakota		Dedicated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

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

	CERTIFICATION 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 Name EWELL N. WALSH Ewell N. Walsh, P.E. Position President Company Walsh Engr. & Prod. Corp. Date 2/1/85 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. Date Surveyed March 20, 1985 Registered Professional Engineer and Land Surveyor Fred B. Kerp, Jr. Certificate No. 3950
	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 Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505

Form C-102
Revised August 15, 2000

Submit 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

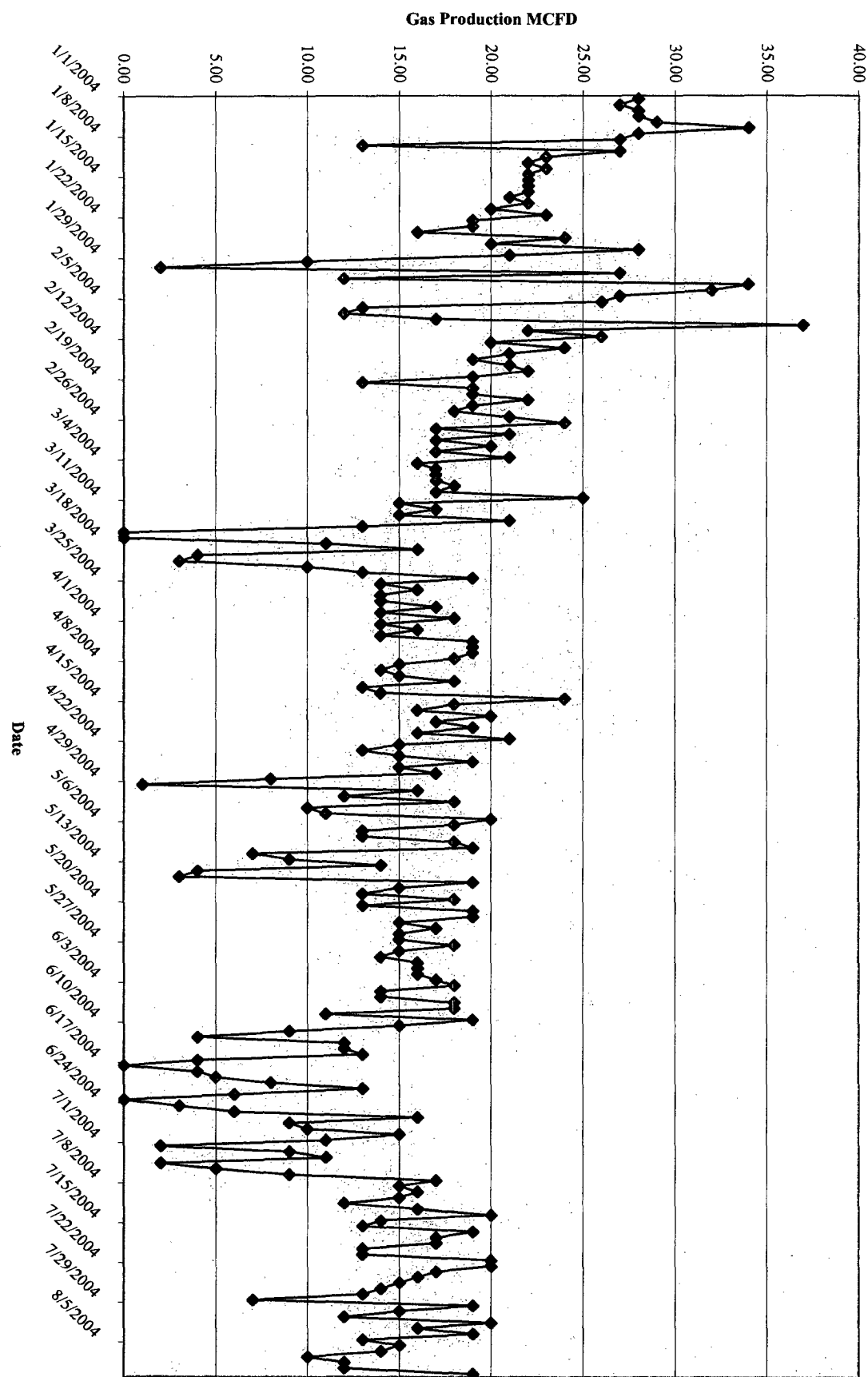
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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	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

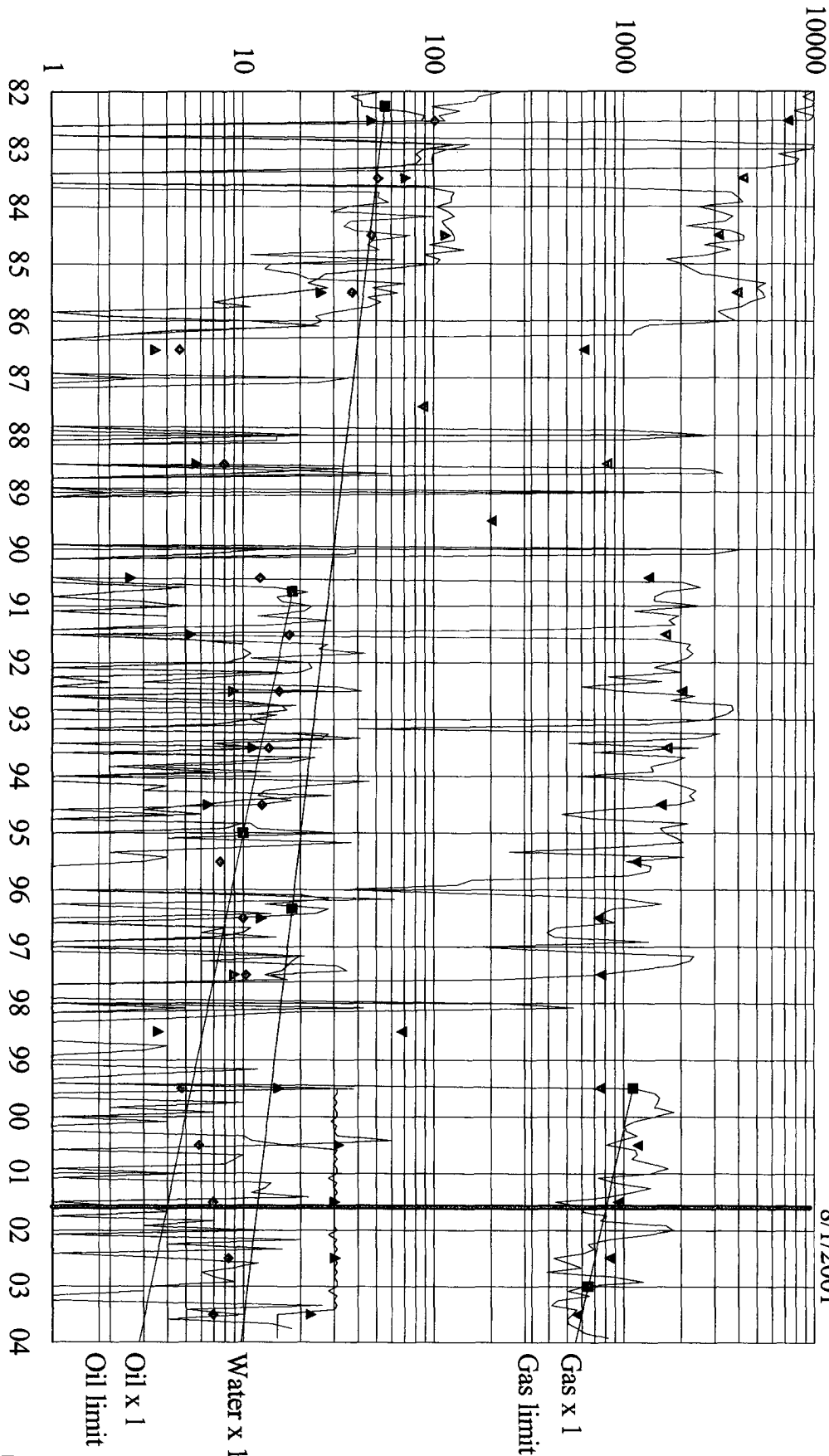
Federal 20-1R Production



PRODUCTION GRAPH

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

Effective Date
8/1/2001



25104525N09W20100DK
Federal 20-1R (1R - 100%)
OLD

Basin DK
San Juan, NM

[3452512]
Basin DK
201 25N 9W

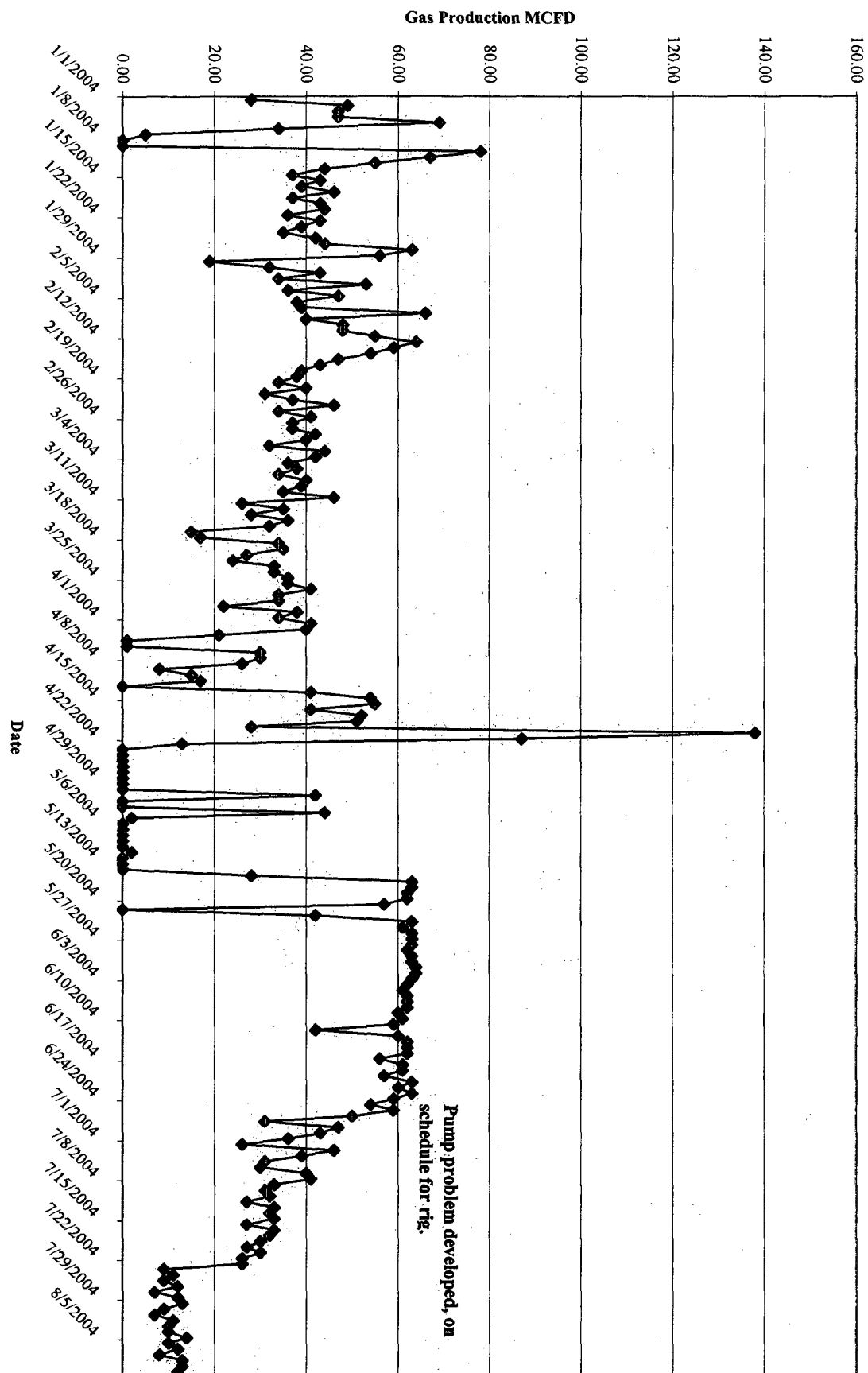
Cumulative:
Remaining:
Ultimate:

Oil (bbl)
4,596
185
4,781

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

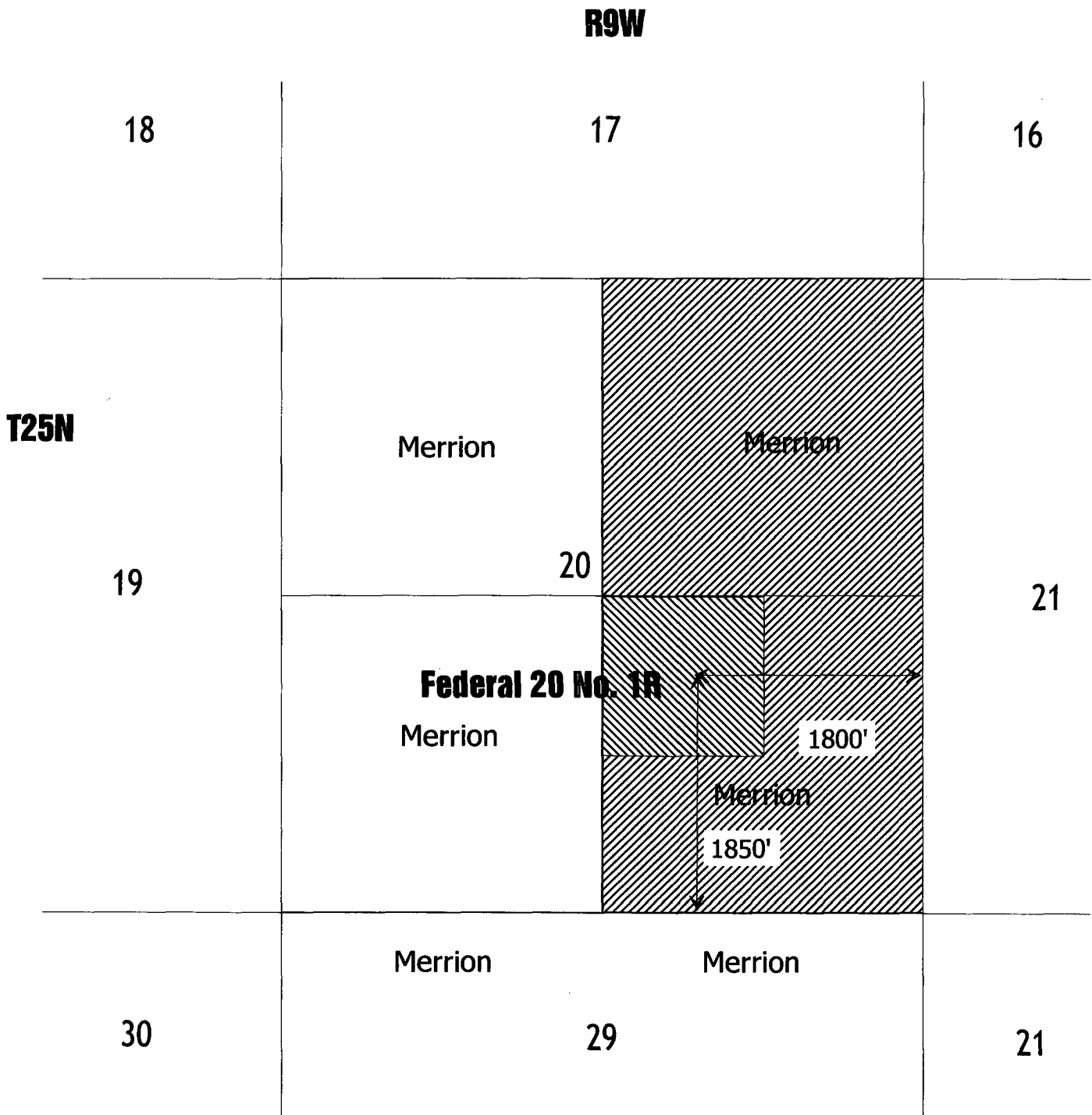
Water (bbl)
5,525
648
6,173

Federal 20-1E Production



Federal 20 No. 1R

Downhole Commingling Application



LEGEND

