

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 (505) 334-6178

| RRUTHERS IOR | | | | AZTEC, NEW (505) 3 |
|---|-------------|------------|---------|--------------------|
| Date: | | | | |
| Oil Conservation Divi P.O. Box 2088 Santa Fe, NM 87504-2 | | | , | |
| Re: Proposed MCProposed DHCProposed NSLProposed SWDProposed WFXProposed PMX | | | | |
| Gentlemen: I have examined the a | | \sum_{t} | 14 199 | O |
| I have examined the a | pplication | dated 1001 | <u></u> | |
| for the Brailing | · | Lease & We | 11 No. | . <u></u> |
| 19781911 Unit, S-T-R | _and my rec | | | follows: |
| - Opprove | | | | |
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| | | | | |
| Yours truly, | | | | |
| 2)0 | | | | |

August 30, 1990

Mr William J. LeMay N. M. Oil Conservation Division P. O. Box 2088 87501-2088 Santa Fe, N.M.

Re:

Reid #20 1030' FNL; 830' FEL Section 19, T28N R09W San Juan County, N. M.



Dear Mr. LeMay:

Meridian Oil Inc. is applying for an administrative downhole commingling order for the referenced well in the Blanco Mesaverde and Basin Dakota fields. ownership of the zones to be commingled is common. offset operator to the south and east is Amoco Production Company with Meridian Oil having acreage to the north and west. The Bureau of Land Management and this offset operator will receive notification of this proposed downhole commingling.

A packer leakage test conducted in April 1990 indicated that the two producing intervals in the subject well have communicated by either a tubing or packer leak. This well has produced since 1960 from the Dakota and since 1972 from the Mesaverde. It has a producing capacity of only 52 MCF/D and 30 MCF/D, respectively, and both sides are listed as "marginal" in the State Proration Schedule. The cumulative production is 1246 MMCF & 25,388 BO from the Dakota and 398 MMCF & 9864 BO from the Mesaverde, as of July 1, 1990. The commingling of the subject well in the twilight of its producing life will result in better producing efficiency. Granting this application will be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

We plan to commingle this well by pulling the tubing and packer seal assembly. The permanent packer will be extracted and a single string of tubing run to the lower producing interval.

The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed downhole commingling. The fluids from each zone are compatible and no precipitates will be formed to cause damage to either reservoir. The daily production will not exceed the limit of Rule 303c, Section 1a, Part 1. The oil from this well is already

Mr. William J. LeMay Reid #20 Page 2

surface commingled as per commingling order PC-700 on May 19, 1988 with no detrimental affects. The oil has an API oil gravity close to 48 degrees. The shut-in casing pressure for the Mesaverde and Dakota are 495 psi and 750 psi, respectively. The Dakota makes no water but the Mesaverde has produced about 10 gallons of water per day. The water is also commingled at the surface with no detrimental affects.

The District Office in Aztec will be notified anytime the commingled well is shut-in for seven (7) consecutive days.

Using the well's production from 1987 and 1988, which was before the tubing or packer leak developed, we propose the following production allocation. See the attached calculations.

Mesaverde gas 39% Mesaverde oil 79%

Dakota gas 61% Dakota oil 21%

Included with this letter is a plat showing ownership of offsetting leases, a copy of the letter to the offset operator and BLM, wellbore diagram, pertinent data sheet, and an allocation calculation sheet.

Yours truly,

P. M. Pippin

Sr. Production Engineer

PMP:pmp attachments

cc: Frank Chavez - OCD

August 30, 1990

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

Gentlemen:

Meridian Oil, Inc. is in the process of applying for a downhole commingling order for their Reid #20 MV/DK well located 1030' FNL 830' FEL, Section 19 T28N R09W, N.M.P.M., San Juan County, New Mexico, in the Blanco Mesaverde and Basin Dakota.

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 the attached copy of this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Yours truly,

P. M. Pippin

Sr. Production Engineer

PMP:pmp

The above downhole commingling request is hereby approved:

Date:____

August 30, 1990

Bureau of Land Management 1235 La Plata Hwy. Farmington, N. M. 87401

Gentlemen:

Meridian Oil, Inc. is in the process of applying for a downhole commingling order for their Reid #20 MV/DK well located 1030' FNL 830' FEL, Section 19 T28N R09W, N.M.P.M., San Juan County, New Mexico, in the Blanco Mesaverde and Basin Dakota.

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 the attached copy of this letter and returning it to this office.

Your prompt attention to this matter would be appreciated.

Yours truly,

P. M. Pippin

Sr. Production Engineer

PMP:pmp

The above downhole commingling request is hereby approved:

Date:

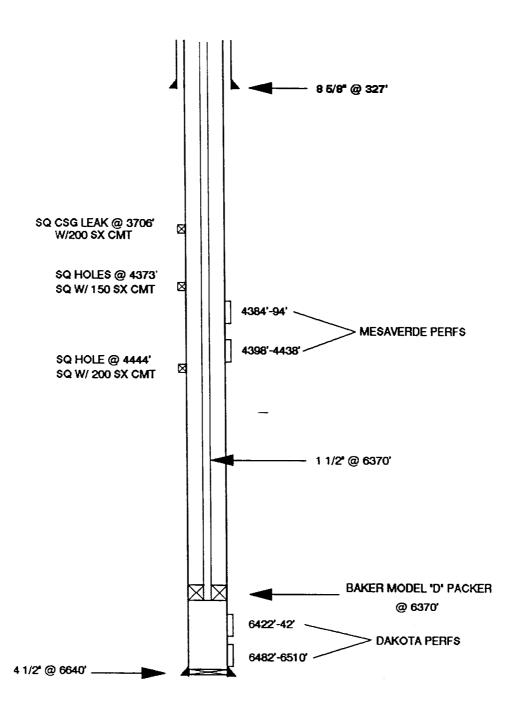
Commingle Application for Mesaverde/Dakota Reid #20 MV/DK San Juan County, N. M.

MV & DK Proration Units

| | 18 | 17 | | |
|--------------|--------------------------------|--------------|----------|--|
| | Meridian Oil | Meridian Oil | Amoco | |
| T 28 N | REID #20 19 Meridian Oil | 2 Am | O 0CO | |
| | Amoco 30 | Amoco 29 | | |
| | Meridian Oil | Meridian Oil | | |

REID #20 MV/DK

UNIT A SECTION 19 T28N R09W SAN JUAN COUNTY, NEW MEXICO



Pertinent Data Sheet - REID #20 MV/DK

Location: 1030'FNL 830' FEL, SEC. 19 T28N R09W, SAN JUAN COUNTY, N.M.

<u>Field:</u> Blanco Mesaverde <u>Elevation:</u> 5799'GR <u>TD:</u> 6641'

Basin Dakota 12'KB PBTD: 6640'

GWI: 100.00%

Completed: 11/17/60 - DK NRI: 85.00%

Recompleted: 1/29/72 - Dual MV/DK

<u>Initial Potential:</u>

DK -- AOF=5358 MCF/D SICP=1974 PSI

MV -- 165 MCF/D & 23 BOPD (Test after recomp.)

Casing Record:

| Hole Size | <u>Csq. Size</u> | <u>Wt. &</u> | Grade | Depth Set | Cement | Top/Cmt. |
|---------------|------------------|------------------|------------|-----------|---------------|-----------|
| 12 1/4" | 8 5/8" | 24.0# | J-55 | 327′ | 225sx | CIRC. CMT |
| 6 3/4" 4 1/2" | 4 1/2" | 9.5/11.6# | J-55 | 6640′ | 250sx | 5480′ |
| | | | DV @ 2219' | 150sx | 1755 <i>′</i> | |

Tubing Record:

198 jts. 1 1/2" 2.7# IJ 6370'w/Baker mod. D pkr @ 6370' & F nip. and sliding sleeve

Formation Tops:

Pictured Cliffs 2010'
Cliff House 3680'
Point Lookour 4340'
Gallup 5524'
Greenhorn 6300'
Dakota 6422'

Logging Record: Induction, Casing Inspection, CBL

<u>Stimulation:</u> Dakota: Perfed @ 6422'-42' & 6482'-6510' w/4 spf. Fraced w/20,000# sand in water. AIR 38 BPM, ATP 2800 PSI, SIP 1200 PSI.

Workover History: 2/7/68--Set BP @ 6376'. Ran McCullough Casing Inspection Log & found hole @ 3706'. Squeezed w/200sx. Drilled out.

Mesaverde: 1/29/72 Perfed SQ hole @ 4444' & sq w/200 sx cmt. Perfed SQ holes @ 4373' & sq w/150 sx cmt. Perfed @ 4384'-94' & 4398'-4438'. Fraced w40,000# 20/40 & 20,000# 10/20. AIR 29 BPM, ATP 3900 psi. 12/30/85--Pulled & lay down 1" tbg. Pull 1 1/2" tbg. and pkr seal assembly & repair.

Production History: Dakota: Cum. = 1246 MMCF & 25,388 BO. Capacity = 52 MCF/D.
Mesaverde: Cum = 398 MMCF & 9,864 BO. Capacity = 30 MCF/D (Up 4 1/2"-1 1/2" annulus)
See attached production curves.

Commingle Application for Mesaverde/Dakota Reid #20 MV/DK San Juan County, N.M.

Allocation Calculation

Mesaverde Production 1987 and 1988 (before tubing leak) 18.441 MMCF 375 BO

Dakota Production 1987 and 1988 (before tubing leak) 29.239 MMCF 100 BO

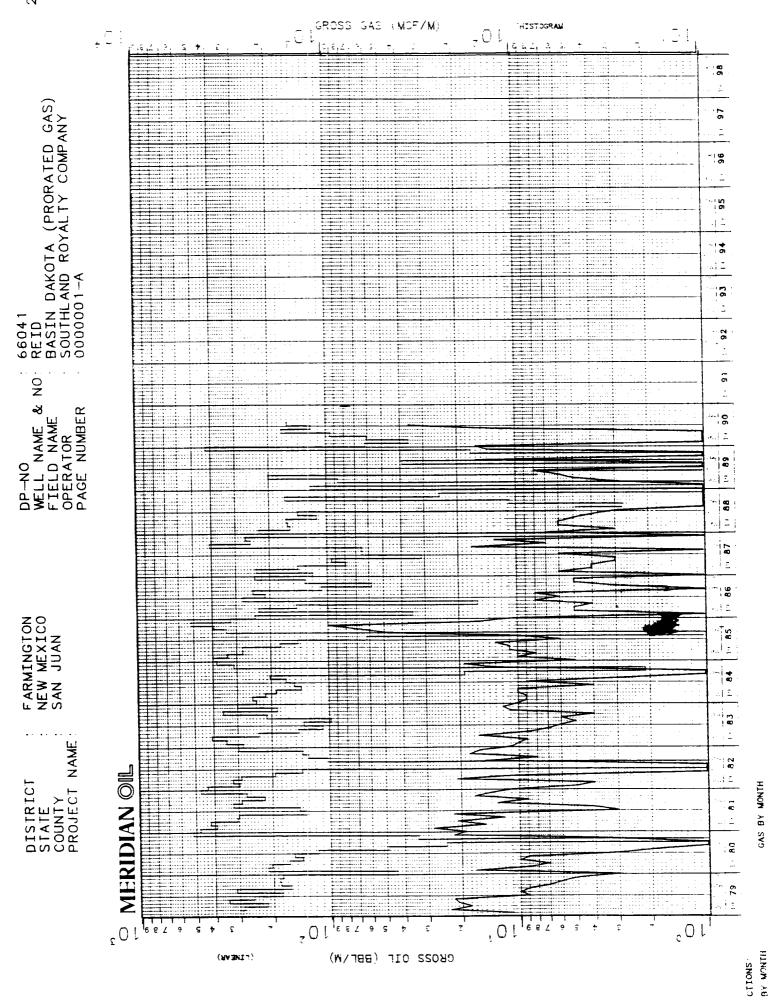
Total 47.68 MMCF 475 BO

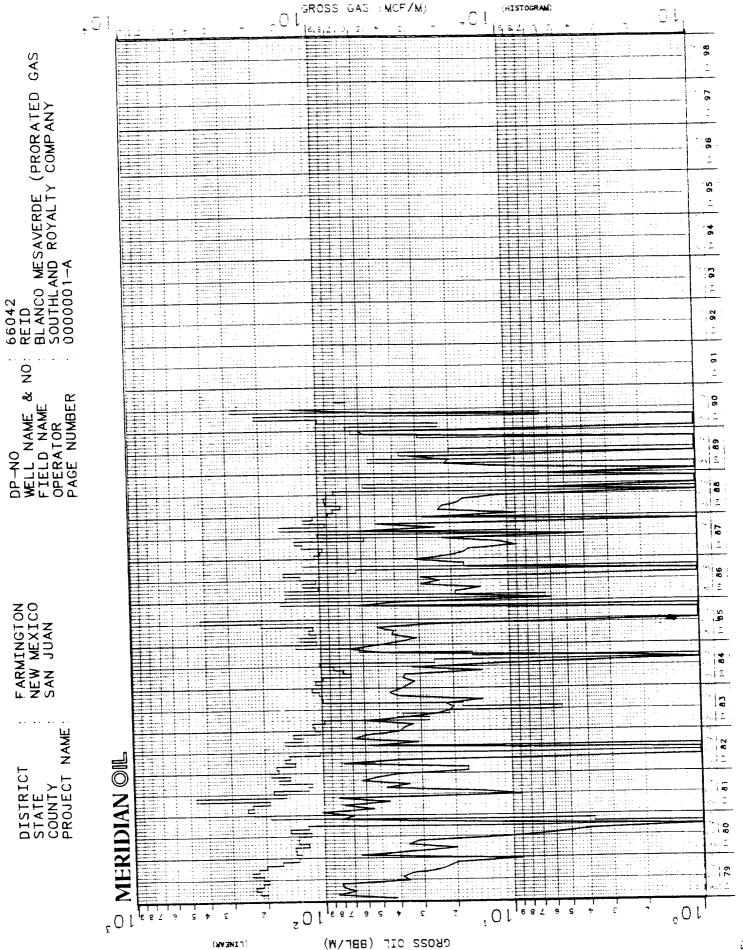
Mesaverde Gas Allocation = $\frac{18.441}{47.68}$ = 39%

Mesverde Oil Allocation = $\frac{375}{475}$ = 79%

Dakota Gas Allocation = $\frac{29.239}{47.68}$ = 61%

Dakota Oil Allocation = $\frac{100}{475}$ = 21%





ELECTIONS:

BY MONTH