

BARBARA FASKEN
FASKEN OIL AND RANCH INTERESTS

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NEW MEXICO OIL CONSERVATION DIVISION
RECEIVED
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June 10, 1991

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Attn: David Catanach

Re: Request for Exception to Rule 303-A
Barbara Fasken
Feil Federal No. 1
660' FNL & 660' FWL
Section 28, T-20-S, R-25-E
Cemetery (Morrow) Field
Eddy County, New Mexico

Gentlemen:

The following additional information is furnished as per your request dated April 19, 1991 for the subject well:

Name of Pools to be commingled:
Cemetery (Morrow)
Cemetery, North (Atoka)

A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.
See Attachment A (map)

A current 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

Morrow
9384'-9532'
FTP-50 psi, Rate-25 mcfpd

Atoka
9155'-9345'
FTP-50 psi, Rate-50 mcfpd
Production rate derived from subtracting Morrow flow rate before Atoka zones were perforated from total producing rate after Atoka zones were perforated.

A production decline curve for the original Morrow zone is attached. See Attachment B. The newly opened Atoka zone was completed naturally with no stimulation.

Atoka reserves are estimated to be 17,300 mcf using a 50%/yr. exponential decline rate. There are no nearby Atoka wells with a established decline curve for comparison. However, a 50%/yr. decline is typical in the Atoka zones of Eddy County.

Remaining Morrow reserves are estimated at 9,500 mcf based on the 42%/yr. decline rate established since this well was completed.

Estimated bottom hole pressure of Morrow = 3706 psi based on the original pressure gradient of the original Morrow completion 9384-96' of .392 psi/ft.

Estimated bottom hole pressure of Atoka = 3065 psi based on bottom hole pressure measurement conducted on 5-6-91.

Both the Atoka and Morrow zones produce only dry sweet gas. There are no fluid incompatibility problems.

The value of the commingled production will not be less than the sum of the values of the individual streams. Both zones produce dry sweet gas.

Remaining reserves in the Morrow zone are estimated to be 9,500 mcf. Atoka reserves are estimated at 17,300 mcf. Thus total combined reserves remaining are 26,800 mcf. Allocation of production would be as follows:

Gas: Morrow - $\frac{9,500 \text{ mcf}}{26,800 \text{ mcf}} = 35.4\%$

Atoka - $\frac{17,300 \text{ mcf}}{26,800 \text{ mcf}} = 64.6\%$

Condensate: Use the same ratios as for gas production.

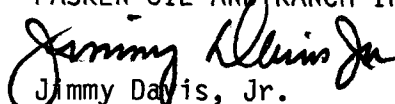
The offset operators for this area and the Bureau of Land Management have been notified of the proposed commingling of the Feil Federal No. 1.

The commingling of the Atoka and Morrow zones in the subject well will allow the recovery of some 26,800 mcf. The well will have to be plugged and abandoned if these zones are not commingled, since costs to isolate and produce each zone separately would be more than the value of the remaining gas reserves.

Please call me at 915-687-1777 should you have any questions.

Yours truly,

FASKEN OIL AND RANCH INTERESTS



Jimmy Davis, Jr.

Drilling and Operations Superintendent

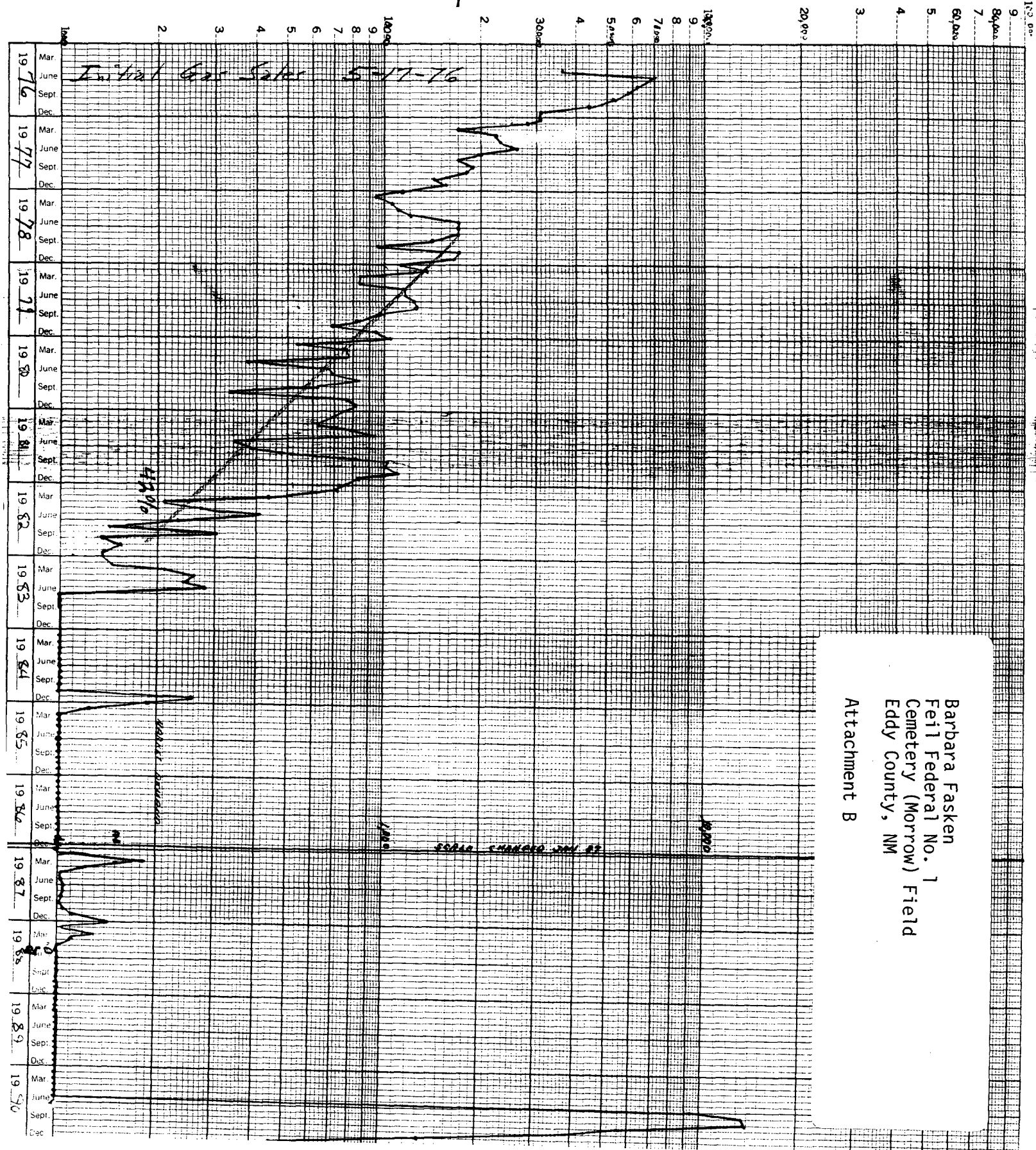
JWD:sb

Attmts.

cc:Read File

Well File

mcf/month



Barbara Fasken
Feil Federal No. 1
Cemetery (Morrow) Field
Eddy County, NM
Attachment B

SUBJECT Feil Federal No. 1

FILE Cemetery (Morrow) Field

DATE Eddy County, N.M.

ENGINEERING MEMORANDUM

