

DHC

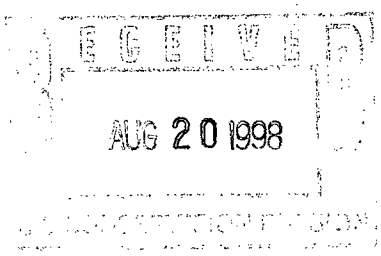
9/9/98

FASKEN OIL AND RANCH, LTD.

303 WEST WALL AVENUE, SUITE 1900
MIDLAND, TEXAS 79701-5116
(915) 687-1777

2098

August 18, 1998



The Oil Conservation Division
Energy, Minerals, and Natural Resources Department
2040 South Pacheco
Santa Fe, New Mexico 87505

Attention: Mr. David Catanach

Re: Downhole Commingle
Strawn and Morrow Zones
Shell Federal #5
Indian Basin (Strawn) Pool
Cemetery (Morrow) Pool
Sec 5, T21S, R24E
Eddy County, New Mexico

Dear Mr. Catanach:

Fasken respectfully requests your consideration of the attached application for downhole commingling of the subject zones. The combined production is 54 mcfpd. The recent work to add the Strawn has added no more than 10 mcfpd to the flow.

Thank you for your help in this matter.

Sincerely,

Carl W. Brown

Carl W. Brown
Petroleum Engineer

CWB/cb
cc: Artesia OCD
File
(Sh5ocd.doc)

Application for Downhole Commingling
Supporting Data

1. Operator:

Fasken Oil and Ranch, Ltd.
303 W. Wall, Suite 1900
Midland, Texas 79701-5116

2. Lease:

Shell Federal #5
Unit G, Section 5, T-21-S, R-24-E
Pools: Indian Basin (Strawn)
Cemetary (Morrow)

30-015-22900

Added marginal Strawn zone June, 1998.

3. Plat attached.

4. Current productivity test:

Combined production 54 MCFPD @ 30 psi 7-15-98.

Indian Basin (Strawn)
Perfs: 8744'-9187' (35 holes overall)

Cemetary (Morrow)
Perfs: 9497'-9573', 9619'-9679' (Original 1979 completion)

5. Production decline history plot attached included both zones.

6. Zone Pressures:

Indian Basin (Strawn) Upper Zone
Shut-in Tubing Pressure 8-5-98: 770 psi

Cemetary (Morrow) Lower Zone
Shut-in Tubing Pressure 7-15-97 C-125: 160 psi

Zones are separated by a packer at 9454' with a check valve in profile nipple which allows Morrow flow when the well is on stream, but will not allow crossflow into the Morrow when the well is shut-in.

7. Fluids from each zone are compatible.

8. The value of the commingled fluids are no less than the sum of the value of the separate streams.

9. The proposed allocation formula is based on an estimate of relative productivity of each zone:

<u>Zone</u>	<u>Gas</u>	<u>Condensate</u>
Strawn	20%	0%
Morrow	80%	100%

10. The commingling is necessary to continue to produce the marginal Morrow zone. The Strawn zone is not economic on its own.

11. There is no crossflow between the zones due to the check valve in the packer at 9454'.

12. The ownership of both zones is common for all interests.
13. The offset operator and the Bureau of Land Management have been notified in writing at the following addresses:

Faulconer, Vernon E., Inc.
P. O. Box 7995
Tyler, Texas 75711

Bureau of Land Management
2920 West Second Street
Roswell, New Mexico 88201

Rate/Time Graph

Project: L:\PIAPPS\DWIGHTS\PTOOLS25\FLML98.MDB

Date: 7/31/1998
Time: 11:47 AM

Lease Name: SHELL FEDERAL COM (000005)
County, ST: EDDY, NM
Location: 0-0-0

Field Name: CEMETARY (MORROW) PM
Operator: FASKEN BARBARA

SHELL FEDERAL COM - CEMETARY (MORROW) PM

