

MERIDIAN OIL

July 22, 1986

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Richard L. Stamets

RE: Application to Downhole Commingle
Bone Spring and Wolfcamp Zones
Aztec "22" Federal #1
South Corbin Field
Lea County, New Mexico

Location: 1980' FN & WL, Sec. 22,
T-18-S, R-33-E

Gentlemen:

Pursuant to the provisions of Statewide Rule 303-C, Meridian Oil Inc. (operated for Southland Royalty Company) respectfully requests administrative approval to commingle production within the wellbore from the Bone Spring and Wolfcamp zones of the subject well.

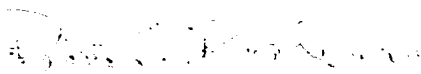
In review, the subject well was drilled as a step-out development well to 13,610' during June 1985 to test the Morrow. After completing the Morrow at 13,242-517' and Atoka at 12,734-48' both zones were abandoned due to noncommercial rates. The Strawn zone at 12,400-10' was then completed during November 1985 for a flowing initial potential of 62 BO + 0 BW + 80 MCF per day. This zone had produced 5,334 BO and was flowing 46 BO + 0 BW + 100 MCF per day when it was temporarily abandoned with a cast iron bridge plug, so that the Bone Spring and Wolfcamp zones could be tested. Southland Royalty Company undertook this testing of uphole potential since additional development drilling could not be justified solely on the Strawn zone. The data obtained was also required to properly evaluate expiring farmout acreage.

The recompletion and testing of 4 intervals, 2 each in the Wolfcamp and Bone Spring zones, was begun on January 16, 1986, and completed on February 17, 1986. The test results of these intervals are attached. The Wolfcamp perforations 10,745-11,332' were temporarily abandoned with a cast iron bridge plug prior to testing the Bone Spring formation. Pumping equipment was installed and the Bone Spring initial potential for 26 BO + 9 BW + 10 MCF per day on April 21, 1986. This zone is currently pumped every other day at 4 BO + 2 BW per day. The current well status is shown on the attached schematic.

With the indicated marginal production from both zones, installation of dual equipment cannot be justified. Also, due to the current oil prices, a workover to cement squeeze the two Bone Spring perforated intervals and then drill out to the Wolfcamp is not feasible. In the interest of conservation and prevention of waste, we propose to downhole commingle the Bone Spring and Wolfcamp in the subject well.

Enclosed is pertinent data supporting this application as outlined in Rule No. 303-C. If additional information is necessary, please call John Stark at our Midland office.

Very respectfully yours,


R. L. Bradshaw
Sr. Staff Environmental/Regulatory
Specialist

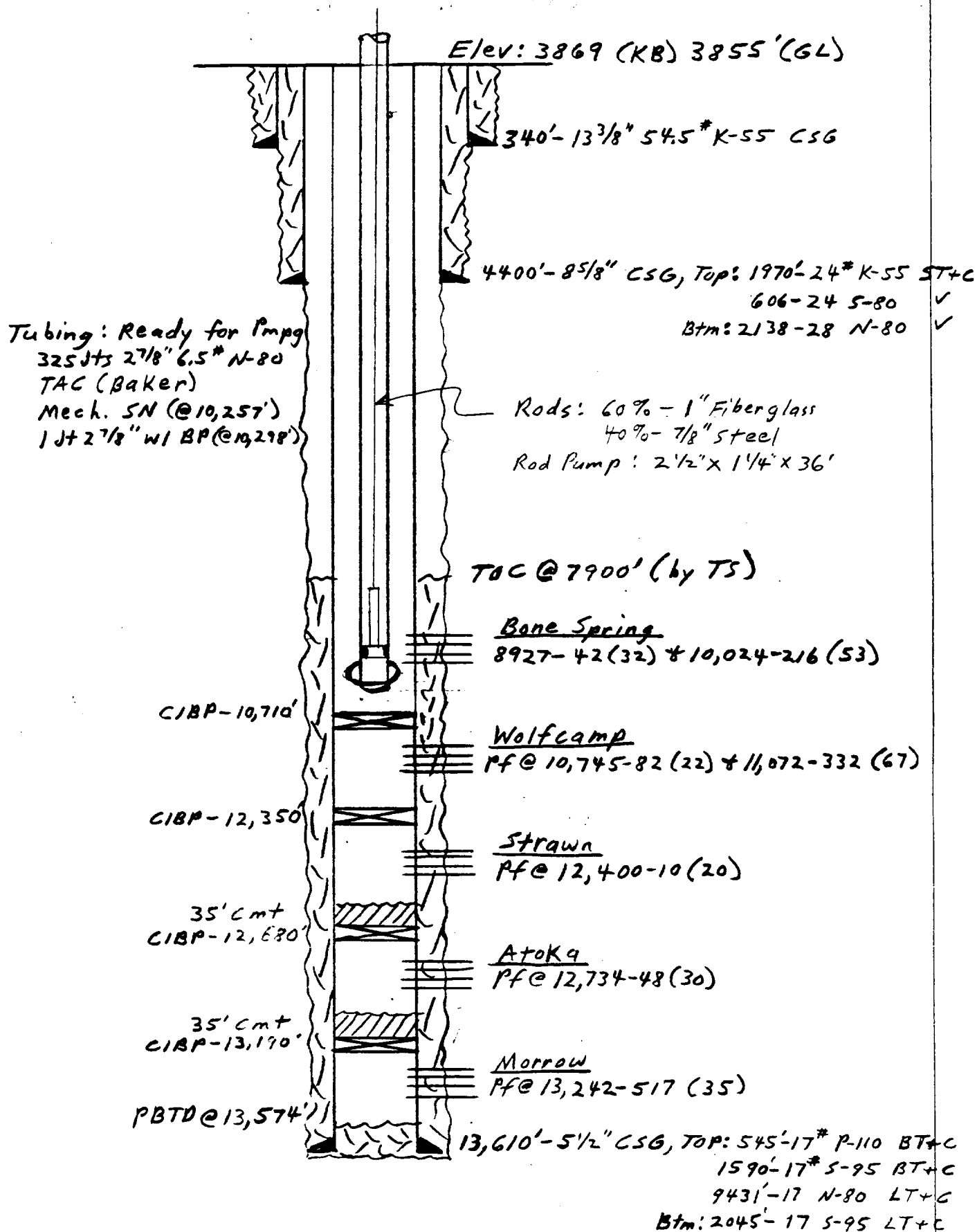
RLB/JRS/cn

Attachments

0079C:072186

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LRS

Aztec 22 Federal #1

Rule 303-C Required Data

- a) Operator: Meridian Oil Inc. (previously Southland Royalty Company)
- b) Lease, Well, Location and Zones to be Commingled:
Aztec "22" Federal #1
1980' FNL & FWL, Section 22, T-18-S, R-33-E
Lea County, New Mexico
Bone Spring and Wolfcamp
- c) Plat of Area showing offset operators and acreage dedicated:
Attached
- d&e) Because this is a newly recompleted well, we are submitting a BLM sundry notice showing the recompletion history, a summary of the swab tests taken of the individual Bone Spring and Wolfcamp intervals, a listing of production from the Bone Spring only and projected Wolfcamp production rates.
- f) Estimated Bottom-hole pressures:
Calculated bottom-hole pressures for the Bone Spring and Wolfcamp zones are 2,983 psi and 3,574 psi, respectfully. Details of calculations are attached.
- g) Fluid Description:
Oil samples were collected during the recompletion to the Bone Spring and Wolfcamp zones. These samples were then taken to a lab for evaluation. The results are on the attached lab report and show that the crudes are very similar, especially for such unstable test periods with no surface treating or separation equipment. Also, attached is a copy of a Wolfcamp oil sales ticket from the Federal "MA" #2, the west offset located 1980' FSL, 660' FEL, 21-18S-33E. This well currently pumps 7 BO + 4BW + 4 MCF per day from the Wolfcamp. Based on the API gravity from the sales ticket, the Wolfcamp oil appears to be more similar to the Bone Spring oil than the lab tests indicated.

h) Value of Commingled Fluid:

The Bone Spring oil from the subject well and the Wolfcamp oil from the Federal "MA" #2 are both classified as intermediate (sweet) oil by the purchaser (The Permian Corp.). Also the below table shows that there is only a 3¢/BO difference in value.

	<u>Bone Spring</u>	<u>Wolfcamp</u>
API Gravity	38.7	40.9
Crude Classification	Intermediate	Intermediate
Base Value (40° API), \$/BO	11.75	11.75
Corrections Below 40° API	-2.0¢/° API	-
Corrections 40° to 45° API	-	None (Flat price)
Current Value, \$/BO	11.72	11.75

i) Allocation of Production:

Since the Wolfcamp zone was only swab tested for a very short period, no accurate allocation can currently be made. However, it is recommended that the two zones be commingled downhole and produced until stabilized rates are obtained. Then from the stabilized Bone Spring rates discussed earlier, the contribution from the Wolfcamp could be determined. A final allocation would then be submitted.

j) Notification of Offset Operators:

Copies of this application have been furnished to all offset operators by certified mail (see attached mailing list). Also, since the subject well is on Federal land, the United States Bureau of Land Management has also been notified.

k) Ownership and Royalty Interests:

Ownership of the two pools to be commingled is common and correlative rights will not be violated.

l) Future Secondary Operations:

Currently, there are no waterfloods in either zone and none are known to be in the planning. The proposed commingling would not jeopardize the efficiency of future secondary recovery operations in either zone.

m) Production Methods:

The commingled production will be pumped and the fluid level monitored to maintain a pumped off condition. This will also eliminate the possibility of cross flow between zones.

[illegible]