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May 22, 1991

Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

ATTN: MR. RON FELLOWS

RE: Navajo Tribal N, P, & U Leases
Lease Nos. 14-20-603-5035
14-20-603-5033
14-20-603-5034

Please refer to your recent letters concerning the status of several wells on the subject Navajo Tribal Leases. In that letter you have required Bayless to advise you of our future plans for these wells. Attached herewith are Sundry Notices for the subject wells, requesting that they be approved for long term shut in. Given Bayless' depletion plan, we urge you to consider these requests on a group basis rather than an individual well basis.

As you are aware, the subject Navajo Tribal leases are in the Tocito Dome Field which has been productive since 1963. The field is now nearly depleted. Bayless is attempting to operate these leases economically such that recovery of remaining reserves is maximized. The advanced state of depletion of the field prohibits major new investment required to bring all nonproducing wells into production. This investment would include, but not be limited to, pumping equipment and tubulars, facility and flowline repair, and compression.

Bayless plans to continue production of the subject leases by rotating production of these wells on a long term basis. Bayless believes this plan is the most effective means to maximize field ultimate recovery. The reasons supporting the plan are set forth below.

The initial fluid distribution in the Tocito Dome Field has never been fully understood, even though the reservoir was extensively cored and studied by several Amoco Engineers and Geologists. Though not apparent on open hole logs, the reservoirs in the Penn "D" are poorly connected vertically, and stratigraphically pinch out laterally. Horizontal permeability varies from poor in some zones to outstanding in others. In some areas of the reservoir water occurs above oil. The reservoir oil originally was fully gas saturated with a gas cap. As oil production continued, solution gas was liberated in the reservoir. This free gas moved up dip until a barrier encountered, and displaced oil in the process. Production also coned water in some areas, further displacing oil.

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Water disposal and gas injection projects further complicate the fluid distribution scenario. Injected water and gas has channeled into some areas of the reservoirs, but not into others.

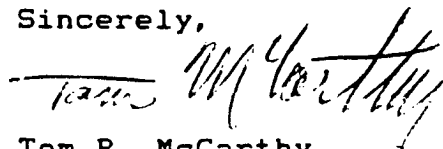
Amoco recognized this problem when they operated in the field. Their foreman has told us that they shut in wells with high gas or water cuts, allowing oil resaturation and higher oil cuts when the wells were produced later. Bayless has returned wells to production at initial rates of over 100 BOPD, that when last produced were uneconomic.

Bayless' plan is to recommence production on several of these wells on a rotating basis in an attempt to find trapped or resaturated oil and gas. Obviously this cannot be done without the existing wellbores. For the most part, additional drilling for these remaining reserves cannot be justified. Putting all shut in wells back on production at this time does not make good engineering sense, in addition to not being a sound economic policy. Many of the remaining shut in wells should be pumped again on a rotating basis in an effort to find oil redistributed by previous operating practices.

We request that BLM approve long term shut in status for all the subject wells not currently producing. Bayless plans to rotate its existing production equipment between the current producing wells and the remaining non plugged wellbores in the field on a long term basis. This plan will maximize remaining oil recovery from this depleted field, and will benefit both Bayless and the Navajo Nation.

Sundry notices requesting long-term shut in are provided with this letter for your approval. Please contact me if you wish to discuss this matter further.

Sincerely,

A handwritten signature in dark ink, appearing to read "Tom R. McCarthy", is written over a horizontal line.

Tom R. McCarthy
Petroleum Engineer

Attachments