

III. Allocation Methodology

Exhibit 3 shows the Morrow historical production while Exhibit 4 shows the production history from the Atoka zone. The current Morrow interval is on a stable decline at 60 MCFD, 1 BOPD, and 15 BWPD. Merriam proposes to obtain a stabilized production test on the Atoka zone and use a fixed percentage to allocate future production between the two zones. If subsequent data indicates the need, additional testing may be done in the future to adjust the allocation percentages.

IV. Reservoir Fluid Compatibility

Water analyses are not available for wells in the immediate area. However, the waters of the Atoka and Morrow have been generally determined to be compatible across the basin based on other similar applications to the OCD.

V. Cross Flow Between Zones

The current reservoir pressure of the Morrow is estimated to be 1800 psi, while the Atoka is estimated to be at 1100 psi. With a flowing line pressure of approximately 200 psi, crossflow is not anticipated to be a problem.

VI. Well Ownership

The spacing unit and ownership of the two zones are identical.

VII. Summary

Both the Atoka and the Morrow have declined to the point where they are economically marginal. Commingling the zones will extend the economic life, maximize reserves and protect correlative rights. Therefore, we request your approval of this application.

Please call me with questions or if additional information is required.

Sincerely,



George F. Sharpe  
Manager - Oil & Gas Investments

xc: Hobbs OCD  
Commissioner of Public Lands

