BARBER OIL, INC.

111 West Mermod Post Office Box 1658 CARLSBAD, NEW MEXICO 88220 (505) 887-2566

July 13, 1992

Bureau of Land Management P. O. Box 1778 Carlsbad, NM 88221-1778

Attn: Tim O'Brien & Jim Amos

Re: Comingling Agreement

Barber Field

Eddy County, New Mexico

Gentlemen:

Barber Oil, Inc. herewith requests approval for a Comingling Agreement to cover production from the following leases:

Colglazier Federal - LC-029096-C State Lease B-2386 - Assignment #1 State Lease B-2386 - Assignment #2 Stovall-Wood Fee Lease

These leases are hereinafter referred to as "Barber", "Barber leases" and "Barber production".

As you may be aware we have recently sought approval for a Unit Agreement of the above lands and that request has been denied by the BLM for statutory reasons. As a result, we are now seeking approval of a Comingling Agreement to prevent premature plugging of the wells.

Barber has, since it's drilling in the late 1930's, always produced a great deal of water. Production is from the Yates-Seven Rivers at approximately 1,500 feet and is about 99% water as it enters the tank battery. Barber Oil, Inc. has, over the years, constructed a system of manifolds, separation tanks, a boiler, a water disposal well and oil storage facilties located on the Stovall-Wood fee lease. This high water volume and low ratio to oil has necessitated that the lease be produced into a common faciltiy for obvious economic reasons. To separate the emulsion of oil and water requires time, chemicals and sometimes heat to acheive a good separation. The gravity of the oil, once removed is about 19° at 60 degrees F. The low gravity crude combined with produced water volumes that can approach 5,000 barrels per day requires considerable settling time. AS a result, we attempt to "quiet" the emulsion through a system of 750 barrel settling tanks where the emulsion has the opportunity to separate with the water going to the disposal well and the oil to the sales tanks. AT one time, Barber produced a 10% oil cut or about 500 barrels of oil per day. We are currently experiencing less than 1% oil cut, with the same amount of water production, or about 42 barrels of crude per day. The cost of setting

Comingling Agreement Barber Field

up heating facilties, chemcial pumps, settling tanks. transfer pumps, oil lines, storage tanks, testing tanks, etc. for each of the three leases (assuming we would not have to set up a separate facility for the two divisions of the State lease) would result in a considerable capital expenditure that could not be recovered with produciton averaging less than 4.7 barrles per day per well. Additionally, operating costs on three separate tank batteries would be prohibitive, as additional manpower, electricity and maintenance costs would be required. We would estimate the capital expenditures required to exceed \$250,000. The additional operating costs would exceed income produced by the sale of the oil by at least 30%. In both cases we have used conservative numbers and in both cases the numbers will not work.

We would propose that historic production figures be used in allocating oil to the separate leases of the Barber leases. In the proposed Unit Agreement we used figures from our records dating back to 1956 and arrived at a "unit participation factor" by the following formula:

100 X <u>Lease Cumulative Oil Recovery</u> All Oil Recovery from Barber Leases

For example: Colglazier Federal under this formula would be as follows:

100 X $\frac{237,778}{1,066,277}$ = 22.299834% of all products produced.

What we call the "State" lease (Assignment #1) would result in a factor of 16.295672%. State "A" - 17.721005% and Stovall-Wood 43.683489% of all crude produced.

This formula, based on almost forty years of production, over a great number of years in which oil tests were performed to ascertain the actual production allocated to each lease, seems a reasonable, simple and cost effective method to allocate production to each of the leases.

Please indicate by executing below your approval of this comingling agreement, or in absence of said execution, please forward to us the requirements you have in order to have a Comingling Agreement approved.

Sincerely,

| Michael D. Gerringer President | APPROVED THIS DAY OF | |
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| | 199 BY | |
| | 177 | OF |
| | THE BUREAU OF LAND MANAGEMENT. | |
| | | |
| | SIGNATURE | |