## Memo

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To: Mark Hafer, Timberline Forest Inventory Consultants

From: Ian Cameron

CC:

Date: January 8, 2002

Project: PTM-013 Yield Tables for TFL 8

Re: Yield adjustments for NDT4 open forest

In response to your request for information on the yield impacts of managing stands for NDT4 Open Forest criteria, I've solicited opinions on appropriate stand densities from MOF staff in Kamloops Region and consulted with Pope & Talbot staff about current prescriptions for this type. The recommended densities appear to range between about 75 trees/ha and 200 trees/ha. The intent is to maintain the stands in this open state either through partial cutting or under-burning. It is not clear whether there will be any meaningful harvest from these stands beyond the initial cutting designed to create the open conditions. Yield curves, however, can serve as predictions of standing volume in these stands.

The densities envisioned for NDT4 Open Forest are below the minimum density available in TIPSY, which is 278 trees/ha (6 m spacing). The MOF Research Branch did some TASS runs that allowed me to compare the yields for stands established at 100 trees/ha (as an example of an Open Forest regime) and 1500 trees/ha (an example of full stocking achieved through planting). At age 100, the yield from the open forest regime is 18.5% of the fully stocked plantation.

In this range of densities, nearly all the trees are open grown and the yields can be expected to be roughly proportional to the number of trees. Therefore, the density range of 75-200 trees/ha should correspond to yield ratios in the range of 14% to 37%.

For the timber supply analysis for TFL 8, I recommend that you use 20%, which translates to an 80% reduction in yield.