

TECHNICAL NOTES

FOREST PRODUCTS LABORATORY

U. S. FOREST SERVICE

MADISON, WISCONSIN

No. E-1

GOOD FLOTATION OILS FROM CRUDE TAR PRODUCTS

The new "flotation" process for the concentration of various sulfide ores has had a very rapid development in the last few years, and as a result the demand for flotation oils to use in the process has been very great. Pine oils and tar oils obtained by the distillation of southern pine have become standard flotation oils, but the tar oils obtained by the destructive distillation of hardwoods have not been used so widely.

Recent investigations by the chemists of the Forest Products Laboratory, U. S. Forest Service, and the Bureau of Mines have shown that several hardwood tar oils have a very high flotation value. Some of the crude tar products obtained in the ordinary operation for making wood alcohol made especially good flotation oils and in general these crude products were better than any of the redistilled oils obtained by further refining. The presence of pitch, which is supposed to be detrimental to pine tar oils, was found to be not only harmless in the case of hardwood tar oils but even desirable.

These discoveries should make available to the mining and smelting companies a large supply of flotation oils and should furnish a market for wood distillation products hitherto used largely as fuel at the plant.