SUMMARY

A short laboratory study was performed to determine whether emulsification significantly affects the rate at which a marine oil spill evaporates. Four crude oils were evaporated in trays in a wind tunnel. One set of experiments considered 2-cm thick slicks having emulsion water contents of 0, 25%, 50% and 67%. The other set considered 67%-water emulsions at the three thicknesses of 0.5, 1.0 and 2 cm. The results indicate that emulsification does inhibit evaporation, that evaporation decreases with increasing emulsion water content and slick thickness, and that the process is strongly influenced by the properties of the parent oil. No attempt has been made at this point to analyze the results in depth or to model the process.