## HENRY C. FULLER ANALYTICAL AND CONSULTING CHEMIST COLUMBIA MEDICAL BUILDING 1835 EYE STREET, N.W. WASHINGTON, D. C.

PHONE NATIONAL 7200 CABLE ADDRESS "CORBIN"

July 23, 1942.

Trip-L-Seal, 416 5th Street, N. W., Washington, D. C.

Gentlemen:

## LAB, NO. 10948

STUDY OF THE EFFECT OF TRIP-L-SEAL CEMENT COMPOSITION ON GASOLINE.

Small blocks of the Cement Composition were submitted by John V. Drummond of Trip-L-Seal, Inc.

Sample of Gasoline amounting to 1 gallon was divided into equal portions. In one portion, the blocks of Cement Composition were immersed and allowed to remain in contact with the gasoline for one week. The container was loosely covered. The balance of the sample was held in a closed gallon can.

At the end of the test period the blocks were removed and the customary gasoline analysis was performed on both specimens. Careful tests were made for Calcium Salts (Lime) in both. The results are tabulated on the attached sheet.

## CONCLUSIONS.

No Calcium Salts were present in either the original gasoline or the specimen in which the Cement blocks were immersed.

The analysis of the two samples showed no significant difference. The slightly higher boiling range might be attributed to the usual variation which results in running duplicate determinations. It was probably due to the fact that the jar containing the gasoline in which the blocks were immersed was not as tightly enclosed as the liquid in the can, and some of the lower volatile hydrocarbons escaped due to the unseasonal temperature which obtained while the test was running. This would also account for the slight variation in gravity.

The variation in the gum value is due no doubt to

the handling of the cement blocks, and the trace of fatty substances left thereby.

As ordinary gasolines of good quality may show from 25 to 40 milligrams of residue in the gum value test, and as the residue in the tests under review was mainly the coloring matter, the figures obtained are of no special significance.

The test for sulphur was perfunctory. No sulphur of any moment is present in the gasoline.

The results show that the composition of the gasoline has not been affected by the Cement Composition, nor has it been contaminated by the Cement.

Respectfully submitted,

HCF/jbf