

PLUS

DOUGLAS AIRCRAFT DIVISION

3855 Lakewood Boulevard Long Beach, California 90801

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CI-39-RDA-062

Gentlemen:

Several tests have been conducted with FE-plus additive in our gasoline and diesel driven vehicles using the following proportions: One part FE-plus per 5,000 gasoline parts and one part per 4,000 diesel fuel parts. In the crankcase oil we used one part FE-plus per 130 parts of oil.

The gasoline driven vehicles were driven immediately after the additive was introduced and it was noted that the vehicles have reduced smoke emission and showed considerable improvement in performance. Since these vehicles were not instrumented, the degree of improvement (such as HP) was not recorded. However, the mileage of gasoline vehicles was improved by 12% to 20% and the oil consumption was reduced. To date, the oil consumption percentage of reduction is not available.

Tests for application of the FE-plus additive in the diesel are being performed at the present time in a long range 370 HP tractor, Unit #L1-506, which is assigned to Tulsa, Oklahoma - Long Beach, California run. So far we have recorded the following improvements: Reduction of oil consumption by 57% and diesel fuel consumption by 9%; increase in HP of 5.5% and reduction of smoke emission. Special exhaust analysis tests will be performed in the near future.

Nine gallons of FE-plus additive have been received by Mr. Don Mohler, Foreman of our Aviation/Automotive Fuel Control Department and he is conducting a field application of the additive which is of several weeks duration. These tests will provide us with figures for justification of contractual purchase of FE-plus.

On January 23, 1970, Mr. Mohler introduced FE-plus to a 10,000 gallon tank of fuel. In order to provide better mixing, the FE-plus was added while the tank was being filled. The first fill was about 8,500 gallons of gasoline and 2-1/4 gallons of FE-plus. Therefore, the first tank was mixed with a ratio of one part FE-plus to 4,000 parts of gasoline. Subsequent mixes will be at the ratio of one part FE-plus to 5,000 parts of gasoline.

Since Mr. Mohler maintains accurate records of gasoline consumption, we were able to calculate preliminary results of gasoline consumption from a treated tank. By comparing eight days of gas consumption in the middle of January from this tank without additive, and eight days since additive was

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