

SAMPLES OVER 3 CC OF LEAD

KE 0022993

N22730

January 10, 1942

Dr. R. A. Kehoe

Attention: Dr. Willard Machle

Dear Dr. Machle:

You will recall the previous correspondence we have had about the handling of Ethyl Fluid in the Phillips Petroleum Company's research laboratory at Bartlesville. We submitted a proposed letter to them which you approved. Attached hereto is a copy of Mr. Legatski's reply. Mr. Legatski is Assistant Director of the Research Department. We are sure you will agree that the Phillips Petroleum Company in this instance has more than met us half way.

Yours very truly,

L. W. SHANK

By: *L. L. Hupstables*

LLH:jvh

cc - Mr. O. B. Lewis

KE 0022996

Mr. L. W. Shank
Division Manager
Ethyl Gasoline Corp.
Tulsa, Oklahoma

Dear Mr. Shank:

This will acknowledge receipt of your letter reporting on Mr. Barnes' visit to our Bartlesville laboratory. In line with the recommendations contained in your letter, we have taken the following steps in an effort to improve our equipment and the handling of TEL fluid.

1. A more up to date system for keeping a record of our TEL containers has been instituted. This record includes the serial number of each can, the time of receipt in our laboratory, the date opened, the date of destruction of empty cans, and person by whom destroyed.
2. We have always made it a point to keep our TEL supply as low as possible, however, as explained to your representative, the nature of our experimental work and the number of engines which we have in operation results in our supply of TEL fluid being higher than the normal quantity carried by most laboratories. Even in face of this, we have at various times in the past been forced to postpone problems on account of an insufficient supply of TEL fluid.

It has always been against the rule to open a new can of TEL fluid until the supply of TEL in the opened can has been depleted. When our new steel locker as described below is completed, these rules can be rigidly enforced. It has always been our practice to burn all empty cans; however, added emphasis has now been placed on the importance of thorough burning and final burying of the cans.

3. Notwithstanding that our present hood has met with the approval of the Ethyl Gasoline Corporation, we have designed a hood and locker which we believe to be superior to the present hood for blending and ethylizing as well as adequate for the storage purposes of our laboratory. This hood and locker will conform with all the requirements of your Ethyl hood. The

Wilmot Clark, who will have charge of the keys.

In addition, a separate compartment will be provided for storage of the gas mask, rubber gloves, and apron. Rules for use of the gas mask, rubber gloves, and apron will be fastened to the door of this compartment.

4. Even before we received your letter, the door to our present hood was repaired and made easier to operate. It has always been our practice to remove stained paint from our equipment and repaint. This cleaning and repainting has in the past been done at intervals of two to four weeks. Increasing the size of the container to 1200 cc. capacity tends to keep the staining down to a minimum. We have found that containers which are nickel or chromium plated can be more readily cleaned, and we are replacing our present painted containers with this type.

5. The preparation of our dilute fluid has been assigned to Messrs. W. N. Cole and J. J. Fleming who are regular employees. However, it may be expedient at times to assign this duty temporarily to some other regular employee, in which event, he will receive proper instructions before undertaking the assignment.

6. We do not believe that the concentration of TEL in our 55 gallon drum has ever exceeded 3.0 cc. TEL per gallon. Nevertheless, since we have improved the record system for our TEL fluid and since with the new locker and hood, our Mr. Clark can more easily and effectively control the TEL fluid, a more rigid control of the concentration of the TEL in the 55 gallon waste drum will be possible.

7. About the first of October, we installed an automatic 10 cc. burette for handling the dilute fluid for our supercharged engine. We have found this burette very satisfactory and advantageous.

8. We have assigned to Mr. A. M. Fitch, one of the regular employees, the duty of destroying empty TEL cans. Mr. Fitch is well informed regarding rules and regulations for handling TEL fluid as well as proper procedure for burning and burying empty cans. In Mr. Fitch's absence, another regular employee will be temporarily assigned this duty and will be properly instructed in the procedure.

9. Mimeographed copies have been made of the safety rules which were attached to your letter and each member of the Fuel Test Section has been given a copy. In addition, copies are posted on the door of our Ethyl hood.

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ing, which has been posted on the door of our Ethyl hood.

The Ethyl Corporation representative offered no criticism as to the kind or type of rubberized apron, rubber gloves, or gas mask. However, we have felt that while the present rubber gloves are probably suitable for drum blending and heavy usage, they are not pliable enough to permit sufficient dexterity in hood and small sample blending and as a consequent, a more pliable reasonably gasoline resistant glove is being sought. It was also felt that our present rubber apron was not heavy enough, consequently, a long heavy rubber apron was obtained and is now in use. There have been complaints that our present type mask is clumsy, awkward and difficult to breathe through and, as a result, two MSA All Service Gas Masks have been ordered for use in our TEL blending projects and they will replace the mask currently in use.

11. We agree with your suggestion for a safety meeting and suggest that this meeting be held after the first of the year.

Any further comments you may have will be appreciated.

Yours very truly,

/s/ T. W. Legatski

TWL:dlc

cc: D. G. Oberfell
R. C. Alden
Harry Markee

KE 0022999