

May 5, 1939.

Mr. H.C. Dees,
Baltimore, Md.

Dear Claire,

In order to obtain further data on the cleaning of dirty tank cars, I was present at the Baltimore Terminal of The Texas Company this week and obtained samples from three of the cars. The data on these samples which should be forwarded to Dr. Kehoe is as follows.

- Car BTK 4284 - This car contained about three gallons of scale and sludge and what product had formerly been in this car is not known. -----
- Car BTK 5073 - This car contained about 1 gallon of scale and sludge. Products hauled in this car not known. The men who cleaned this car stated that it had the appearance of having been steamed since it was last used.
- Car GATX 9123 - This car contained about 1 gallon of rust and the men who cleaned the car believed that it had been recently used in fuel oil service.

All three of these samples were sent Express Collect to Dr. Kehoe on Wednesday of this week.

The following matters were discussed with Mr. Kelly the Supt. of this terminal and I would appreciate comments from Dr. Kehoe on these matters.

(1) At present the sludge and scale from tankcars is dumped on a dump adjacent to the water and the question arose as to whether or not this sludge and scale should be buried as we require when same is removed from a storage tank.

(2) The men who clean these cars wear safety shoes made of leather using brass nails in the soles and heels. These shoes are furnished by The Texas Co and only used in cleaning tankcars. Mr. Kelly advised that it was almost impossible to wear rubber boots in this operation due to slipping on the car bottom. Air line masks (not blower type) are used and the men do not wear rubber gloves. No special clothing is worn.

(3) Mr. Kelly advised that sometimes cars are returned with from 50 to 100 gallons of gasoline remaining in the bottom. Should a car in this condition return when movements are slow it is possible that it might set on a siding for a month or two. It is likely to assume that in this time the gasoline might all evaporate and the question arises as to where the lead would go. The Chief Chemist of one of the oil companies here in town advised me that sometime ago he ran some tests regarding the fractional distillation of loaded gasoline and obtained the following results. A liter sample of 3 cc concentration was made up and this was cut in 10 fractions of 100 cc each. The first fraction came over with a concentration of .03 cc/gal the second about .16 cc/gal and so on up to the last fraction which contained about 9 cc/gal. From this it indicates that with slow evaporation as we might get in the above mentioned car, practically all of the lead would remain in the rust and scale in the bottom.

I believe that should we desire any additional information on products or movements of the above sampled cars prior to the time they were turned over to the Texas Co. we might be able to obtain same from the Penn Conley Co. from whom they were leased.

These cars were in much better condition than than some previous cars which have come into this terminal as Mr. Kelly stated they have had cars with as much as a barrel or two of sludge and scale. Mr. Kelly will advise me when they receive another lot of dirty cars and I shall plan to be on hand to obtain samples from same.

Yours very truly,

John S. Cole.