

Analyses of gasoline, oil, TEL
and decomposition products

KE 0009763

*See
a letter for
analysis of
in order to
+ Substances
J. T. Tamm*

Material:

Quart jar of gasoline containing gelatinous material,
taken from the tank of a 1958 Oldsmobile (owned by
the Triangle Motor Company, Joplin, Missouri)

Submitted:

5-20-58 by Dr. K. V. Kitzmiller for Mr. J. M. Rollins,
Ethyl Corporation, Tulsa, Oklahoma for Tidewater
Oil Company, Joplin, Missouri

Required:

Lead Analyses

Results

Analysis Number - 58A-3458

Gasoline

Mg. Pb/Liter - 673.5

Gelatinous Material

Total Lead - 684 PPM

The concentration of lead in these samples corresponds approximately to
that of gasoline which contains 3 ml of tetraethyl lead per gallon. The
difference between the two is probably within the limits of analytical
variation and is of little or no significance.

Signed:

Robert A. Kehoe
Robert A. Kehoe, M. D.

Reported: 5-28-58

KE 0009764

Gunitite from Tank #191, Standard Oil Company of California, El Segundo, Calif.

12-13-57 by Mr. A. H. Chenault, Ethyl Corporation,
1141 Huntley Drive, Los Angeles

Lead Content

Results

Analysis Number - 57A-8593

Lead Tetraethyl - $< 0.0001\%$

Remaining Organic Lead - 0.023%

The concentration of tetraethyl lead within this sample of Gunite is negligible from the aspect of safety, but is probably barely significant (enough to indicate that some small amount had been absorbed) in the analytical sense. The organic lead otherwise (presumably degradation products of tetraethyl lead tend also to show that the material (Gunite) is not impervious to gasoline containing tetraethyl lead.

The total lead content of this material is insignificant from the aspect of hazard. While this one result is not to be regarded as illustrative of what might happen under other circumstances, it is reassuring, and if the usual precautions are taken in cleaning such tanks, and if the results of air analyses after cleaning are within safe limits, the presence of this type of lining will probably not alter the procedures. It would be wise to reserve judgment on this point to some extent until further experience can demonstrate whether or not these results are characteristic.

Signed:

Robert A. Kehoe
Robert A. Kehoe, M. D.

Reported: 1-6-58

KE 0009765