

Cases of Tetraethyllead Poisoning
in connection with Tank Cleaning
in Athens, Greece

May 12, 1961

George M. Saunders, M.D.
Secony Mobil Oil Company
Room 1403
150, East 42nd Street
New York 17, New York

Dear George:

I enclose herewith two copies of each of three reports of the analyses of the samples of blood contained in the package which was forwarded by you from Greece.

The samples were contained in corked glass Ehrlenmayer flasks. Each had been treated with Heparin to prevent coagulation. I suppose that this had been introduced as a dried film in the bottom and side of the flasks, but I am not sure, nor does this matter now. I think it reasonably certain also that the samples had been obtained by the use of syringes and ordinary needles. The point is that under these circumstances some degree of contamination of the samples was to be expected, and I would not have been at all surprised if they had given abnormally high results. This is why I wanted you to send them to us, since high results in other hands could well have been a source of confusion.

Fortunately any contamination which may have occurred was very slight, and the results are as they should be. It is necessary, however, or at least wise, to explain this to our Greek colleagues and, therefore, I have inserted the explanatory note which you can use as you think best.

Sincerely yours,

Robert A. Kehoe, M. D.

RAK:ss

Enclosures

KE 0020818

Name :

Material: Blood

Submitted: 5-8-61 by Dr. G. M. Saunders, Mobil Overseas Oil
Company Inc., 150 East 42nd Street, New York 17, N.Y.

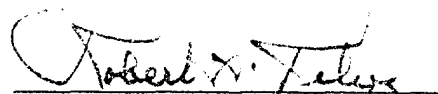
Required: Lead Analysis

BLOOD

Analysis Number	-	61A-3170
Weight	-	21.4 Grams
Mg. Pb/100 Grams	-	0.03 (Spectrographic)
Mg. Pb/100 Grams	-	0.04 (Dithizone)

The concentration of lead in the blood (either of the two results, or the average value) is within normal limits, being very near - only slightly and insignificantly above - the mean (or average) normal value. Such a result might be obtained by the examination of the blood of any ordinary individual in the general population provided he had not sustained any fairly recent exposure to inorganic compounds of lead.

Signed:


Robert A. Kehoe, M.D.

Reported: 5-12-61

KE 0020819

N 24414.01

Name:

Material: Blood

Submitted: 5-8-61 by Dr. G. M. Saunders, Mobil Overseas Oil
Company Inc., 150 East 42nd Street, New York 17, N. Y.

Required: Lead Analysis

BLOOD

Analysis Number	-	61A-3171
Weight	-	22.6 Grams
Mg. Pb/100 Grams	-	0.03 (Spectrographic)
Mg. Pb/100 Grams	-	0.03 (Dithizone)

The concentration of lead in the blood is at the mean normal level.

Signed:


Robert A. Kehoe, M. D.

Reported: 5-12-61

KE 0020820

Name :

Material: Blood

Submitted: 5-8-61 by Dr. G. M. Saunders, Mobil Overseas Oil
Company Inc., 150 East 42nd Street, New York 17, N. Y.

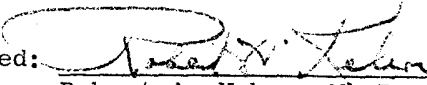
Required: Lead Analysis

BLOOD

Analysis Number	-	61A-3172
Weight	-	18.9 Grams
Mg. Pb/100 Grams	-	0.06 (Spectrographic)
Mg. Pb/100 Grams	-	0.05 (Dithizone)

The concentration of lead in the blood of this man is just at or perhaps slightly above the upper normal value. Such results are found from time to time in completely normal individuals who have had no abnormal or unusual exposure to inorganic compounds of lead.

Signed:


Robert A. Kehoe, M.D.

Reported: 5-12-61

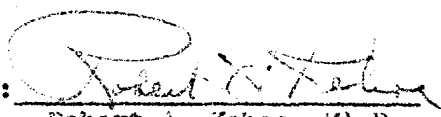
KE 0020821

NOTE.

It should be understood by all concerned that the analytical results submitted herewith have no significance, diagnostic or otherwise, in relation to any actual or potential exposure to tetraethyllead on the part of the persons from whom the samples of blood were obtained. The absorption of tetraethyllead, because of the chemical nature of the compound and of its early degradation products in the human body is not taken up by the erythrocytes as are the inorganic compounds of lead. The lead content of the blood is not, therefore, an indication of the extent of the absorption of tetraethyllead. Indeed, the concentration of lead in the blood, as in these instances, may be well within normal limits at a time when the concentration of lead in the urine is near to or in excess of the level of 1 milligram per liter.

The results reported here, therefore, provide no clue whatever, to the severity of the exposure of these men to tetraethyllead.

Moreover, these samples of blood could not be expected to yield any useful information on microscopic examination since there are no hematological abnormalities in association with tetraethyllead poisoning.

Signed: 

Robert A. Kehoe, M. D.

May 12, 1961

KE 0020822

N 24414.02