

January 16, 1946

Mr. I. C. Roberts,
Aluminum Ore Company,
East St. Louis, Illinois.

Dear Mr. Roberts:

In the absence of Dr. Kehoe from the Laboratory I am forwarding to you under separate cover two sets of containers for the collection of blood and urine samples in accordance with your letter of January 14.

The equipment I have sent for the collection of the blood samples is a new type of container supplied by Becton and Dickinson. It seems likely that the doctor who will take the blood samples will not have seen any of these tubes previously, and therefore it seems desirable to send you rather detailed instructions for their use. For that reason I enclose herewith a memorandum giving such instructions which I think will be found to be adequate.

It is our belief that the opportunities for contamination of blood samples for lead determination taken by this means will be substantially negligible. However, it seems advisable to prove the point to our mutual satisfaction inasmuch as we may be dealing with samples which in any case may have important medico-legal relationships. For this reason it is desirable for the doctor to obtain two samples in each instance of at least 10 c.c. each. With a little care I believe it will be possible to obtain two samples without removing the needle from the vein, merely shifting it from one tube to the other.

I am enclosing an extra copy of this letter for your convenience in forwarding this information to Dr. Irwin or whoever will be taking the samples.

Very truly yours,

E. I. Fortlage, Secretary to
Dr. Kehoe

ef

Enc.

KE 0005291

N 7304

Aluminum Ore Company

East St. Louis, Ill.

January 14, 1946

Dr. Robert A. Kehoe
Kettering Laboratory of Applied Physiology
College of Medicine, Eden Avenue
University of Cincinnati
Cincinnati 19, Ohio

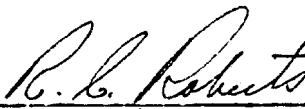
Dear Dr. Kehoe:

September 4, 1945 your laboratory analyzed one of our employees for blood-lead and urine-lead. Based on the results of these analyses this employee is still being used on non-exposure work.

If it is convenient at this time we would like to have this man rechecked and also have one other man analyzed who has been doing lead burning for the past six months. Will you kindly furnish us with the necessary sterile needles and specimen bottles for this work. We assume that your fee for these analyses is \$10.00 as in previous cases.

At the time that you were in St. Louis for the Industrial Hygiene meeting, I was called to Chicago. It was with a great deal of regret that I had to miss your splendid talk. However, one of our men attended the meeting and prepared a full summary of your talk. We found this to be very instructive and interesting. I hope at some future date I will have the privilege of hearing you.

Very truly yours,



R. C. Roberts

RCR:AK

KE 0005292

N 7304 01

Aluminum Ore Company

East St. Louis, Ill.

September 6, 1945

Dr. Robert A. Kehoe, Director
Kettering Laboratory of Applied Physiology
College of Medicine, Eden Avenue
University of Cincinnati
Cincinnati 19, Ohio

Dear Dr. Kehoe:

We have your letter of September 4 enclosing analyses of samples of urine and blood on one of our employees. You should receive a check very shortly covering expenses involved in these analyses.

It is gratifying to us to know that the blood-lead is slowly tapering off to normal level. As you suggest in your letter this man will not be returned to his previous occupation until such time as his blood level has dropped to .05 mg per 100 grams. In the meantime, we have made extensive changes to improve ventilation so that there will not be a recurrence of this trouble. With your permission we would like to check this man again in about three months.

Again we appreciate your cooperation in this problem.

Very truly yours,

ALUMINUM ORE COMPANY



R. C. Roberts

RCR:AK

CC: Dr. D. A. Irwin, Alcoa Medical Director

KE 0005293

N 7304.02

September 8, 1945

Mr. I. C. Roberts,
Aluminum Ore Company,
East St. Louis, Illinois.

Dear Mr. Roberts:

Thank you for calling attention to the error on the analytical report of [REDACTED] attached to my letter of September 4. You are correct in that the report should have read Mg.Pb/100 grams of blood. I regret that this typographical error slipped by unnoticed.

Very truly yours,

Robert A. Kehoe, M. D.

ef

KE 0005294

N 7304.03

Aluminum Ore Company

East St. Louis, Ill.

September 7, 1945

Dr. Robert A. Kehoe, Director
Kettering Laboratory of Applied Physiology
College of Medicine-Eden Avenue
University of Cincinnati
Cincinnati 19, Ohio

Dear Dr. Kehoe:

Regarding the analytical report attached to your letter of September 4 covering blood and urine analyses, we note under blood analysis that the results are expressed in Mg. Pb/Liter. We wonder if this should not correctly read Mg. Pb/100 grams of blood. We have interpreted the results to mean this but wish to be sure that this is the case.

Very truly yours,

R. C. Roberts

R. C. Roberts

RCR:AK

CC: Dr. D. A. Irwin - Alcoa Medical Director

KE 0005295

N 7304.04

September 4, 1945

Mr. A. C. Roberts,
Aluminum Ore Company,
East St. Louis, Illinois.

Dear Mr. Roberts:

I am sending you herewith a report on the results obtained in the analysis of samples of urine and blood on your employee, [REDACTED]. I enclose also a bill in duplicate in accordance with your request.

You will note that the urinary lead concentration in this man's case has diminished quite appreciably. The concentration in the blood on the other hand has dropped only slightly. This behavior is not unusual in the case of individuals who have had considerable lead exposure over a fairly prolonged period. There is a tendency for the urinary lead concentration to drop more rapidly than the blood concentration, but there is also a tendency for the urinary lead levels to vary up and down during this period. So long as blood levels are as high as they are at present, it can be anticipated that samples of urine from time to time will show high concentrations. In other words the urine samples will vary up and down while the blood will slowly taper off to normal levels. Thus by mere chance we have obtained a low result on this occasion in the urine. The disposition of this man should be determined in this case by the blood level, which is abnormally high. Considering his history it is my feeling that his exposure should be discontinued until such a time as his blood levels have dropped at least as far as 0.05 mgs. per 100 grams. In terms of current practice this may be leaning over backwards to be safe, but this is what I do in the case of men for whom I have medical responsibility.

Very truly yours,

Robert A. Kehoe, M. D.

RAK ef

Enc.

KE 0005296

N 7304.05

[REDACTED]

Samples of urine and blood received from the Aluminum Ore Company, East St. Louis, Missouri, for lead analyses.

Urine

Analysis Number = 45A-4574

Volume = 100 ml.

Mg. Pb/Liter = 0.06

Blood

Analysis Number = 45A-4575

	<u>Spectrographic</u>	<u>Dithizone</u>
Grams	16.5	19.0
Mg. Pb/ ^{100 grams} Liter	0.08	0.07

Sample Collected: 8-24-45

Sample Received: 8-27-45

Sample Reported: 8-31-45

KE 0005297

N 7304.06