

April 1, 1941

Dr. Llewellyn Sale
4500 Olive Street
St. Louis
Missouri

Dear Doctor Sale:

In connection with the case brought to your attention by the Shell Oil Company at Wood River, I shall be very glad to cooperate in obtaining any information which may be useful. In such conversation as I have had with Mr. Gillis over this case, I suggested the advisability of having a thorough-going examination at the hands of a competent internist for the purpose of determining clearly the general nature and degree of any disability which he may have at the present time. The question of lead exposure has arisen in this case, and no doubt at the present time it will be difficult to solve this question by any laboratory observations. Despite that fact, I am entirely willing to supply you with containers for the collection of certain samples, and also to send instructions for the collection of these samples in such a way that no opportunity will be offered for contamination. This will enable us to see whether at the time of your examination there is any evidence of abnormal lead absorption. This may be useful in the interpretation of any existing evidence of intoxication.

In handling the matter in this fashion, you will obviously be freed of any preconceptions of any kind, and can arrive at whatever conclusions seem justified on purely clinical grounds. At the same time I shall be able to supply you with analytical evidence for the purpose of evaluating the effects of lead exposure, if such effects have persisted to the present time.

Our experience permits us to say that an examination of the blood and of a sample of urine, taken practically simultaneously, will reveal the status of this man with respect to the general lead content of his body at this time. An examination of the spinal fluid can scarcely be regarded as useful from a diagnostic point of view for a number of reasons, chief among which is the fact that no one has worked out adequate

standards for the differentiation between normal and abnormal values. Moreover the relationships between the lead concentration in blood, tissues and spinal fluid have not been studied adequately, and, therefore, no suitable interpretation can be made. On the other hand, if you are interested in obtaining a sample of spinal fluid in this case, I should be glad to send you a special needle and a special receptacle for the spinal fluid. In our experience it is useless to examine the spinal fluid unless it is obtained by means of a special needle properly prepared and cleaned for the purpose, and unless the sample is withdrawn into a special chemically clean container. The quantities of lead involved are so slight that it is almost certain otherwise that contamination of the sample will occur and destroy the significance of any data which might be obtained. We have studied a number of cases purely for investigative purposes, and I shall be agreeable to doing so in this case, if you are interested.

I enclose herewith instructions for the collection of the blood and urine samples and will send you, separately, containers by mail.

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.