

cc: Dr. R. A. Kehoe
Dr. O. E. Kurt
Mr. E. J. Gay

July 31, 1947

Dr. Roy O. Gilbert
County of Los Angeles
Office of Air Pollution Control
808 North Spring Street
Los Angeles 12, California

Dear Dr. Gilbert:

We were pleased to receive a copy of the procedure which you are using for determining aldehydes in the atmosphere. Whereas we have not had much experience in air sampling for aldehydes, the method of assay appears satisfactory and straightforward.

We have, however, carried out considerable research on the problem of obtaining the sample--in this case tetraethyllead and particulate lead from air streams--and can endorse the use of a midget impinger. The two principal advantages which we have found in this type of scrubber over the sintered-glass disc type are lower pressure drop through the system and ease of cleaning. The dimensions were found to be quite critical, and I am enclosing for your information a drawing showing the scrubber we prefer for air sampling at a rate of 1.0 cu.ft./min. with 10 ml. of iodine solution. You will note that a glass wool plug is used above the scrubbing solution. This serves the two-fold purpose of preventing evaporation losses of iodine and entrainment of liquid. The first may not concern you, but entrainment losses may be important.

We have requested drawings and a description of the continuous automatic apparatus for determining lead in air which was developed at our Baton Rouge Laboratory. When we have received these, we will forward them to you.

Very truly yours,


Harold A. Beatty
Assistant Director of Chemical Research

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Encl.

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