

G. Howell  
W. H. Sievert  
E. K. Locher  
C. O. White

October 13, 1954

Personal

Mr. Dave Ring  
Shell Oil Company  
100 Bush Street  
San Francisco, California

Dear Mr. Ring:

I am attaching a report showing the results of the air samples taken at your Los Angeles and Burbank terminals. These samples were taken by Charlie White and me in company with your Mr. J. F. Duncan. Dr. E. W. Doty of our Medical department advised on the method and location for taking these samples.

Dr. Robert A. Kehoe, Head of our Medical department, has written an interpretation of the results which I am attaching. Please feel free to call upon us for any further assistance that you need.

Yours very truly,

  
A. H. Chenault  
Chief Safety Engineer

AHC:dc

Attach.

P. S. Messrs. Fleck, Howell, Sievert, Locher, & White:

The last paragraph of the interpretation is quoted below.

"The results obtained by these analyses, if due allowance be made for the smallness of the volume of air sampled and the small numbers of samples obtained, are within the range of the findings in the general atmosphere of Los Angeles and Pasadena. They give no evidence of any occupational exposure to lead."

A. H. C.

RE 001265A

10/10/54  
Carr

L. A. Vulliamy

**Material:**

Iodine solutions from lead-in-air analyzer used to sample air

**Source:**

Los Angeles and Burbank Terminals of Shell Oil Company

**Submitted:**

10-4-54 by Mr. A. H. Chenaunt, Chief Safety Engineer, Ethyl Corporation,  
1141 Huntley Drive, Los Angeles, California

N13227.01

**Required:**

Lead Determination

Results

| <u>Analysis Number</u> | <u>Time</u> | <u>Date</u> | <u>Terminal</u> | <u>Number and Location</u>                 | <u>Volume Air Sampled</u> | <u>Mg. Pb in Sample</u> | <u>Mg. Pb/M<sup>3</sup> air</u> |
|------------------------|-------------|-------------|-----------------|--------------------------------------------|---------------------------|-------------------------|---------------------------------|
| 54A-7742               | 10:15 am    | 9-23-54     | L.A.            | #1 Carr's desk                             | 8 cu. ft.                 | 0.0043                  | 0.019                           |
| 54A-7743               | 10:45 am    | 9-23-54     | L.A.            | #2 Phillips' desk                          | 8 cu. ft.                 | 0.0040                  | 0.018                           |
| 54A-7746               | 9:45 am     | 9-24-54     | L.A.            | #6 Carr's desk                             | 8 cu. ft.                 | 0.0033                  | 0.015                           |
| 54A-7747               | 10:00 am    | 9-24-54     | L.A.            | #7 Phillips' desk                          | 8 cu. ft.                 | 0.0024                  | 0.011                           |
| 54A-7752               | 3:15 pm     | 9-27-54     | L.A.            | #12 Carr's desk                            | 8 cu. ft.                 | 0.0030                  | 0.013                           |
| 54A-7753               | 3:30 pm     | 9-27-54     | L.A.            | #13 Phillips' desk                         | 8 cu. ft.                 | 0.0260                  | 0.115                           |
| 54A-7744               | 1:15 pm     | 9-23-54     | Burbank         | #4 Phillips' desk - air conditioned office | 8 cu. ft.                 | 0.0024                  | 0.011                           |
| 54A-7745               | 1:45 pm     | 9-23-54     | Burbank         | #5 De Vine's desk - air conditioned office | 8 cu. ft.                 | 0.0020                  | 0.009                           |
| 54A-7748               | 10:45 am    | 9-24-54     | Burbank         | #8 Phillips' desk                          | 8 cu. ft.                 | 0.0036                  | 0.016                           |
| 54A-7749               | 11:15 am    | 9-24-54     | Burbank         | #9 De Vine's desk                          | 8 cu. ft.                 | 0.0024                  | 0.011                           |
| 54A-7750               | 2:00 pm     | 9-27-54     | Burbank         | #10 De Vine's desk                         | 8 cu. ft.                 | 0.0130                  | 0.057                           |
| 54A-7751               | 2:15 pm     | 9-27-54     | Burbank         | #11 Phillips' desk                         | 8 cu. ft.                 | 0.0033                  | 0.015                           |

Reported: 10-8-54

2592100 34

### INTERPRETATION

The results of these analyses, with one exception (which will be referred to below) are of the general order of magnitude that may be expected as the consequence of sampling and analysing the air in practically any type of industrial establishment. The average of the observations in the Los Angeles Terminal (excluding the one aberrant result) is 0.015 mg. of lead (Pb) per cubic meter of air, while the average of those made in the Burbank terminal is 0.020 mg. per cubic meter, if a high result of 0.057 is included, and 0.013 mg. per cubic meter if this result is excluded. (In taking samples of this type, it is to be recognized that the gathering in of just a few unusually large particles of lead-containing dust from the air may result in an aberrant value. The quantities being dealt with are so small that they can be distorted grossly by a sampling accident of this type. The two high results, therefore, are not to be regarded as remarkable in a situation of this type. Both are out of the range of the others.)

The most commonly accepted value for a tolerable (safe) concentration of lead in air for regular daily exposure during the working day is 0.15 mg. per cubic meter. The values found in these terminals, being approximately one tenth of this tolerable value, speak for themselves.

The results obtained by these analyses, if due allowance be made for the smallness of the volume of air sampled and the small numbers of samples obtained, are within the range of the findings in the general atmosphere of Los Angeles and Pasadena. They give no evidence of any occupational exposure to lead.

Signed:

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

KE 0012658

N13227.02

October 9, 1954

AIR MAIL

Mr. A. H. Chenault  
Chief Safety Engineer  
Ethyl Corporation  
1141 Huntley Drive  
Los Angeles, California

Dear Hume:

I send you herewith three copies of the results of the observations made at the Los Angeles and Burbank Terminals of Shell Oil Company, as described in your letter of September 29.

If any questions come up in connection with this report, please send them along.

Sincerely yours,

Robert A. Kehoe, M. D.

RAK ef

Enc.

C.C.: Dr. Earl W. Doty  
Mr. L. R. Fleck

KE 0012659

N13227.03

*Sample report*

## ETHYL CORPORATION

INTER-OFFICE  
CORRESPONDENCE

cc: L. R. Fleck  
E. W. Doty  
G. Howell  
W. H. Sievert  
E. K. Locher  
C. O. White

|         |                                                  |         |                    |
|---------|--------------------------------------------------|---------|--------------------|
| TO      | Dr. K. V. Kitzmiller                             | ADDRESS | Cincinnati         |
| FROM    | A. H. Chenault.                                  | ADDRESS | Los Angeles        |
| SUBJECT | Shell Oil Company<br>Alleged Lead Poisoning Case | DATE    | September 29, 1954 |

Dear Karl:

Confirming our two or three telephone conversations, I wish to report the following alleged lead poisoning case.

On September 15, 1954 our Mr. W. H. Sievert received a call from Mr. Dave Ring of Shell Oil Company's Legal Department in San Francisco regarding a Mr. [REDACTED] of 1365 E. Mountain Street, Glendale, California. Mr. [REDACTED] was a district engineer for the Shell Oil Company at their Burbank, California plant. His duties were about 75% in the office, and 25% supervising the installation and repairs to service stations. He had worked at the Burbank plant approximately three (3) years. The Shell Oil Company decided to move him from their Burbank terminal to their Los Angeles terminal. Mr. [REDACTED] gave five reasons why he did not want to move; one of which was that the gasoline vapors containing lead in the Los Angeles terminal would effect his health. Even in view of this, Shell did move him on July 12, 1954. On August 24, 1954 he reported that he was ill.

It seems that Mr. [REDACTED] had Dr. Robert C. Seibly of 1319 Westbrook Building, Los Angeles, California, who reported that Mr. [REDACTED] had the "maximum normal level of lead in the blood, and should be kept away from potential lead hazards". He also had Dr. Edward E. Harnagel of the Moore-White Clinic, 511 S. Bonnie Brea Street, Los Angeles, California, who reported "lead poison - and believed that Mr. [REDACTED] should stay away from lead hazards"; also Dr. Joseph D. Peluso, who reported "lead in blood normal".

Shell Oil Company employed Dr. Rutherford T. Johnstone who examined Mr. [REDACTED] and, quoting Dr. Kehoe's literature, said that Mr. [REDACTED] could not have lead poisoning.

Mr. Ring, in his conversation with Mr. Sievert and later in subsequent conversations with me, asked that we take air samples in the offices where Mr. [REDACTED] worked at the Los Angeles terminal and their Burbank terminal; so that Shell would be in a position to see if there was any difference in the lead content of the air in these two offices. Through you we arranged

KE 0012660

N13227.04

Mr. to Dr. K. V. Kitzmiller  
Shell Oil Company  
Alleged Lead Poisoning Case

- 3 -

September 29, 1954

Samples Continued:

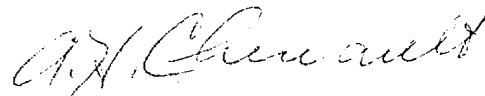
| <u>SAMPLE<br/>NUMBER</u> | <u>DATE</u> | <u>TIME</u> | <u>TERMINAL</u> | <u>LOCATION</u> | <u>NOTES</u> |
|--------------------------|-------------|-------------|-----------------|-----------------|--------------|
| 6.                       | 9/24/54     | 9:45 AM     | Los Angeles     | Carr's desk     | -            |
| 7.                       | 9/24/54     | 10:00 AM    | Los Angeles     | Phillips' desk  | -            |
| 8.                       | 9/24/54     | 10:45 AM    | Burbank         | Phillips' desk  | -            |
| 9.                       | 9/24/54     | 11:15 AM    | Burbank         | De Vine's desk  | -            |
| 10.                      | 9/27/54     | 2:00 PM     | Burbank         | De Vine's desk  | -            |
| 11.                      | 9/27/54     | 2:15 PM     | Burbank         | Phillips' desk  | -            |
| 12.                      | 9/27/54     | 3:15 PM     | Los Angeles     | Carr's desk     | -            |
| 13.                      | 9/27/54     | 3:30 PM     | Los Angeles     | Phillips' desk  | -            |

Mr. [REDACTED] reports that he is now feeling alright and wishes to come back to work, but up until September 24th had refused to let Shell's doctor make an examination.

The Shell people made an appointment for Mr. [REDACTED] to see Dr. Doty as a representative of the Ethyl Corporation on September 24th, which Mr. Phillips cancelled. They made another appointment for September 27th which he also cancelled, and has refused to see Dr. Doty.

The Iodine samples are going out air express today. We would appreciate receiving a report on these at your earliest convenience. Will you please send the results direct to this office so that we may deliver them in person to the Shell Oil Company.

Yours very truly,



A. H. Chenault

AHC:dc

KE 0012661