

Dr. B. A. Kehoe

Mr. M. A. Taylor

New York

Mr. A. J. Baldwin

New York

Cape Fear Terminals
Wilmington, N.C.
Alleged Case of Lead Poisoning

June 28, 1948

Dear Matt:

At approximately ten o'clock Wednesday evening, June 23rd, you called me at home and advised me of the illness of a tank cleaner in Wilmington, North Carolina. I left that night for Wilmington, arriving there about 5:30 A.M. The following is a resume of Fritz Mercer's report to me on events prior to my arrival and on our joint investigations following my arrival.

The Carolina Terminal, Wilmington, North Carolina have been leased by the Cape Fear Terminals, also in Wilmington. Mr. R. N. Williams, Superintendent of the Cape Fear Terminals contracted with Tank Cleaners, Inc., Jacksonville, Florida to clean three 40,000 barrel floating roof tanks at their own Cape Fear Terminal and eight 12,000 barrel tanks at the Carolina Terminals.

L. Williams is a partner in Tank Cleaners, Inc.; L. H. Nichols, job foreman, [redacted] and [redacted] colored men, were the workmen on the job. The Contractors started cleaning Tank No. 211 at the Cape Fear Terminal on Wednesday, June 16th. This is a floating roof 40,000 barrel tank and was thoroughly cleaned for roof repairs. The actual cleaning work was finished on Thursday evening. The tank was steamed Thursday night and the water pumped out and the workmen completed drying the bottom on Friday morning. Fritz then examined the tank through the side manhole and through two manholes in the roof of the tank. The roof was resting on its supports approximately four feet above the floor and Fritz was able to see the bottom quite clearly, and it appeared to be well cleaned. He then entered the tank without protective equipment for approximately twenty minutes to carefully inspect the bottom and side wall. It was thoroughly clean from a standpoint of a lead hazard and Fritz okayed it for entry without protective equipment. Mr. L. Williams was also present during the cleaning of this tank. [redacted] and [redacted] had each been in this tank approximately eight hours for cleaning purposes. (See Tank Cleaning Report June 16-18-48)

The Contractor moved his equipment Friday afternoon to Carolina Terminals to start cleaning the eight 12,000 barrel tanks. These tanks had been empty for approximately five years. There was

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no history available of the service these tanks had been in. The Republic Oil and Refining Company used these tanks from the time the tanks were built in 1935 or 36 until they were abandoned five years ago, but as yet we had been unable to learn what product they had stored in the tanks.

The attached sketch shows the arrangement of the tankage and the identifying numbers of each. Friday afternoon the water bottom was pumped from Tank No. 1. The suction hose from a small gasoline engine driven centrifugal pump was put through a tank manhole without entering the tank. The removal of the water from this tank completed the work for the day. This operation was observed by Fritz.

While the men were cleaning up the equipment, Mr. L. Williams asked Fritz about the precautions necessary for the cleaning of these tanks. He asked if a respirator type mask could be used. Fritz explained that since there was no history on these tanks, it must be assumed that they had been in leaded service at some time and that the agitation of the sludge could release lead vapors, therefore, full protective equipment should be worn. Mr. L. Williams agreed with Fritz and stated that full protective equipment would be used.

Saturday morning a Mr. Nichols met Fritz in front of the Carolina Terminals and told him that Mr. L. Williams had left early that morning for Jacksonville, Florida. Fritz then went to the Cape Fear Terminal to discuss the condition of Tank No. 211 with Mr. R.H. Williams but Mr. Williams was not there so Fritz talked with a Mr. L.A. Tichon, Office Manager, who said he would pass the information on to Mr. Williams. Fritz then left for Charlotte, North Carolina, his home, for the week-end and other work, planning to return to Wilmington late Tuesday to spto-check the tank cleaning work. Fritz returned to Wilmington late Tuesday afternoon, June 22nd, as planned and Mr. Nichols met him in the hotel lobby. Mr. Nichols reported that [redacted] tank cleaner, had been sent to Jacksonville, Florida Tuesday with an attack of appendicitis. Mr. Nichols also stated that he was not feeling too good but attributed it to a hard week-end. He also volunteered the information that he had not accepted the job with Tank Cleaners, Inc. to be a job foreman and was going back to Jacksonville to quit and had his old job with Otis Elevator in Dallas lined up. He said that they had worked Saturday and Monday but not Tuesday and that they had cleaned three tanks at the Carolina Terminals. Later Tuesday evening George Smith flew up from Jacksonville to replace Mr. L. H. Nichols as job foreman and Nichols left the next morning for Jacksonville.

Wednesday morning, June 23rd, George Smith and [redacted], entered Tank No. 3, with protective equipment, for about three hours in the forenoon and [redacted] alone for about three hours in the afternoon, leaving the tank unfinished. Fritz was present during this work. When [redacted] came out of the tank at noon, his coveralls were wet from the knees down and his boots had water in them. He cleaned his boots and put on a clean set of coveralls in the afternoon. Fritz asked him about bathing and he said he always took a bath every night.

The next development was Matt Taylor's telephone call Wednesday evening about ten to Fritz reporting that he had been notified by Lou Shank that Mr. [redacted] was in a Jacksonville hospital with an alledged case of lead poisoning. Fritz tried to get in touch with George Smith at intervals

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Mr. H.A. Taylor

up to 12:30 with no success. Thursday morning Fritz arrived at the Carolina Terminals and was met out in front by George Smith who told Fritz he had sent [redacted] to Jacksonville by bus that morning, sick. That left no one of the tank cleaning crew in Wilmington who had been present during the work on Saturday and Monday prior to Davis taking ill. No tank cleaning work was done on Thursday. Thursday evening I arrived in Wilmington and spent the rest of the day discussing the above events with Fritz.

Fritz stated that at [redacted] time had Nichols indicated to him that tank entries had been made without full protective equipment. Of course, Nichols had left Wilmington by the time Fritz was told of the seriousness of [redacted] illness. Late Thursday evening, the chemical box of the lead-in-air analyzer, which you had shipped by Air Express, arrived but the pump box did not arrive until Friday P.M.

Friday morning, Fritz and I visited the Carolina Terminals so that I could make a general inspection of the tanks and surrounding area. It was noted that the area within the fire banks, where tank washings had been pumped, had a strong odor, much stronger than is generally the case under similar conditions. The sludge pit at Tank No. 3 and all equipment had been left untouched at the request of Fritz until I could inspect it. It was noted at this time that there was a bad break in one length of hose line about five feet from the mask. Fritz and I inspected this break carefully. It appeared to be a recent break since the threads in the break were white and had not become stained with rust or sludge. Fritz had inspected the equipment during the cleaning of Tank No. 211 and said that it was in good condition at that time.

Fritz and I then visited the Cape Fear Terminals and saw George Smith and Joe Sova, the new foreman who had been sent up with a new crew. Fritz asked George Smith, in my presence, if Mr. L. Williams had told him that Fritz had said it was O.K. to enter the tanks at Carolina Terminals without protective equipment. George replied absolutely not and that he had been specifically instructed by Mr. Williams to wear masks and all protective equipment. Fritz and I then saw Mr. R.N. Williams, Superintendent of Cape Fear Terminals and Joe Miller, Engineer, Pure Oil Company, and acquainted them with the story as known then, relative to the illness of William Davis and Raymond Rouser, the tank cleaning crew. While discussing these matters, Joe Miller volunteered the information that he had visited the Carolina Terminals two or three times a day during the period that Tank Cleaners, Inc. had been cleaning tanks there and had noticed that the crew in the tank was wearing masks but the man outside handling the sludge was not wearing a mask.

Fritz and I purchased a dozen new pint Mason jars and took samples of the washing from Tank No. 3 (samples No. 1 and 2), scale from Tank No. 3 (samples No. 3 and 4), washing from Tank No. 1 (samples 5 and 6), and scale from Tank No. 1 (samples 7 and 8). Friday afternoon, the cleaning operations of Tank No. 212 at the Cape Fear Terminal was observed by Fritz and I. This job was being done by Tank Cleaners, Inc., Joe Sova, foreman, and the new crew.

Saturday morning, Fritz and I made lead-in-air analyzer tests as noted on attached reports. It was also learned that George Smith had been called off

Mr. M. A. Taylor

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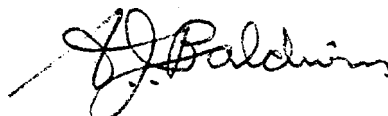
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the job early this morning and had left for another job. Matt telephoned Saturday morning to advise that [REDACTED] had died early that morning.

Dr. Kitzmiller telephoned from Jacksonville to request that certain samples be taken. In addition to the scale samples already obtained, he asked that similar samples be taken from Tank No. 211, Cape Fear Terminal, and Tanks A and 2 at Carolina Terminals. It was suggested that the length of broken airline hose be sent to Kettering Laboratory and Dr. Kitzmiller thought it a good idea.

I left Wilmington Saturday evening. Fritz will remain on the job until the tank cleaning work is completed at both Terminals. Fritz will get the additional samples and ship them, together with the hose, to Cincinnati within the next day or two.

Very truly yours,



A.J. Baldwin

AJB:gh
Enc.

CC: SAFETY DEPT.
DR. R. A. KEHOE
MR. L. SHANK
MR. F. Y. MERCER

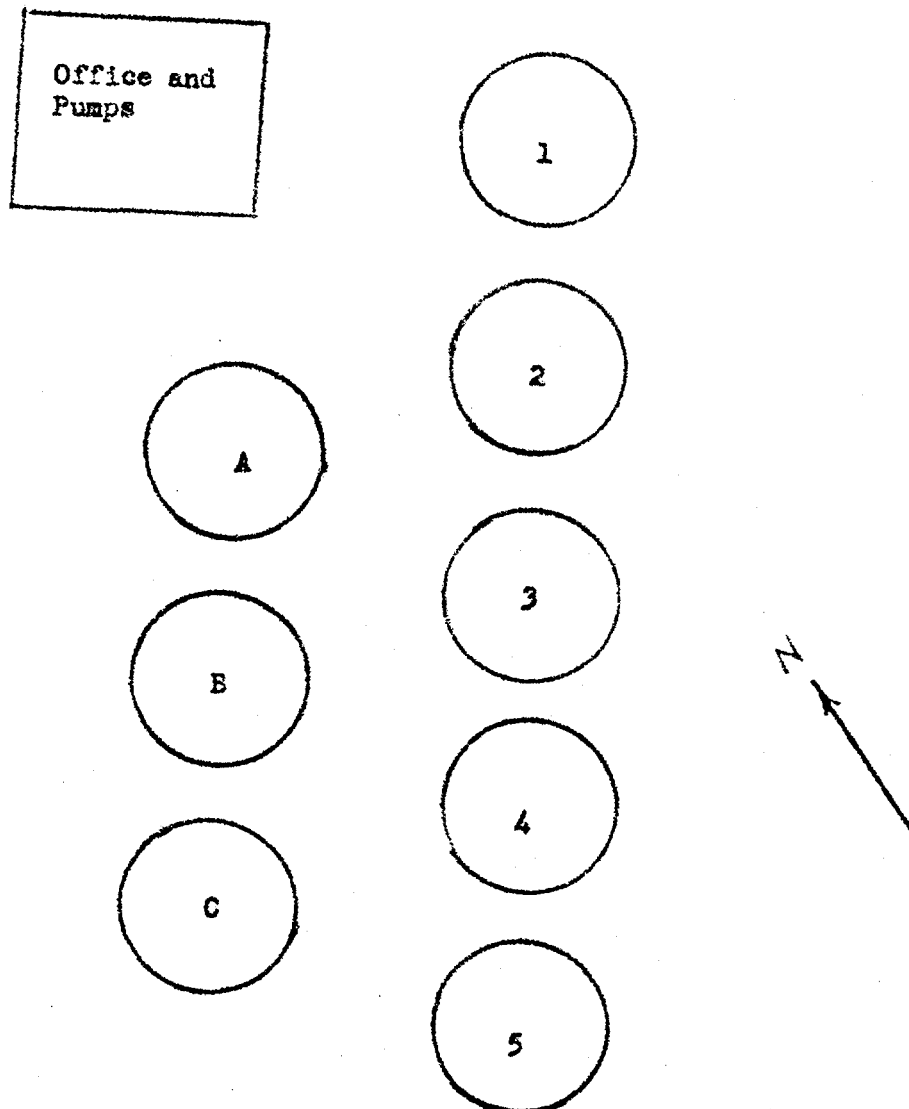
P.S. We are certain that none of these men went back in Tank No. 211 after cleaning was completed and tank was pronounced Lead Hazard Free by Mr. Mercer. As the tank was returned to gasoline service prior to my arrival, it could not be tested with the Lead-in-Air Analyzer.

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CAROLINA TERMINALS, WILMINGTON, N.C.

Arrangement and identification of tankage at the Terminal.



cc: Regional Office
Dr. R. A. Kehoe
Mr. E. O. Jones
Mr. W. R. Barnes

"ETHYL" LEAD ANALYZER TESTS

REGION Eastern

TESTED BY A. J. Baldwin
F. Y. Mercer

DATE June 26, 1948

OIL COMPANY	Carolina Terminals	Wilmington,	North Carolina	
CONTRACTOR	Tank Cleaners, Inc.	Jacksonville,	Florida	
LOCATION	Wilmington			
TANK NO.	1			
PRODUCT	Unknown			
SIZE & TYPE TANK	12,000 bbl. Vert.			
SAMPLE NO.	5			
TESTS BEFORE OR AFTER CLEANING	7 days after cleaning			
WEATHER CONDITION	Cloudy hot breeze			
TEMPERATURE ° F OUTSIDE TANK	94			
TEMPERATURE ° F INSIDE TANK	100 approx.			
MICROGRAMS - ph./CU. FT. OF AIR	between 0 & 1			
Mg. pb/10 M ³				
COMBUSTIBLE GAS INDICATOR READINGS	-----			
REASON FOR DETERMINATION				

REMARKS:

Used extension hose on
analyser. Sample taken
from 10' within the tank.

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REGION Eastern

TESTED BY A.J. Baldwin
 F.Y. Mercer

DATE June 26, 1948

OIL COMPANY	Carolina Terminals, Wilmington, North Carolina			
CONTRACTOR	Tank Cleaners, Inc. Jacksonville, Florida			
LOCATION	Wilmington,		Wilmington	
TANK NO.	-----		-----	
PRODUCT	-----		-----	
SIZE & TYPE TANK	-----		-----	
SAMPLE NO.	1		4	
TESTS BEFORE OR AFTER CLEANING				
WEATHER CONDITION	Hot breeze		Hot Breeze growing cloudy	
TEMPERATURE ° F OUTSIDE TANK	95		96	
TEMPERATURE ° F INSIDE TANK	-----		-----	
MICROGRAMS - ph./CU. FT. OF AIR	2 +		4	
Mg. pb/10 M ³				
COMBUSTIBLE GAS INDICATOR READINGS	-----		-----	
REASON FOR DETERMINATION				

REMARKS:

Sample taken through two 25' sections of air line hose which had been in use on this job. One section had a break in it about 5' from mask.

Within fire walls of tank #3 over area covered by tank washings from the #3 and possibly 1, 2 & A.

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"ETHYL" LEAD ANALYZER TESTS

REGION Eastern

TESTED BY A.J. Baldwin
F.Y. Mercer

DATE June 26, 1948

OIL COMPANY	Cape Fear Terminal			
CONTRACTOR	Tank Cleaners, Inc. Jacksonville, Florida			
LOCATION	Wilmington, North Carolina			
TANK NO.				
PRODUCT				
SIZE & TYPE TANK				
SAMPLE NO.	2		3	
TESTS BEFORE OR AFTER CLEANING				
WEATHER CONDITION	Hot breeze		Hot breeze	
TEMPERATURE ° F OUTSIDE TANK	98		98	
TEMPERATURE ° F INSIDE TANK				
MICROGRAMS - ph./CU. FT. OF AIR	0		0	
Mg. pb/10 M ³				
COMBUSTIBLE GAS INDICATOR READINGS				
REASON FOR DETERMINATION				

REMARKS:

Sample of air from mask end of 75 feet air line hose 50' of which had been used at Carolina Terminal through Wednesday 6/23. This equipment now being used to clean tank 212 at Cape Fear Terminal.

Sample of air from mask end of other air line being used at Cape Fear Terminal cleaning tank 212. This hose not previously used at Wilmington.

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