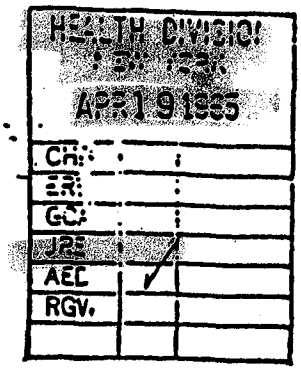
FILE NAME: Texaco (TEX)

DATE: 1965

DOC#: TEX022

DOCUMENT DESCRIPTION: Unpublished Report - The Health of Repairmen Applying Asbestos Insulation with Cover Letter



74004

April 13, 1965

Nathan V. Hendricks
Standard Oil Company (N.J.)
30 Rockefeller Plaza
Room 2400
New York 20, N. Y.

Dear Van:

I am enclosing a copy of my status report on the potential asbestos health problem among refinery insulators which I presented at the Spring meeting in Miami. There seemed to be some dissatisfaction with the way this survey is being conducted and suggestions were made to place the work in the hands of a subcommittee and to have all the medical records examined by a roentgenologist and specialist in chest diseases.

In accordance with my assurances to the Medical and Health Committee to preserve the confidenciality of the data sent to me, I will plan to return each contributor's letter. Any new subcommittee that is appointed can then work out its own modus operandi.

Very truly yours,

ORIGINAL SIGNED BY
LUCIAN E. REMES

Lucian E. Remes

LER:bgm

cc: Allan E. Dooley
Arthur C. Pabst

Enclosure

THE HEALTH OF REFINERYMEN APPLYING ASBESTOS INSULATION
(A Preliminary Audit)

Recent reports describing a high incidence of pulmonary neoplasms among asbestos workers has focused attention on the health of refinery craftsmen engaged in insulation activities. To obtain information relative to the experience of petroleum companies with the health of their insulators, members of the Medical and Health Committee were polled, inviting them to contribute personal information on this subject to a common pool. Assurances were offered that the identity of the donor and source of information would not be revealed to preserve their confidentiality. Before presenting an analysis of the available information on petroleum company experience, a brief history of asbestos as an industrial health hazard is appropriate.

Historical - For 50 years or longer asbestosis has been recognized in the United States as a form of pneumonoconiosis resulting from exposure to asbestos dust. However, it was not until joint medical and environmental studies were conducted by official health agencies in the mills of Pennsylvania and North Carolina about 30 years ago that the relationship between dust concentration, particle size, years of exposure and definitive chest x-ray markings was established. The lung field markings were also shown to correlate well with certain subjective reactions related to pulmonary function.

Important facts concerning the physical character of the dusts associated with asbestosis were revealed in these studies. Although asbestos fibers, ranging in median length from 7-16 microns, were found in the air, these long fibers were relatively few in number. The bulk of suspended dust ranged from about 0.5-3 microns in length and varied in concentration from as little as 1 or 2 million particles per cubic foot of air (mppcf) to 20 or more mppcf, depending on the mechanical operation involved. The correlations also showed that after 15 or more years of exposure the disease reached about the same degree of advancement, as evidenced by chest x-ray markings, regardless of dust intensity.

In these studies there seemed to be no evidence of pulmonary or other thoracic neoplasms and no suggestion of such findings. Subsequently, reports of the occurrence of lung cancer and other malignancies associated with asbestos employment began to appear in the literature. Although the number of such cases appeared large, some investigators felt that the observations did not establish an increased incidence of cancer and that the association was unproved. Many

valid weaknesses were shown to exist in the reports claiming lung cancer as a specific industrial hazard of asbestos workers. However, in 1963 a report published by Selikoff, Churg and Hammond (the latter of the cigarette fame) described a significant incidence of lung cancer and other pleural tumors as well as cancers of the stomach, colon and rectum among asbestos insulators in the construction industry. These insulators were exposed to a variety of materials including fibrous glass, cork and hair felts which contain no asbestos; other insulating materials, such as magnesia, calcium silicate insulating block and insulation cements containing 10-15 percent asbestos. No free silica was present and asbestos appears to be the only biologically active material in the exposure. This report seemed to be free of the statistical weaknesses and other valid criticisms of the earlier reports. Since the date of that report at least 3 additional publications by other investigators confirm in part, if not all, the findings of Selikoff and his associates. An important finding in these reports is that these cancers are found some 20-40 years after initial exposure to asbestos, frequently after retirement from active employment.

Summary of Findings - The response to the poll of the Medical and Health Committee members regarding this potential problem was nominal for this type of inquiry. Twelve replies representing nine companies were received. Of this number about 3 companies had made what appears to be a careful examination of their health records and at least two other companies are engaged or are about to begin both environmental as well as medical surveys of asbestos insulators. A point of special interest is that not all insulating materials used in a refinery consist of or contain asbestos. Considerable quantities of glass wool or rock wool, as well as magnesia, are also used as insulation. These materials are similar in composition to those reported by Selikoff and associates.

One company reports that among a group of about 40 insulators there was one case of bronchogenic carcinoma after some 16 years of exposure and one case of adenocarcinoma of the rectum after some 20 years of exposure. Two other employees have had lung biopsies performed; one with 25 years of exposure showing a single asbestos body in the specimen and the other with 20 years of service with fibrous thickening of the alveolar septa but no asbestos bodies in the specimen. There was no significant pathology in these specimens.

In another company one plant reports a suspected case of asbestosis which occurred some 10 years ago, but the outcome of the case is lost to antiquity. At another plant of the same company one insulator had a lower lobectomy and it was suspected that the fibrosis was caused by asbestos. A biopsy disproved this

WA-TEX 003886

allegation. X-ray examinations of 7 additional insulators at this plant, each of whom has had 18 or more years of exposure, revealed no significant findings. At still another plant roentgenography of all the insulators revealed broncho-vascular markings which was not apparent among other refinery people. No significance was attached to these markings by the contributing physician.

A third company reported examination of insulators at all their plants. The majority have less than 15 years service and their chest x-ray films and other tests appear normal. Two employees with more than 15 years service are reported to have a bronchitis.

All other reporting companies state that their insulators appear healthy and that there have been no unusual illnesses among the group. No results of any dust surveys were reported although one or two companies state that the inhalation exposure to asbestos is insignificant. It is pertinent to point out that the so-called MAC for asbestos dust is 5 mppcf and that some investigators consider this value to be too high. It is equally important to point out that dust concentrations below about 5 mppcf of air are generally invisible to the naked eye even to that of the experienced observer.

Conclusion - The data obtained to date from the Medical and Health Committee is inadequate to resolve the question as to the degree of hazard which asbestos poses to refinery insulators. This is so because the total number of refinery insulators (about 150) covered by the contributing companies' reports is insufficient for reliable statistical treatment and it is uncertain in every case that the morbidity and mortality records of retired refinery insulators or former refinery insulators have been included in the reports. Since the usual diagnostic examinations are frequently inadequate to detect certain cancers in their early stages, the disease may not be revealed until it has progressed to advanced stages late in life.

To obtain an adequate population sample of refinery insulators for statistical reliability and comparison with published data, at least 500 employees should be covered in the survey. Since there are only a relatively few insulators of long tenure in any one plant, the survey would require the full cooperation of at least 10 companies to obtain meaningful results. As a matter of interest, Selikoff reports that the expected mortality from lung and pleural cancers over a 20 year period in a population of 500-600 persons is about 6 and for the same length of time, the expected mortality from neoplasms of the stomach, colon and rectum is about 9 for the same size population.

WA-TEX 003887

Based on some personal observations of insulating activities, it is my opinion that the inhalation exposure to asbestos among refinery insulators is neither minimal nor insignificant and I urge the Medical and Health Committee to continue studying this potential health problem.

WA-TEX 003888

1. "A Study of Asbestosis in the Asbestos Textile Industry" - Public Health Bulletin #241, August 1938, U.S. Government Printing Office.

2. Braum, D.C. and Truan, T. D. - "An Epidemiological Study of Lung Cancer in Asbestos Miners" - AMA Archives of Industrial Health, Vol. 17 (June) 1958.

3. Selikoff, Churg and Hammond - "Asbestos Exposure and Neoplasia" - JAMA Vol. 188, No. 1, 1964.

4. Elwood, P.C. and Cochrane, A.L. - "A Follow-up Study of Workers from an Asbestos Factory" - British Journal of Industrial Medicine, Vol. 21, No. 4, 1964.

5. Dutra, T.R. and Carney, J.D. - "Asbestosis and Pulmonary Carcinoma" - Archives of Environmental Health - Vol. 10, No. 3, 1965.

6. Williams, W.F. - "Asbestosis and Lung Cancer" - Archives of Environmental Health - Vol. 10, No. 1, 1965.

7. Asbestosis Symposium - New York Academy of Sciences - Summer of 1964.

AMERICAN PETROLEUM INSTITUTE

DEPARTMENT OF TECHNICAL SERVICES

COMMITTEE CORRESPONDENCE

REPLY TO

November 1, 1965

Mr. Robert Diakun
Humble Oil & Refining Company
P. O. Box 222
Linden, New Jersey 07036

Mr. Lester Levin
Socony Mobil Oil Company
150 E. 42nd Street
New York, N. Y. 10017

Gentlemen:

I am pleased that you have agreed to serve with me as a working group on the assignment given us by Mr. N. V. Hendricks, Chairman of the API Committee on Industrial Hygiene.

Our assignment, as you know, is to look into the matter of possible adverse health effects among insulators in the oil industry due to exposures to asbestos dust. I plan to invite the medical directors of the various oil companies to provide us with medical information on the health status of their refinery insulators. I believe that some companies have already compiled this information and hope that it will be made available to us. However, some additional information will be needed as to the relative amount of asbestos insulation being used as compared to the amount used in earlier years.

Currently there appears to be some confusion about the health of insulators because of an assumption among some writers that all insulators are exposed only to asbestos dust. As I see it, one of the things that our group can do is to learn the relative role of asbestos in present refinery insulating materials.

I will let you know when I receive the needed data so that we can review it and prepare a report of our study.

Sincerely,

Allan E. Dooley

AED-TC
CC:NVH

PHILLIPS PETROLEUM COMPANY
BARTLESVILLE, OKLAHOMA

MEDICAL DEPARTMENT

HEALTH DIVISION
NEW YORK
JAN 15 1965
CHB
ERS
GCA
JRE
AED
RGW

January 5, 1965

Subject: Use of Asbestos in the Petroleum Industry

To Members
Central Committee on Medicine and Health,
and Technical Advisors

Gentlemen:

At the request of the Chairman, Committee on Industrial Hygiene, members of the Medical and Health Committee are being asked to contribute information regarding their environmental health experience with the use of asbestos in the petroleum industry. This inquiry is prompted by reports of epidemiologic studies which revealed manifold carcinogenic effects among building trades workers handling asbestos insulating material.

To preserve the confidential nature of any information developed by a contributing company, Dr. Carl A. Nau (Environmental Health Institute, the University of Oklahoma Medical Center, Oklahoma City, Oklahoma) has agreed to serve as a "third party" and postal center. Those who would prefer not to send the information to me directly can mail it to Dr. Nau who will remove all identifying marks including the postmark and relay it on to me. The information will be collated and presented to the Committee at its next spring meeting if possible. Along with this information the report will include a review of the published information on the subject of asbestos exposure and its physiological effects.

Unless two or more companies can offer some definite data or information, the Survey report will consist of a review of the literature in the hope that it will stimulate future investigations among member companies.

Very truly yours,

Lucian E. Renes

LER:bgm

cc: G. H. Collings, M.D.
T. E. Allen, M. D.
Paul D. Halley
E. O. Mattocks
M. V. Hendricks

TEXACO

Port Arthur, Texas, March 11, 1965

API CENTRAL COMMITTEE ON MEDICINE AND HEALTH
USE OF ASBESTOS IN THE PETROLEUM INDUSTRY

MAR 15 1965
GEN. MGR.
ASST.GEN.MGR.
CO-ORD. CR. REQ.
SUPVR.-COST & ST.
SUPVR.-EMP.REL.
Supvr.-Proc. & Prod.
Supvr.-Adm. & Serv.
ASST. TO G.M.
Supvr.-Lab. Cont.

STRICTLY PERSONAL
AND CONFIDENTIAL

M E M O R A N D U M

Mr. H. G. Tigh
Houston, Texas

We are sending you herewith the information requested in your strictly personal and confidential memorandum of February 15, 1965, on this subject.

You will note that we have included more information than was actually requested by Dr. Baylor, thinking that it would be helpful to him in his study. The attached tabulation is broken down into the following two parts:

I. Insulators In Service On 3-1-65

II. Insulators Retired During The Past Five Years

After reviewing the entire data, Dr. F. W. Wilson made the following comments:

"You will note that the majority of them show few specific changes. A few show calcific pleural plaques and/or pleural adhesions. Several show varying severity of diffuse pulmonary fibrosis; however, we find this type of fibrosis to be frequent in this area and consider it to be non-specific in etiology.

"For additional followup data, we have included those who have retired during the past five years. In the combined group two malignancy deaths have occurred. L. A. Broussard died 7-29-63 of a gastrointestinal tract carcinoma associated with chronic regional ileitis. Peter Cappadonna, a foreman who had been an insulator for many years, died May 10, 1960, of widespread malignancy.

secondary to mesothelioma of the pleura. I should mention a third individual, Joe Pecorino, Jr., who is in a terminal malignancy state. He was found to have widespread seeding of the peritoneum with a highly anaplastic neoplasm suspected of being mesothelioma."

We hope that this will provide Dr. Baylor with all the data he is seeking, but we will be happy to provide any additional data or clarification that might be needed.

E. W. McNEALY

EAN-JLM

Enc.

I. INSULATORS IN SERVICE ON 1-1-65

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPT. (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
Merlie Palermo	57	38	10-26-64	11-8-64	10	Upper respiratory infection	Has hypertensive heart disease. Last chest x-ray 7-28-64--moderately heavy lung markings, enlarged heart.
			12-27-62	1-7-63	7	Upper respiratory infection	
			6-8-62	6-24-62	11	Meniere's Syndrome	
			5-16-62	5-27-62	8	Meniere's Syndrome	
			1-24-62	1-29-62	3	Virus	
			5-26-61	6-12-61	11	Depressive reaction	
			12-26-60	2-13-61	33	Hypertension	
			5-16-60	6-6-60	15	Sore leg	
					98		
Judy Chamberlain	55	36	4-19-61	4-23-61	3	Acute gastro enteritis	Chest x-ray 11-10-48--negative.
Clifford Bihm	58	36	No absences last 5 years		0		Last chest x-ray 5-29-63--negative.
Joe Pecorino, Jr.	54	36	9-30-63	10-2-63	3	Virus	Terminal malignancy case. Last chest x-ray here 5-1-64--generalized fibrosis & emphysema.
			3-5-63	3-18-63	9	Upper respiratory infection	
			2-18-63	2-24-63	5	Influenza	
			6-14-60	7-10-60	18	Pneumonia	
					35		
H. J. Dreyer	58	35	8-17-64	8-30-64	10	Arthritis	No record of chest x-ray here.
			7-6-62	7-23-62	11	Prostatitis	
					21		
F. G. Brown	60	34	11-24-64	11-26-64	2	Ingrown toenail	Last chest x-ray 1-25-55-negative.
			10-19-64	10-19-64	1	Cold	
			7-6-64	7-7-64	1	Cold	
			3-25-64	4-12-64	13	Bursitis left shoulder	
			1-13-64	1-28-64	11	Bursitis left shoulder	
			11-27-63	12-16-63	13	Upper respiratory infection	
			5-20-63	5-28-63	6	Acute duodenitis	

WA-TEX 003846

Mr.	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPT. (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
G. Brown(cont'd)			12-12-62	1-13-63	23	Duodenal ulcer & hernia	
			11-2-62	11-15-62	9	Duodenitis	
			10-15-62	10-16-62	1	Virus	
			11-27-61	11-30-61	3	Virus .	
			7-31-61	8-8-61	6	Influenza	
			3-6-61	3-8-61	2	Multiple abscesses	
			5-9-60	5-31-60	15	Arthritis	
			1-27-61	2-12-61	11		
					117		
C. Rich	59	32	6-1-64	6-15-64	10	Sore throat	Chest x-ray 7-19-63-- negative.
			8-5-63	8-19-63	10	Infected foot	
			4-15-63	4-28-63	10	Influenza	
			1-15-63	1-20-63	4	Upper respiratory infection	
			2-8-60	3-20-60	30	Influenza and arthritis	
					64		
m Camerera	57	31	9-18-62	10-1-62	9	Upper respiratory infection	Chest x-ray 10-20-64-- negative.
			7-30-62	8-5-62	5	Labrynthitis	
			1-22-62	2-19-62	20	Duodenal diverticulum	
			2-3-60	3-6-60	23	Influenza & pleurisy	
					57		
J. DeJean	52	30	No absences last 5 years		0		No record of chest x-ray.
ff Polito	56	37	11-20-64	11-29-64	6	Muscle strain	No record of chest x-ray.
			11-9-61	11-14-61	4	Upper respiratory infection	
					10		

WA-TEX 003847

...et No. 3

ME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPT. (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
...rge Bordonaro	53	30	12-30-64	1-17-65	13	Acute bronchitis	Chest x-ray 2-24-64--negative. Has muscular dystrophy.
			10-14-64	10-25-64	8	Acute bronchitis	
			1-14-64	2-23-64	29	Pneumonia	
			6-19-63	9-1-63	52	Cholecystectomy	
			4-1-63	4-14-63	9	Bronchitis	
			4-4-60	4-24-60	15	Myotomic dystrophria	
			3-14-60	3-27-60	10	Influenza	
					136		
...erlie Accardo	58	30	3-17-60	3-21-60	3	Bronchitis	No record of chest x-ray.
...ny Arisco, Jr.	59	28	1-5-65	1-8-65	4	Cold	X-ray 9-17-64--generalized fibrosis, pleural pericardial adhesions, calcium plaques in diaphragm.
			1-6-64	1-19-64	10	Bronchitis & pleurisy	
			3-27-61	3-28-61	1	Ear trouble	
			9-12-60	9-18-60	5	Cold and sore throat	
			6-27-60	7-11-60	11	Deafness	
					31		
...ony Fecorino	53	28	12-27-62	1-1-63	3	Severe gastroenteritis	X-ray 10-12-55--negative.
			5-16-60	7-10-60	40	Prostate trouble	
			8-14-61	8-16-61	3		
					46		
...W. Eleman	59	28	1-4-62	4-9-62	67	Bronchopneumonia	X-ray 4-19-62--heavy fibrosis, pleural adhesions, emphysema. Chronic asthma.
...S. Morgan	58	27	1-4-65	1-24-65	15	Influenza	X-ray 11-9-48--not remarkable.
			2-3-64	2-16-64	10	Influenza	
			9-13-61	10-1-61	13	Upper respiratory infection	
			2-24-60	3-6-60	8	Influenza	
					46		

WA-TEX 003848

Sheet No. 4

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPT. (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
R. E. Worthy	54	26	7-20-61	7-23-61	2	Vasitis	X-ray 9-11-64--left ventricular preponderance.
Ray McBride	51	25	12-3-62	1-29-63	42	Pyloric ulcer	No record of x-ray.
			10-24-62 only		1	Cold	
			1-18-60	2-1-60	10	Influenza	
					53		
Sam Mandasso	54	21	5-7-62	5-13-02	5	Dental extraction	No record of x-ray.
Paul J. Mirabella	44	21	12-23-64	12-27-64	P/A	Hand injury-P/A	X-ray 10-13-55--negative.
			3-4-63	3-17-63	10	Reactive depression	
			12-28-62	2-10-63	31	Prostate trouble	
			11-21-61	11-26-61	4	Acute gastroenteritis	
			6-12-61	7-2-61	15	Duodenal ulcer-intercostal neuritis	
			9-20-60	9-25-60	4	Acute upper respiratory infection	
			2-1-60	2-21-60	16	Influenza	
					80		
Tony Cimino	41	21	7-31-61	8-13-61	10	Pterygium resection	12-1-53--chest - negative x-ray.
Steve Graffagnino	40	21	3-7-63	3-17-63	7	Renal calculas	No chest x-ray of record.
			10-17-60	10-23-60	5	Gastroenteritis	
			2-4-60	2-14-60	7	Influenza	
					19		

WA-TEX 003849

Sheet No. 5

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPARTMENT (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
John A. Mondello	42	21	10-14-64	10-16-64	3	Upper respiratory infection	No chest x-ray of record.
			3-9-64	3-15-64	5	Prostatis	
			3-13-63	3-14-63	1	Cold	
			1-23-63	2-4-63	8	Ear infection	
			10-2-61	10-3-61	1	Cold	
			2-3-60	2-14-60	8	Influenza	
					26		
A. A. Wilkerson, Jr.	43	20	No absence past five years				Chest x-ray 3-13-57--negative.
J. E. Lumbley	57	20	3-11-63	4-22-63	30	Chronic inflamation-hand	Chest x-ray 1-7-59--negative.
			12-27-61	1-7-62	8	Infected finger	
			7-18-60	7-24-60	5	Boil	
					43		
Claude Cimino	40	20	2-21-64	3-2-64	6	Hemorrhoids	Chest x-ray 2-24-65--moderately increased markings. Rheumatic valvular disease.
			12-9-63	12-22-63	10	Pterygium resection	
			3-13-61	3-15-61	3	Septic throat	
			3-7-61	3-8-61	1	Bursitis	
			1-27-60	2-7-60	8	Bronchitis & sinusitis	
					28		
Leslie R. Cook	40	20	1-19-65	2-21-65	24	Duodenal ulcer	No chest x-ray of record.
			7-2-63	7-5-63	2	Virus	
					26		
Russell Migues	39	20	2-18-60	3-6-60	12	Pneumonia	No chest x-ray of record.
			2-1-60	2-10-60	8	Upper respiratory infection	
			1-6-60	1-7-60	2	Virus	
					22		

WA-TEX 003850

Sheet No. 6

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPARTMENT (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
James L. Bihm	56	19	7-9-62	8-26-62	35	Hernia-N/A	Chest x-ray 6-22-64--relatively heavy lung markings. Calcifications in diaphragm.
			3-30-61	5-7-61	27	Deafness-surgery	
					62		
Martin Piazza	49	19	10-9-63 only		1	Virus	Arteriosclerotic heart disease. Chest x-ray 3-18-64. Scarring of base of right lung plus pleural thickening of area. Emphysematous blebs.
			7-25-63 only		1	Virus	
			3-19-63	4-7-63	14	Viral gastroenteritis-congestive heart failure	
			9-10-62	9-23-62	9	Congestive heart failure	
			2-5-62	3-4-62	19	Congestive heart failure	
			5-22-61	5-28-61	5	Sunburn	
			4-3-61	4-9-61	5	Arthritis	
			12-13-60	12-14-60	2	Virus	
			7-15-60	7-18-60	2	URI	
			12-11-59	12-13-59	1	Virus	
			10-20-58	11-6-58	13	Prostate trouble	
			8-13-58 only		1	Cold	
			2-12-58	3-9-58	16	URI	
			12-16-57	1-12-58	20	URI	
			10-15-57	11-3-57	13	Influenza	
			10-31-56	11-11-56	8	Arthritis	
			2-28-56	3-4-56	4	Cold	
			1-3-56	1-29-56	19	Flu	
			9-19-55	10-25-55	27	Hemorrhoidectomy	
					182		
Santos O. Delgadillo	38	19	5-8-64	5-11-64	2	Conjunctisutis	Chest x-ray 6-26-63--negative.
			1-13-64	2-9-64	20	Renal glycosuria	
			4-10-61	4-16-61	5	Low back pain-N/A	
			3-30-60	4-3-60	3	Virus	
					30		

WA-TEX 003851

Sheet No. 7

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPARTMENT (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
Joseph C. Lee	42	19	12-30-63	1-19-64	15	Dermatitis	No chest x-ray of record.
			5-8-63	7-7-63	43	Gastroenteritis	
			7-17-61	7-23-61	5	Acute URI	
			4-4-60	4-17-60	9	Colitis	
					72		
Everett Shively	47	19	2-15-65	2-21-65	5	Acute bronchitis	No chest x-ray of record.
Camille Piazza	37	16	No absences past 5 years		0		No chest x-ray of record.
Lawless J. Bellot	51	16	11-26-63	12-15-63	14	Acute lumbosacral strain	Chest x-ray 10-9-46--negative.
			6-4-62	7-15-62	30	Hemorrhoidectomy	
			1-26-61	1-27-61	1	Sore throat	
					45		
Wilson Hanks	46	18	3-8-60	3-10-60	3	Virus	Chest x-ray 5-19-47--negative.
Jasper F. Wiggins	46	16	11-24-64	11-25-64	1	Muscle strain	Chest x-ray 7-16-59--negative
			3-24-64	4-12-64	14	Pterygium	
			11-11-63	11-17-63	5	Otitis	
			9-25-63	9-30-63	3	Contusion-thigh	
			5-16-63	6-16-63	22	Gastritis & ulcer	
			3-8-63	3-26-63	12	Influenza	
			12-14-60	12-15-60	1	Headache w/cold	
			2-15-60	2-28-60	9	Influenza	
					67		
Calvin B. Roberts	39	17	11-24-64	1-11-65	36	Pilonidal cyst	Narcolepsy. Chest x-ray 7-27-64--increased markings.
			11-27-61	12-17-61	15	Headaches	
			1-27-60	2-1-60	3	Knee injury-N/A	
					54		

WA-TEX 003852

Sheet No. 6

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPARTMENT (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
Harris J. Baglio	39	17	8-20-64	8-31-64	6	Knee injury - P/A	Chest x-ray 2-18-64--negative
			12-28-62	12-30-62	1	Upper respiratory infection	
			10-23-62	10-28-62	4	Cardiospasm	
			9-27-62	10-14-62	12	Anxiety state	
					23		
Antime Gonsoulin	51	17	8-21-63	9-2-63	8	Influenza	Chest x-ray 6-15-61--emphysema.
			10-1-62	10-14-62	10	Dermatitis	
			12-1-61	12-17-61	11	Anxiety state	
					29		
Simon Bass	43	17	No absences past 5 years		0		No chest x-ray of record.
Forester McGee	41	17	6-11-62	6-24-62	10	Meniere's syndrome	Chest x-ray 10-13-58--negative.
			1-4-61	3-19-61	53	Hernia - N/A	
					63		
J. K. Thompson	45	17	1-25-65	2-14-65	15	Tumor of neck	Chest x-ray 9-10-64--negative.
			11-14-60	12-18-60	25	Peptic ulcers	
					40		
Peter Cimino	38	17	1-7-64	2-2-64	19	Duodenal ulcer	No chest x-ray of record.
			11-27-61	1-1-62	25	Hemorrhoidectomy	
			8-14-61	8-27-61	10	Duodenal ulcer	
			11-1-60	12-11-60	29	Low back pain	
					83		
Boyd Lambright	38	16	No absences past 5 years		0		No chest x-ray of record.
Velma M. Foley	38	15	2-26-62	3-11-62	10	Cervical adnitis	Chest x-ray 9-3-58--negative.

WA-TEX 003853

Sheet No. 10

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPARTMENT (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
Arnulfo Guerra	42	13	No absences past 5 years		0		No chest x-ray of record.
Geo. Barrilleaux	48	13	1-12-62	1-16-62	3	URI	Chest x-ray 4-9-56--emphysema.
			3-14-60	3-27-60	10	Injured toe	
					13		
Ovey Cormier	57	13	10-23-64	10-30-64	6	Hemorrhoids	No chest x-ray of record.
			6-30-64	7-7-64	6	Thumb infection	
			1-14-63	1-15-63	1	Cold	
					13		
Tony J. Baglio	36	12	2-10-64	3-9-64	20	Acute depressive reaction	No chest x-ray of record.
			6-7-63	7-15-63	26	Bunions	
			2-22-63	2-25-63	2	Cold	
			9-7-62	9-16-62	6	Bronchitis-sinusitis	
			8-28-62	9-3-62	4	" "	
			8-20-62 only		1	Dental surgery	
			2-9-61	2-13-61	2	Sinusitis	
			5-3-60	5-17-60	9	Dermatitis right hand	
					70		
Necol Chiasson	56	12	2-5-63	2-11-63	3	Cellulitis-cheek	No chest x-ray of record.
Cesar A. Ramirez	38	10	9-21-62 only		1	Cold	No chest x-ray of record.
			9-11-62	9-12-62	2	Renal calculus	
					3		
Pedro Arriola, Jr.	34	5	7-29-63	10-27-63	65	Acute coronary thrombosis	Chest x-ray 10-17-64--negative.
			1-25-60	2-7-60	10	Influenza	
					75		

WA-TEX 003854

Sheet No. 11

NAME	AGE (12-31-64)	FULL YEARS SERVICE IN INSULATING DEPARTMENT (12-31-64)	ABSENCES LAST FIVE YEARS FROM	TO	WORK DAYS ABSENT	DIAGNOSIS	COMMENTS
Clifton Corkran	30	5	12-23-63	1-7-64	12	Fractured ribs, lacerations N/A	Chest x-ray 1-27-64--negative.
			3-18-63	4-14-63	19	Back strain - P/A	
			7-25-62	8-1-62	6	Fractured ribs-bruises-N/A	
			11-27-61	12-3-61	5	Clinical studies	
			4-19-61	5-14-61	18	Mumps	
					60		
Arnulfo Patino	39	6	5-12-64	5-17-64	4	Strep infection	Chest x-ray 2-3-61--negative.
			8-27-62	9-17-62	15	Diseased tonsils & adenoids	
			11-3-60	2-5-61	68	Sinus tachycardia	
					87		
John C. Knobloch	30	5	12-8-64	12-13-64	4	Pneumonitis	Chest x-ray 7-28-53--negative
			2-14-64	2-13-64	1	Cold	
			7-22-63	8-11-63	14	Severe cervical strain	
			4-27-62	5-6-62	6	Paranychia finger	
			2-22-62	3-4-62	5	Osteomyelitis	
			12-20-61	12-25-61	3	Influenza	
			2-19-60	3-1-60	7	Influenza	
					40		
Don R. East	32	5	2-15-65	2-21-65	5	URI	Chest x-ray 8-7-53--negative
			8-17-62	8-19-62	1	Headache-fever	
					6		

WA-TEX 003855

II. INSULATORS RETIRED IN LAST 5 YEARS

ME	AGE (12-31-64 OR WHEN DIED)	FULL YEARS SERVICE INSULATING DEPARTMENT	DAYS LOST	ABSENCES LAST FIVE YEARS SERVICE		DIAGNOSIS	COMMENTS
A. Broussard	59 (died 3-8-64)	32	127	9-12-63	3-8-64	Regional ileitis	Last x-ray 8-2-62- negative. Died of G.I. tract malignancy on 3-8-64.
			8	4-10-63	4-22-64	Colon trouble	
			43	10-11-62	12-10-62	Regional ileitis	
			10	8-27-62	9-10-62	Pylorospasm	
			10	7-23-62	8-6-62	Ileitis	
			5	10-9-61	10-16-61	Cardiopylorospasm	
			7	1-28-60	2-8-60	Influenza	
			5	12-23-59	12-27-59	URI	
			51	9-25-59	11-16-59	Cardio duodenal spasm	
			268				
D. Johnson	65 (Early retirement 4-30-63)	34	0	No record of absences last 5 years of service			
E. Lauve -man)	66 (Normal retirement 11-1-63)	6-As Insu. 30-As Supvsr.	4	3-6-62	3-19-62	Virus & cold	Chest x-ray 2-22-60- negative.
			14	1-5-60	1-18-60	Virus & cold	
			23	1-31-63	2-22-63	Not available	
			3	2-24-63	2-26-63	Not available	
			44				
-ney A. Nixon	57 (Early retirement 8-31-63)	20	4	10-16-62	10-21-62	Lumbar arthritis	Chest x-ray 3-27-57--old pleural adhesions.
			5	7-23-62	7-29-62	Osteoarthritis	
			1	1-8-62	1-9-62	Not available	
			5	10-16-61	10-22-61	Febromyositis	
			4	4-11-61	4-17-61	Arthritis of knee	
			15	12-5-60	12-27-60	Influenza	
			7	2-1-62	2-11-62	Arthritis	
			15	5-2-60	5-22-60	Whiplash injury-N/A	
			3	1-13-60	1-18-60	Arthritis	
			7	11-2-59	11-8-59	Arthritis	
			12	10-1-59	10-12-59	Arthritis	
			11	9-17-59	9-27-59	Arthritis	

WA-TEX 003856

set No. 2

E	AGE (12-31-64 OR WHEN DIED)	FULL YEARS SERVICE INSULATING DEPARTMENT	DAYS LOST
ney A. Nixon(cont'd)			26
			11
			29
			155
ert Powers	68 (Normal retirement 1-31-62)	33	42
			62
			104
er Cappadonna	58 (Died 5-10-60)	30-As Insu: 15-As Sup.	21
			133
			41
			97
			292

WA-TEX 003857

ABSENCES

LAST FIVE YEARS SERVICE		DIAGNOSIS	COMMENTS
5-7-59	6-1-59	Arthritis	
3-13-59	3-23-59	Acute URI	
9-29-58	10-27-58	Anemia	
6-15-61	8-14-61	Dupuytren's contracture	Chest x-ray
6-16-59	8-16-59	Knee surgery-P/A	10-26-61-negative.
8-17-56	9-16-56	Appendectomy	Medical record
1-28-59	7-31-59	Acute plural effusion	not available.
10-9-59	12-6-59	Acute plural effusion and exploratory thoracostomy.	
12-28-59	5-10-60	Carcinoma of lungs	

TEXACO

Anacortes, Washington, March 10, 1965

ACTING HOUSTON OFFICE
MAR 15 1965
GEN. MGR.
ASST GEN MGR
CO-ORD CR. REL.
SUPVR CMSF & ST.
SUPVR EMP REL.
GEN. Prod. & Proc
GEN. Adm. & Serv
ASST. TO G.M.
Secret. - Eng. Cons.

API CENTRAL COMMITTEE ON
MEDICINE AND HEALTH
USE OF ASBESTOS IN THE
PETROLEUM INDUSTRY

STRICTLY PERSONAL
AND CONFIDENTIAL

MEMORANDUM

Mr. H. G. Tigh
Houston, Texas

In compliance with your request of February 15, 1965, above subject, we are attaching letter from Dr. P. C. Noble concerning the health status of Messrs. T. J. Scoggins and Warren H. Cornwall. Both of these individuals are employed regularly as Insulators at this location.

For your further information, the following may be of interest:

T. J. Scoggins (Age 42) - Employed 11-10-58 as Insulator. According to his application for employment he has worked as an Insulator since September 1951, at least.

Absentee Record:
1958 - 0 days
1959 - 6 days (sickness)
1960 - 0 days
1961 - 12 days (sickness)
1962 - 9 days "
1963 - 23 days "
1964 - 10 days "
34 days (non-industrial accident)
1965 - 0 days

Warren H. Cornwall (Age 44) - Employed 9-22-58 as a Laborer; in the Insulating Department since June 29, 1959.

Absentee Record:
1958 - 1 day (sickness)
1959 - 3 days "
1960 - 5 days "
12 days (industrial accident)
1961 - 5 days (sickness)
1962 - 15 days "
1963 - 5 days "
1964 - 1 day "
1965 - 3 days "

H. P. CREEL

IFH-LMR

P. C NOBLE, M.D
J A OSTLUND, M D
1303 EIGHTH STREET CYpress 3-2161
ANACORTES, WASHINGTON

March 5, 1963

Mr. Ira Holley
% Texaco Refinery
P. O. Box 622
Anacortes, Wash.

Re: Thomas Scoggins
Warren Cornwell

Dear Mr. Holley:

I have carefully reviewed the medical records of the above men since their employment in 1958. Neither man has had an unusual number of days off due to illness and there is nothing to suggest a relationship between their illnesses and their work as insulators.

Truly yours,

P. C. Noble, M.D.

PCN/hs

TEXACO

Tulsa, Oklahoma, March 4, 1965

API CENTRAL COMMITTEE ON MEDICINE AND HEALTH
USE OF ASBESTOS IN THE PETROLEUM INDUSTRY

STRICTLY PERSONAL
AND CONFIDENTIAL

MEMORANDUM

Mr. H. G. Tigh
Houston, Texas

This is in reference to your subject memorandum of February 15, 1965. We are attaching hereto a list of employes in our Insulating Department, giving the requested information.

We have no chest X-Rays available for study on any of these people. To the best of our knowledge none of our current Insulators, and a number of them have retired in recent years, have suffered any ill effects from the handling of asbestos materials.

S. W. DARLING

JLMcG-EH

Attach.

Kenneth E. Cox Age 46 Departmental Service - 15 Yrs.
Health generally good. No chest trouble known.

Clifford C. Scott Age 50 Departmental Service - 14 Yrs.
Has had lots of sinus trouble, lost time over it. Also under treatment for high blood pressure. The past year lost time on account of dermatitis of an unknown origin. Otherwise all right. No chest trouble known.

James V. Holland Age 37 Departmental Service - 14 Yrs.
General health good.

Oran L. Kelly Age 42 Departmental Service - 14 Yrs.
Has had a nervous condition in the past. Back surgery last year, otherwise O.K.

Herbert J. Smith Age 39 Departmental Service - 13 Yrs.
Stomach ulcers and surgery for the same. Has had hives many times in the past, reason unknown. Does have a nervous condition. No chest trouble known.

George W. Dees Age 50 Departmental Service - 6 Yrs.
Seems to be in good health, no chest trouble known.

Nolen Stimson Age 44 Departmental Service - 6 Yrs.
Surgery on varicose veins last year, otherwise in good health. No chest trouble known.

H. G. Burcham Age 46 Departmental Service - 2 Yrs.
Good health, no chest trouble known.

E. J. Eperson Age 42 Departmental Service - 1 Yr.
Has had lots of upper respiratory infections, but otherwise health is good. No major chest infection known.

TEXACO

HEALTH DIVISION
NEW YORK
MAR 24 1965

Houston, Texas 77052, March 22, 1965

CHB	API CENTRAL COMMITTEE ON MEDICINE AND HEALTH	
ERS	USE OF ASBESTOS IN THE PETROLEUM INDUSTRY	
GCA		
JRE		
AED		
RGW		

MEMORANDUM

Dr. C. H. Baylor
New York, New York

Please refer to your subject letter dated February 2, 1965.

Enclosed you will find the original report for Refining Department location in accordance with your request. We are not retaining any copy for our files.

No attempt to compile the data has been made by this office since we thought you would probably prefer to tabulate this data to your own format.

Kindly advise us if you should desire any additional information or if you should find that the report for any particular plant is deficient in any respect.

R. G. TIGH

JCG-MLM

Enclosure

Asbestos Study

The subcommittee to investigate the matter of possible health effects among insulators in the oil industry because of exposure to asbestos dust consists of Allan E. Dooley (Texaco), Chairman, Robert Diskan (Humble) and Lester Levin (Socony Mobil). Medical directors of the various oil companies will be asked to submit information on the health status of their refinery insulators. It is understood that some medical directors have already assembled this information and the subcommittee hopes that it will be made available. Anonymity of the companies and employes will be maintained.

Concurrently, the subcommittee will attempt to ascertain the relative amount of asbestos insulation being used as compared to other types. Some writers seem to assume that insulators are exposed only to asbestos dust or that asbestos was the only biologically-active substance in the work environment. The medical director of one company that manufactures a great variety of insulating materials including asbestos products believes that the role of asbestos as a health hazard among insulators has been exaggerated in some reports. It is hoped that this subcommittee can help in a small way to clarify some of the existing confusion.

November 6, 1965

Allan E. Dooley
Chairman