



Shell Oil Company
Interoffice Memorandum

FEBRUARY 13, 1990

TO: DR. ROBERT HUGHES, DEER PARK MANUFACTURING COMPLEX, MEDICAL
DEPARTMENT

FROM: LOUIS C. WADDELL, JR., M.D.

SUBJECT: PULMONARY REGISTRY REVIEW, EMPLOYEE

This case is reviewed because of a possible pleural plaque.

His job classification is "material controller". He is in the Asbestos Surveillance Program.

His chest X-ray was interpreted by a radiologist, Dr. M. A. Mullican on 04/21/88 using the ILO system. That classification indicated no parenchymal abnormalities thought to be consistent with pneumoconiosis. However, there were pleural changes classified as circumscribed changes bilaterally of width A and extent 1. Pleural calcification was also described on the right side of extent 1. The calcification is in a distinctly unusual area for asbestos exposure related radiographic findings. The area of concern is a small linear presumably calcified area at the right apex. Dr. Mullican also describes "a localized convexity along the right diaphragm which could be a non-calcified pleural plaque or possibly a normal variation".

The chest X-rays have also been interpreted by Dr. Patrick M. Conoley, a NIOSH certified B-reader radiologist. On his film report dated 09/24/87 he says the following concerning four-way views of the chest dated 09/14/87 as well as X-rays dated 09/22/87, "There is a minimal, focal convexity to the right hemidiaphragm of indeterminate significance. There is minimal widening of the pleural stripe along the lateral thoracic wall without evidence of calcification. There is a short calcific linear change at the right pulmonary apex. I do not see evidence of pleural thickening at this site. It is basically stable in appearance since 1982. This may represent a atherosclerotic pleural in the subclavian artery but I could not exclude the possibility of focal, linear, calcified pleural calcified plaques. No other significant change is noted to suggest pleuraparenchymal asbestosis."

Although there is a check mark on the pulmonary registry form indicating possible fibrosis, all film readers including this consultant feel that the lung parenchymal is clear and there is no radiographic evidence of interstitial fibrosis. There is a slight reduction in the percent predicted forced vital capacity to 78% but there is a greater reduction

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ABS-055356

LAM 031963

in the percent of predicted of the FEV1 to 70%, all of which suggest an obstructive rather than restrictive ventilatory impairment.

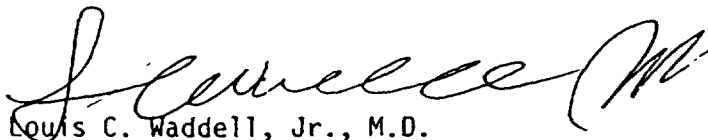
I have also had the opportunity to review the chest X-rays. I agree with the film interpretations of the two radiologists both of whom agree essentially in their ILO classification.

The changes are certainly consistent with the pleural findings associated with asbestos exposure. It should be noted that apical pleural changes are distinctly unusual findings in an asbestos exposure person. Personally, I have seen over 3,000 chest X-ray of employees who are in asbestos surveillance programs and I have not seen any cases of calcified pleural plaques in the apex. However, the lateral wall changes are consistent with asbestos exposure and the area along the right diaphragm is consistent with a diaphragmatic pleural plaque. Because he is in an asbestos surveillance program with its presumption of previous occupational exposure to asbestos and because the radiographic changes are consistent with pleural plaques, I would suggest that he be considered a pleural plaque case both for purposes of recording on the OSHA 200 log and for counseling the employee concerning the chest X-ray and the implications of those changes.

Accordingly, it would be my opinion that the case should be recorded on the OSHA 200 log as a "bilateral pleural plaque" case.

If you have any questions please give me a call.

Thank you for your cooperation in handling these cases.



Louis C. Waddell, Jr., M.D.

LCW:SAM

S-13280 (4/89)
006051

CONFIDENTIAL - MEDICAL

PULMONARY REGISTRY

NAME OF EMPLOYEE	EMPLOYEE NUMBER	LOCATION <i>D.P.M.C.</i>
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• REASON FOR REVIEW

1. CHEST X-RAY REPORT INDICATING:

- a) Possible pleural abnormality *Bilateral calcified diaphragmatic plaques*
- b) Possible fibrosis

2. PULMONARY FUNCTION TEST ABNORMALITY:

- a) FVC less than 75% of predicted *It is 75%*
- b) Other

3. Other reason for review

4. Time of service *1982 to 1985*

5. Has the employee worked in a facility that used asbestos so that it is possible that a pleural plaque could be related to job exposure? ☒ YES ☐ NO

6. Has the employee worked at a job (e.g., bricklayer, insulator, etc.) for a sufficient time (usually at least 10 years) for it to be likely that asbestosis could have developed? ☒ YES ☐ NO *6 + 4 years*

7. Has the employee had a job where it is possible, or likely, that he has been exposed to some other agent known to cause a dust disease of the lung, (e.g., Silica, etc.)? If so, list ☐ YES ☒ NO

8. PLEASE LIST JOB TITLES AND NO. OF YEARS IN THAT POSITION

See Occup Hist.

9. Is there any history of other respiratory illness that could account for the X-ray abnormalities under consideration? If so, list ☐ YES ☒ NO

10. Is there a history of exposure to a pneumoconiosis producing agent outside of employment at Shell (prior to working at Shell or associated with a part-time job, or avocation)? If so, list ☐ YES ☒ NO

• RESULT OF REVIEW: *CXR reviewed. Chest X rays shows Bilateral calcified pleural plaques on diaphragmatic surfaces & a non calcified*

• Recommendation: *1. Latent with plaque*

Free CXR 200 by Enzy AS "Bilateral Pleural Plaques"

REVIEWED BY *J. J. J.*

NOTE: (check list of actions to be completed by the Company doctor and returned to registry in Houston, with one copy to be retained in employee's chart)

IF PLEURAL CHANGE	DATE	IF POSSIBLE FIBROSIS	DATE
Patient counseled: <i>Y</i>	<i>1/23/89</i>	Patient counseled:	
OSHA Form 200: <i>NO</i>		OSHA Form 200:	
Worker's Compensation:		Worker's Compensation:	

EMPLOYEE REFERRED TO DR.

DR'S NAME

(Please send copy of consultation when available)

*Dr. S. P. Fisher Dec. 1984*COMMENTS: *Is an annual review*

ABS-055358

CONTEMPLATED FOLLOW-UP

☒ PERIODIC EXAM☐ OTHER

LAM 031965

ILO PULMONARY SURVEILLANCE WORKSHEET

LCW

EMPLOYEE NAME (First, Middle, Last)			EMPLOYEE NUMBER RETIRED		DATE OF X-RAY READING 4-18-90	
COMPANY ☐ SHELL OIL COMPANY ☐ SHELL CHEM. COMPANY ☐ SHELL DEV. COMPANY ☒ OTHER (Specify) <u>DPMC</u>			TYPE OF EXAMINATION ☒ ASBESTOS ☐ SILICA ☐ OTHER (Specify) _____			

1A. DATE OF X-RAY MONTH 04 DAY 18 YR 90	1B. FILM QUALITY 1 2 X 1/4 If Not Grade 1 Give Reason <i>Shutter overexposed</i>	1C. IS FILM COMPLETELY NEGATIVE? YES ☐ Proceed to Section 5 NO ☒ Proceed to Section 2
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2A. ANY PARENCHYMAL ABNORMALITIES CONSISTENT WITH PNEUMOCONIOSIS? YES ☐ COMPLETE 2B and 2C NO ☒ PROCEED TO SECTION 3

2B. SMALL OPACITIES

a. SHAPE-SIZE

PRIMARY

P	S
Q	I
R	U

SECONDARY

P	S
Q	I
R	U

b. ZONES

R L

2C. LARGE OPACITIES

c. PROFUSION

0/-	0/0	0/1
1/0	1/1	1/2
2/1	2/2	2/3
3/2	3/3	3/+

SIZE

O	A	B	C
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*PROCEED TO
-SECTION J

3A. ANY PLEURAL ABNORMALITIES CONSISTENT WITH PNEUMOCONIOSIS? YES ☒ COMPLETE 3B, 3C and 3D NO ☐ PROCEED TO SECTION 4

3B. PLEURAL THICKENING

a. DIAPHRAGM (plaque)

SITE

O	X	X
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b. COSTOPHRENIC ANGLE

SITE

X	R	L
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3C. PLEURAL THICKENING ... Chest Wall

a. CIRCUMSCRIBED (plaque)

SITE

X	R			
O	A	B	C	
0	1	2	3	

IN PROFILE

i. WIDTH

ii. EXTENT

FACE ON

iii. EXTENT

0	1	2	3
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b. DIFFUSE

SITE

X	R			
O	A	B	C	
0	1	2	3	

IN PROFILE

i. WIDTH

ii. EXTENT

FACE ON

iii. EXTENT

0	1	2	3
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3D. PLEURAL CALCIFICATION																	
a. DIAPHRAGM b. WALL c. OTHER SITES	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">SITE</td> <td style="padding: 2px; text-align: center;">0</td> <td style="padding: 2px; text-align: center;">X</td> <td style="padding: 2px;">EXTENT</td> </tr> <tr> <td></td> <td style="padding: 2px; text-align: center;">0</td> <td style="padding: 2px; text-align: center;">1</td> <td style="padding: 2px; text-align: center;">3</td> </tr> <tr> <td></td> <td style="padding: 2px; text-align: center;">X</td> <td style="padding: 2px; text-align: center;">1</td> <td style="padding: 2px; text-align: center;">2 3</td> </tr> <tr> <td></td> <td style="padding: 2px; text-align: center;">0</td> <td style="padding: 2px; text-align: center;">1</td> <td style="padding: 2px; text-align: center;">2 3</td> </tr> </table>	SITE	0	X	EXTENT		0	1	3		X	1	2 3		0	1	2 3
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	0	1	3														
	X	1	2 3														
	0	1	2 3														

4A. ANY OTHER ABNORMALITIES? YES ☐ COMPLETE 4B AND 4C NO ☒ PROCEED TO SECTION 5

4B. OTHER SYMBOLS (OBLIGATORY)

O	ae	bu	ca	cn	co	cp	cv	di	ef	em	es	fr	hi	ho	id	ih	kl	pl	pt	rp	td
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Report items which may be of present clinical significance in this section

☐ (SPECIFY od)

Date Personal Physician notified?

MONTH	DAY	YR
1	1	1

1. CLINICAL INTERPRETATION There are believed to be bilateral calcified diaphragmatic plaques. The chest x-ray is otherwise unremarkable and little interval change is apparent since 1-23-89.	2. B-READING COMMENTS ABS-055359
• PLEASE TYPE OR PRINT NAME OF PHYSICIAN E. SHEPPER, M.D. / R. A. HUGHES, M.D. ADDRESS SHELL OIL COMPANY, P. O. BOX 100 CITY/STATE/ZIP CODE DEER PARK, TEXAS 77535	• PHYSICIAN'S SIGNATURE <i>[Signature]</i> SIGNED 4-18-90 DATE SIGNED

LAM 031966