SM-32 (REV. 5-78)

PLAINTIFF'S EXHIBIT

SH-2282

Shell Oil Company
Interoffice Memorandum

OCTOBER 18, 1989

TO: DR. R. A. HUGHES, DEER PARK MANUFACTURING COMPLEX

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

SUBJECT: PULMONARY REGISTRY REVIEW, EMPLOYEE

This employee's case is review because of possible increased interstitial markings on the chest x-ray.

is 61 years old. He joined Shell in 1977 as an insulator and has continued in that job position to the present. Prior to that time he worked as an insulator from 1953 to 1976 for Diamond Shamrock. He was a cigarette smoker for approximately 40 years quitting cigarettes in 1986. His spirometry that was done on 11/29/88 showed a forced vital capacity of 81% of predicted and a FEV1 of 66% of predicted with an FEV1/FVC ratio of 64%. These values are consistent with the interpretation of mild to moderate obstructive ventilatory impairment.

The earliest chest x-ray that we have in the film folder is dated 4/14/77. On that film there is some irregularity to the left hemidiaphragm on its lateral aspect. Although that film is somewhat less penetrated then the more recent films there appears to be increase in the appearance of interstitial markings both on the film in 1977 as well as more films. There are film reports in the chart dated 4/14/77 and 5/10/77 and 12/06/77. The 4/14/77 film report says, "The lower right chest shows a stringy infiltrate." The 5/10/77 film was a film done because of the possible findings noted on the April film. That film report says, "Two views show less congestion then seen on previous exam though the increased markings remain." A film reading dated 11/03/78 says, "Films dating back to 4/14/77 show very little change. There was perhaps slightly more prominence of the left major fissure as seen in the lateral views . . . . Impression increase marking with pleural thickening." The area that the film reader commented on was according to the report a small irregularity on the left hemidiaphragm which was thought to represent a pleural plaque and that there was little or no change in that area from the earliest films available.

I have had an opportunity to review all of the chest x-rays. The film dated 11/26/79 is compared to a film dated 11/29/88. These two films have very similar radiographic technique. When viewing the films side by side I am unable to see an interval increase in the general appearance of increased interstitial markings.

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Since the film in 1979 was only two years after he began employment at Shell there would not have been time for interstitial fibrosis to have developed within so short a period. Several other film readers have interpreted the chest x-rays. Dr. M. A. Mullican said on the film reading January 8, 1987, "There are slight prominent interstitial markings and there is some tinting of the left diaphragm."

On 12/16/87 the same film reader said, "Little interval change is noted since previous films again show prominent interstitial markings are noted particularly in the mid and lower lung fields and there are believed to be some small irregular opacities." The radiologist also commented on some symmetrically increased density over the lateral aspects of the mid-lung fields. "I tend to think that this is overlying pectoralis muscle rather than enface pleural plaques." Oblique views were then carried out and they failed to confirm the presence of pleural plaques.

The films have also been read by Dr. Patrick M. Conoley of the Kelsey-Sebold Clinic. He classified the parenchyma as showing 0/1 profusion grade size and shape S/S in the lower one-third of the lung bilaterally. He did not see any pleural plaques.

I agree with Dr. Conoley's reading I do not see any radiographic evidence of pleural plaques.

There is some overall increase in the interstitial markings which are most prominent in the lower one-third of both lungs. These are unchanged over the time interval and were present on the earliest film. This would effectively excluded interstitial fibrosis due to asbestos exposure at Shell. Further, his functional profile is indicated by spirometry indicates an obstructive ventilatory impairment rather than the restrictive impairment which typifies such infiltrative interstitial lung diseases as asbestosis. It is not uncommon for a person with a long history of heavy cigarette smoking and evidence of airway obstruction on spirometry to show a so call "dirty lung" picture which is consistent with the type of radiographic findings we see here.

In summary, considering the job history the chronology of exposure and x-ray findings and the type of radiographic picture it is my opinion that there is not evidence of either asbestosis nor pleural plaque formation to justify considering that this person has either of those two entities. Accordingly, there would not be any reason for an OSHA 200 log recording.

The employee obviously should be encouraged to continue to be abstinent in regard to cigarettes because anyone with a past history of exposure to asbestos has his risk of lung cancer substantially multiplied by continuing to smoke cigarettes.

We are returning the pulmonary registry form with our portion completed.

Thank you for sending me this case for review if you have any questions please give me a call.

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

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Enclosures

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