

HAGER LABORATORIES, INC.

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PLAINTIFF'S
EXHIBIT
KRC-253

REPORT ON SERVICE NUMBER 31915IH
March 16, 1988

To: Caroline DeYong
Southwestern Refinery
Corpus Christi, Texas

Analysis: The following samples were submitted for analysis:
Two membrane filter samples and two blanks for asbestos
count.

One bulk sample for asbestos identification and content
determination.

Method:

ASBESTOS (count)

The fiber concentration of each filter sample was determined following NIOSH Method 7400. Wedges from each filter were examined at 400 power using phase contrast microscopy. All fibers longer than five (5) microns with a length-to-width ratio of 3:1 or more were counted as asbestos.

ASBESTOS (identification)

Each sample was analyzed following EPA method 600/M4-82-020. Portions of each bulk material were immersed in liquid media of known refractive index on a microscope slide and observed at 125 power using a McCrone Dispersion Staining Objective with polarized light. Characteristics of the fibers under polarizing light and dispersion staining conditions using four media were compared to similarly prepared samples of known asbestos types. Optical estimates of the asbestos fiber content were made by comparing the quantity of non-asbestos material to asbestos fibers.

Results: The results are found on Tables 1, 2, and 3.

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Discussion:

The present OSHA permissible exposure limit (PEL) for asbestos is 0.2 fibers/cc.

Detection limit for bulk samples is 1% by weight asbestos fibers.

The sampling rates used were obtained from the 3M Compound Guide R35AG(611)R May 1981.

Sample no. 88-18 appears to have been oversampled. The reported air concentration may be lower than the actual value.

Sample no. 88-19 was received with the filter and support pad wet and the filter damaged. Upon microscopic observation, the filter surface displayed filamentous fungi, making counting difficult. The reported results may not be accurate and the area should be resampled.

LT() indicates "less than" with the lower limit of quantification shown in parentheses.

All samples have been corrected for the blank unless otherwise noted.

Laboratory data are filed and available upon request.

Hager Laboratories Inc. has been AIHA accredited since 1977.

If you have any questions, please call customer service.

Submitted by:

Maria Aleynikov
Maria Aleynikov
Supervisor

MA/sn

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TABLE 1

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TABLE 3

Sample Number	Asbestos (sample contains)
1 Bulk	no detected asbestos 15-30% glass-like fibers

Surfalone