



Date: May 31, 2022

File No: ERI AS # 220296 A, B & C

Case Name-Mae Moore

Specimen: A package containing fixed tissue in the case of Mae Moore was received February 17, 2022. The materials were sent by:

MGM-The Law Firm
444 South Flower Street, Suite 4100
Los Angeles, CA 90071

Inside the box was a container within which were six vials containing tissue. Two of the vials were broken with some tissue released out of the container. All of the labels were moisture damaged and/or tearing or worn off. There were pieces of tissue loose in the bag in which the vials were packaged with some tissue dried and stuck to the vial(s).

The label on the vials and the degree to which they could be read were as follows;

Mae Moore Left upper lobe
Mae Moore Right middle lobe lesion 1/2/2022
Mae Moore Right middle lobe+R node Dr. Eisenstat 1/2/2022 * Broken vial
Mae Moore Right lower lobe Dr. Eisenstat 1/2 *Broken Vial
e Moore? Upper lobe? -label very damaged, no tissue was sampled from this vial.
Mae Moore Left lower lobe+L nodes Dr. Eisenstat 1/2/2022

Ten pieces of tissue were dissected from the left lung (five from the container labeled LUL and five from the container labeled LLL). The ten pieces of left lung tissue were designated as ERI A.S. #220296A. The digest pool from the pieces of left lung tissue (ERI A.S. No. 220296A) contained 1.0239 gms. wet weight of tissue.

Ten pieces of tissue were dissected from the right lung (five from the container labeled RLL and five from the container labeled RML). The ten pieces of right lung tissue were designated as ERI A.S. #220296B. The digest pool from the pieces of right lung tissue (ERI A.S. No. 220296B) contained 1.2095 gms. wet weight of tissue.

There were six pieces of lymph tissue (from the left lung) dissected for evaluation. The six pieces of lymph tissue were designated as ERI A.S. #220296C. The digest pool from the pieces of lymph tissue (ERI A.S. No. 220296C) contained 0.2739 gms. wet weight of tissue.

Wet tissue was sent by: See above.

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Date received: February 17, 2022 –Wet tissue

Date analyzed: May 6, 2022 (Light Microscopy for Ferruginous Bodies-Samples A, B & C -RFD)

May 31, 2022 (A Sample-ATEM by J3 Resources)

May 31, 2022 (B Sample-ATEM by J3 Resources)

May 31, 2022 (C Sample-ATEM by J3 Resources)

Morphology of Specimen: Authorization from Ms. Lindsay Weiss of the MGM Law Firm for destructive testing of wet tissue was received in the case of Mae Moore (ERI A.S. #220296 A, B, C). The process of analysis of the tissue would permit determination of the numbers of ferruginous bodies (FB) and uncoated asbestos fibers in the respective samples.

Light Microscopy: For this evaluation one fourth of the mixed cellulose ester filter from the representative samples of A, B & C was mounted on glass slides, cleared (made transparent) using acetone vapor and then scanned by light microscopy at 100-400x in an AO light microscope for the presence of ferruginous bodies.

Filter 220296A d1 F4 representing the digested samples from the left lung was scanned by light microscopy and represented by 0.19503 gm. wet (0.01197 gm. dry) weight sample of the respective pool. There was one classical ferruginous body found in the area scanned. The one classical ferruginous body was equivalent to 20 FB's/gm. wet (334 FB's/gm. dry) weight of tissue. The detection limit for this sample was 20 FB's/gm. wet (334 FB's/gm. dry) weight of tissue.

Filter 220296B d1 F4 representing the digested samples from the right lung was scanned by light microscopy and represented by 0.20158 gm. wet (0.02223 gm. dry) weight sample of the respective pool. There were no classical ferruginous bodies found in the area scanned. The detection limit for this sample was 20 FB's/gm. wet (180 FB's/gm. dry) weight of tissue.

Filter 220296C d1 F5 representing the digested samples from the lymph tissue was scanned by light microscopy and represented by 0.0913gm. wet (0.01135 gm. dry) weight sample of the respective pool. There were no classical ferruginous bodies found in the area scanned. The detection limit for this sample was 44 FB's/gm. wet (352.4 FB's/gm. dry) weight of tissue.

ATEM Morphology: For electron microscopy analysis a strip was cut from the carbon coated polycarbonate filter representing each of the areas sampled. These strips were mounted on 100 mesh copper grids and the filter matrix dissolved by the use of chloroform. This resulted in the production of a carbon extraction replica containing the entrapped fibers and other particulates. Scans were made at 15,000x with counts and analysis including all fibers greater than or equal to 0.5 μm in length and with an aspect ratio of greater than 5:1. The cores of any ferruginous bodies found in the count areas were analyzed. An additional area was scanned at 2,000x for the presence of ferruginous

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bodies. If any ferruginous bodies were found the core material was analyzed. Any fibers ($>3\mu\text{m}$) found in the area scanned at 2,000x were also analyzed.

Filter 220296A d1 F1 represented a 0.07801 gm. wet weight (0.00479 gm. dry weight) aliquot of the digestate from the left lung sample. An area of the prepared grids from this sample consisting of 1.2 mm^2 was scanned at 15,000x. There were no asbestos fibers found in the area scanned at 15,000x. There were no ferruginous bodies found in the area scanned at 15,000x. The limit of detection in the scan at 15,000x was 4112.8 fibers/gm. wet (66,956.5 fibers/gm. dry) weight of tissue. An additional scan at 2,000x was carried out on sixty grid squares on three grids for the presence of ferruginous bodies. There were no ferruginous bodies found in the area scanned at 2,000x. There was one tremolite asbestos fiber ($>3\mu\text{m}$) found in the area scanned at 2,000x.

Filter 220296B d1 F1 represented a 0.08063 gm. wet weight (0.00889 gm. dry weight) aliquot of the digestate from the right lung sample. An area of the prepared grids from this sample consisting of 1.158 mm^2 was scanned at 15,000x. There were no asbestos fibers found in the area scanned at 15,000x. There were no ferruginous bodies found in the area scanned at 15,000x. The limit of detection in the scan at 15,000x was 4123.4 fibers/gm. wet (37,415 fibers/gm. dry) weight of tissue. An additional scan at 2,000x was carried out on sixty grid squares on three grids for the presence of ferruginous bodies. There were no ferruginous bodies found in the area scanned at 2,000x. There were no asbestos fibers ($>3\mu\text{m}$) found in the area scanned at 2,000x.

Filter 220296C d1 F3 represented a 0.01826 gm. wet weight (0.00227 gm. dry weight) aliquot of the digestate from the peribronchial lymph samples. An area of the prepared grids from this sample consisting of 1.122 mm^2 was scanned at 15,000x. There was one "Libby amphibole" fiber, one tremolite asbestos fiber and one anthophyllite asbestos fiber found in the area scanned at 15,000x. The two asbestos fibers were equivalent to 37,579.2 fibers/gm. wet (301,960.8 fibers/gm. dry) weight of tissue. There were no ferruginous bodies found in the area scanned at 15,000x. The limit of detection in the scan at 15,000x was 18,789.6 fibers/gm. wet (150,980.4 fibers/gm. dry) weight of tissue. An additional scan at 2,000x was carried out on sixty grid squares on three grids for the presence of ferruginous bodies. There were no ferruginous bodies found in the area scanned at 2,000x. There was one actinolite asbestos fiber ($>3\mu\text{m}$) found in the area scanned at 2,000x.

Background 491: There were no asbestos fibers equal to or greater than $0.5\mu\text{m}$ in length found in a scan of 1.218 mm^2 made at 15,000x. There were no asbestos fibers or ferruginous bodies found in a scan 2.436 mm^2 at 2,000x.

Limit of detection: Limit of detection is defined as that concentration below which a single fiber or ferruginous body would not likely be detected.

Light microscopy analysis for the presence of ferruginous bodies performed by Ronald F. Dodson, Ph.D.

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Analytical Transmission Electron Microscopy performed by J3 Resources

Final Report Approved:

Tracy Foster Date 6/6/2022

Tracy Foster, B.S.

Director:

Analytical Laboratory -ERI Consulting

Ronald F. Dodson Date Jun 6, 2022

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