



AMERICAN MUTUAL LIABILITY INSURANCE COMPANY

REPORT OF INVESTIGATION

Quin-T Corporation  
Tilton, New Hampshire



By

Leon D. Horowitz  
Chief Industrial Hygiene Section  
Industrial Hygienist  
(Laboratory Director)  
American Mutual Laboratories  
Accredited by A.I.H.A.

February 26, 1980

ENGINEERING DEPARTMENT

#34

## LABORATORY REPORT

### ASBESTOS FIBER COUNT RESULTS

The six (6) samples obtained by your personnel have been analyzed and counted in our laboratory. The results are shown on the attached Air Analysis Tables.

### METHOD OF ANALYSIS

Airborne concentrations of asbestos fibers were made by membrane filter method at 400 times magnification with phase contrast illumination as required by the Occupational Safety and Health Standard (OSHA) 1910.93a (Federal Register Vol. 37 No. 110 - Wednesday June 7, 1972).

### PERMISSIBLE EXPOSURE TO AIRBORNE CONCENTRATIONS OF ASBESTOS FIBERS (OSHA Std. 1910.93a)

The eight hour time weighted average airborne concentrations of asbestos fibers to which any employee may be exposed shall not exceed 2 fibers (longer than 5 micrometers) per cubic centimeter of air. (Effective September 30, 1975)

The permissible ceiling concentrations - 10 fibers per c.c.

NOTE: Proposed OSHA Standard Section 1910.1001 (Federal Register Vol. 30 May 1977 Thursday, October 9, 1975) recommends a lowering of permissible exposure to an eight hour time weighted average not to exceed 0.5 fibers per c.c. and a Ceiling Concentration of 5 fibers per c.c.

### LIMITATIONS

The attached results are on the samples as received. The results can be no more accurate or informative than the accuracy and care taken in collecting the samples.

1980 - lab report.

DATE February 26, 1980PLANT Quin-T CorpLOCATION Tilton New Hampshire

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### AIR ANALYSIS TABLE

| Sample No. | Time Mins. | Location and Events             | fibers/cc<br>Concentration |
|------------|------------|---------------------------------|----------------------------|
| Blank      |            | Blank                           | 0.0025 fibers/field        |
| AIW-1      | 111        | Amer Insulated Wire Ambient Air | 0.013                      |
| AIW-2      | 78         | " " " ESE tape operator         | < 0.0089                   |
| AIW-3      | 74         | " " " ESE tape area sample      | 0.075                      |
|            |            |                                 |                            |
|            |            |                                 |                            |
|            |            |                                 |                            |
|            |            |                                 |                            |
|            |            |                                 |                            |
|            |            |                                 |                            |

Threshold Limit Value

2.0

A—Milligrams per Cubic Meter

B—Parts per Million

C—Million Particles per Cubic Foot

D—Micrograms per Cubic Meter

AMERICAN MUTUAL LIABILITY INSURANCE CO.

| Date:                                                                       | 2-15-80                  |  | Description and Time Log                                                                                                                                       |
|-----------------------------------------------------------------------------|--------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pl.:                                                                        | American Insulated Wire  |  |                                                                                                                                                                |
| Department                                                                  |                          |  | Area Sample at tape                                                                                                                                            |
| Location                                                                    |                          |  | wrapping machine                                                                                                                                               |
| Operator's Name                                                             |                          |  |                                                                                                                                                                |
| Sample Type                                                                 | Area Sample              |  | 1 1/2" Cable and ESE                                                                                                                                           |
| Pump No.                                                                    | E-02-1001 Flow Rate 2.0  |  |                                                                                                                                                                |
| Start Time                                                                  | 1:54 p.m.                |  |                                                                                                                                                                |
| Stop Time                                                                   | 3:08                     |  |                                                                                                                                                                |
| Sample I.D. No.                                                             | AIW-3                    |  |                                                                                                                                                                |
| Operation Description: (Equipment used, Job procedures, techniques, speeds) |                          |  | Sample taken approximately 2 feet from actual unwound point of ESE tape. This is closer than the operator stands except when he is changing rolls of ESE tape. |
| Wrapping cable with ESE tape.                                               |                          |  |                                                                                                                                                                |
| Material Size                                                               | 1 1/2" width .010" thick |  |                                                                                                                                                                |
| Process Speeds                                                              |                          |  |                                                                                                                                                                |
| Amount of Material                                                          |                          |  |                                                                                                                                                                |
| Normal Operator Work Cycle:                                                 | 8-12 hrs./day            |  |                                                                                                                                                                |
| Actual Operating Time:                                                      | 4 hrs./day               |  |                                                                                                                                                                |
| Rate the following: 0 = None 1 = Slight 2 = Moderate 3 = High               |                          |  |                                                                                                                                                                |
| 1. Ventilation Control                                                      | 0                        |  |                                                                                                                                                                |
| 2. Drafts                                                                   | 1                        |  |                                                                                                                                                                |
| 3. Settled dust on machines                                                 | 0                        |  |                                                                                                                                                                |
| 4. Settled dust on floor                                                    | 0                        |  |                                                                                                                                                                |
| 5. Settled dust on clothing                                                 | 1                        |  |                                                                                                                                                                |
| 6. Airborne dust                                                            | 0                        |  |                                                                                                                                                                |
| 7. Traffic                                                                  | 1                        |  |                                                                                                                                                                |
| Sampled by:                                                                 |                          |  | MW E. J. C.                                                                                                                                                    |



| Date                                                                          | Description and Time Log                                                  |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 2/15/80                                                                       |                                                                           |
| PL <u>American Insulated Wire</u>                                             |                                                                           |
| Department                                                                    | Area sample - tape wrapping with non-calibrator                           |
| Location                                                                      | tape.                                                                     |
| Operator's Name                                                               | No calibrator products being used in the area at this time.               |
| Sample Type <u>Area sample (Ambient air)</u>                                  |                                                                           |
| Pump No. <u>D-10-0356</u> Flow Rate <u>2.0</u>                                | Sample was taken approximately 24" from actual unwound point of ESE tape. |
| Start Time <u>11:52 a.m.</u>                                                  |                                                                           |
| Stop Time <u>1:43 p.m.</u>                                                    |                                                                           |
| Sample I.D. No. <u>AIW-1</u>                                                  |                                                                           |
| Operation Description: (Equipment used, Job procedures, techniques, speeds)   |                                                                           |
| Cable wrapping area. Several different types of tape are wrapped over cables. |                                                                           |
| Material Size                                                                 |                                                                           |
| Process Speeds                                                                |                                                                           |
| Amount of Material                                                            |                                                                           |
| Normal Operator Work Cycle: <u>8-12</u> hrs./day                              |                                                                           |
| Actual Operating Time: _____ hrs./day                                         |                                                                           |
| Rate the following: 0 = None    2 = Moderate<br>1 = Slight    3 = High        |                                                                           |
| 1. Ventilation Control                                                        | 0                                                                         |
| 2. Drafts                                                                     | 1                                                                         |
| 3. Settled dust on machines                                                   | 0                                                                         |
| 4. Settled dust on floor                                                      | 0                                                                         |
| 5. Settled dust on clothing                                                   | 1                                                                         |
| 6. Airborne Just                                                              | 0                                                                         |
| 7. Traffic                                                                    | 1                                                                         |
| Sampled by: <u>MW Eadie</u>                                                   |                                                                           |