PLAINTIFF'S EXHIBIT
GP-199

Georgia-Pacific

intracompany memo

to Mr. G. E. Wilson — location Portland
Mr. E. B. Hollingsworth — Wilmington

from Harry W. Scharf — location Milford

subject O. S. H. A. Inspection Report — date 12-1-75

Attached you will find a copy of our OSHA Inspection Report which was issued as a result of an inspection made at our plant during October, 1975.

H. W. S.

cc: Mr. J. R. Hurd - Portland
Mr. H. W. Peele - Wilmington
Mr. Ken Gipson - Portland
Mr. J. W. Hart - Wilmington
Mr. T. W. Richards - Tigard

OCT 19 1981

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Name Environmental

Title

Date 10/22/75

Pump Serial No. B-06-0305

Sampled by George Fowler

Signature

LOCATION	Ready mix Mixing area	Packing area	Ware-house	Dry Blend area					
FILTER NO.	253	244	255	245					
FLOW: Pump Setting	6	6	6	6					
Liter/min (R)	1.8	1.8	1.8	1.8					
TIME: On	7:15	8:54	1:00	2:30					
Off	8:54	1:00	2:30	3:30					
ELAPSED TIME (min) (t)	99	246	90	60					
VOLUME, Liters (t x r)	178	443	162	108					
REMARKS									
CONCENTRATION (F) fibers/ml	.59	.13	.30	.61					

Total Sample Time (T) 495 mins.

Time Weight Av. Concentration = $\frac{(t_1F_1) + (t_2\ 2) + (t_3F_3) + \ldots}{T}$

RECEIVED
NOV 03 19

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Name

Title Lead Man

Date 10/27/75

Pump Serial No. B-08-0490

Sampled by George Fowler

Signature George Fowler

LOCATION	Ready mix wet area	—	DRY Blend area	Ready mix area	—					
FILTER NO.	249	254	235	250	248					
FLOW: Pump Setting	6	6	6	6	6					
Liter/min (R)	1.7	1.7	1.7	1.7	1.7					
TIME: On	7:13	8:48	11:15	1:20	1:35					
Off	8:48	11:15	1:20	1:35	3:25					
ELAPSED TIME (min) (t)	95	147	95	15	110					
VOLUME, Liters (t x r)	162	250	162	25.5	187					
REMARKS			off for 30 min lunch							
CONCENTRATION (F) fibers/ml	.26	.22	1.32	.70	.29					

Total Sample Time (T) 462 mins.

Time Weight Av. Concentration = $\frac{(t_1F_1) + (t_2\ 2) + (t_3F_3) + \ldots}{T}$

Conc. $= \frac{(95 \times .26) + (147 \times .22) + (95 \times 1.32) + (15 \times .70) + 110 \times .26)}{462}$

$= \frac{25 + 32 + 125 + 11 + 32}{462} = \frac{225}{462}$

$= .49$

RECEIVED
NOV 03 19

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Name

Title Forklift truck Driver

Date 10/22/25

Pump Serial No. R-74-0799

Sampled by George Fowler

Signature George Fowler

LOCATION	All over Plant	All over Plant	—	—	—					
FILTER NO.	224	247	256	240	251					
FLOW: Pump Setting	6	6	6	6	6					
Liter/min (R)	1.9	1.9	1.9	1.9	1.9					
TIME: On	7:10	8:50	11:28	1:30	1:45					
Off	8:50	11:28	1:30	1:45	3:22					
ELAPSED TIME (min) (t)	100	158	92	15	97					
VOLUME, Liters (t x r)	190	300	175	28.5	184					
REMARKS			off for 20 min lunch							
CONCENTRATION (F) fibers/ml	.46	.28	.53	1.39	0.25					

Total Sample Time (T) 462 mins.

$$\text{Time Weight Av. Concentration} = \frac{(t_1F_1) + (t_2\ _2) + (t_3F_3) + \ldots}{T}$$

$$\ldots = \frac{(100 \times .46) + (158 \times .28) + (92 \times .53) + 15 \times 1.39) + (97 \times .25)}{462}$$

$$= \frac{46 + 44 + 49 + 21 + 24}{462} = \frac{184}{462}$$

= .39

RECEIVED
NOV 03 19

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Chicago

Name

Title Ready Mix Mixer

Date 10/27/75

Pump Serial No. B-06-0422

Sampled by George Fowler

Signature George Fowler

LOCATION	wet mix	wet mix	dry packer	—	wet mix					
FILTER NO.	243	242	239	246	241					
FLOW: Pump Setting	6	6	6	6	6					
Liter/min (R)	1.7	1.7	1.7	1.7	1.7					
TIME: On	7:05	8:51	11:30	1:35	1:50					
Off	8:51	11:30	1:35	1:50	3:20					
ELAPSED TIME (min) (t)	106	159	95	15	90					
VOLUME, Liters (t x r)	180	270	162	255	153					
REMARKS			off for 30 min lunch							
CONCENTRATION (F) fibers/ml	.75	.17	.27	.17	.21					

Total Sample Time (T) 465 mins.

$$\text{Time Weight Av. Concentration} = \frac{(t_1F_1) + (t_2\ _2) + (t_3F_3) + \ldots}{T}$$

$$\text{Conc} = \frac{(106 \times .75) + (159 \times .17) + (95 \times .27) + (15 \times .17) + (90 \times .21)}{465}$$

$$= \frac{80 + 27 + 26 + 2.6 + 19}{465} = \frac{154.6}{465}$$

$$= .33$$

RECEIVED
NOV 03 19

Date: 11-24-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 224

ELAPSED TIME (t) 1[illegible] mins.

FLOW RATE 1.9 l/min

VOLUME (V) 1[illegible] liters

FIELD AREA (a) [illegible] mm^2

BLANK COUNT (b) – fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) [illegible] fibers/field

	–	1	–	–	–
0	1	–	1	1	1
	2	1	1	1	1
	–	1	–	–	–
	–	–	1	–	–
	–	1	–	–	–
5	1	–	–	–	–
	–	1	–	1	–
	–	1	–	–	–
	–	–	–	–	3
	–	–	–	–	2
10	1	1	–	–	–
	–	1	–	–	–
	–	–	1	–	–
	–	–	2	2	–
15	1	–	–	1	1
	1	1	–	–	1
	–	1	–	–	1
	–	1	–	–	1
	–	–	2	–	1
20					
SUBTOTALS	[illegible]	[illegible]			12

TOTAL [illegible]

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ [illegible]

Date: 11-26-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 239

ELAPSED TIME (t) 95 mins.

FLOW RATE 1.7 l/min

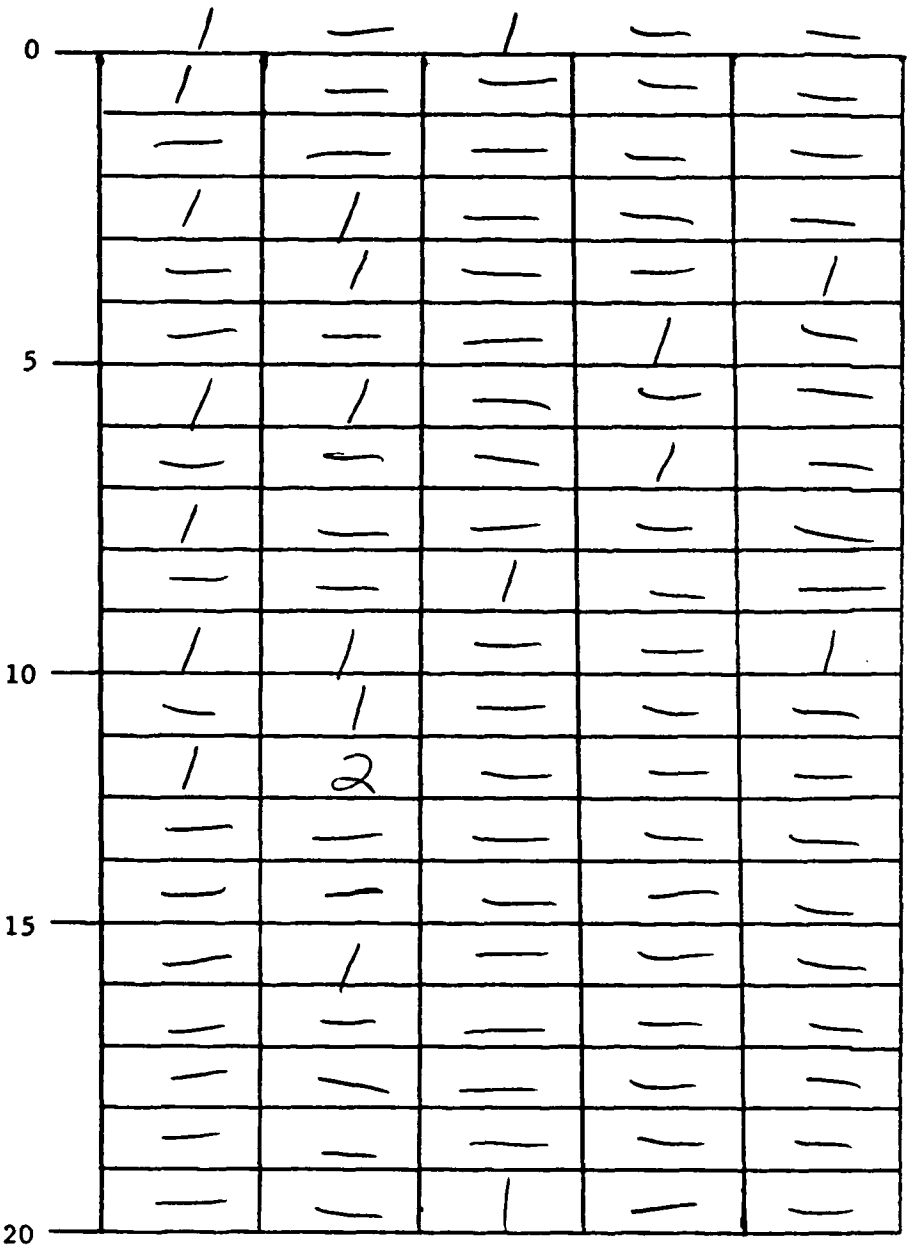
VOLUME (V) 162 liters

FIELD AREA (a) _____ mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) _____ fibers/field



SUBTOTALS

TOTAL 22

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198\ (.22)}{162} = .27$

Date: 11-15-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 256

ELAPSED TIME (t) 92 mins.

FLOW RATE 1.9 l/min

VOLUME (V) 175 liters

FIELD AREA (a) .0432 mm^2

BLANK COUNT (b) fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .47 fibers/field

0	—	—	—	1	1
	—	—	—	—	1
	—	1	—	—	1
	1	—	—	—	—
	1	—	—	—	—
	—	—	1	—	—
5	3	—	—	—	2
	—	—	1	—	—
	—	1	—	—	2
	—	—	—	1	2
	1	2	1	—	—
10	2	1	—	1	—
	1	1	1	—	—
	1	1	—	1	—
	—	1	—	3	—
15	1	—	—	—	—
	—	1	1	—	—
	—	1	1	—	—
	1	—	—	—	1
20	—	1	—	1	—
SUBTOTALS	12	11	6	3	1

TOTAL 47

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{19.2\ (.47)}{175} = .52$

Date: 11-18-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 242

ELAPSED TIME (t) 154 mins.

FLOW RATE 1.7 l/min

VOLUME (V) 270 liters

FIELD AREA (a) .0432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .23 fibers/field

0	1	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	2	—	—	—
	1	—	—	—	—
	—	—	1	1	1
5	—	—	—	—	—
	—	—	—	—	—
	—	2	1	2	1
	2	—	—	1	—
	—	—	2	—	—
	—	1	—	1	—
10	1	—	1	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	—	—	—	—
	—	1	—	—	—
15	—	—	—	—	—
	1	—	—	—	—
	—	—	—	—	—
20	SUBTOTALS	5	6	5	2

TOTAL 23

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{195(.23)}{270} = .17$

Date: 11-14-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 235 ELAPSED TIME (t) 95 mins.

FLOW RATE 1.7 l/min VOLUME (V) 162 liters

FIELD AREA (a) .0432 mm^2 BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm^2 AV. FIBER COUNT (f) 1.08 fibers/field

0	1	1	2	—	2
	1	1	—	1	1
	2	—	—	—	—
	1	1	1	2	2
	2	1	1	1	—
	1	2	2	1	—
5	1	2	1	1	—
	3	3	2	2	1
	3	—	1	2	—
	2	1	2	2	—
	1	—	2	1	3
10	2	—	—	1	—
	1	1	—	2	—
	—	2	—	2	1
	1	—	—	1	1
15	—	1	1	—	1
	2	—	2	—	—
	—	1	2	2	2
	1	2	2	1	2
	1	—	—	—	2
20					
SUBTOTALS	26	19	21	22	21

TOTAL 109

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{148\ (1.08)}{162} = 1.32$

Date: _____

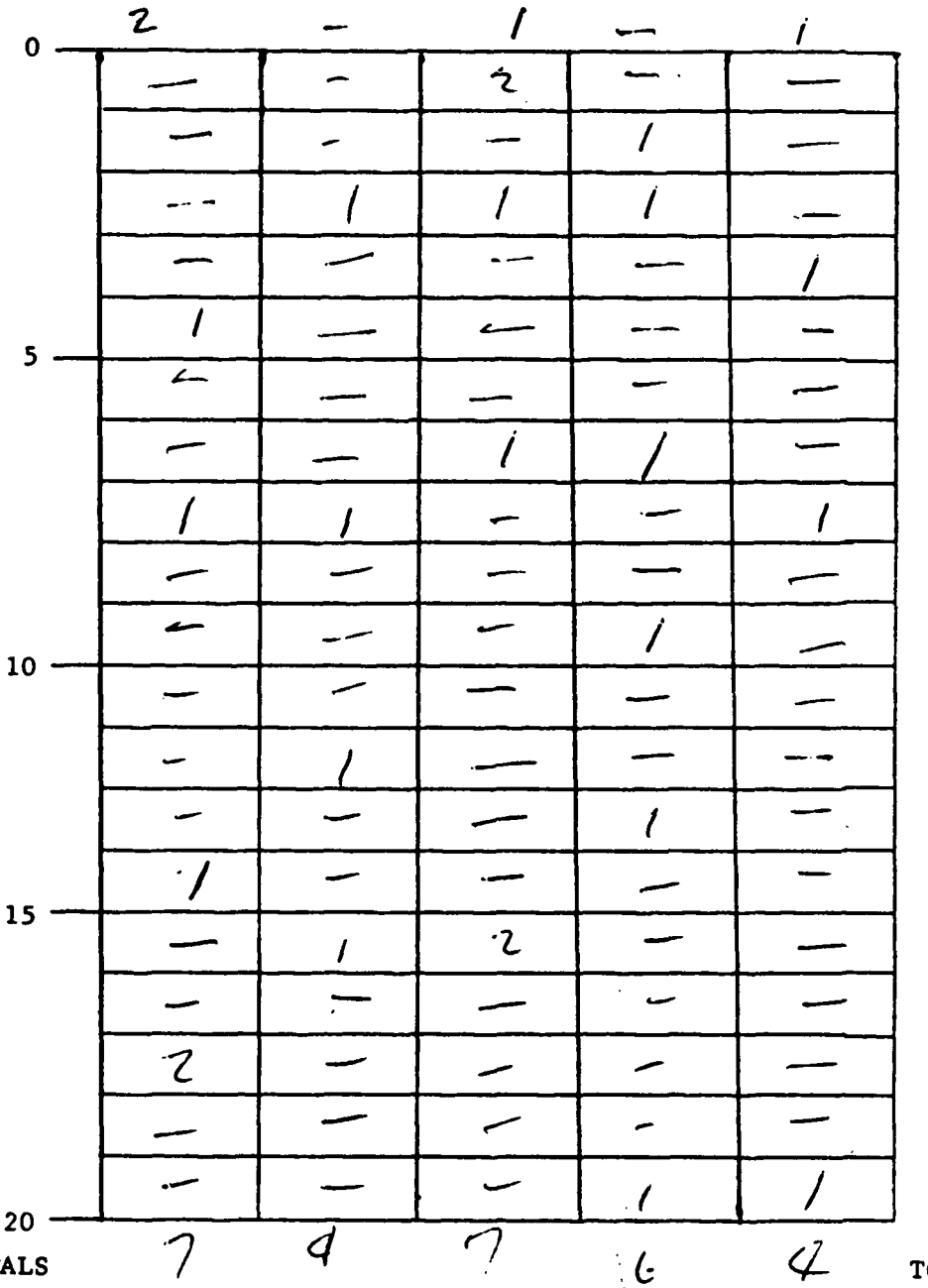
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 254 | ELAPSED TIME (t) 147 mins.

FLOW RATE 1.7 l/min | VOLUME (V) 250 liters

FIELD AREA (a) .0432 mm^2 | BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2 | AV. FIBER COUNT (f) 12.5 fibers/field



SUBTOTALS 7 9 7 6 4 TOTAL 21

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198\ (.25)}{250} = .22$

Date: 11-14-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 241

ELAPSED TIME (t) 90 mins.

FLOW RATE 1.7 l/min

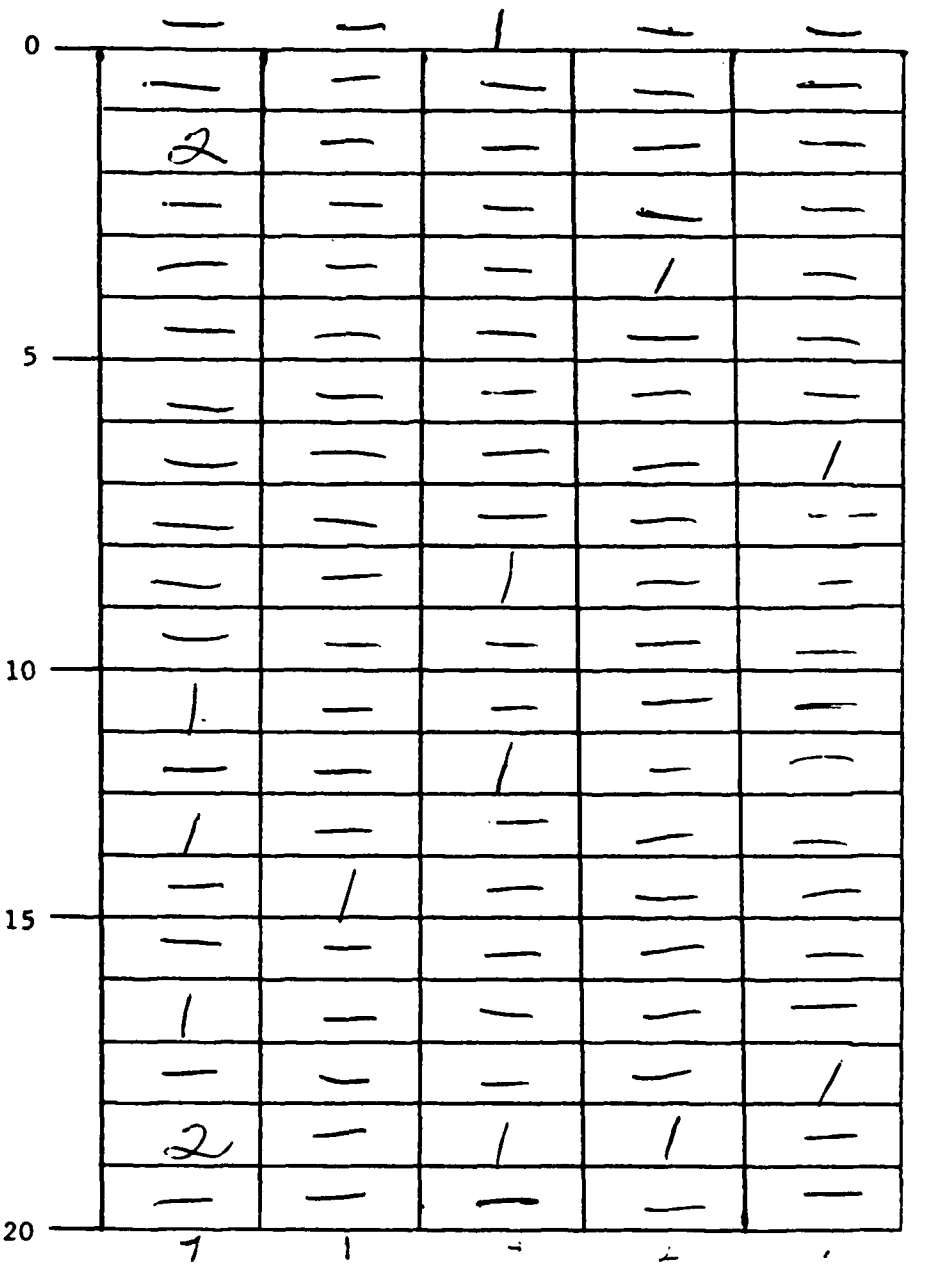
VOLUME (V) 153 liters

FIELD AREA (a) .00432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .16 fibers/field



SUBTOTALS 1 1 — 1 —

TOTAL 16

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{19.8 \times .16}{153} = .21$

Date: 11-16-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 248

ELAPSED TIME (t) 110 mins.

FLOW RATE 1.7 l/min

VOLUME (V) 187 liters

FIELD AREA (a) .0432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .27 fibers/field

0	—	1	—	—	—
	—	—	3	—	1
	1	—	—	1	—
	—	—	—	—	1
	—	—	—	1	—
5	1	—	1	—	1
	—	1	—	—	—
	—	1	—	—	1
	—	—	—	1	—
	—	—	—	—	—
10	—	—	—	—	1
	—	—	—	—	—
	—	—	—	—	—
	1	1	—	—	—
15	—	1	—	1	—
	—	—	—	—	—
	1	—	—	—	—
	1	—	—	1	—
	—	—	1	—	—
20	—	1	1	—	—
SUBTOTALS	5	6	6	5	5

TOTAL ____

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{19.8 \times .27}{187} = .29$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 245 | ELAPSED TIME (t) 60 mins.

FLOW RATE 1.8 l/min | VOLUME (V) 108 liters

FIELD AREA (a) .00432 mm^2 | BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2 | AV. FIBER COUNT (f) .33 fibers/field

0	—	1	1	—	—
	—	—	—	—	—
	—	1	1	—	—
	—	1	2	1	—
	—	—	—	—	—
	2	1	1	—	—
5	—	—	—	—	1
	—	—	—	—	—
	1	1	—	—	—
	—	1	—	1	1
	—	—	—	2	1
10	1	—	—	1	—
	—	—	—	—	—
	—	—	—	1	—
	—	1	—	—	—
15	—	1	—	1	—
	1	—	—	—	1
	—	1	—	1	—
	—	—	—	—	2
20	—	—	—	—	—
SUBTOTALS	5	9	5	8	6

TOTAL 33

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{1.48 \times .33}{108} = .61$

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 243 ELAPSED TIME (t) 106 mins.

FLOW RATE 1.7 1/min VOLUME (V) 180 liters

FIELD AREA (a) .00432 mm^2 BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2 AV. FIBER COUNT (f) .68 fibers/field

	1	2	1	—	—
0	1	—	—	3	2
	—	—	—	2	1
	—	—	—	—	—
	—	—	—	—	3
	—	3	1	—	—
5	1	—	1	—	—
	1	—	—	1	—
	1	1	1	—	1
	—	1	1	1	—
	1	—	—	1	1
10	1	1	2	—	1
	1	—	1	1	1
	—	—	1	1	—
	3	1	2	—	—
15	1	—	—	3	—
	—	1	1	2	—
	1	—	—	1	—
	1	—	1	1	—
20	2	1	—	1	—
SUBTOTALS	16	11	13	18	10

TOTAL 68

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{(19)\ (.68)}{180} = .07$

Date: _____

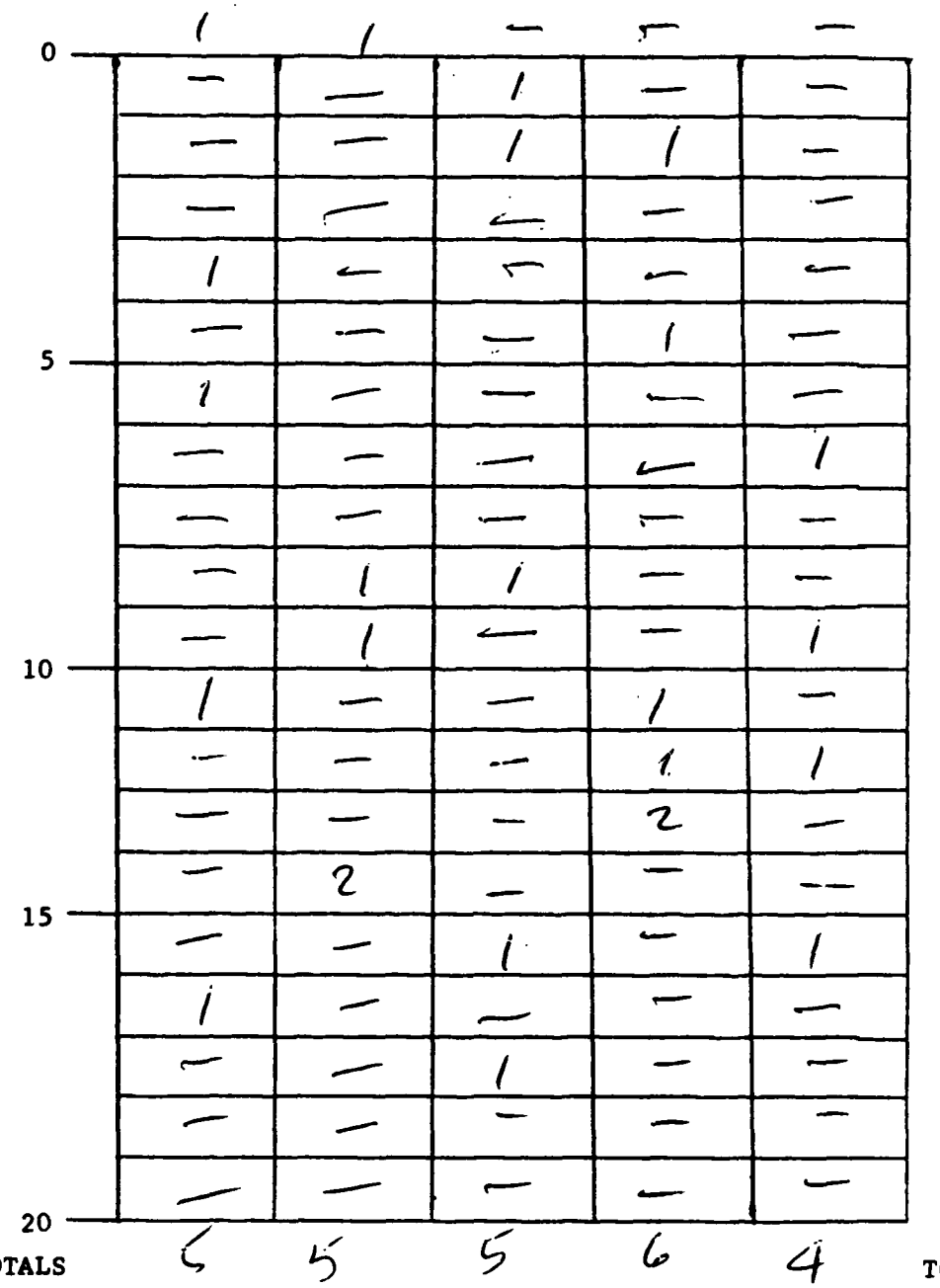
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 255 ELAPSED TIME (t) 90 mins.

FLOW RATE 1.8 l/min VOLUME (V) 162 liters

FIELD AREA (a) .00432 mm^2 BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm^2 AV. FIBER COUNT (f) .21 fibers/field



SUBTOTALS 6 5 5 6 4 TOTAL 21

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198(.21)}{162} = .30$

Date: Nov. 24, 1975

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. Q49

ELAPSED TIME (t) 95 mins.

FLOW RATE 1.7 l/min

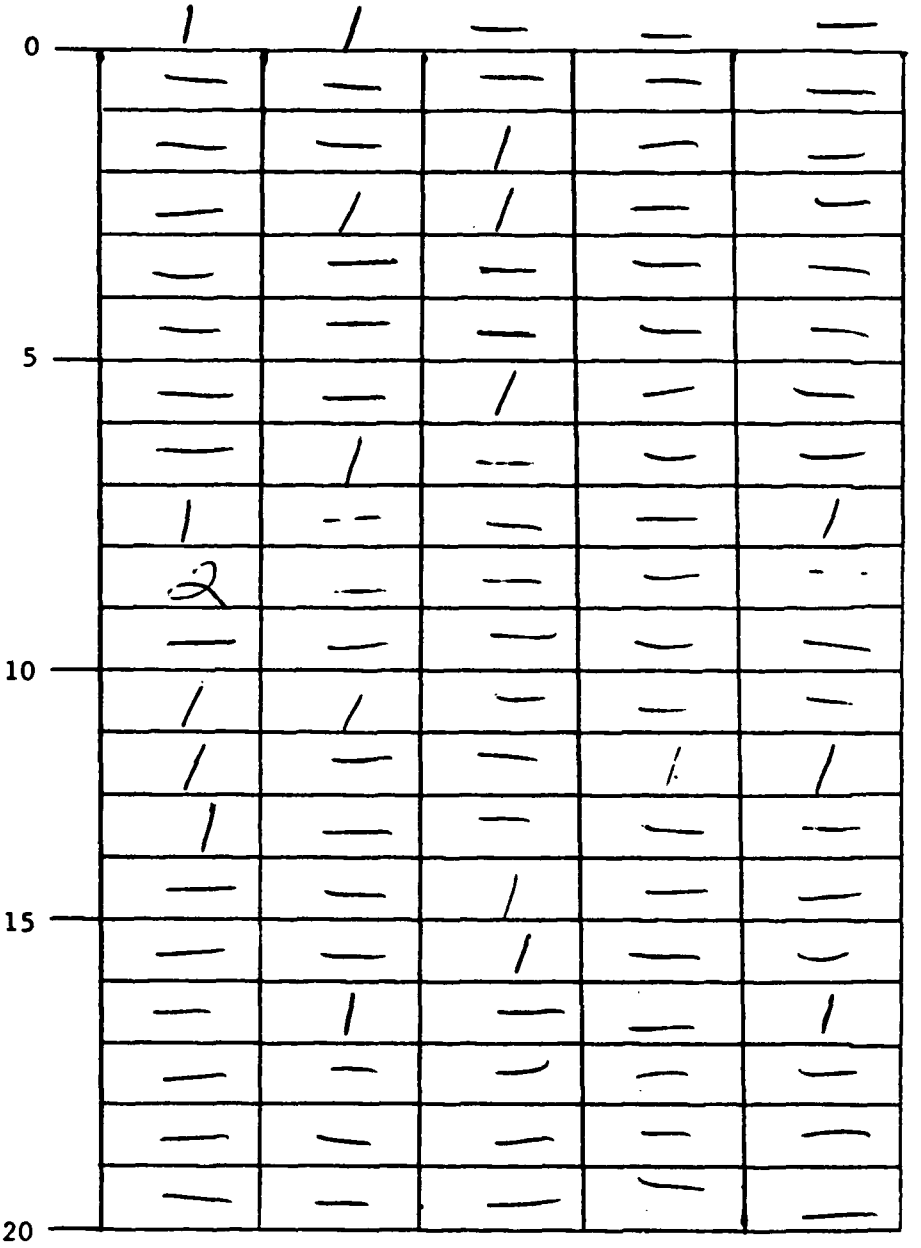
VOLUME (V) 162 liters

FIELD AREA (a) .00432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .21 fibers/field



SUBTOTALS

TOTAL 21

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{195\ (.21)}{162} = .26$

Date: 11-25-95

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 250

ELAPSED TIME (t) 15 mins.

FLOW RATE 1.7 l/min

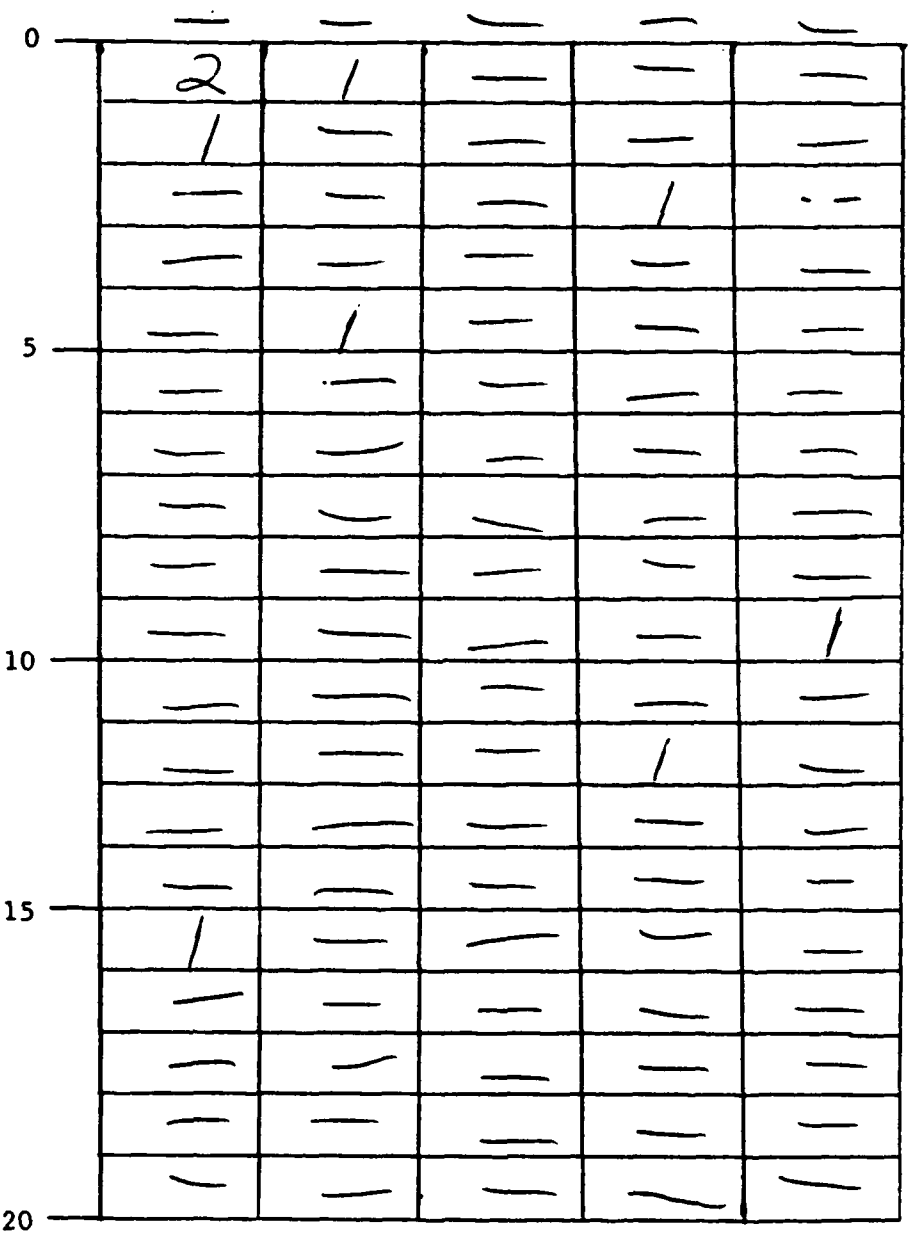
VOLUME (V) 25.5 liters

FIELD AREA (a) .0432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .09 fibers/field



SUBTOTALS

TOTAL 4

Constant k = $\frac{A}{1000\ a}$ = 1.95

Fiber Concentration (F) = $\frac{k\ (f-b)}{V}$ $\frac{1.95 \times .09}{25.5}$ = .07

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 247 | ELAPSED TIME (t) 158 mins.

FLOW RATE 1.9 l/min | VOLUME (V) 300 liters

FIELD AREA (a) .00432 mm^2 | BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2 | AV. FIBER COUNT (f) .43 fibers/field

0	1	—	1	—	1
	1	—	1	1	—
	—	—	2	—	—
	—	1	1	—	—
	1	—	1	1	—
	1	2	1	—	—
5	1	—	—	—	2
	—	—	—	1	—
	—	—	—	1	—
	—	—	2	—	—
	—	1	—	1	1
10	—	—	—	—	—
	1	—	—	—	—
	1	1	—	1	—
	—	—	—	1	—
15	—	1	1	—	—
	—	—	—	1	1
	1	1	1	—	—
	1	—	1	—	1
20	—	—	—	—	1
SUBTOTALS	9	7	12	8	7

TOTAL 43

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198\ (.43)}{300} = .28$

Date: 11-24-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 253

FLOW RATE 1.8 l/min

FIELD AREA (a) .0432 mm^2

FILTER AREA (A) 855 mm^2

ELAPSED TIME (t) 99 mins.

VOLUME (V) 178 liters

BLANK COUNT (b) — fibers/field

AV. FIBER COUNT (f) .53 fibers/field

0	—	—	—	2	—
	—	1	—	1	1
	—	—	—	—	—
	2	—	—	—	1
	1	—	—	—	3
5	—	2	—	—	1
	—	—	—	—	—
	—	1	—	1	1
	—	1	1	—	—
	1	2	3	—	—
10	—	1	2	—	—
	—	1	2	—	—
	—	—	—	1	1
	—	—	—	—	—
15	—	1	1	1	—
	2	—	1	2	2
	1	—	2	—	1
	2	—	—	—	—
	—	—	—	—	1
20	—	1	—	1	—
SUBTOTALS	9	11	12	9	12

TOTAL 53

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V} = \frac{192\ (.53)}{178} = .59$

Date: 11-25-25

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 251

ELAPSED TIME (t) 97 mins.

FLOW RATE 1.9 l/min

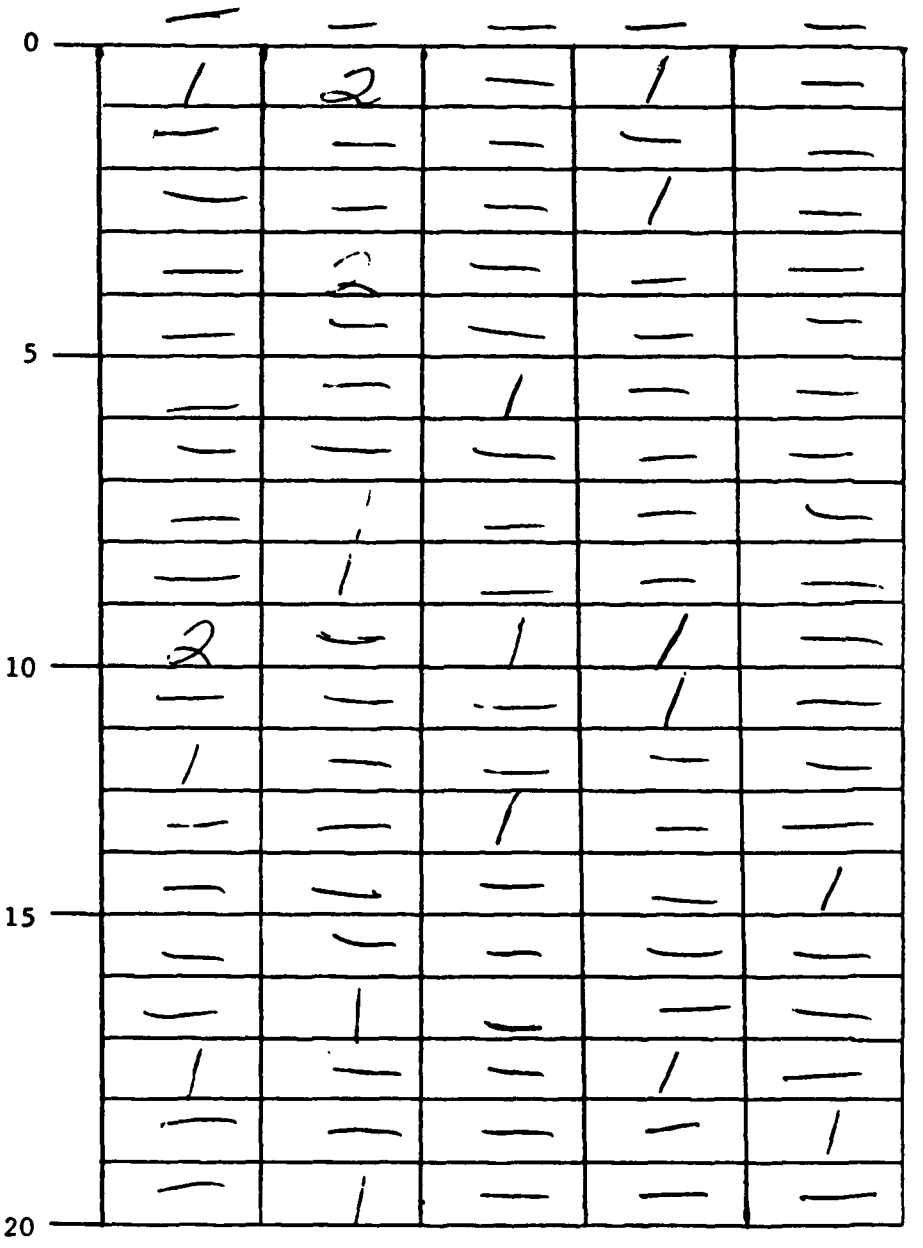
VOLUME (V) 184 liters

FIELD AREA (a) .00432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .23 fibers/field



SUBTOTALS

TOTAL 23

Constant $k = \frac{A}{1000\ a} = 195$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V} = \frac{195\ (.23)}{184} = .25$

Date: 11-25-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 246

ELAPSED TIME (t) 106 mins.

FLOW RATE 1.7 l/min

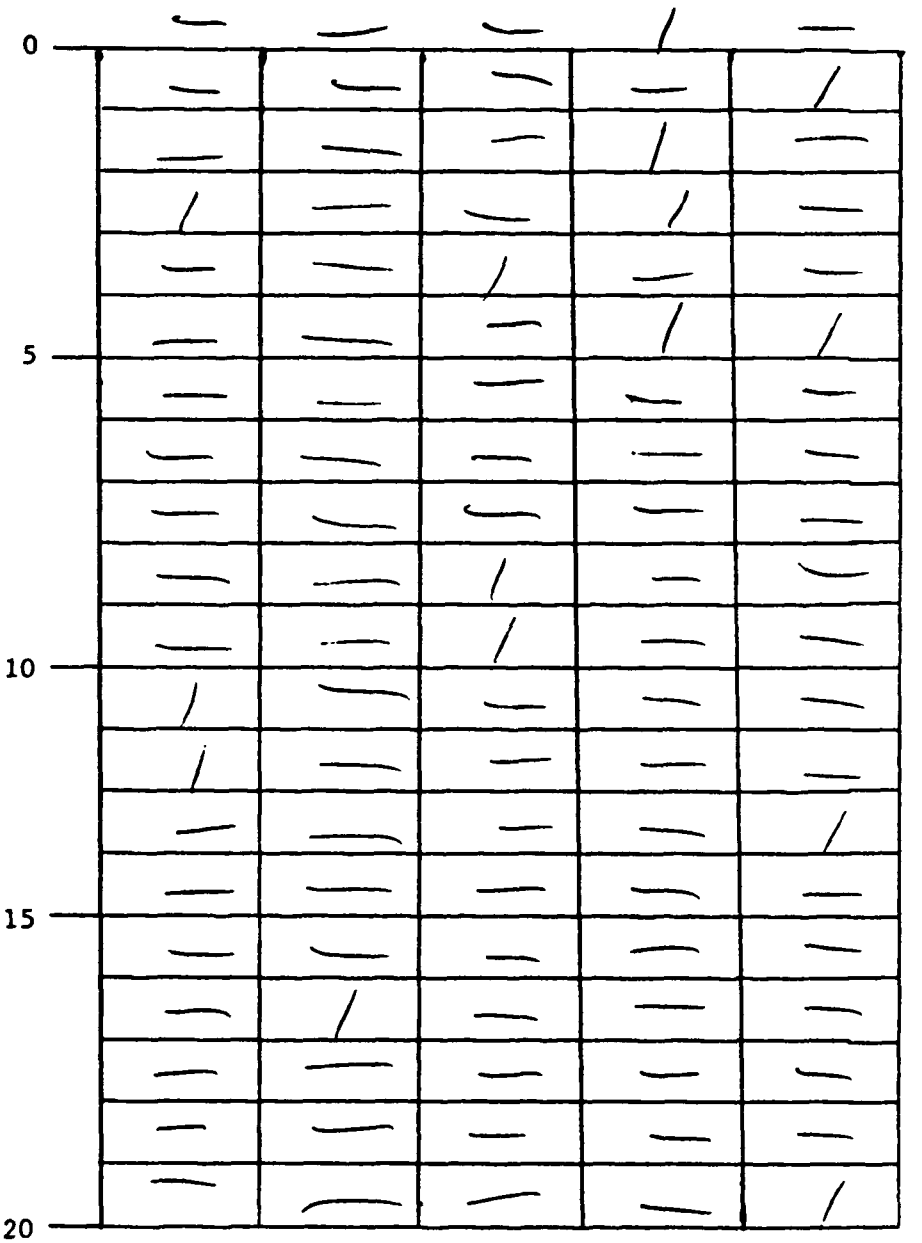
VOLUME (V) 180 liters

FIELD AREA (a) .0432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .15 fibers/field



SUBTOTALS

TOTAL 15

Constant $k = \frac{A}{1000\ a} = \frac{855}{(.0432)(1000)} = 19.8$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{19.8\ (.15)}{180} = .017$

Date: 11-26-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 244

ELAPSED TIME (t) 246 mins.

FLOW RATE 1.8 l/min

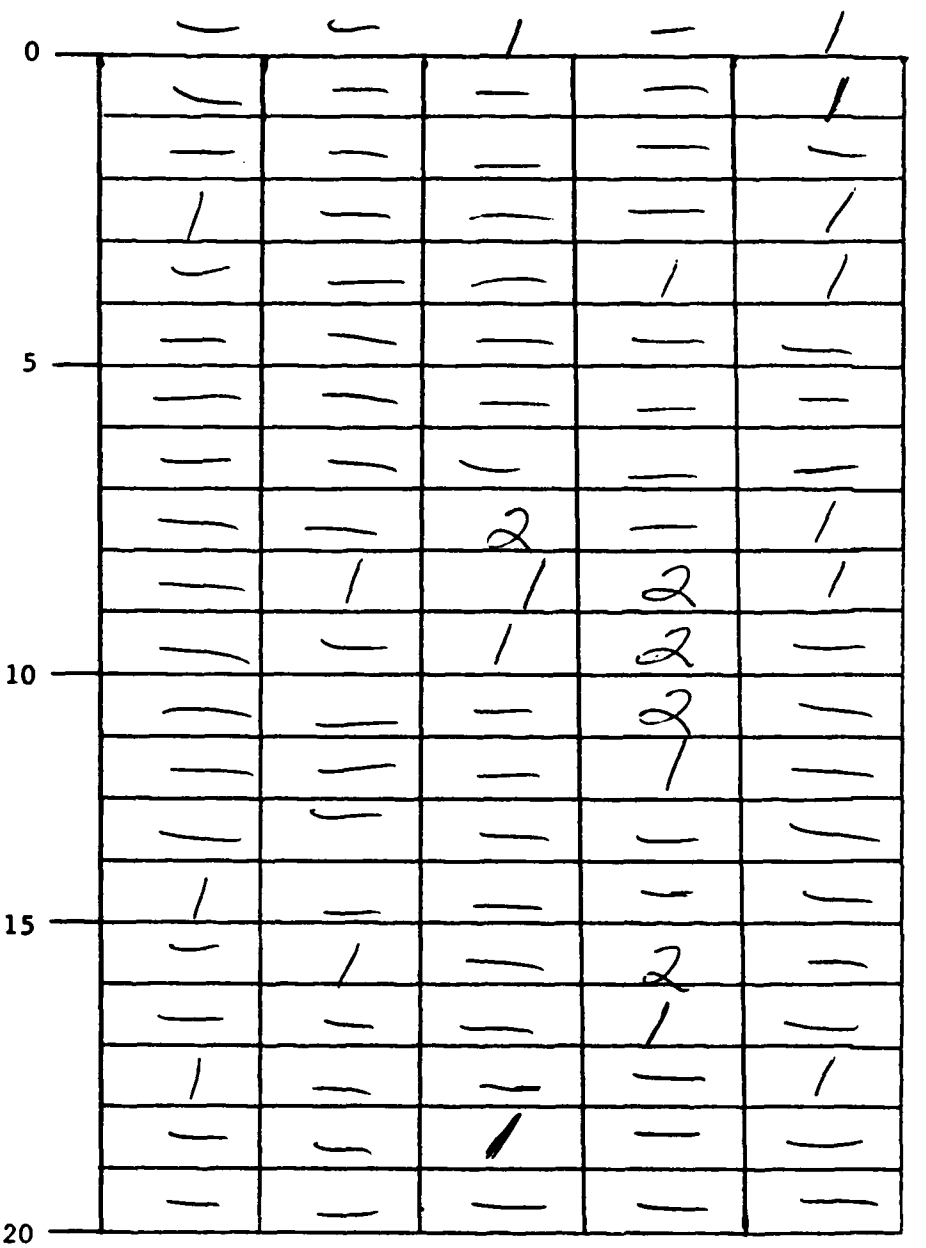
VOLUME (V) 443 liters

FIELD AREA (a) .00432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .29 fibers/field



SUBTOTALS

TOTAL 29

Constant $k = \frac{A}{1000\ a} = 198$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198\ (.29)}{443} = .13$

Date: 11-26-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 240

ELAPSED TIME (t) 15 mins.

FLOW RATE 1.9 l/min

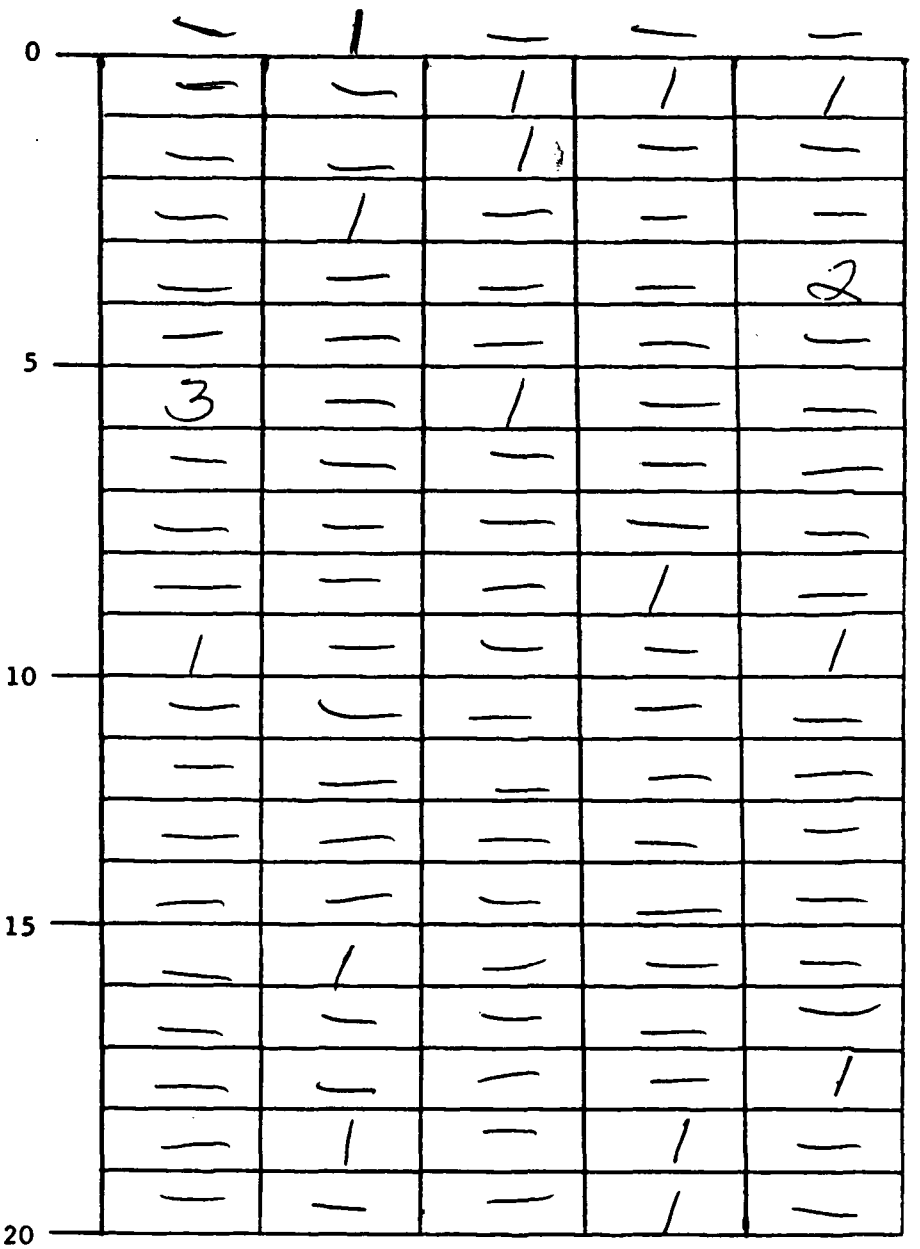
VOLUME (V) 25.5 liters

FIELD AREA (a) .00432 mm^2

BLANK COUNT (b) — fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) _____ fibers/field



SUBTOTALS

TOTAL 90

Constant $k = \frac{A}{1000\ a}$

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$

$\frac{1.98\ (.20)}{25.5} = 1.39$