PLAINTIFF'S EXHIBIT

GP-697

AIRBORNE ASBESTOS SURVEY AT MARIETTA JOINT CEMENT PLANT

October 17 1975

SGP 0021036

Georgia-Pacific

intracompany memo

to	Mr. R. V. Favero	location	Marietta
from	G. W. Green	location	Tigard
subject	Airborne Asbestos Survey at Marietta Joint Cement Plant	date	November 17, 1975

On October 17, 1975 the Marietta plant was monitored for airborne asbestos dust by George Fowler. The samples were shipped to Tigard for counting.

All of the time weighted averages were well below the current maximum of five samples per milliliter and even below the two fibers per milliliter scheduled to take effect next July.

A ceiling level test for 9 minutes on G. James yielded a count of 7.5 fibers. The ceiling limit is 10 fibers, so we are below that.

If all the workers who were tested in both April and November are compared, they show an average 40% reduction in asbestos counts.

G. W. G.

~~C. W. L.~~

CWL/gvp

cc: Mr. J. R. Hurd - Portland
Mr. H. W. Peele - Wilmington
Mr. G. F. Fowler - Marietta

GP 09

SGP 0021037

MARIETTA, GEORGIA JOINT CEMENT PLANT
AIRBORNE ASBESTOS DUST SURVEY
Date Sampled: October 17, 1975

Name	Location or Job Title	Time Weight Av. Fiber/ml.	Filter No.	Elapsed Time (Mins.)	Individual Count Fiber/ml.
G. James	Dry Mixer	1.63	145	90	1.11
			150	9	7.50
			151	41	1.78
			155	35	0.86
			157	103	1.23
			163	39	1.71
			164	16	2.87
			120	19	0.33
			121	16	2.47
			125	62	2.89
			133	42	0.79
H. G. Dodd	Wet Mix Operator	1.07	146	98	1.23
			152	9	1.76
			154	67	1.58
			158	102	0.82
			162	40	1.71
			165	37	0.54
			124	16	0.56
			128	67	0.98
			132	34	0.35
W. Potter	Lidder & Stacker	0.59	147	99	0.73
			153	170	0.64
			161	55	0.78
			168	25	0.48
			123	15	1.10
			126	104	0.31
G. Delloroso	Lab Tester	0.36	148	260	0.32
			160	56	0.40
			167	29	0.40
			122	13	0.18
			127	107	0.44
Environmental Samples	Plant Lab		149	105	0.82
	Wet Mixer		156	38	1.52
	Warehouse		159	144	0.83
	Dry Mixer		166	60	1.11
	Dry Mixer		129	51	.60
	Stacker		134	45	.67

Georgia-Pacific

route slip

LOCATION

ATTN:

- [ ] PLEASE HANDLE TO CONCLUSION
- [ ] READ AND GIVE ME YOUR COMMENTS
- [ ] PLEASE READ AND RETURN
- [ ] FOR YOUR FILES
- [ ] FOR YOUR APPROVAL
- [ ] PER YOUR REQUEST

DATE

FROM

GP02

R&D 347

Georgia-Pacific

intracompany memo

to	Mr. P. Schultz	location	Rochester, N. Y.
from	John Darmstedter	location	Akron, N. Y.
subject	Field Investigation, Geneva, N. Y.	date	October 17, 1975

cc: Mr. I. F. Weibel - Akron
Mr. C. R. Smalley - Clifton, N. J.
Mr. A. J. Petraline - Wilmington
Mr. A. Collins - Rochester

RECEIVED
OCT 20 1975

Distribution Center - Rochester, N. Y.

Sales Complaint No. - None

Plant Complaint No. - None

Distribution Customer - Rochester Acoustical Co.; Rochester, N. Y.

Date Investigation Requested - 10/13/75

Date Investigated - 10/15/75

Material - Asbestos Free Ready Mix

Code No. - 10105A1; 10105A2

Sales Representative - Mr. Al Collins

Job Site - Hobart College; Geneva, N. Y.

Problem - Account states that the Asbestos Free Ready Mix is very short working; that the color is not as white as National's Regular Ready Mix.

Results - Upon arrival at the job site, Mr. Weibel, Mr. Collins, and this writer met with Mr. Bob DiMarco, the job superintendent for Rochester Acoustical. Mr. DiMarco stated that the working time when running "flats" was on the order of five minutes. After that, the material remaining on the hawk must be discarded because it "lumped up" and then was not suitable for finishing work. Mr. DiMarco stated that this was not much of a problem when taping or filling, but the final coat would scratch badly.

We told Mr. DiMarco that we may be able to overcome this problem on future manufacture.

You will remember that Mr. DiMarco was one of the first to try the G. P. Asbestos Free Ready Mix on the Strathallen Apartment job in Rochester. At that time, he reported that the material had no body and exhibited a good deal of drag under the knife. Mr. DiMarco told us that these problems have been greatly improved with the present material, but that he still noted some drag. He stated that the real problem was the short working.

In further discussing Asbestos Free Ready Mix's, Mr. DiMarco told us that he had recently used some Gold Bond material on another job and that it worked very well. Mr. DiMarco was using some regular Gold Bond R/M on this Hobart College job, and he showed us that our Asbestos Free material was not as white as normal production from Gold Bond. He stated that the whiteness of the material was important to him because of the great deal of texturing that he does with Ready Mix.

Date: _____

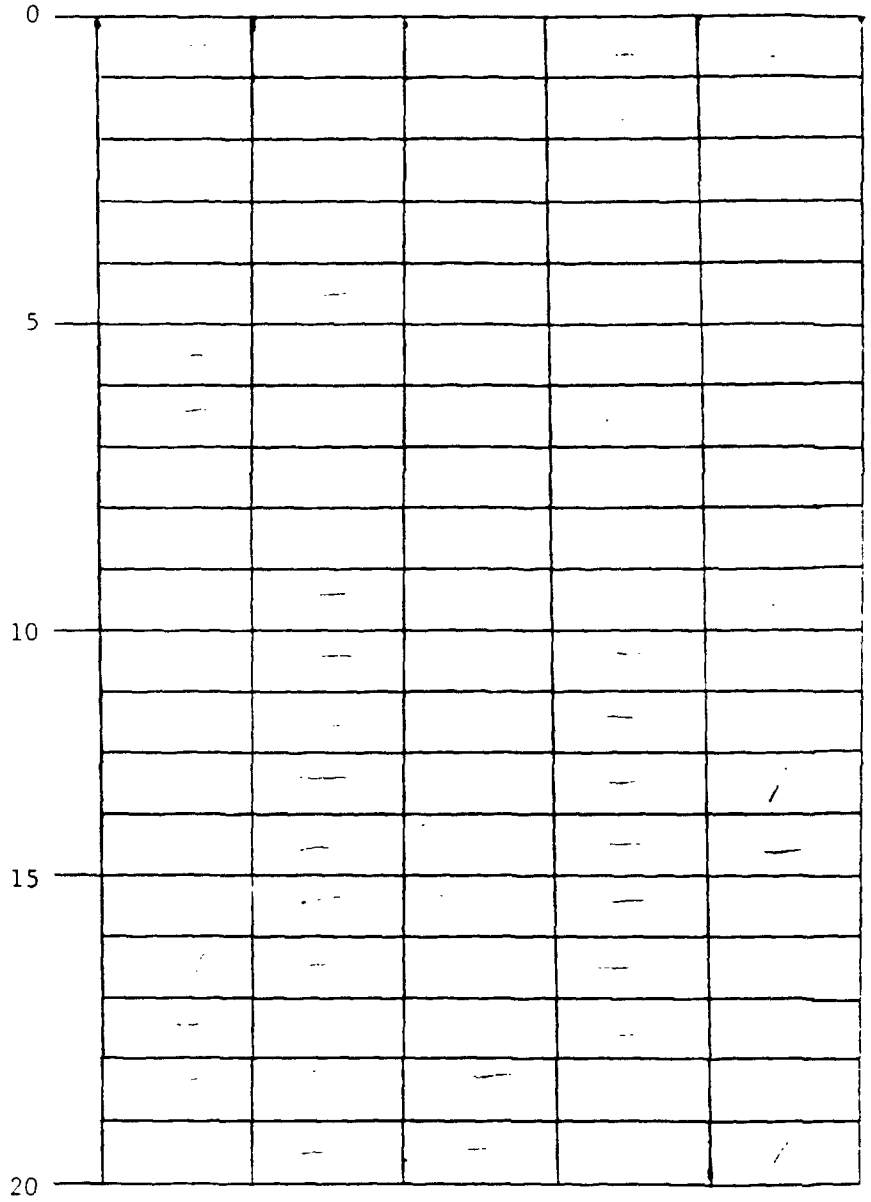
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

SGP 0021041

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta
Name J. James
Title Dry Mixer

Date 11/17/75
Pump Serial No. R-74-0799
Sampled by George Fowler
Signature George Fowler

LOCATION	Dry Mixer	Dry Mixer	Dry Mixer	Dry mix	Dry mix
FILTER NO.	145	150	151	155	157
FLOW: Pump Setting	6	6	6	6	6
Liter/min (R)					
TIME: On	9:00	9:30	9:39	10:20	10:55
Off	9:30	9:39	10:20	10:55	*1:08
ELAPSED TIME (min) (t)	30	9	41	35	103
VOLUME, Liters (t x r)	171				196
REMARKS					*30 min lunch Pump turn off
CONCENTRATION (F) fibers/ml		7.50			1.23

Total Sample Time (T) 477 mins.

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

SGP 0021042

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name G. James

Title DRY MIXER

Date 10/17/75

Pump Serial No. R-74-C799

Sampled by George Fowler

Signature George Fowler

LOCATION	Dry Mix	DRy Mix	DRy Mix	DRy Mix	DRy mix
FILTER NO.	163	164	170	121	125
FLOW: Pump Setting	6	6	6	6	6
Liter/min (R)					
TIME: On	1.08	1:47	2:03	2:22	2:38 ~~2:38~~
Off	1.47	2:03	2:22	2:38	3:40
ELAPSED TIME (min) (t)	[illegible]	16	19	16	62
VOLUME, Liters (t x r)					
REMARKS					
CONCENTRATION (F) fibers/ml	1.71	2.5[illegible]	[illegible]	2.47	[illegible]

Total Sample Time (T) _____ mins.

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

SGP 0021043

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name D. James

Title Dry Mixer

Date 10/17/75

Pump Serial No. K-74-0799

Sampled by

Signature

LOCATION	Dry Mix				
FILTER NO.	133				
FLOW: Pump Setting	6				
Liter/min (R)					
TIME: On	3:40				
Off	4:22				
ELAPSED TIME (min) (t)	42				
VOLUME, Liters (t x r)					
REMARKS					
CONCENTRATION (F) fibers/ml					

Total Sample Time (T) _____ mins.

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

SGP 0021044

Date: 1-12-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. [illegible]

ELAPSED TIME (t) 9 mins.

FLOW RATE 1.9 l/min

VOLUME (V) 17.1 liters

FIELD AREA (a) _____ mm^2

BLANK COUNT (b) .02 fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .73 fibers/field

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

TOTAL 73

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198(.73-.02)}{17.1} = 7.5$

SGP 0021045

Date: 11-12-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 145

ELAPSED TIME (t) 90 mins.

FLOW RATE _____ l/min

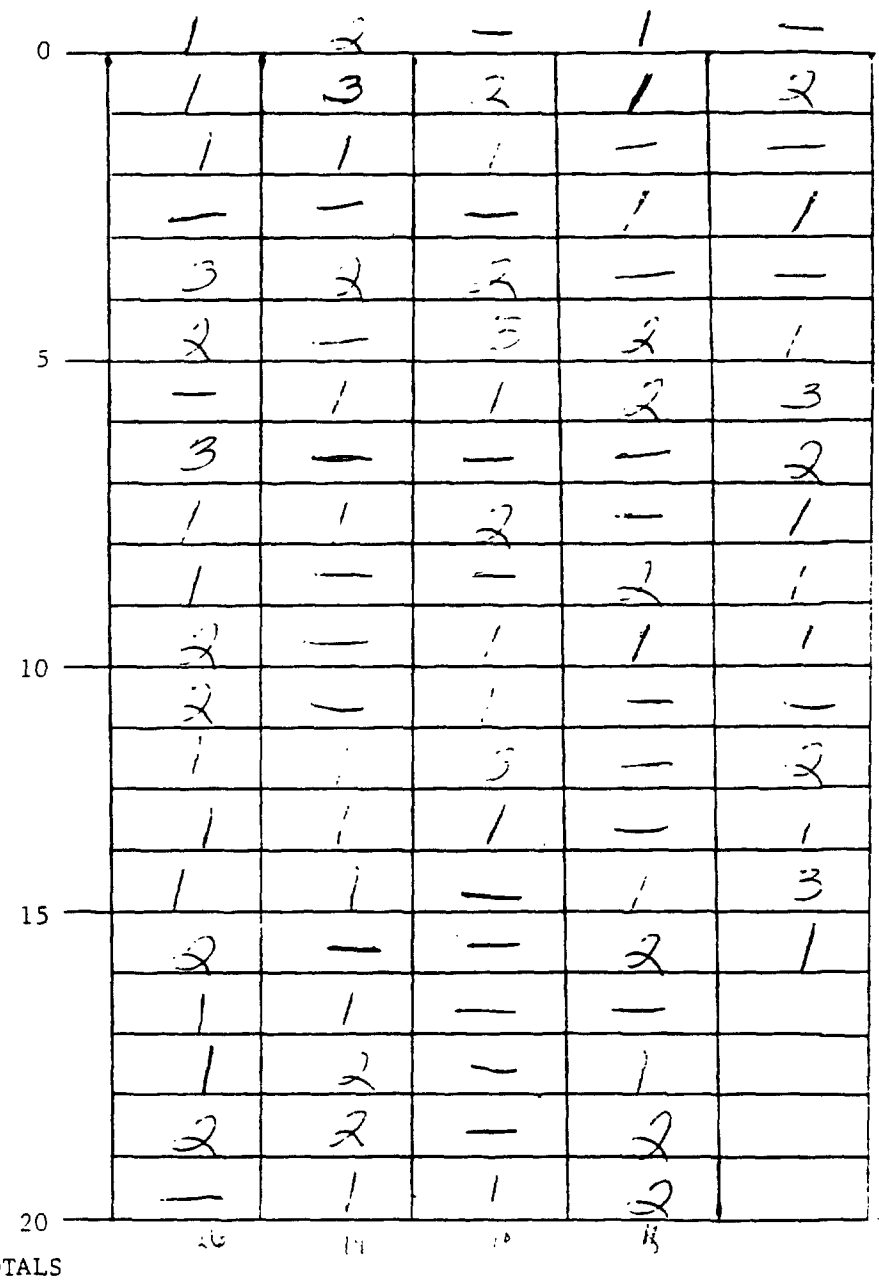
VOLUME (V) 171 liters

FIELD AREA (a) _____ mm^2

BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) 1.04 fibers/field



SUBTOTALS 26 17 10 18

TOTAL 101

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

Fiber Concentration (F) = $\frac{k\ (f-b)}{V}$ $\frac{19 \times (1.04 - 0.0)}{171}$ = 1.11

SGP 0021046

Date: _____

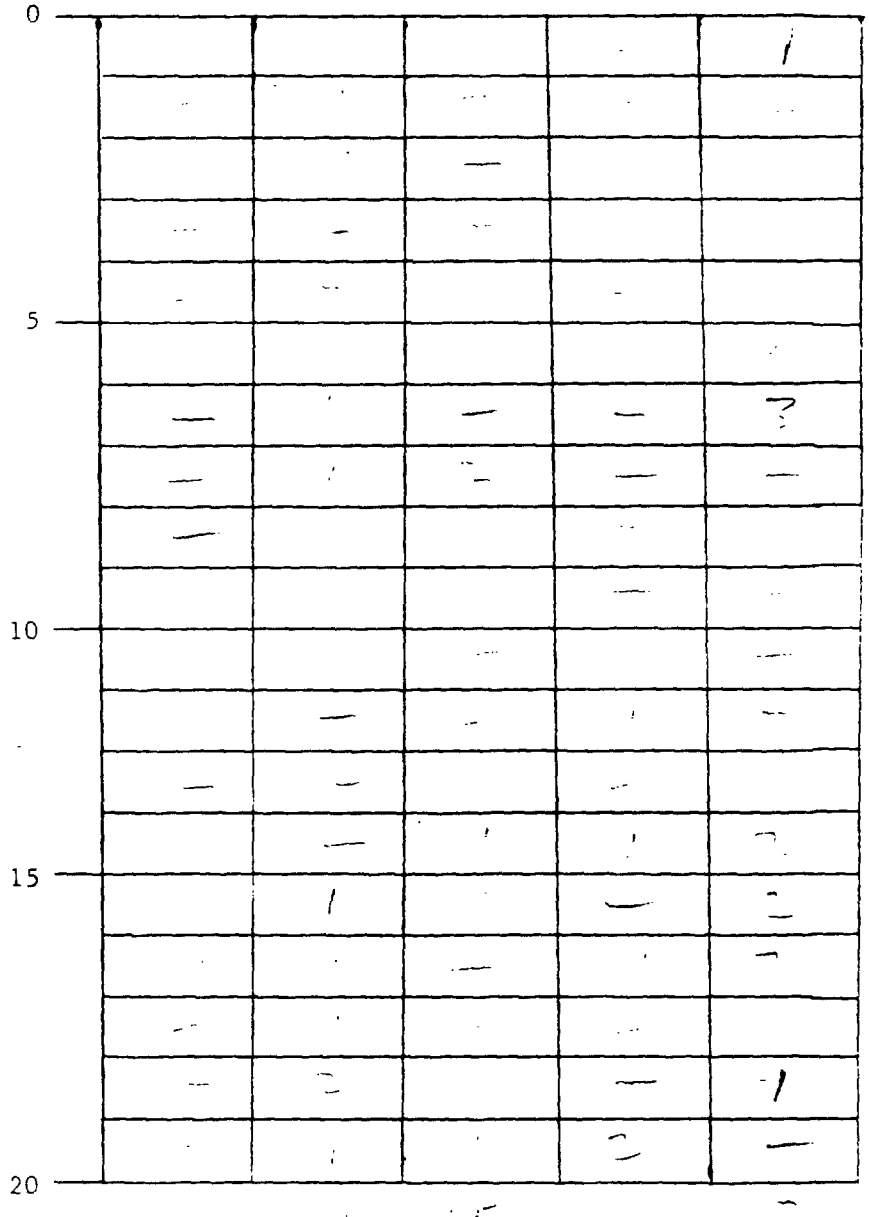
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

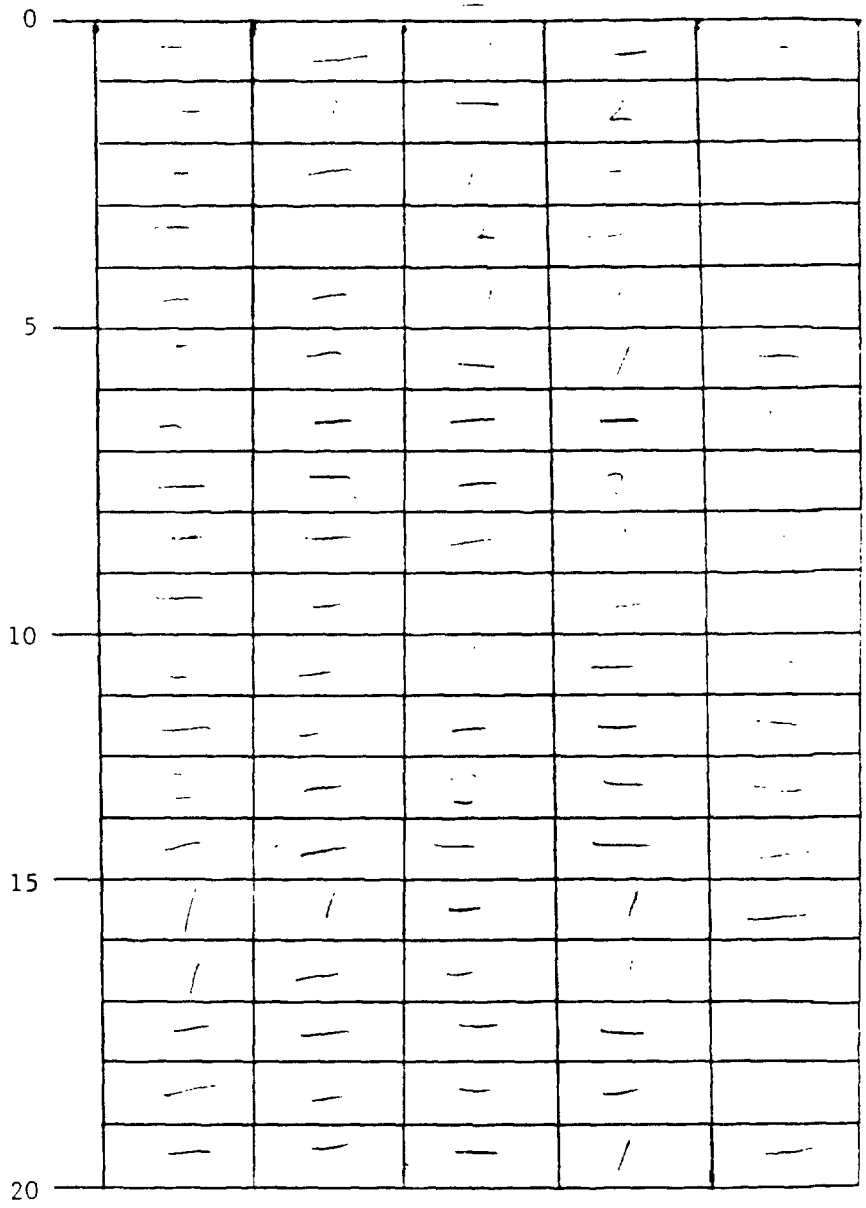
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

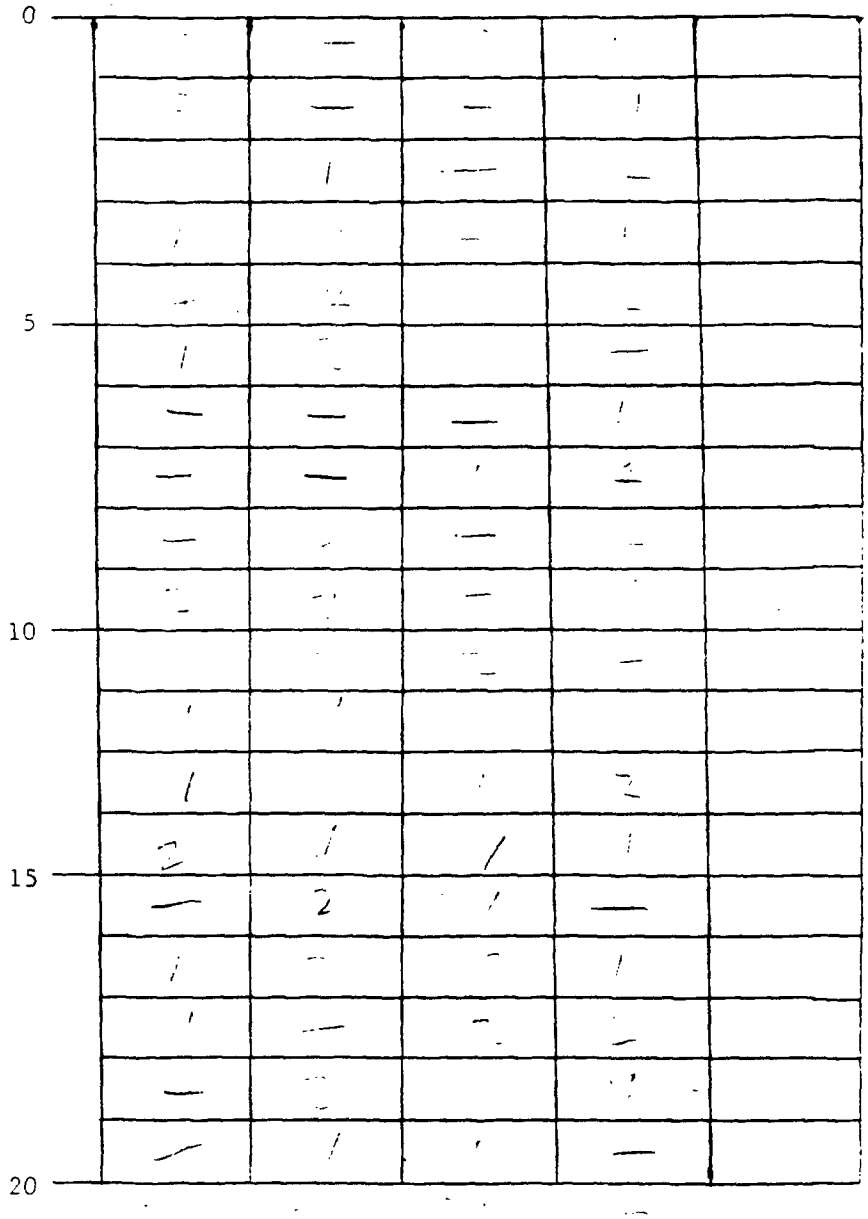
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

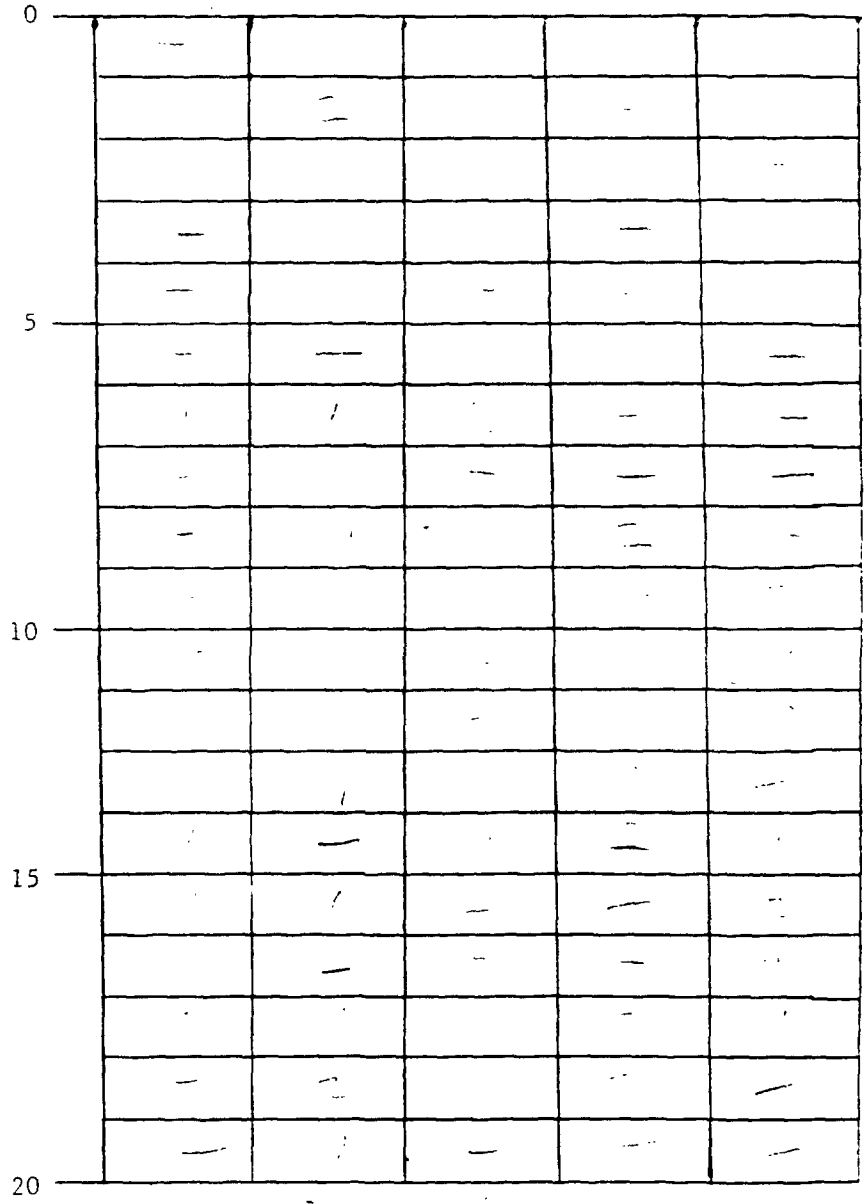
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

SGP 0021050

Date: _____

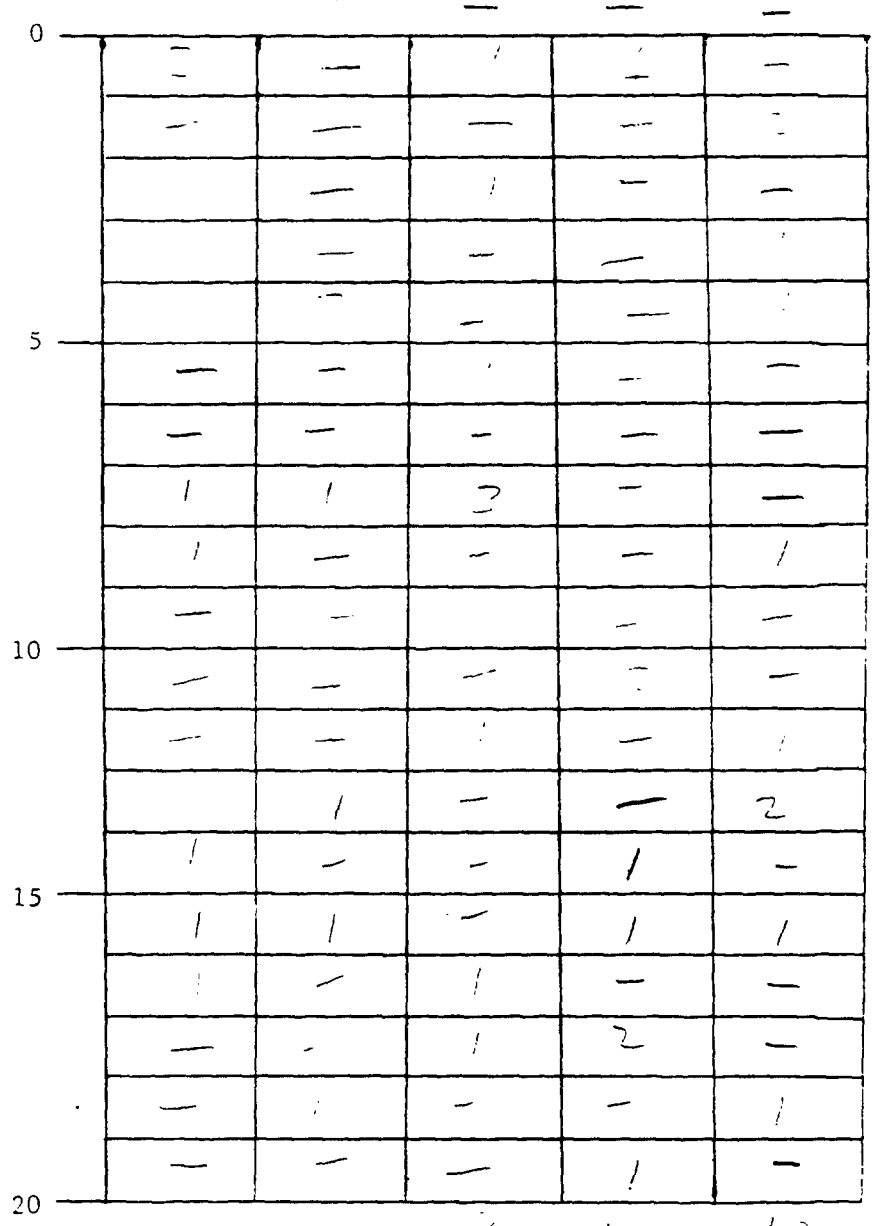
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ liters

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

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



SUBTOTALS 4 11 10 TOTAL 52

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

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

Date: _____

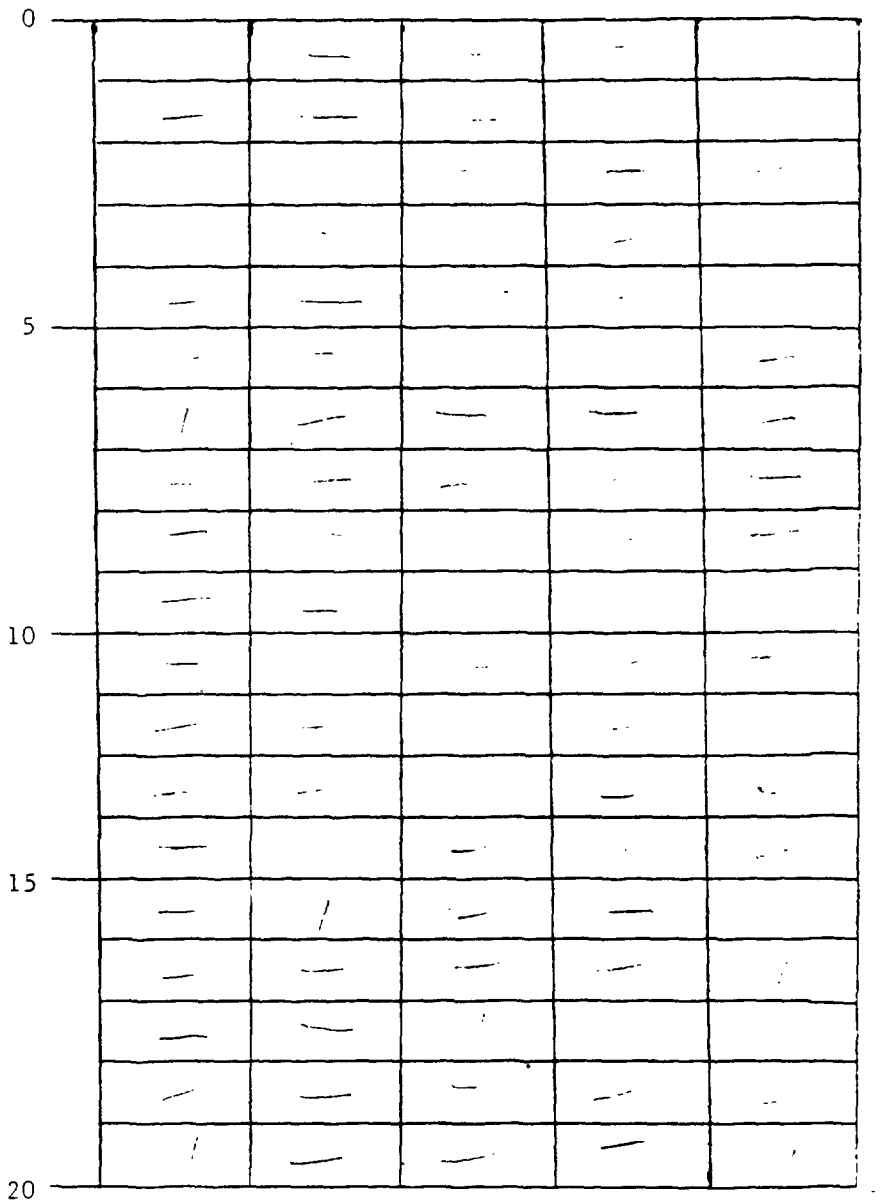
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 20 | ELAPSED TIME (t) 9 mins.

FLOW RATE 3 l/min | VOLUME (V) 26 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 _____

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ _____ / 26

SGP 0021052

Date: _____

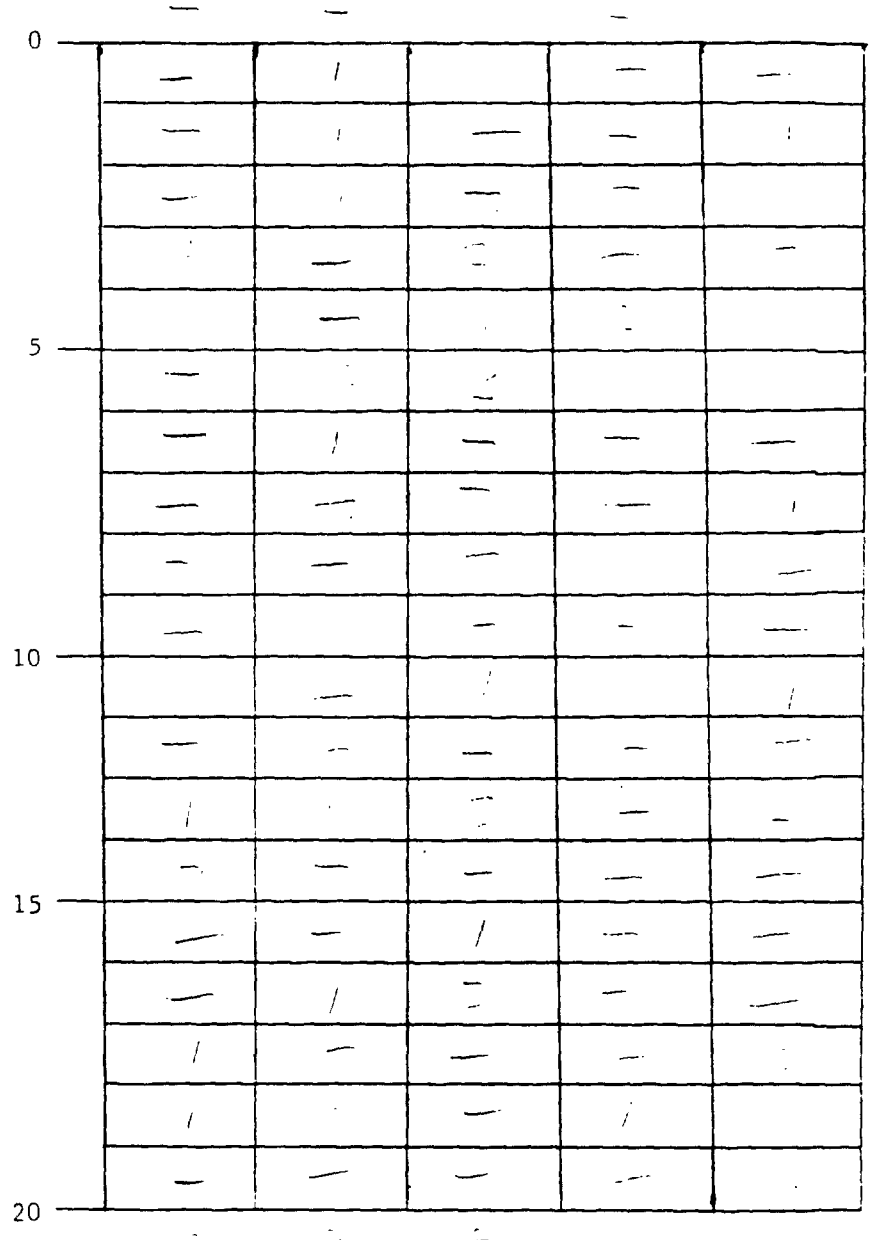
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ = 2.4

SGP 0021053

Date: _____

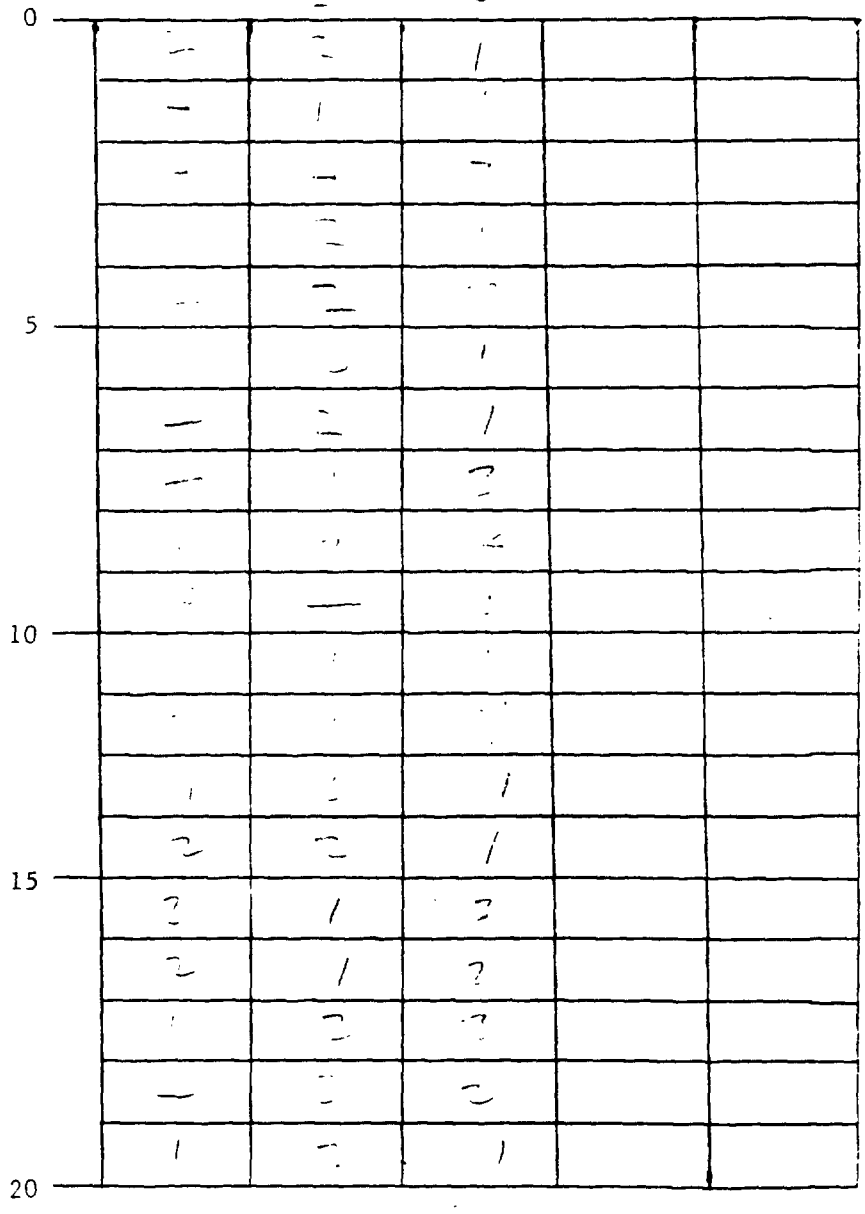
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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

1.5

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

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

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 125 ELAPSED TIME (t) 42 mins.

FLOW RATE 1.9 l/min VOLUME (V) [illegible] liters

FIELD AREA (a) [illegible] mm^2 BLANK COUNT (b) [illegible] fibers/field

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

0	—	—	—	2	2
	—	2	—	—	1
	1	—	—	—	2
	1	—	1	—	—
	—	—	1	—	—
5	—	—	—	—	—
	—	—	1	—	1
	—	1	1	2	—
	—	[illegible]	1	—	—
	1	—	1	—	—
10	—	—	—	—	—
	—	—	—	—	—
	—	1	1	—	—
	—	2	1	1	1
15	3	—	—	—	—
	—	—	—	—	—
	1	1	—	—	—
	1	1	1	—	—
20	—	—	1	—	—
SUBTOTALS	8	9	11	5	7

TOTAL 40

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V} = \frac{1.98\ (40 - [illegible])}{[illegible]} = .79$

SGP 0021055

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name H. G. Dodd

Title Wet Mix operator

Date 10/17/75

Pump Serial No. B-06-0165

Sampled by George Fowler

Signature George Fowler

LOCATION	wet mix	wet mix	wet mix	wet mix	wet mix
FILTER NO.	146	152	154	158	162
FLOW: Pump Setting	6	6	6	6	6
Liter/min (R)	2.0	2.0	2.0	2.0	2.0
TIME: On	8:04	9:42	9:51	10:58	1:10
Off	9:42	9:51	10:58	*1:10	1:50
ELAPSED TIME (min) (t)	98	9	[illegible]	[illegible]	40
VOLUME, Liters (t x r)	96	[illegible]	[illegible]	[illegible]	[illegible]
REMARKS				* 30 min lunch pumps turned off	
CONCENTRATION (F) fibers/ml	1.23	1.76	1.58	0.82	1.71

Total Sample Time (T) 470 mins.

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

$$Av = 98(1.23) + (9)(1.76) + [illegible] + 116 \times .5[illegible]) + [illegible] + (34 \times [illegible]) / 4$$

$$= 120.5 + 15.8 + 105.9 + [illegible]$$

$$= [illegible]$$

SGP 0021056

AIRBORNE ASBESTOS FIBER SAMPLING

Plant MARIETTA

Name H. Y. Dodd

Title wet mix operator

Date 10/17/75

Pump Serial No. B-06-0165

Sampled by George Fowler

Signature George Fowler

LOCATION	wet mix	wet mix	wet mix	wet mix	
FILTER NO.	165	124	128	132	
FLOW: Pump Setting	6	6	6	6	
Liter/min (R)					
TIME: On	1:50	2:27	2:43	3:50	
Off	2:27	2:43	3:50	4:24	
ELAPSED TIME (min) (t)	37				
VOLUME, Liters (t x r)					
REMARKS					
CONCENTRATION (F) fibers/ml		.56			

Total Sample Time (T) _____ mins.

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

Date: _____

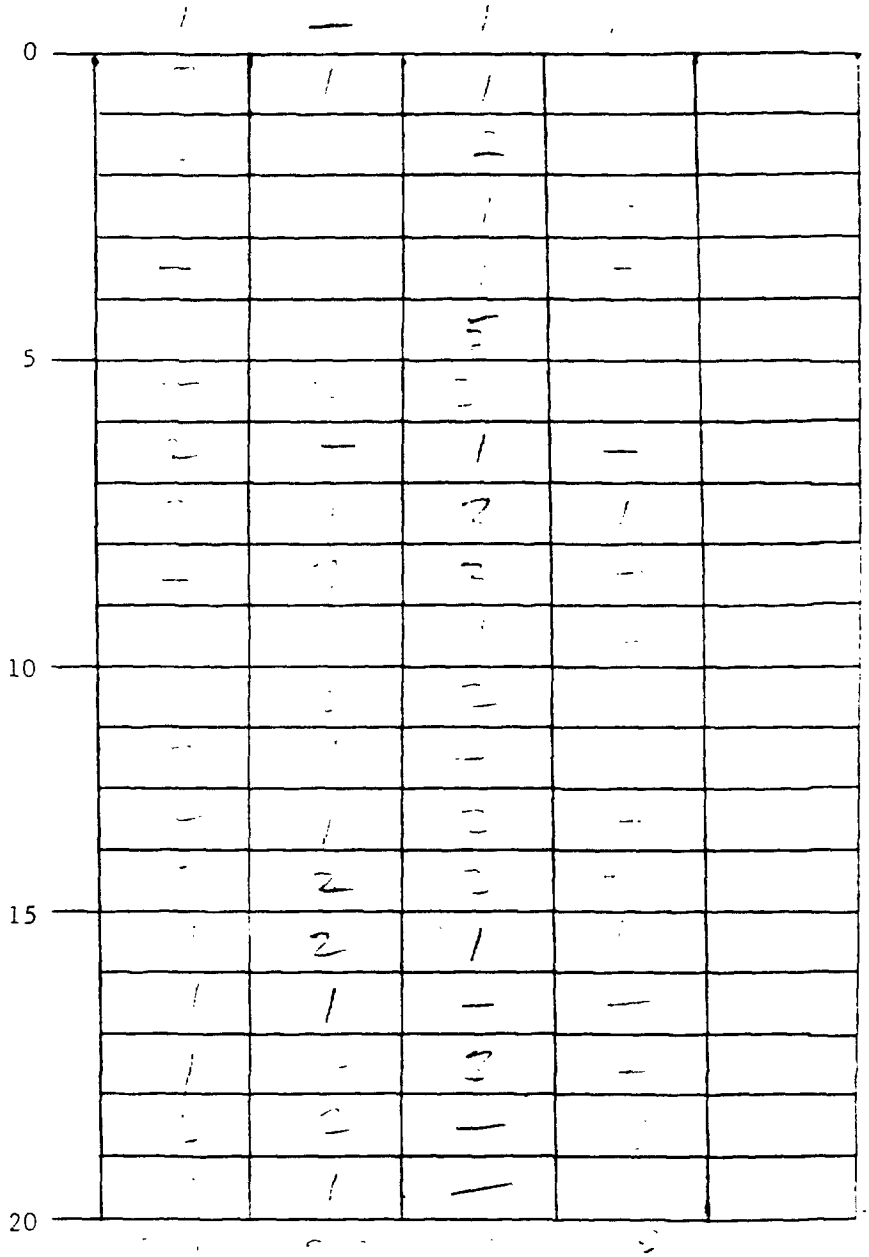
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 4

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

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

Date: 11/13/75

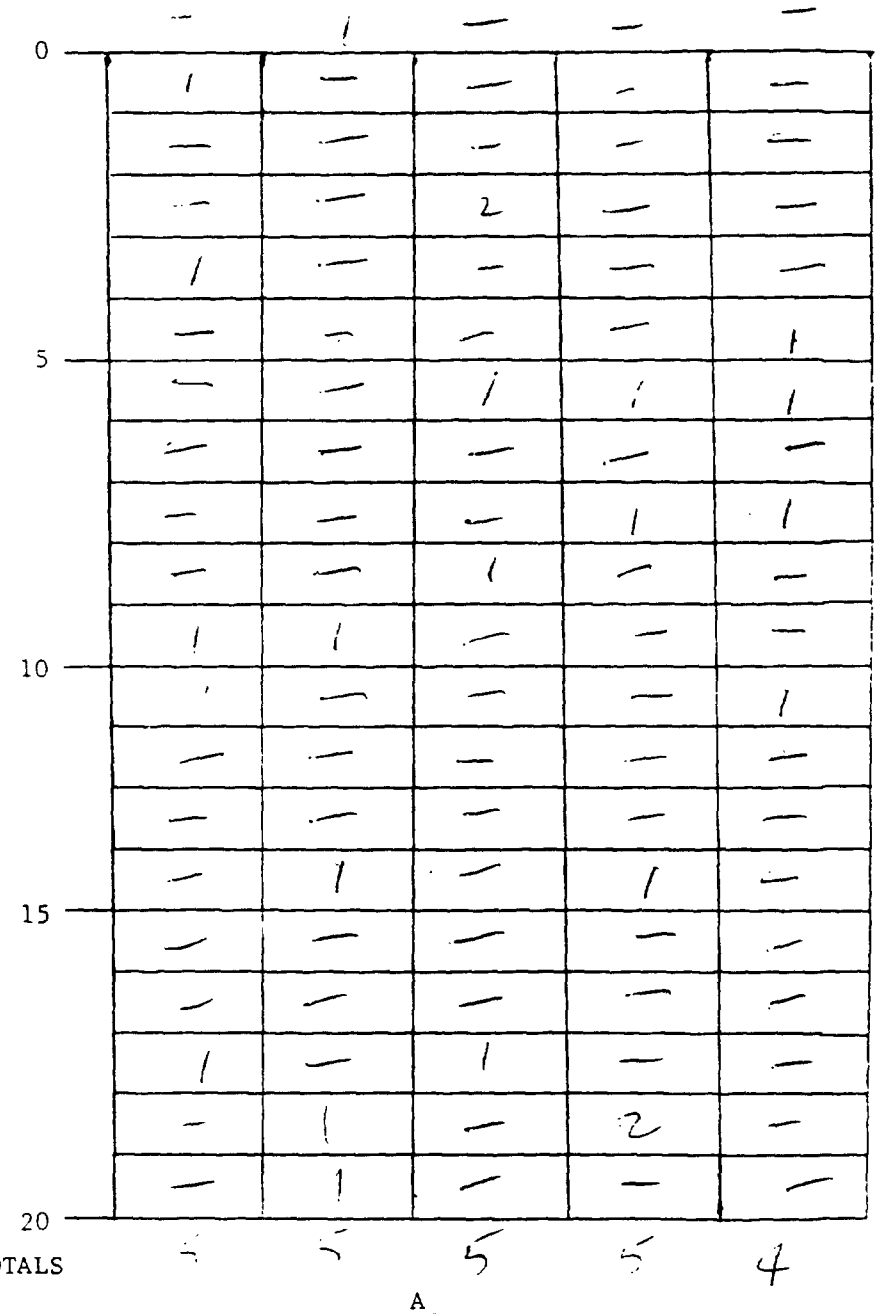
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 152 — ELAPSED TIME (t) 7 mins.

FLOW RATE _____ l/min — VOLUME (V) _____ liters

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

FILTER AREA (A) 855 mm^2 — AV. FIBER COUNT (f) 1.24 fibers/field



SUBTOTALS	5	5	5	5	4	TOTAL 24

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

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

Date: _____

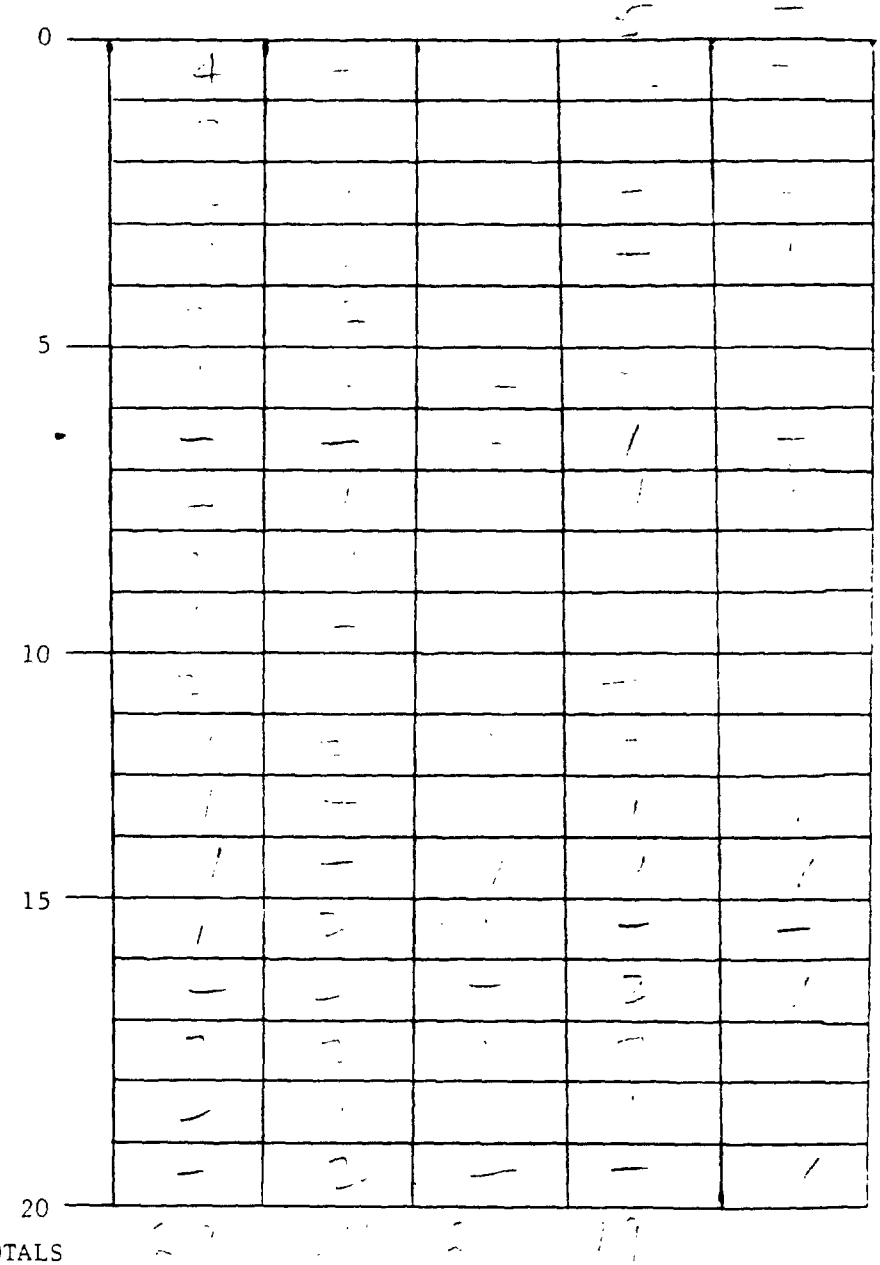
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 14

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ = 1.5

Date:_____

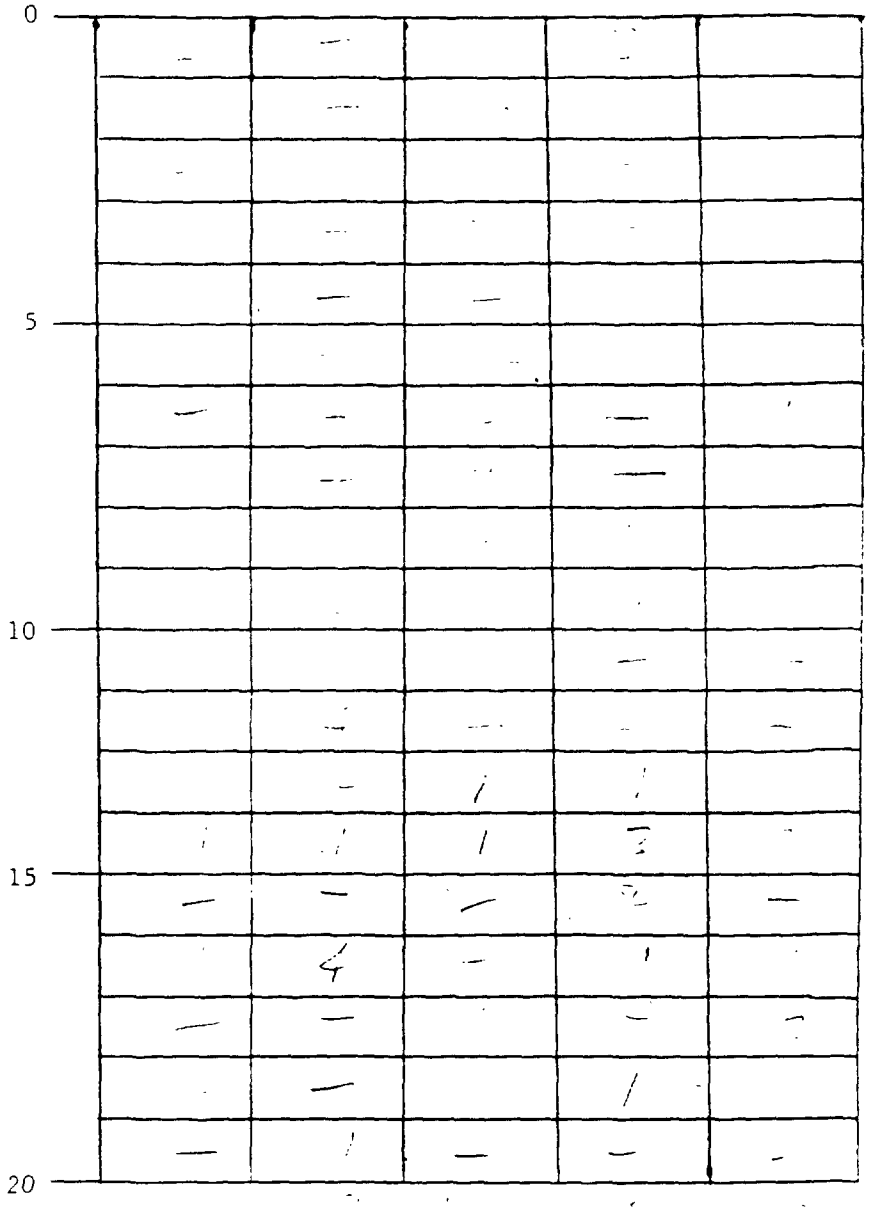
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO._____ ELAPSED TIME (t)_____ mins.

FLOW RATE_____ l/min VOLUME (V)_____ 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_____

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

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

SGP 0021061

Date: _____

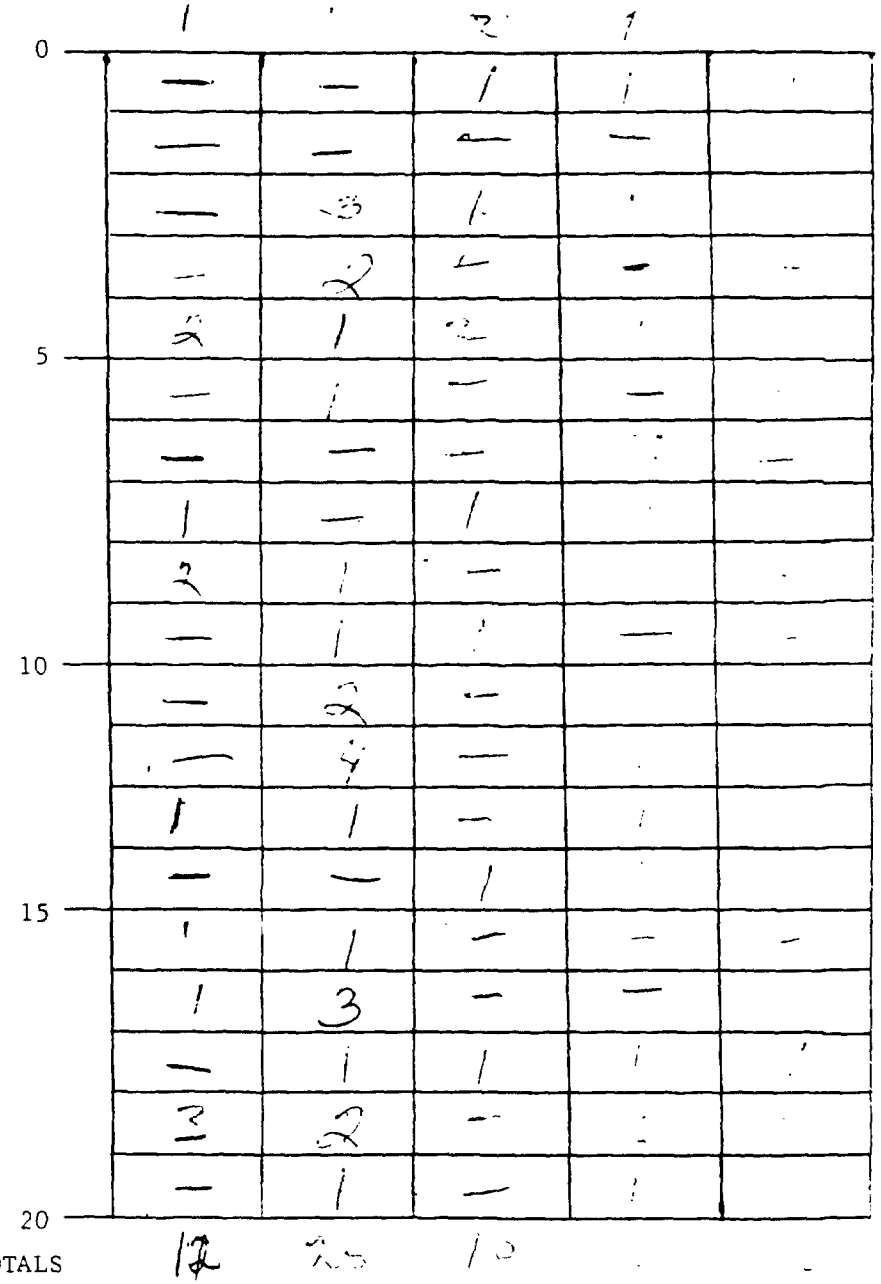
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

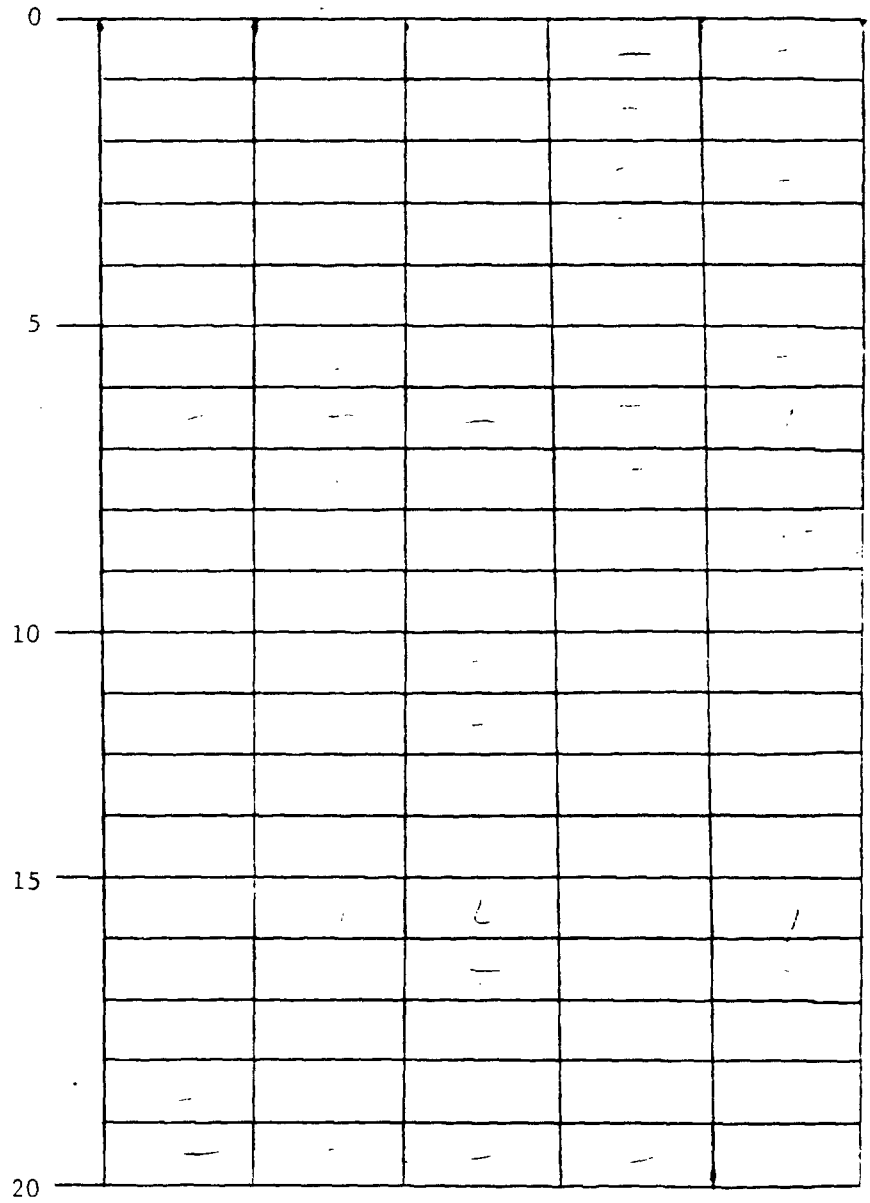
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: [illegible]

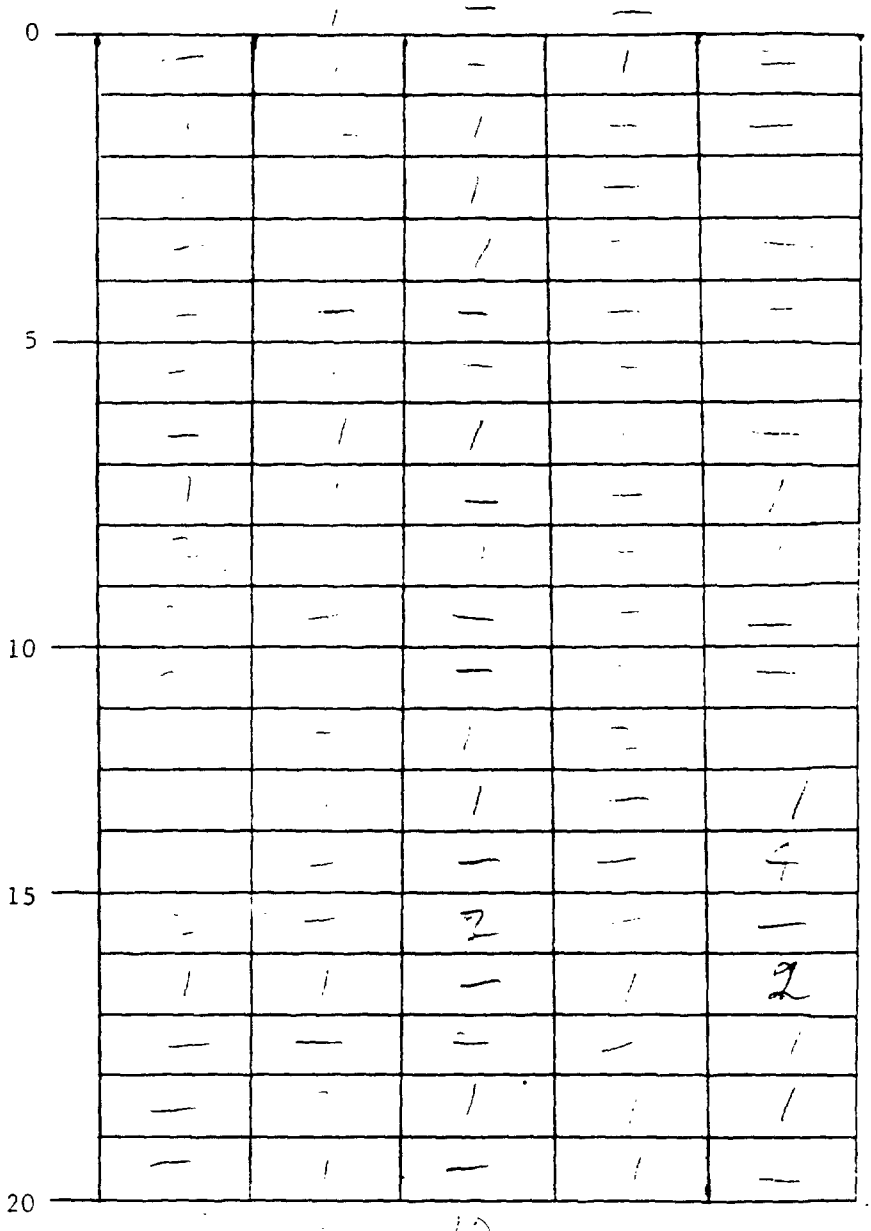
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ liters

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

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



0					
	—		—	/	—
		—	/	—	—
			/	—	
	—		/	—	—
	—	—	—	—	—
5					
	—		—	—	
	—	/	/		—
	/		—	—	/
	—			—	
		—	—	—	—
10					
	—		—		—
		—	/	—	
			/	—	/
		—	—	—	4
15					
	—	—	2	—	—
	/	/	—	/	2
	—	—	—	—	/
	—	—	/	/	/
	—	/	—	/	—
20					
SUBTOTALS			10		TOTAL [illegible]

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ $\frac{198\ (.74-0.[illegible])}{[illegible]} = .98$

SGP 0021064

Date: _____

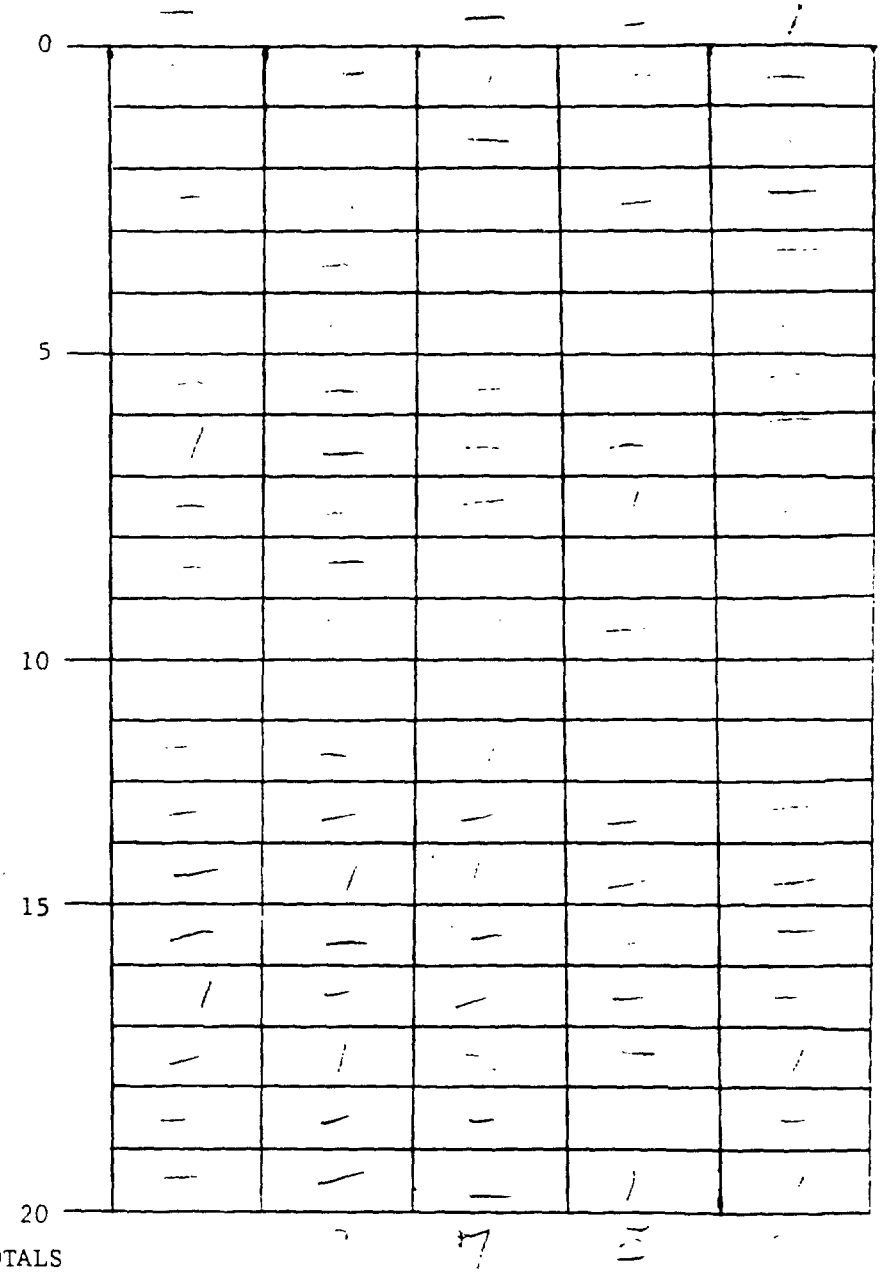
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

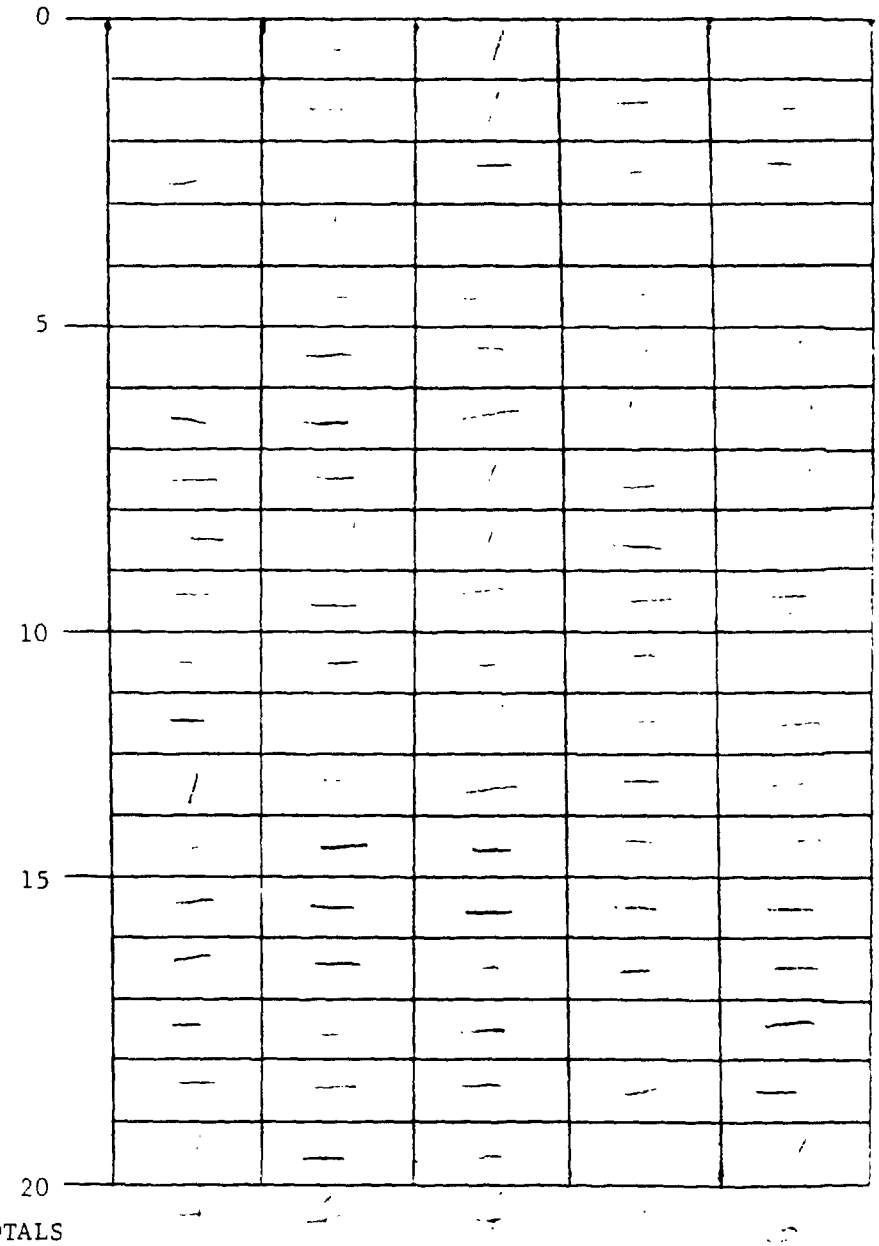
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 20

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

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

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name W. Potter

Title Ladder & STACKER

Date 10/17/75

Pump Serial No. B-06-0305

Sampled by George Fowler

Signature George Fowler

LOCATION	Ladder	Ladder	Ladder	Ladder	Ladder
FILTER NO.	147	153	161	168	123
FLOW: Pump Setting	6	6	6	6	6
Liter/min (R)					
TIME: On	8:06	9:45	1:05	2:00	2:25
Off	9:45	* 1:05	2:00	2:25	2:40
ELAPSED TIME (min) (t)	99	1[illegible]	55	[illegible]	15
VOLUME, Liters (t x r)		[illegible]	99	[illegible]	[illegible]
REMARKS		* 30 min Lunch Pumps Turned Off			
CONCENTRATION (F) fibers/ml	[illegible]	[illegible]	.79	.44	1.10

Total Sample Time (T) _____ mins.

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

46

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name W. Potter

Title Lidder & Stacker

Date 10/17/75

Pump Serial No. B-06-0305

Sampled by George Fowler

Signature George Fowler

LOCATION	Lidder				
FILTER NO.	126				
FLOW: Pump Setting	6				
Liter/min (R)					
TIME: On	2:40				
Off	4:24				
ELAPSED TIME (min) (t)					
VOLUME, Liters (t x r)					
REMARKS					
CONCENTRATION (F) fibers/ml	.21				

Total Sample Time (T) _____ mins.

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

SGP 0021068

Date: Dec. 13, 1975

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 1477 ELAPSED TIME (t) _____ mins.

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

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

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

0	1	1	2	—	—
	1	1	—	2	—
	1	1	—	1	—
	—	1	—	—	—
	—	—	1	—	—
	1	1	1	1	—
5	3	—	—	2	1
	—	3	2	1	—
	1	1	—	2	1
		—	2	—	2
	—	2	—	—	—
10	—	1	—	—	2
	1	—	—	2	1
	1	—	1	2	—
	1	1	—	1	1
	1	—	—	—	—
15	—	2	1	—	1
	—	—	—	—	—
	1	—	2	1	2
	1	1	2	1	2
20					

SUBTOTALS TOTAL 74

Constant $k = \frac{A}{1000\ a}$ = 1.7

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ = $\frac{198\ .74-.0}{178.2}$ = .72

SGP 0021069

Date: _____

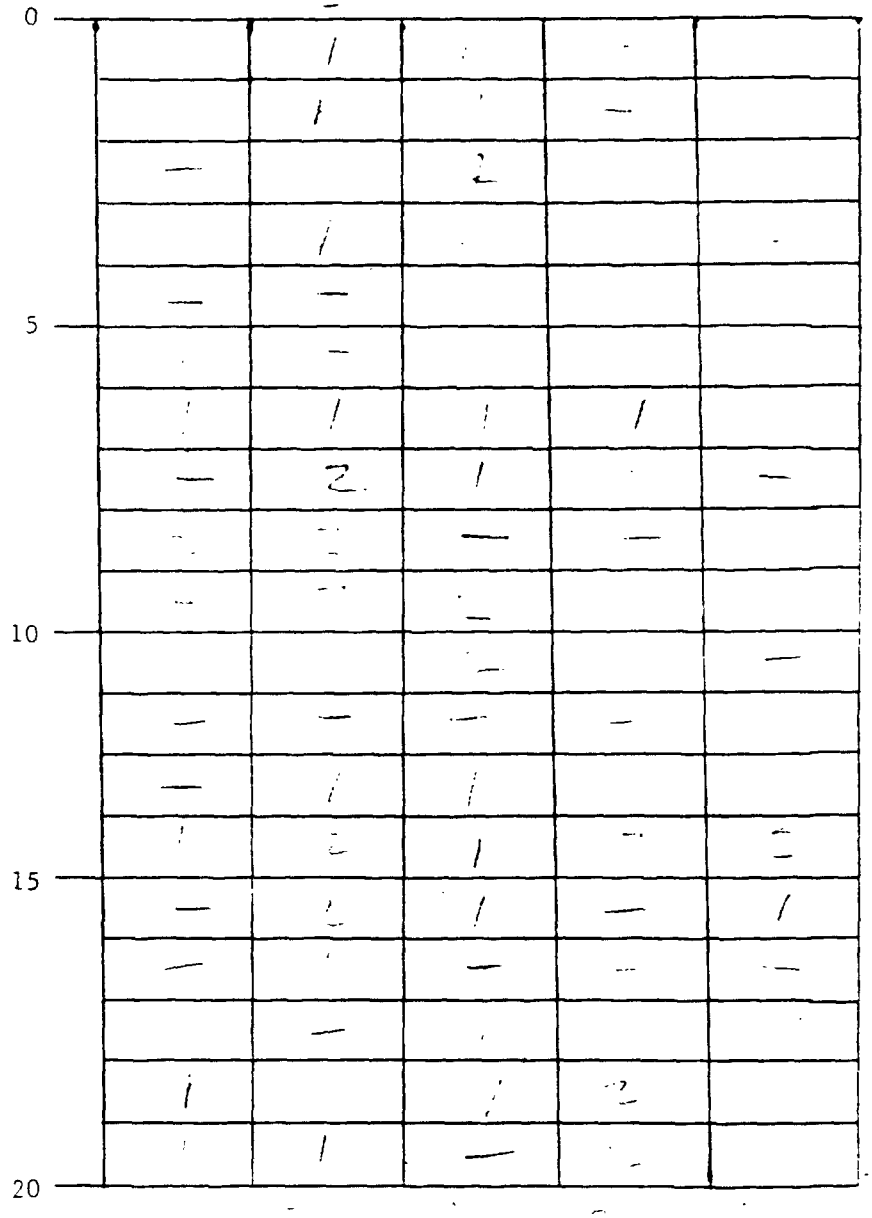
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

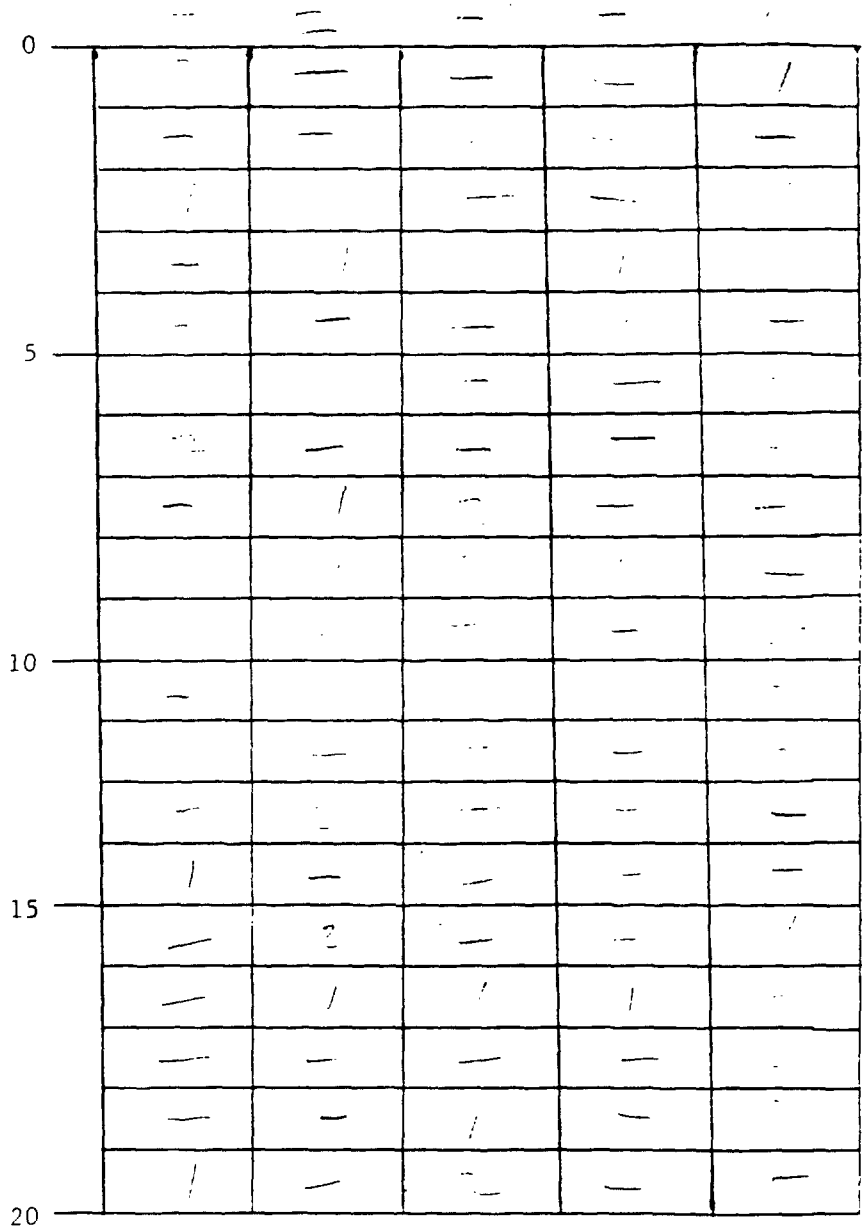
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ = 2,78

Date: _____

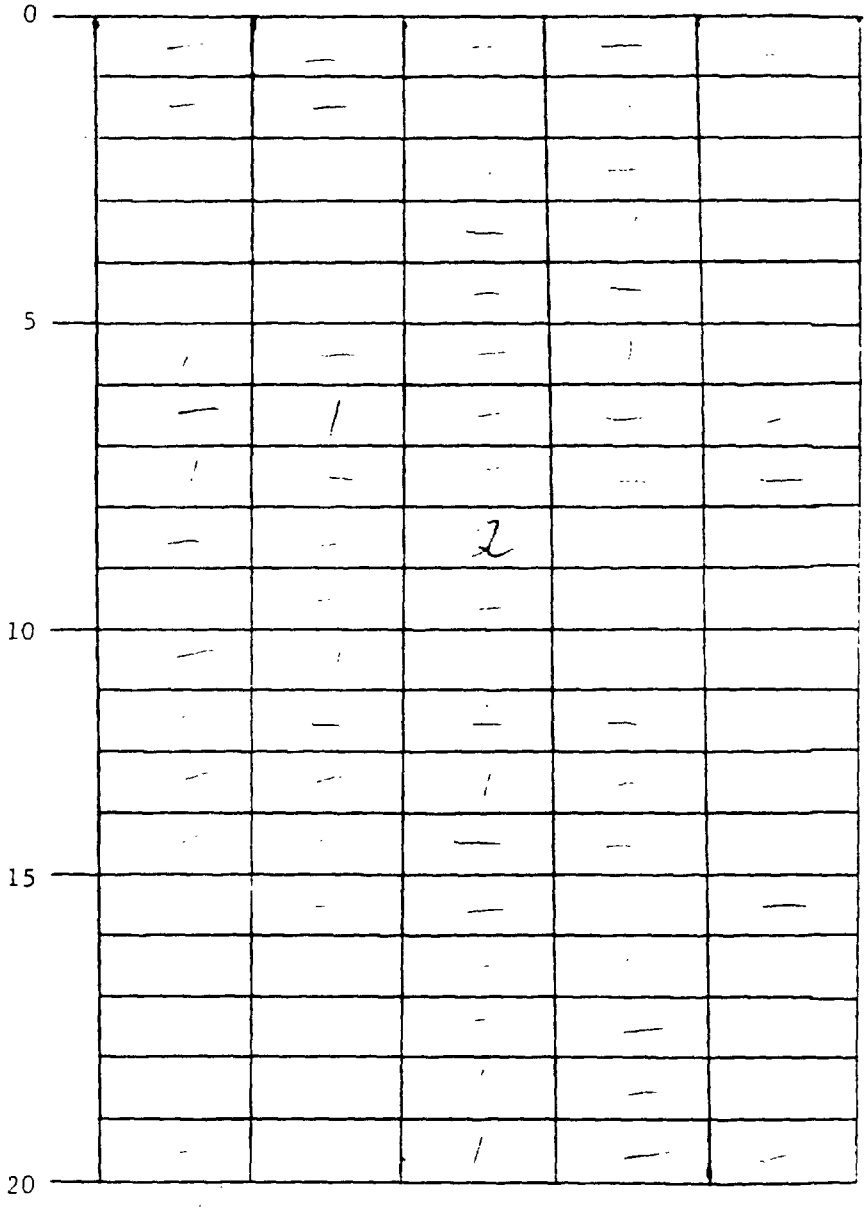
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

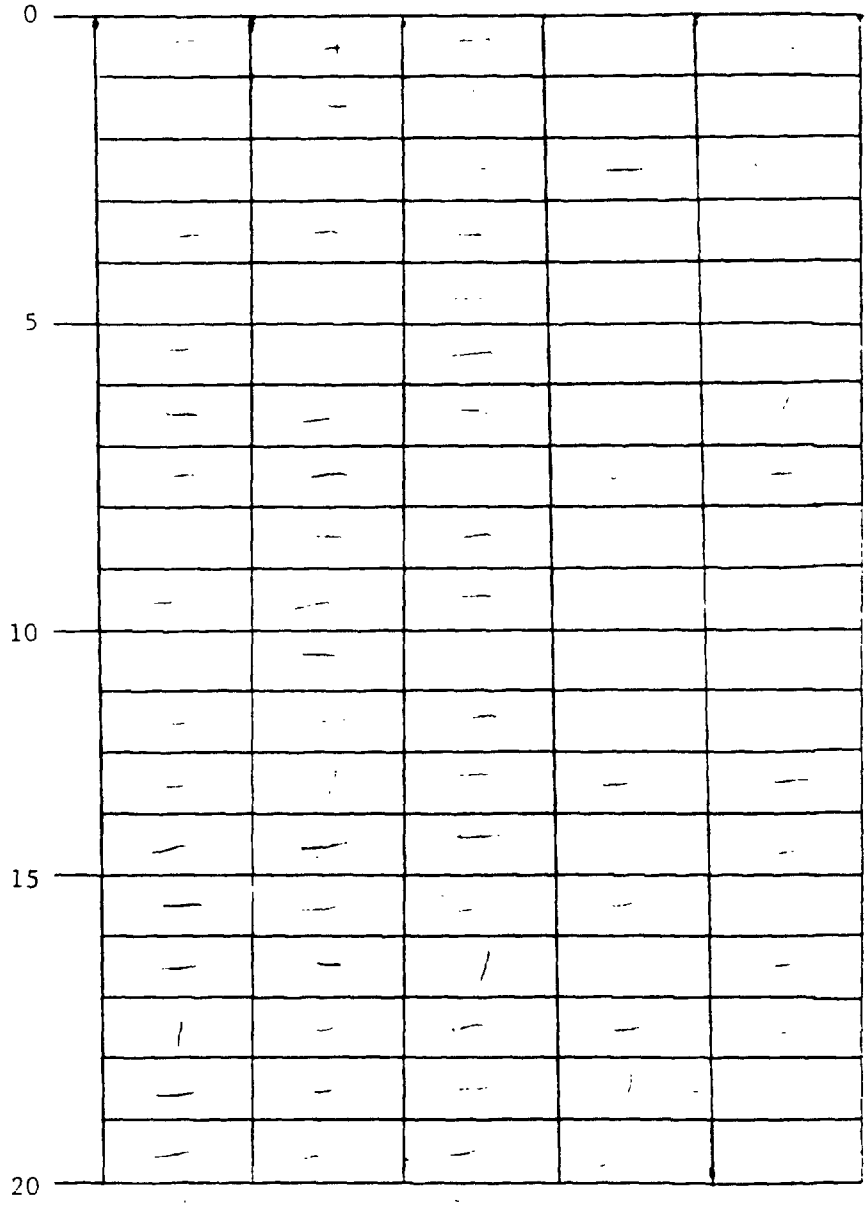
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 23

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

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

Date: 11-12-[illegible]

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 126

ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min

VOLUME (V) _____ liters

FIELD AREA (a) _____ mm^2

BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) _____ fibers/field

0	—	—	1	—	3
	—	—	—	—	—
	1	1	—	—	—
	1	1	—	—	—
	—	—	—	—	—
	—		—	2	—
5		1	1	1	—
	1	1	1	—	—
	—	—	—	—	—
	—	—	2	—	1
	1	—	—	—	—
10	—	2	—	1	—
	—	—	—	—	—
	—	2	2	—	1
	—	—	—	1	1
15	2	1	—	—	—
	—	—	—	—	1
	—	—	—	—	1
	—	—	—	—	—
	—	—	1	—	—
20					

SUBTOTALS

TOTAL 37

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

Fiber Concentration $(F) = \frac{k\ (f-b)}{V}$ 10 [illegible] = .37

SGP 0021074

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name Environmental

Title

Date 10/17/75

Pump Serial No. S-06-0422

Sampled by George Fowler

Signature George Fowler

LOCATION	Plant Lab	Wet Mixer	Laboratory	Dry Mixer area	Dry Mixer
FILTER NO.	149	156	159	166	129
FLOW: Pump Setting	6	6	6	6	6
Liter/min (R)					
TIME: On	8:37	10:22	*11:00	1:54	8:54
Off	10:22	11:00	1:54	2:54	3:45
ELAPSED TIME (min) (t)					51
VOLUME, Liters (t x r)					
REMARKS			* 30 min Launch Pumps were off		
CONCENTRATION (F) fibers/ml		1.52			.60

Total Sample Time (T) _____ mins.

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

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name Environment

Title

Date 10/17/75

Pump Serial No. B-66-0422

Sampled by George Fowler

Signature George Fowler

LOCATION	STACKER				
FILTER NO.	134				
FLOW: Pump Setting	6				
Liter/min (R)	-				
TIME: On	3:45				
Off	4:30				
ELAPSED TIME (min) (t)	45				
VOLUME, Liters (t x r)					
REMARKS					
CONCENTRATION (F) fibers/ml	.67				

Total Sample Time (T) _____ mins.

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

SGP 0021076

Date: _____

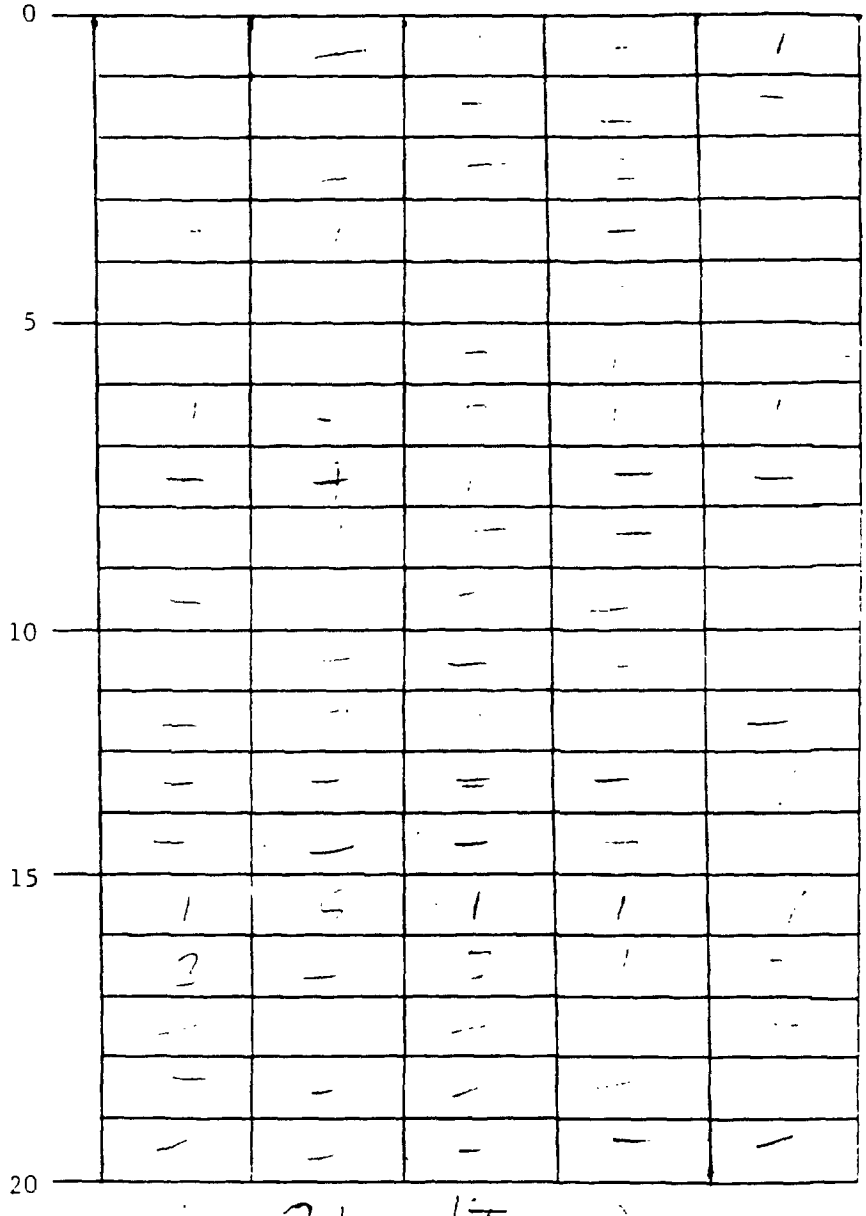
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ liters

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

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



SUBTOTALS 21 14 TOTAL _____

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

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

SGP 0021077

Date: _____

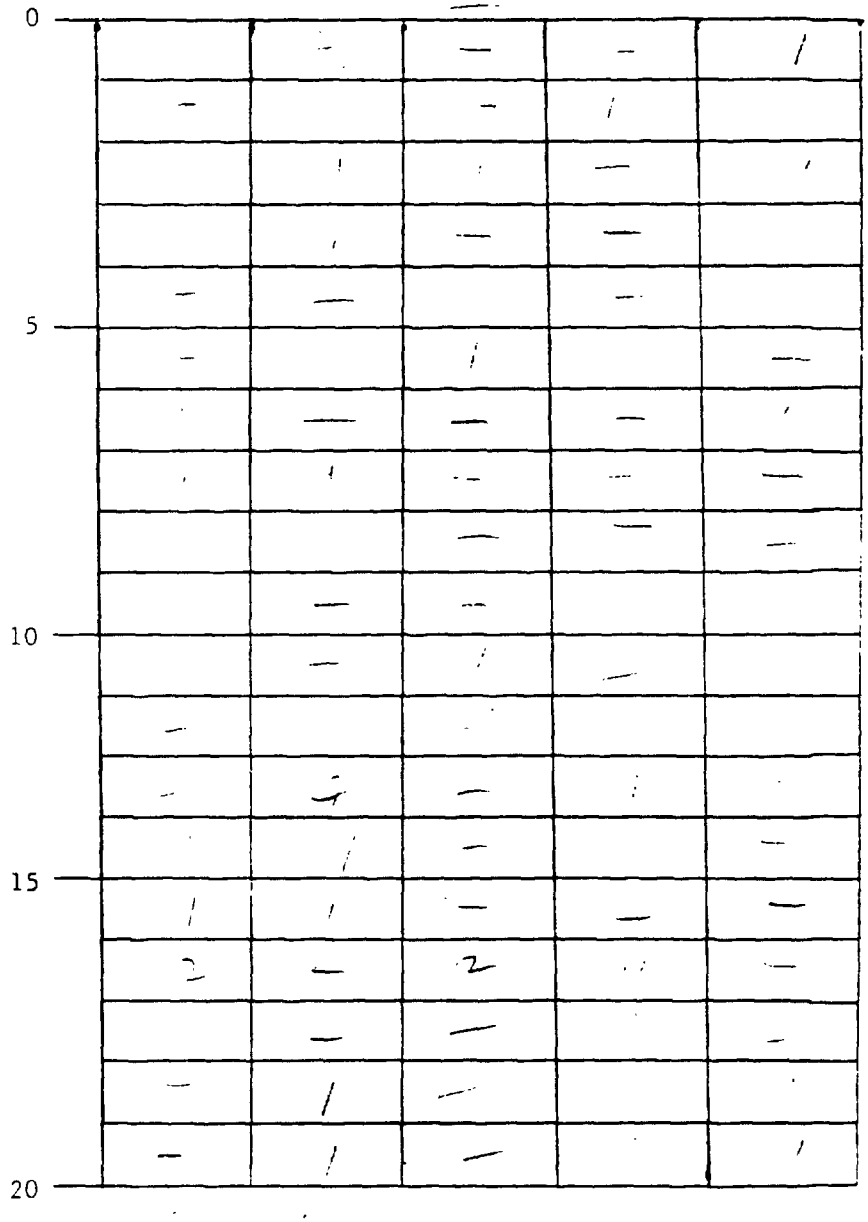
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

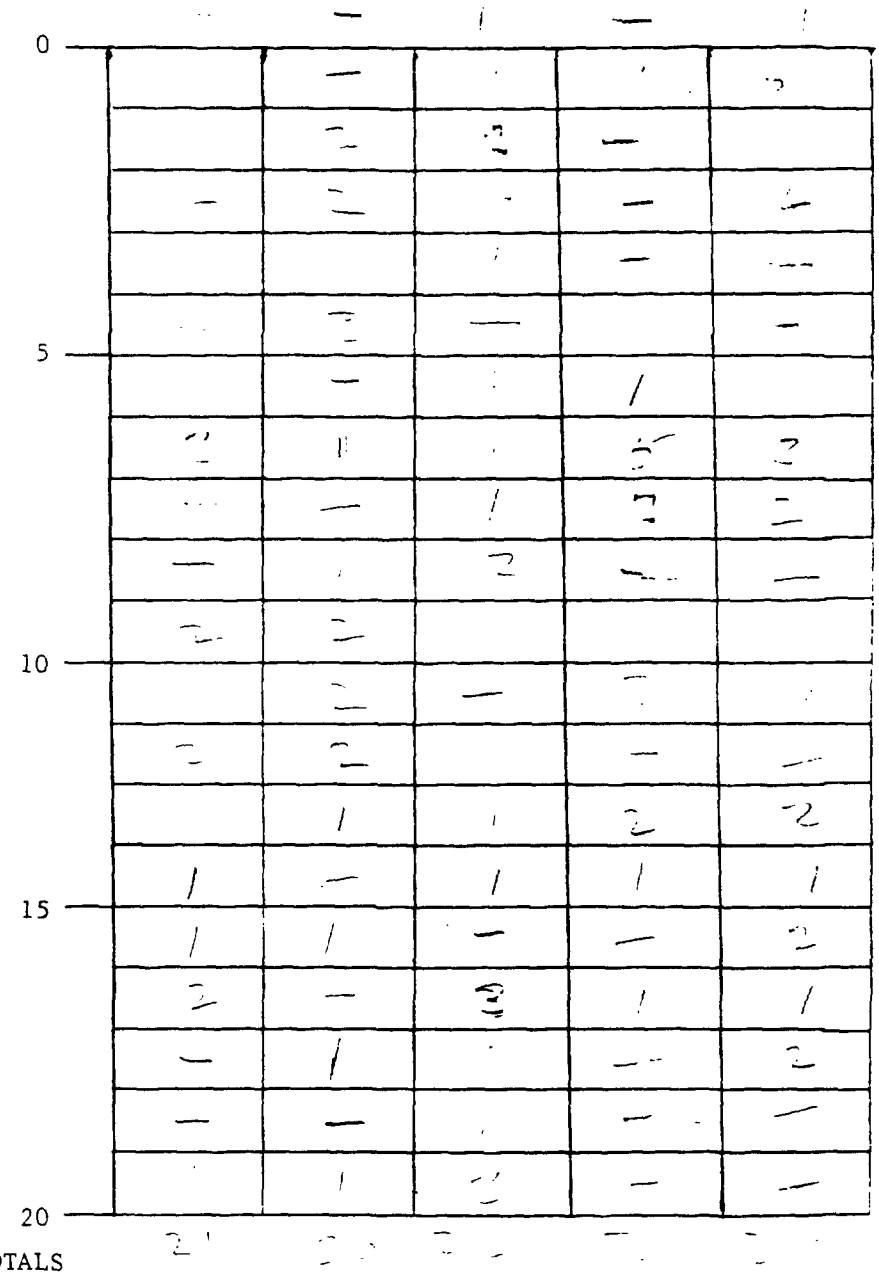
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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

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

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

SGP 0021079

Date: _____

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 166 | ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min | VOLUME (V) _____ liters

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

FILTER AREA (A) 855 mm^2 | AV. FIBER COUNT (f) .65 fibers/field

	1	2	3	4	5
0	—	1	1	1	—
	—	—	—	1	1
	1	—	2	—	1
	2	—	1	—	2
	1	—	—	—	
5	—	1	—	—	2
	—	—	—	—	—
	1	—	—	—	—
	—	1	2	3	—
	—	—	1	1	—
10	1	3	—	2	2
	—	—	—	2	1
	—	—	1	2	—
	1	—	—	1	—
15	—	1	1	1	—
	1	1	—	1	1
	—	—	—	—	—
	—	—	1	—	1
20	1	—	2	—	—
SUBTOTALS	5	9	13	17	16

TOTAL 65

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

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

Date: _____

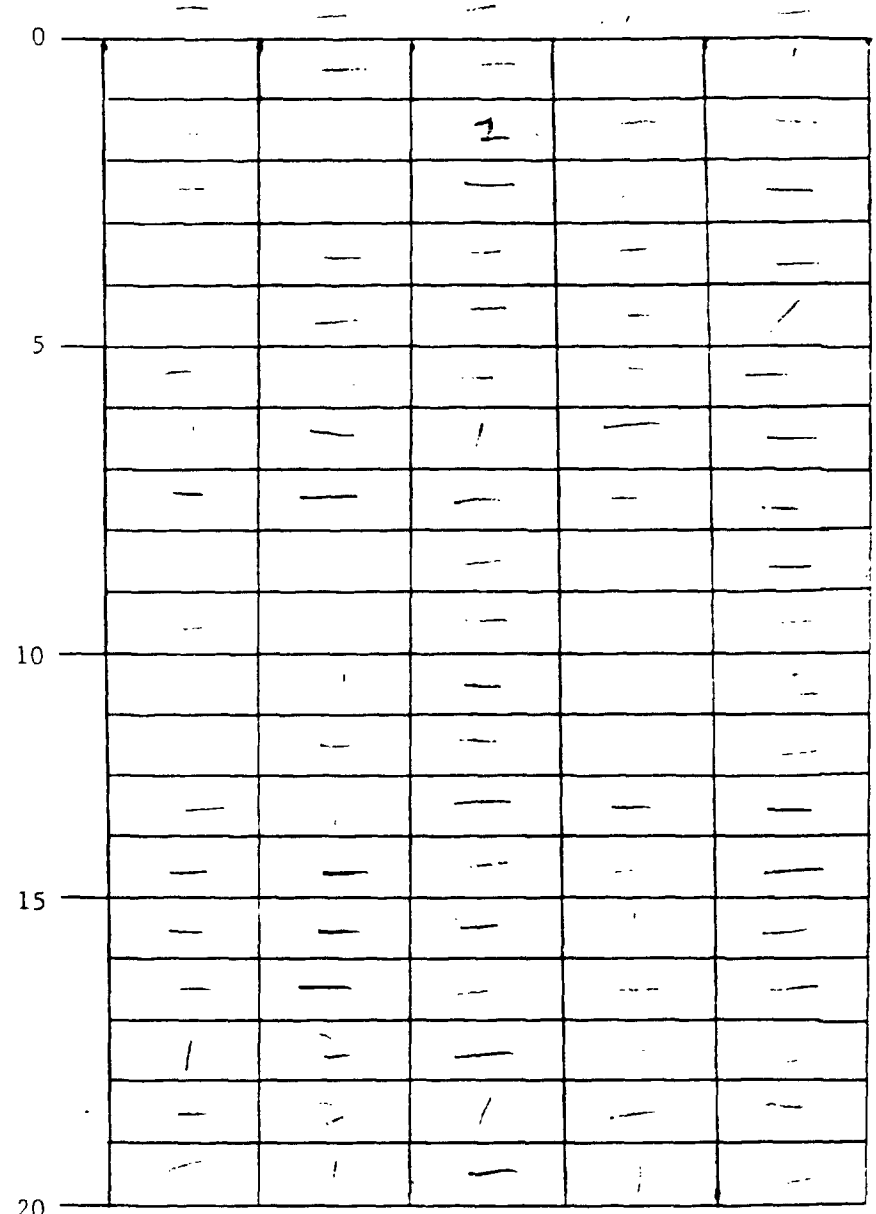
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) 51 mins.

FLOW RATE _____ l/min VOLUME (V) 86 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 _____

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

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

SGP 0021081

Date: _____

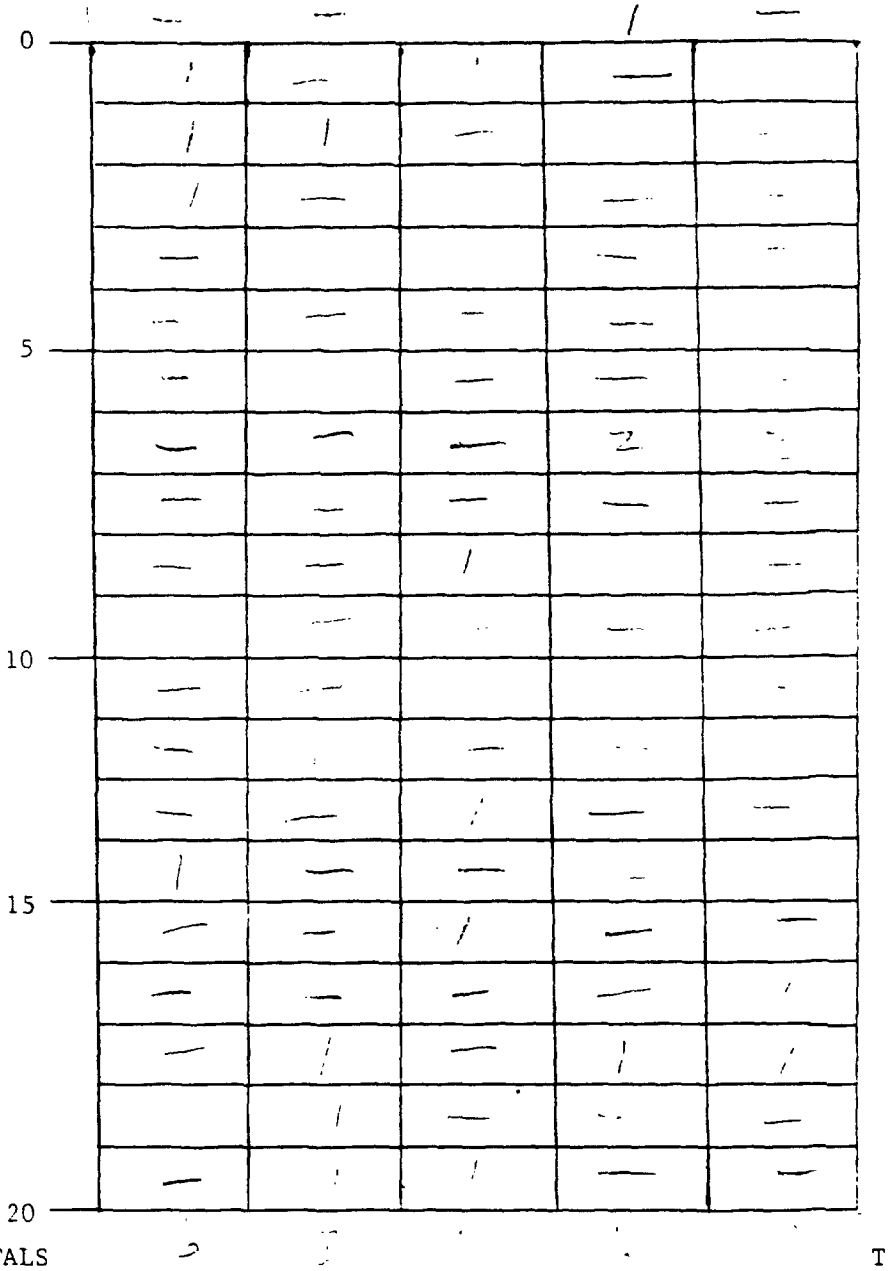
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

AIRBORNE ASBESTOS FIBER SAMPLING

Plant Marietta

Name G. Dellorso

Title Lab tester

Date 10/17/75

Pump Serial No. B-08-0490

Sampled by George Fowler

Signature George Fowler

LOCATION	Lab	Lab	Lab	Lab	Lab
FILTER NO.	148	160	167	122	127
FLOW: Pump Setting	6	6	6	6	6
Liter/min (R)					
TIME: On	8:10	1:00	1:56	2:25	2:38
Off	* 1:00	1:56	2:25	2:38	4:25
ELAPSED TIME (min) (t)	260	56	29	13	107
VOLUME, Liters (t x r)		95.2		22	182
REMARKS	* 30 min lunch Pumps turned off				
CONCENTRATION (F) fibers/ml	.32	.40	.40	.18	.44

Total Sample Time (T) 4[illegible] mins.

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

+ (13 x .18) + (107 x .44) [illegible]

SGP 0021083

Date: _____

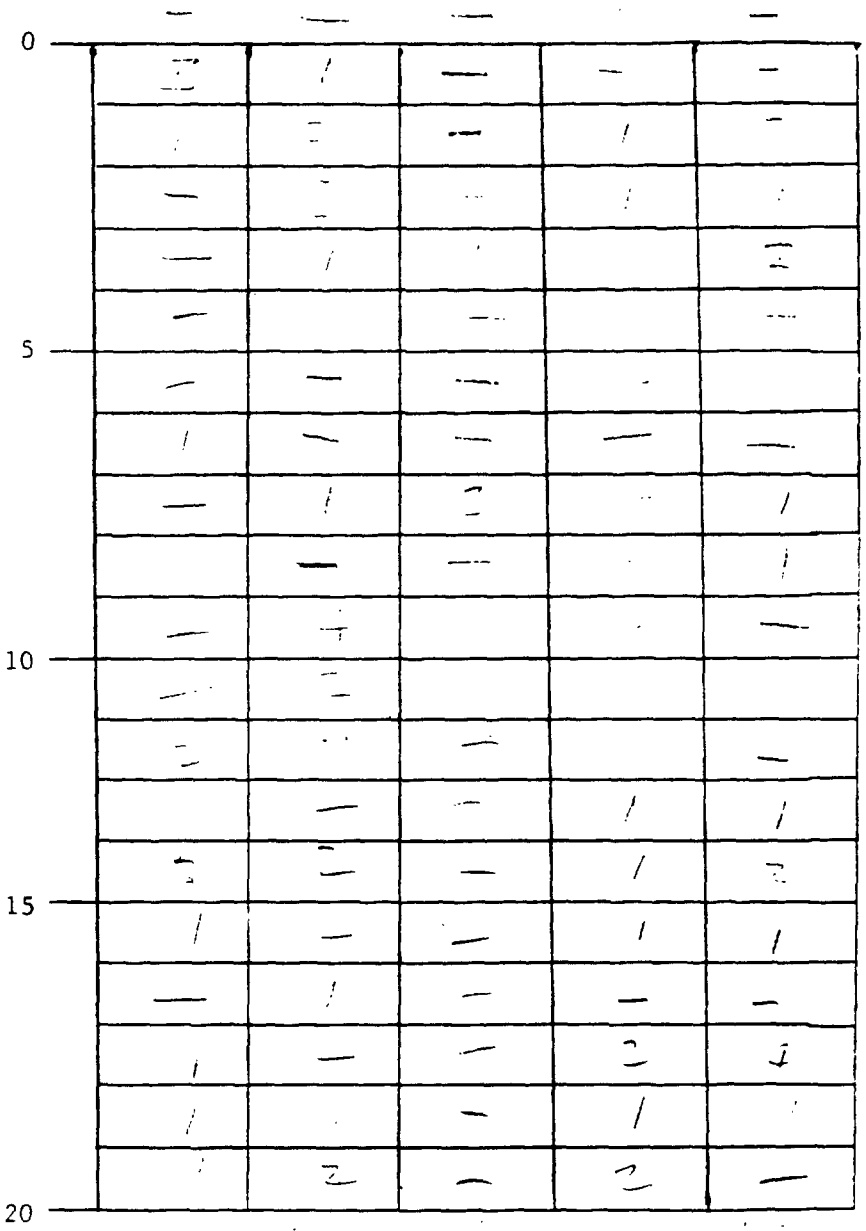
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

SGP 0021084

Date: _____

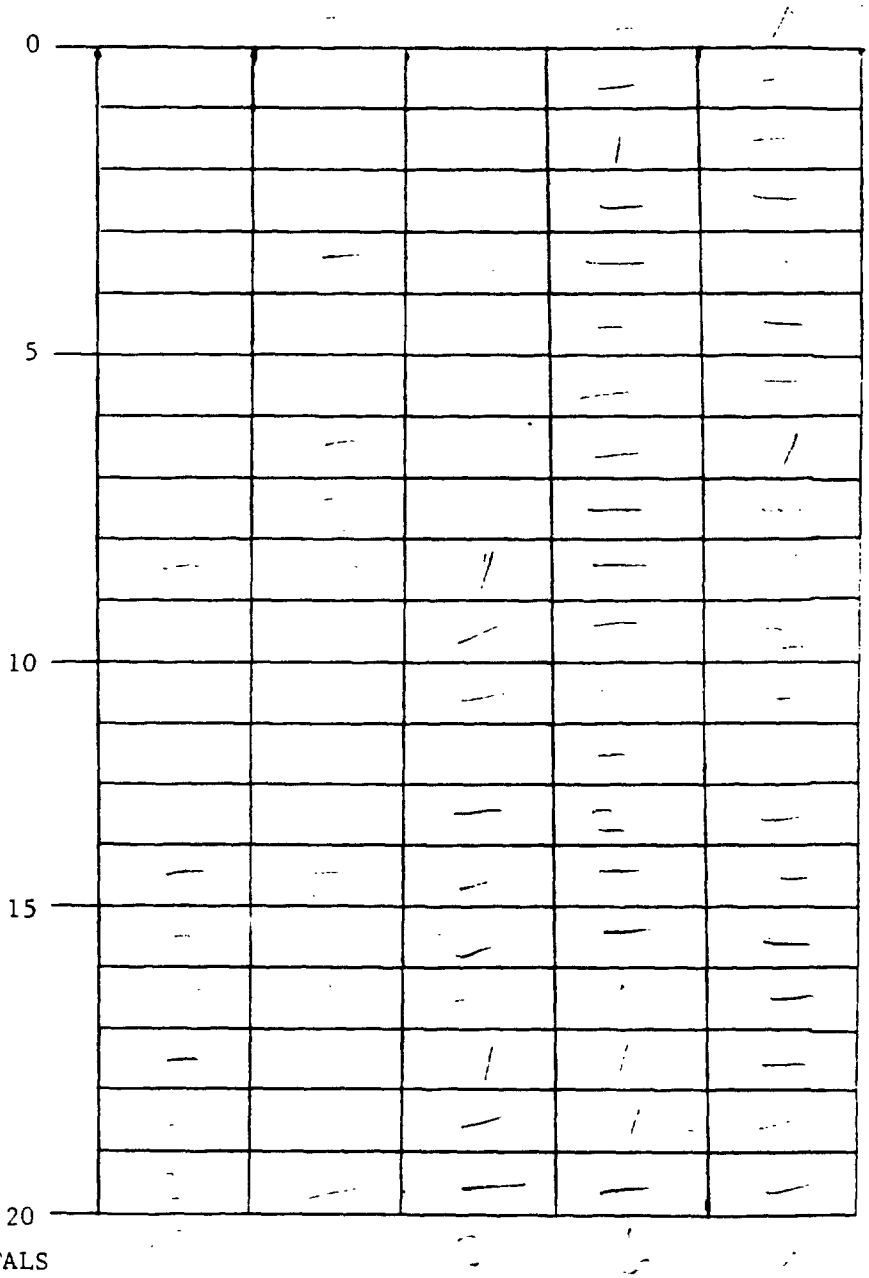
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

Date: _____

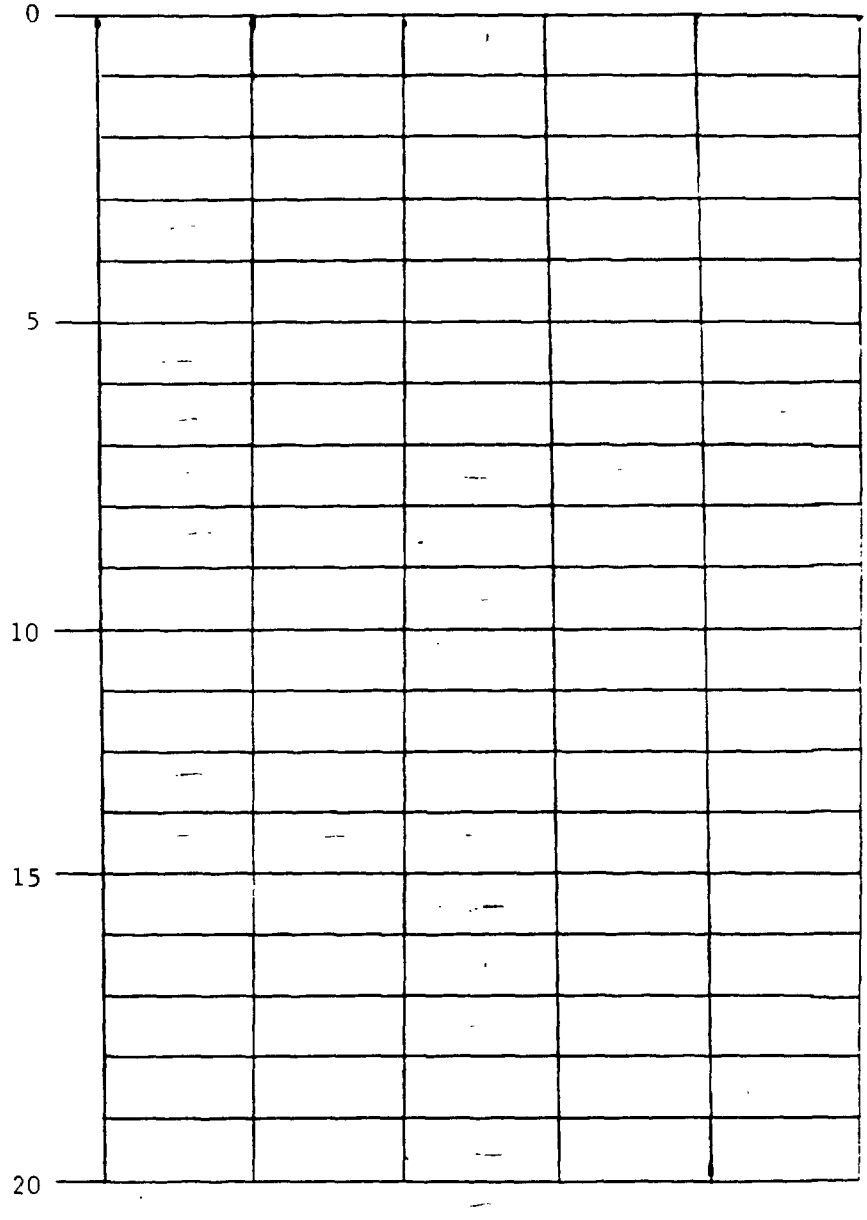
ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. _____ ELAPSED TIME (t) _____ mins.

FLOW RATE _____ l/min VOLUME (V) _____ 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 _____

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

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

SGP 0021086

Date: 11-11-75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 123

ELAPSED TIME (t) — mins.

FLOW RATE ____ l/min

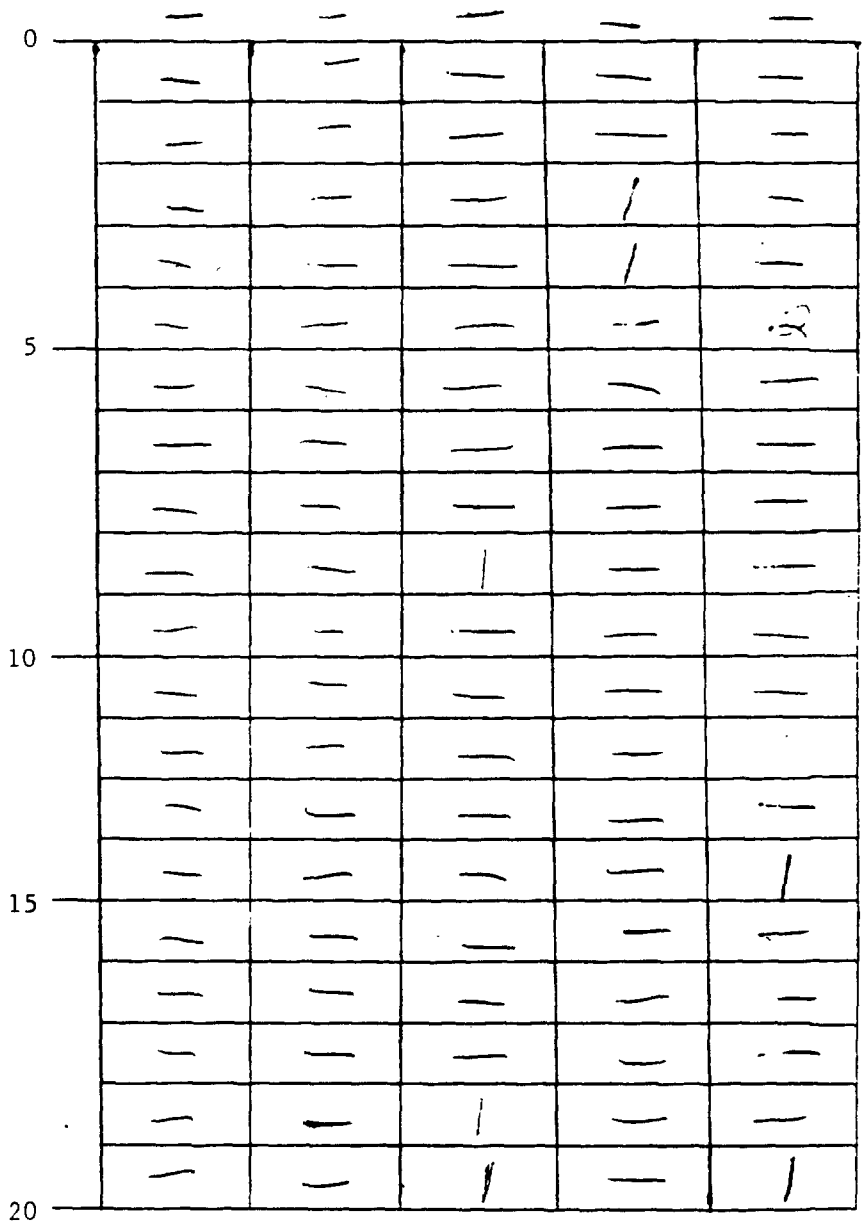
VOLUME (V) — liters

FIELD AREA (a) ____ mm^2

BLANK COUNT (b) ____ fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) ____ fibers/field



SUBTOTALS

TOTAL 10

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

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

SGP 0021087

Date: 11/6/75

ASBESTOS FIBER COUNT WORKSHEET

SAMPLE NO. 127

ELAPSED TIME (t) 10' mins.

FLOW RATE _____ l/min

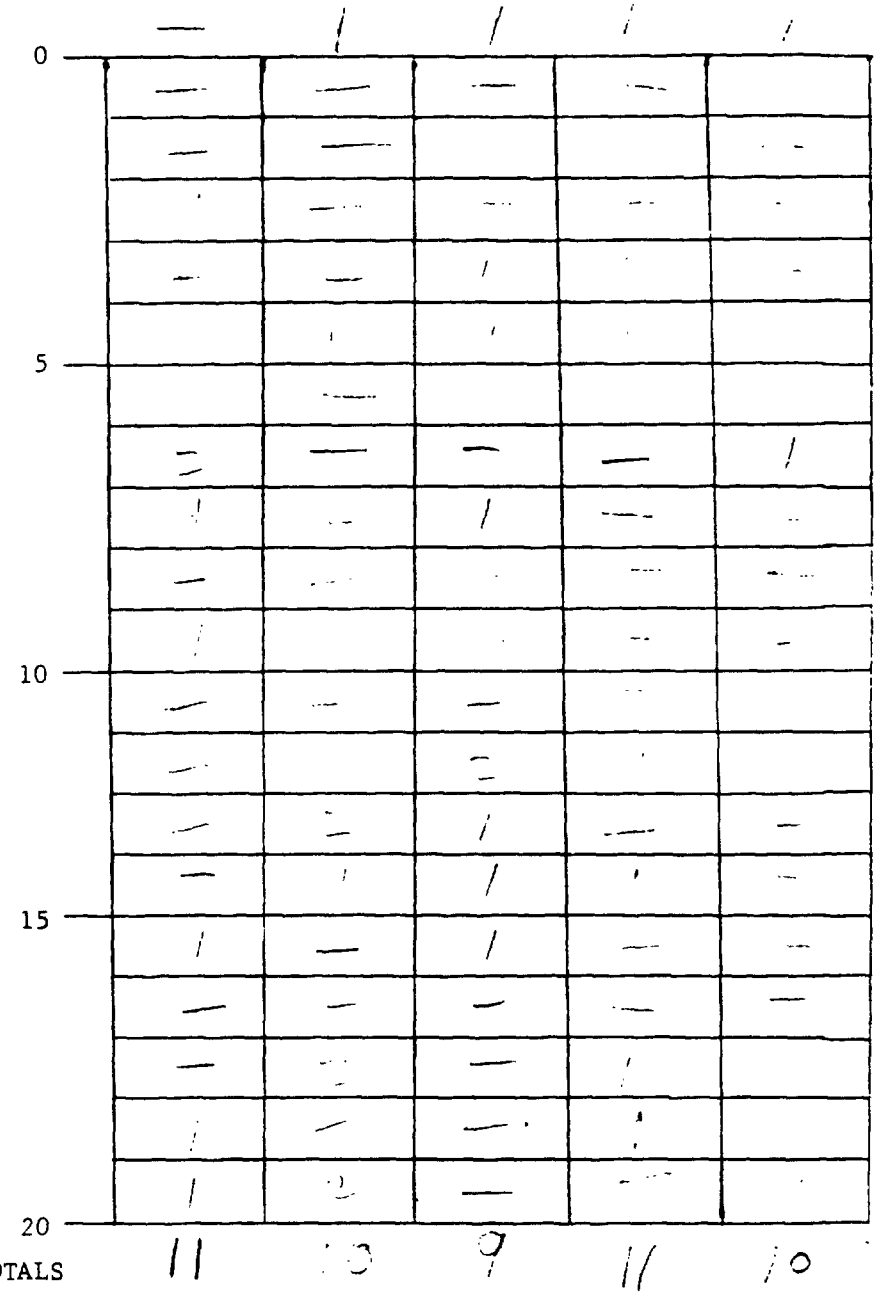
VOLUME (V) _____ liters

FIELD AREA (a) _____ mm^2

BLANK COUNT (b) _____ fibers/field

FILTER AREA (A) 855 mm^2

AV. FIBER COUNT (f) .51 fibers/field



SUBTOTALS 11 13 9 11 10 TOTAL _____

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

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

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

CSHO NO.	OSHA-1 NO.	FY
T-2710	183	76
AREA 0280	REGION 04	

1.

TO:
2. Georgia Pacific Corporation
P. O. Box 776
Marietta, Georgia, 30060

NOTIFICATION OF FAILURE TO CORRECT ALLEGED VIOLATION AND OF PROPOSED ADDITIONAL PENALTY

On the 3. 7th day of August, 19 75, Citation(s) was (were) issued to you in accordance with the provisions of section 9(a) of the Occupational Safety and Health Act of 1970 (84 Stat. 1601; 29 U.S.C. 651, *et seq.*), hereinafter referred to as the Act, notifying you of certain alleged violations of the Act and the dates by which they were to be corrected.

Based upon reinspection conducted on 4. October 16, 1975, it is alleged that you have failed to correct the alleged violations specified below within the times prescribed:

5. SERIOUS VIOLATIONS:

5A. Citation No.	5B. Number of Days Failed to Correct	X	5C. Proposed Daily Additional Penalty	=	5D. Proposed Total Additional Penalty For Failure To Correct

6. NONSERIOUS VIOLATIONS:

6A. Citation No. and Item No.	6B. Number of Days Failed to Correct	X	6C. Proposed Daily Additional Penalty	=	6D. Proposed Total Daily Additional Penalty	-	6E. Previously Allowed Abatement Credit	=	6F. Proposed Total Additional Penalty For Failure to Correct
1, Item 3	9		$25.00		$225.00		None		$225.00
Item 4	10		$18.50		$185.00		None		$185.00
								Total	$410.00

7. Area Director Joseph L. Camp

8. Date October 22, 1975

(NOTICE: Additional Important Information On Reverse Side)

Form OSHA-2
Rev. Sept. 1972

SGP 0021089

Georgia-Pacific

intracompany memo

to	* See Below	location	
from	G. E. Wilson	location	Portland
subject	Asbestos	date	October 23, 1975

COPY

As you are all aware, we find ourselves in a position of being legislated out of the use of asbestos in joint cement. The question at this time is not if it will happen, but when, as all signs are definite that levels will be established too low for us to live with.

With this in mind, one if not our major priority in joint cement at this time is to develop a Ready-Mix that does not contain asbestos. We want to do this as soon as possible but at the same time want to take an orderly approach so that we do not get ourselves into a major catastrophe.

You can be of great assistance by fully cooperating with the product development people in formula changes and field trials, making sure that when material is sent out it is followed and we get accurate readings on performance. In view of the program, I would also remind you that you should maintain close control of your asbestos inventory so that we do not find ourselves in a position of writing off large quantities that are no longer useable.

G. E. W.

GEW:jb

* TO: Messrs. K. W. Brown - Acme
I. F. Weibel - Akron, N. Y.
M. A. Palmowski - Chicago J. S. Plant
R. V. Favero - Marietta
H. W. Scharf - Milford

cc: Messrs. E. B. Hollingsworth - Wilmington, Del. - Gypsum
T. W. Richards - Tigard Lab
C. W. Lehnert - Tigard Lab
E. L. Aasen

RECEIVED
OCT 24 1975

Georgia-Pacific

intracompany memo

to	Mr. I. F. Weibel	location	Akron
from	G. W. Green	location	Tigard
subject	Airborne Asbestos Survey at Akron Joint Cement Plant	date	February 11, 1976

An asbestos dust survey was made at the Akron plant by George Fowler on October 23, 1975. An additional sample was taken later on November 7, 1975 during the unloading of an asbestos car.

All the time-weighted averages were below the 5 fibers/ml maximum currently in effect, and, in fact, are below the 2 fiber maximum to go into effect in July. The highest time-weighted average is on packer-stacker Leon Spears with 1.43 fibers/ml. The highest ceiling limit was measured on Al Kenworth, the ready mix mixer at 3.0 fibers/ml.

Sample No. 130, taken on Leon Spears, was not counted in his time-weighted average because the sampling pump was inadvertently turned off sometime during the sampling period so that the sample time was not known. If this sample were used, it would lower the time-weighted average slightly.

Sample No. 207, taken on Charlie Jackson was not counted because the filter was destroyed. The cause of the destruction is not known. If this sample was assumed to have a count of 1.57 fibers/ml (the highest Charlie Jackson had for the day) it would raise his average from 0.93 to 1.06.

Most of the samples were counted by Gail Patch, with a few being done by the writer. The method of sampling and analysis is by the N.I.O.S.H. Membrane Filter Method. The counting is done at 500X magnification on a Nikon phase contrast microscope.

G. W. G.

GWG:gvp

att.

cc: Mr. J. R. Hurd - Portland
Mr. H. W. Peele - Wilmington
Mr. G. F. Fowler - Marietta

GP 09

SGP 0021091