74-PT-09

PLAINTIFF'S EXHIBIT
CT-587

Seq T Name AREA Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0002 A Soc Sec Locn MANDREL TWA 0.170000 F/CC
Date 01/16/1974 Proc Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job AREA SAMPLE Product

Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	16	07:00	07:43	43	0.0000	0.1744/	0.0	0.1700			MANDREL PULLER

Seq T Name AREA Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0003 A Soc Sec Locn MANDREL TWA 0.075000 F/CC
Date 01/16/1974 Proc Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job AREA SAMPLE Product

Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	17	07:00	09:00	120	0.0000	0.0750/	0.0	0.0750			MANDREL PULLER

Seq T Name ENGINEERING Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0004 E Soc Sec Locn GENERAL TWA 1.400000 F/CC
Date 02/07/1974 Proc LINE 1 Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job AREA SAMPLE Product 6" 150 - 6" 200

Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1	09:25	09:55	30	0.0000	1.4300/	0.0	1.4000			J RAGAN WORKING IN A REA-WEARING A RESPIRATOR

Seq T Name ENGINEERING Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0005 E Soc Sec Locn BORING MILL TWA 2.300000 F/CC
Date 03/20/1974 Proc LINE 2 Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job AREA SAMPLE Product

Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	2	10:05	10:15	10	0.0000	2.3300/	0.0	2.3000			J DYSON & H LOUIS WE RE WORKING IN AREA

Seq T Name MELTON, DONALD R. Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0006 P Soc Sec 487-46-0711 Locn BORING MILL TWA 0.770000 F/CC
Date 05/06/1974 Proc LINE 1 Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product 12" 150 CPLGS

Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	6	13:20	13:50	30	0.0000	0.7700/	0.0	0.7700		N	NO 1 MILL

Seq T Name ENGINEERING | Dept PRODUCTION | Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0007 E Soc Sec | Locn GENERAL | TWA 2.200000 F/CC
Date 05/30/1974 | Proc LINE 1 | Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR | Job AREA SAMPLE | Product 6" 150 - 6" 200

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		3	08:45	09:15	30	0.0000	2.2300/	0.0	2.2000			FORMULA #3

Seq T Name HUMBOLT, H | Dept PRODUCTION | Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0008 P Soc Sec 999-99-3027 | Locn GENERAL | TWA 2.900000 F/CC
Date 05/30/1974 | Proc LINE 1 | Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR | Job OPERATOR | Product 6" 150 - 6" 200

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		4	09:30	10:00	30	0.0000	2.9000/	0.0	2.9000		Y DISPOSABLE SNGLE USE	FORMULA #3-#1 FIBERM AN

Seq T Name BONDUCK | Dept PRODUCTION | Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0009 P Soc Sec 999-99-3028 | Locn GENERAL | TWA 1.050000 F/CC
Date 06/01/1974 | Proc LINE 2 | Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR | Job OPERATOR | Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		5	12:30	12:57	27	0.0000	1.0500/	0.0	1.0500		Y DISPOSABLE SNGLE USE	FIBERMAN #2 P/M

Seq T Name LOUIS, HAROLD L. | Dept PRODUCTION | Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0010 P Soc Sec 498-14-6395 | Locn BORING MILL | TWA 0.670000 F/CC
Date 06/07/1974 | Proc LINE 2 | Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR | Job OPERATOR | Product 6" 200 CPLGS

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		7	07:15	07:45	30	0.0000	0.6700/	0.0	0.6700		N	NO #2 MILL

Seq T Name PALAZZOLA, JAMES J. | Dept PRODUCTION | Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0011 P Soc Sec 489-48-3108 | Locn GENERAL | TWA 1.300000 F/CC
Date 06/07/1974 | Proc | Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR | Job LABORER | Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		8	11:00	11:30	30	0.0000	1.3000/	0.0	1.3000		Y DISPOSABLE SNGLE USE	NO #1 FIBER

Seq T Name HUGHES, W — Dept PRODUCTION — Contaminant Asbestos / CEF 37mm .8u — /P&CAM 239 R=A
0012 P Soc Sec 999-99-3029 — Locn GENERAL — TWA 0.700000 F/CC
Date 06/07/1974 — Proc LINE 2 — Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR — Job OPERATOR — Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		9	11:05	11:35	30	0.0000	0.7000/	0.0	0.7000		Y DISPOSABLE SNGLE USE NO #2 FIBER	

Seq T Name DYSON, JR, JOHNIE — Dept PRODUCTION — Contaminant Asbestos / CEF 37mm .8u — /P&CAM 239 R=A
0013 P Soc Sec 495-44-7613 — Locn BORING MILL — TWA 0.950000 F/CC
Date 06/14/1974 — Proc LINE 3 — Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR — Job OPERATOR — Product 6" 150 CPLGS

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		10	09:00	09:30	30	0.0000	0.9500/	0.0	0.9500		N	NO #3 MILL

Seq T Name THOMPSON, R — Dept PRODUCTION — Contaminant Asbestos / CEF 37mm .8u — /P&CAM 239 R=A
0014 P Soc Sec 999-99-3030 — Locn LATHE LINE — TWA 0.330000 F/CC
Date 06/16/1974 — Proc LINE 2 — Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR — Job OPERATOR — Product 4" 150 PIPE

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		11	09:15	09:45	30	0.0000	0.3300/	0.0	0.3300		N	

Seq T Name DEBERRY, HARVEY J. — Dept PRODUCTION — Contaminant Asbestos / CEF 37mm .8u — /P&CAM 239 R=A
0015 P Soc Sec 497-01-6191 — Locn LATHE LINE — TWA 0.520000 F/CC
Date 06/16/1974 — Proc LINE 1 — Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR — Job OPERATOR — Product 6" 150 PIPE

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		12	09:45	10:15	30	0.0000	0.5200/	0.0	0.5200		N	

Seq T Name AREA — Dept PRODUCTION — Contaminant Asbestos / CEF 37mm .8u — /P&CAM 239 R=A
0016 A Soc Sec — Locn MANDREL — TWA 0.300000 F/CC
Date 06/19/1974 — Proc — Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR — Job AREA SAMPLE — Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		29	07:00	07:30	30	0.0000	0.3000/	0.0	0.3000			MANDREL PULLER

Seq T Name HAUSCHILD Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0017 P Soc Sec 999-99-3031 Locn GENERAL TWA 1.400000 F/CC
Date 06/21/1974 Proc LINE 2 Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job LABORER Product 10" 150 - 12" 150 PIPE

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		13	08:50	09:20	30	0.0000	1.3800/	0.0	1.4000		Y DISPOSABLE SNGLE USE FIBER	

Seq T Name LUMPKINS Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0018 P Soc Sec 999-99-3032 Locn COUPLING SAW TWA 3.700000 F/CC
Date 09/06/1974 Proc Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product 6" 150 & 12" 150 CPLGS

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		14	08:45	09:15	30	0.0000	3.7100/	0.0	3.7000		Y DISPOSABLE SNGLE USE	

Seq T Name ALEXANDER Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0019 P Soc Sec 999-99-3033 Locn GENERAL TWA 0.280000 F/CC
Date 09/06/1974 Proc Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		15	09:20	09:50	30	0.0000	0.2800/	0.0	0.2800		N	WET OPERATION-CORE D RILL

Seq T Name PEEBLES, HOSIE D. Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0020 P Soc Sec 419-26-1424 Locn FITTINGS TWA 0.860000 F/CC
Date 09/17/1974 Proc Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product 6" SEWER MEO

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		16	08:50	09:20	30	0.0000	0.8600/	0.0	0.8600		N	FITTINGS LATHE

Seq T Name THOMPSON, R Dept PRODUCTION Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
0021 P Soc Sec 999-99-3030 Locn LATHE LINE TWA 2.000000 F/CC
Date 09/17/1974 Proc Pel/Exp Limt OSHA PEL = 2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product 16" 150 F/M

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		17	09:25	09:55	30	0.0000	1.9900/	0.0	2.0000		N	

Seq T Name HATCHARD, GARY
0022 P Soc Sec 499-54-5960
Date 10/29/1974
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn LATHE LINE
Proc LINE 3
Job OPERATOR

Contaminant Asbestos / CEF 37mm .8u /P&CAM 239 R=A
TWA 0.520000 F/CC
Pel/Exp Limt OSHA PEL = 2 F/CC
Product 12" 200 PIPE

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/CC		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.		18	08:40	09:10	30	0.0000	0.5200/	0.0	0.5200		N	

* * * End Of Report * * * DREXLESL

CTD017992

74-1 working water

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 Plant | 901 Dept. | E Type | NO.I FINES Location | 2-7-74 Date | 9:25 A.M. Time | J. RAGAN Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	C115	1003	9:00 AM 2-7-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8 U	855 37MM

Weather Conditions ; CLOUDY - COLD Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments; FORMULA #11 6"-150-6"-200 SILICA CONVEYOR LEAK

CLEAN UP GOING ON ON MEZZANINE

Sampler; J. FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; 7 [5MM/cc] counted 30; Fields counted 100; Average 30

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR \times ST)(1000)} = \frac{.30 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{257}{180} = 1.43$$

Concentration = _____

CONCENTRATION = 1.43 Fibers GREATER THAN 5MM/cc Slide Number 74-1

Analysts; J. FEAR Microscopist; J. FEAR

74 - PT -
ST Louis

R=K

ASBESTOS COUNT RECORD SHEET

SAMPLE# 16 OPERATION Area Mandrel Puller

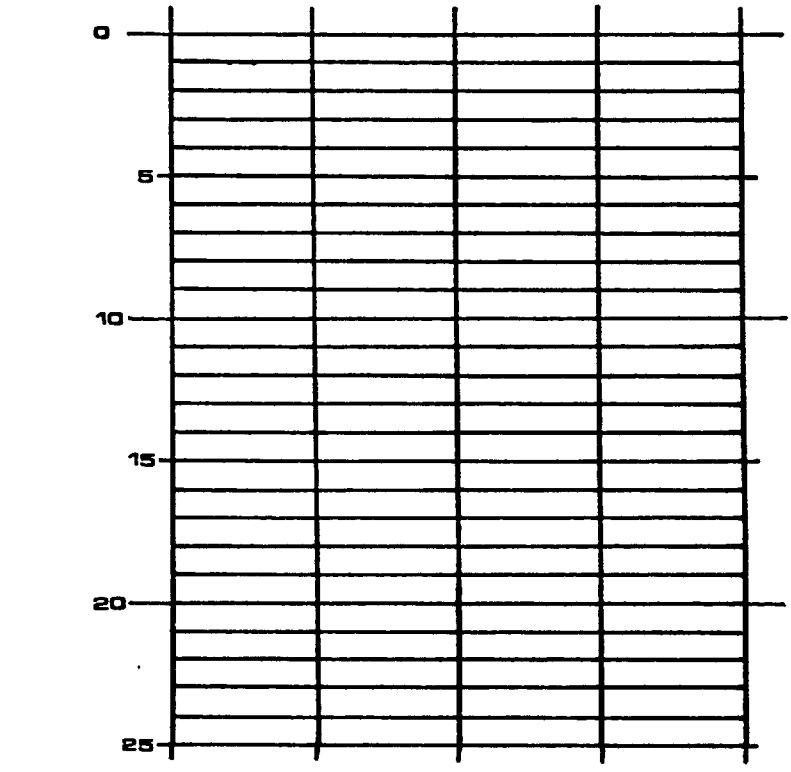
FLOW 1.9 TIME 43 min VOLUME _____ DATE 1/16/74

INITIALS _____ F.AREA 100.30 BLK.CNT.AV. .01

AV.COUNT .06 CONCENTRATION .1744

COMMENTS _____

100-6



0				
5				
10				
15				
20				
25				

SUB-TOTALS

use 7-7:43a
ASB-D - PCAM239
Inhouse counts

CTD017994

R = A

ASBESTOS COUNT RECORD SHEET

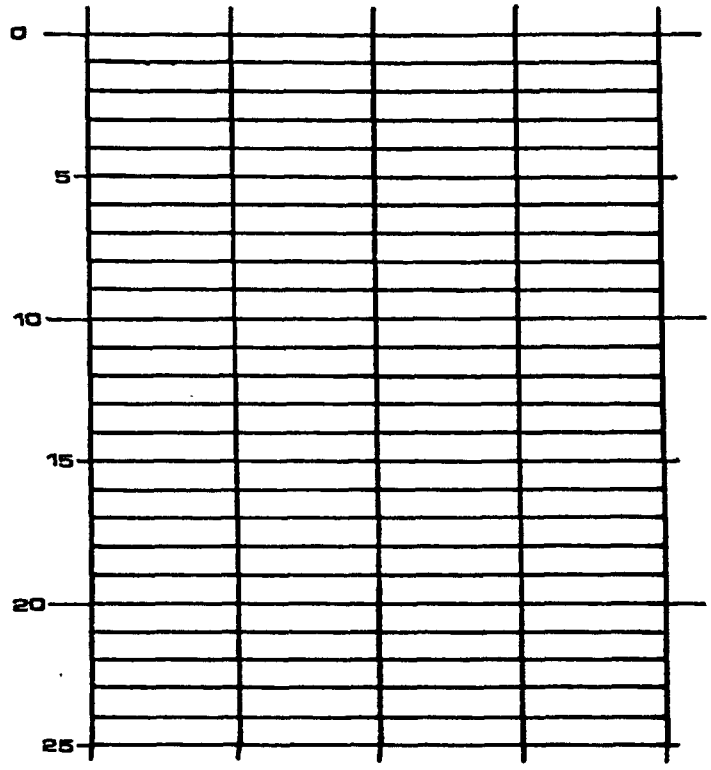
SAMPLE# 17 OPERATION Attic Model Pulled

FLOW 1.9 TIME 120 MIN VOLUME _____ DATE 1/16/74

INITIALS _____ F.AREA .0030 BLK.CNT.AV. .01

AV.COUNT .07 CONCENTRATION .075

COMMENTS Pump static



SUB-TOTALS

CTD017995

74-2 Worker in area

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 (Plant) 905 (Dept.) E (Type) 2-3 BORING MILLS (Location) 3-20-74 (Date) 10:05 A.M. (Time) J. DYSON H. LOUIS (Employee)

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	C115	1003	9:45 A.M. 3-20-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8 μ	855 37MM

Weather Conditions ; SUNNY - COOL Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments;

Sampler; J. FEAR Area Total Sampling Time 10 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; [LESS THAN 5MM/cc] counted 18; Fields counted 100; Average .18

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR)(ST)(1000)} = \frac{.18 \times 855}{.0030 \times 2.0 \times 10 \times 1000} = \frac{154}{66} = 2.33$$

Concentration = _____

CONCENTRATION = 2.33 Fibers GREATER THAN 5MM/cc Slide Number 74-2

Analysts; J. FEAR Microscopist; J. FEAR

CTD017996

74-6

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 (P) NO1 MILL 5-6-74 1:20PM D. MELTON
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP				5-6-74	

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area

Weather Conditions ; RAIN - WARM Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; 12"-150 COUP

Sampler; J. FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 16; Fields counted 100; Average .16

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR \times ST)(1000)} \cdot \frac{.16 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{137}{180} = .77$$

Concentration = _____

CONCENTRATION = .77 Fibers _____ Slide Number 74-6

Analysts; J. FEAR Microscopist; J. FEAR

CTD017997

74-3

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 E NO.1 FIBES 5-30-74 8:45A.M

Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	C115	1003	9:00AM 5-30-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; CLEAR-WARM Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments; FORMULA # 3 6"-150 - 6"-200

Sampler; J.FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; > [5MM/cc] counted 47; Fields counted 100; Average .47

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR)(ST)(1000)} \quad \frac{.47 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{402}{180} = 2.23$$

Concentration = _____

CONCENTRATION = 2.23 Fibers GREATER THAN 5MM/cc Slide Number 74-3

Analysts; J.FEAR Microscopist; J.FEAR

CTD017998

74-4

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 P #1 FIBERMAN 5-30-74 9:30 A.M. H. HUMBOLT
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	C115	1003	5-30-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; CLEAN-WARM Time Log [redacted] Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments; FORMULA # 3 6"-150 - 6"-200

Sampler; J. FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; Z[S/MM/CC] counted 61; Fields counted 100; Average .61

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FRxST)(1000)} \quad \frac{.61 \times 855}{.003c \times 2.0 \times 30 \times 1000} = \frac{522}{180} = 2.90$$

Concentration = _____

CONCENTRATION = 2.90 Fibers _____ Slide Number 74-4

Analysts; J. FEAR Microscopist; J. FEAR

CTD017999

74-5

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 59-901-P-FIBERMAN #2 P/M 6-1-74 12:30 P.M. - Bonpuck

Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
				6-1-74	

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area

Weather Conditions ; warm & clear

Ventilation Controls; Dust collector working good

Operating Conditions; Normal

Personal Protection ; Welsh 7100 Respo

Comments; Dumped 1 batch Fiber blend # 41

Activity Log
Time Log
IN Area Out of Area Min.

12:25 -

12:35 - started dumping

12:45 - stopped dumping

12:48 - set up next batch

12:52 -

Sampler; [signature] Area Total Sampling Time 27 min

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
					.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 22; Fields counted 100; Average .22

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FRxST)(1000)} \cdot \frac{.22 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{188}{180} = 1.05$$

Concentration = _____

CONCENTRATION = 1.05 Fibers _____ Slide Number 74-5

Analysts; J. FEAR Microscopist; J. FEAR

CTD018000

74-7

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 (P) NO2 MILL 6-7-74 7:15AM H. LOUIS
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
				6-7-74	

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area

Weather Conditions ; CLEAR - COOL Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; 6"-200 COUP.

Sampler; J. FEAR Area Total Sampling Time ----------

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 14; Fields counted 100; Average .14

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR\times ST)(1000)} \quad \frac{.14 \times 855}{.0030 \times 2.0 \times 30 \times 1000} \quad \frac{120}{180} = .67$$

Concentration = _____

CONCENTRATION = .67 Fibers _____ Slide Number 74-7

Analysts; J. FEAR Microscopist; J. FEAR

CTD018001

74-8

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 (Plant) 901 (Dept.) (P) (Type) NO1 FIBER (Location) 6-7-74 (Date) 10:30 A.M. (Time) PALLAZOLLA (Employee)

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
				6-7-74	

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area

Weather Conditions ; CLOUDY RAIN Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments;

Sampler; J. FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 28; Fields counted 100; Average .28

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR\times ST)(1000)} \quad \frac{.28\times 855}{.0030\times 2.0\times 30\times 1000} = \frac{239}{180} = 1.33$$

Concentration = _____

CONCENTRATION = 1.30 Fibers _____ Slide Number 74-8

Analysts; J. FEAR Microscopist; J. FEAR

CTD018002

74-9

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 (Plant) 901 (Dept.) P (Type) NO.2 FIBER (Location) 6-7-74 (Date) 11:05 A-M (Time) W. HUGHES (Employee)

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
				6-7-74	

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area

Weather Conditions ; CLOUDY RAW Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments;

Sampler; J. FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 19; Fields counted 100; Average .19

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR\times ST)(1000)} \quad \frac{.19 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{162}{180} = .70$$

Concentration = _____

CONCENTRATION = .70 Fibers _____ Slide Number 74-9

Analysts; J. FEAR Microscopist; J. FEAR

CTD018003

74-10

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 P No 3 MILL 6-14-74 9:00AM J.DYSON
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	1003	80498	6-14-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; CLOUDY WARM Time Log [redacted] Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; 6"-150 COMP.

Sampler; J. FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		6-14-74	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 20; Fields counted 100; Average .20

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR\times ST)(1000)} \quad \frac{.20 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{171}{180} \quad .95$$

Concentration = _____

CONCENTRATION = .95 Fibers _____ Slide Number 74-10

Analysts; J. FEAR Microscopist; J. FEAR

CTD018004

74-11

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 (Plant) 901 (Dept.) P (Type) NO 2 LATHE (Location) 6-16-74 (Date) 9:15 AM (Time) R. THOMPSON (Employee)

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	1003	80498	6-16-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; CLEAR WARM Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; 4" 150 PIPE

Sampler; FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		6-16-74	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 7; Fields counted 100; Average .07

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FRxST)(1000)} \quad \frac{.07 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{60}{180} = .33$$

Concentration = _____

CONCENTRATION = .33 Fibers _____ Slide Number 74-11

Analysts; _____ Microscopist; _____

CTD018005

74-12

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 901 P NO LATHE 6-16-74 9:45 AM DEBERRY
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	1003	80498	6-16-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; CLEAR WARM Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; 6"-150 PIPE

Sampler; FEAR Area Total Sampling Time 30

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		6-16-74	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 11; Fields counted 100; Average .11

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR)(ST)(1000)} \quad \frac{.11 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{94}{180} = .52$$

Concentration = _____

CONCENTRATION = .52 Fibers _____ Slide Number 74-12

Analysts; J FEAR Microscopist; J. FEAR

CTD018006

ASBESTOS COUNT RECORD SHEET

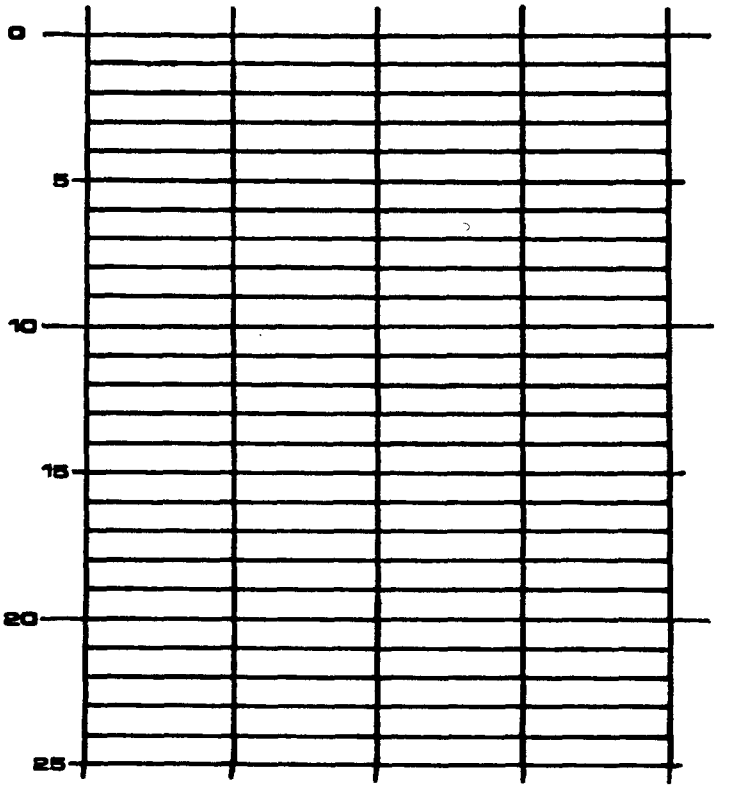
SAMPLE# 29 OPERATION Mandrel Pellet

FLOW 1.9 TIME 30 min VOLUME _____ DATE 6/19/74

INITIALS _____ F.AREA .0030 BLK.CNT.AV. .03

AV.COUNT .09 CONCENTRATION 3

COMMENTS Heavy particles



CTD018007

74-13

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 901 P NO.2 FIBER 6-21-74 8:50 A.M. HAUSCHILD
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	1003	80498	6-21-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8μ	855 37MM

Weather Conditions ; CLOUDY - WARM Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments; 10"-150 - 12"-150 PIPE

Sampler; FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		6-21-74	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 29; Fields counted 100; Average .29

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FRxST)(1000)} \quad \frac{.29 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{248}{180} = 1.38$$

Concentration = _____

CONCENTRATION = 1.38 Fibers _____ Slide Number 74-13

Analysts; J. FEAR Microscopist; J. FEAR

CTD018008

74-14

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 P COUP SAW 9-6-74 8:45 A.M. LUMPKINS
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	C115	1003	9-6-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	1003	0.8 U	855 37MM

Weather Conditions ; CLOUDY-COOL Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; RESPIRATOR

Comments; SAWING 6"-150 AND 12"-150 COUPLINGS

Sampler; FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 78; Fields counted 100; Average .78

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR\times ST)(1000)} \quad \frac{.78 \times 855}{.0030 \times 2.0 \times 30 \times 100} \quad \frac{667}{180} = 3.71$$

Concentration = _____

CONCENTRATION = 3.71 Fibers _____ Slide Number 74-14

Analysts; J. FEAR Microscopist; J. FEAR

CTD018009

74-15

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 F GREDRIL 9-6-74 9:20 A.M ALEXANDER
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
				9-6-74	

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area

Weather Conditions ; CLOUDY - COOL Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE - (THIS IS A WET OPERATION)

Comments;

Sampler; FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 6; Fields counted 100; Average .06

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C.= \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR\times ST)(1000)} \quad \frac{.06 \times 855}{.003 \times 2.0 \times 30 \times 1000} = \frac{51}{180} = .28$$

Concentration = _____

CONCENTRATION = .28 Fibers _____ Slide Number 74-15

Analysts; J. FEAR Microscopist; J. FEAR

CTD018010

74-16

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 905 P FITS LATHE 9-17-74 8:50 AM H. PEEBLES
Plant Dept. Type Location Date Time Employee

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	C115	1003	9-17-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; FAIR. COOL Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; RUNNING 6" SEWER M.E.O.

Sampler; FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 18; Fields counted 100; Average .18

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR \times ST)(1000)} \quad \frac{.18 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{154}{180} .86$$

Concentration = _____

CONCENTRATION = .86 Fibers GREATER THAN 5 MM/cc Slide Number 74-16

Analysts; FEAR Microscopist; FEAR

CTD018011

74-17

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 (Plant) 901 (Dept.) P (Type) OLD PM. LATHE (Location) 9-17-74 (Date) 9:25 A.M. (Time) R. THOMPSON (Employee)

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	CUS	1003	9-17-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; FAIR-COOL Time Log Min.

Ventilation Controls; DUST COLLECTOR

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; RUNNING 16"-150 F/M.

Sampler; FEAR Area Total Sampling Time 30 MINS.

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 42; Fields counted 100; Average .42

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FRxST)(1000)} \quad \frac{.42 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{359}{180} \quad 1.99$$

Concentration = _____

CONCENTRATION = 1.99 Fibers _____ Slide Number 74-17

Analysts; FEAR Microscopist; FEAR

CTD018012

74-18

AIR SAMPLING DATA SHEET

CERTAIN-TEED PRODUCTS 259 (Plant) 901 (Dept.) P (Type) #3 LATHE LINE (Location) 10-29-74 (Date) 8:40 A.M. (Time) G. HATCHARD (Employee)

Instrument	Manufacturer	Model	Serial Number	Calibrated	Flow Rate
AIR SAMPLE PUMP	BENDIX	1003	80498	10-29-74	2.0 LITERS

Sampling Medium	Manufacturer	Part Number	Batch Number	Pore Size	Area
FILTER	METRICEL	60131	80498	0.8U	855 37MM

Weather Conditions ; RAIN - WARM Time Log Min.

Ventilation Controls; NONE

Operating Conditions; NORMAL

Personal Protection ; NONE

Comments; RUNNING 12"-200 PIPE

Sampler; FEAR Area Total Sampling Time 30 MINS

ANALYSIS

Instrument	Manufacturer	Model	Serial Number	Calibrated	Field Area
MICROSCOPE	NIKON	SUKT		7-18-73	.0030

Blank Medium;
Fibers; _____ counted _____; Fields counted _____; Average _____

Sampling Medium;
Fibers; _____ counted 11; Fields counted 100; Average .11

Concentration= (Average Fiber Count-Sampling Medium - Average Fiber Count Blank Medium)X (Sampling Medium Area) ÷ (Field Area) X (Flow Rate X Sampling Time) X (1000) OR

$$C. = \frac{(AFCSM-AFCBM)(SMA)}{(FA)(FR \times ST)(1000)} \quad \frac{.11 \times 855}{.0030 \times 2.0 \times 30 \times 1000} = \frac{94}{180} = .52$$

Concentration = _____

CONCENTRATION = .52 Fibers GREATER THAN 5MM/CC Slide Number 74-18

Analysts; J. FEAR Microscopist; J. FEAR

CTD018013