

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SK-234		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7719	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Pertain-Test Products Corp.				
	STREET ADDRESS 600 St. Cyr. Road				
	CITY Bellevue	COUNTY St. Louis	STATE Mo.		
7. OPERATION Hand unloading type CCC Containers from trailer					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ <u>Open face, AA, 0.8u</u> FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 14 min @ 2 lpm = 28 l. BP (mm) T (C)					
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED Asbestos fibers count longer than 5 um in fibers/cc. = 248					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] Isbani, during handling of bags. 1358 to 1412 hrs. P. respirator used, Veloh 7165 @ BM 21B-129. Pump D03-371; Calib 10-72; Spiron 6.0 = 2 lpm.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017691

ANALYST WORKSHEET

7-SL 234

1. SAMPLE NUMBER X-7 719	2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spain & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{47.3 \text{ Fibers/field} \times 147}{28 \text{ liters air}} = 248 \text{ fibers/cc}$$

*If this area is re sampled take
about 5 liter air volume.*

8. RESERVE SAMPLE

Used in analysis

9. DATE REPORTED 11 Jan '73	10. ANALYST W. Neville	11. CALCULATIONS CHECKED BY Willard Dixon	12. DATE CHECKED 1/11/73
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Form LSB 005 5

CTD017692



SAMPLE IDENTIFICATION SHEET

1. SAMPLE NUMBER (REGIONAL) <i>7-54-236</i>		2. DATE TAKEN <i>12-20-72</i>		3. DATE SUBMITTED TO LAB <i>1-2-73</i>	
4. BY WHOM TAKEN <i>W. Spain</i>				5. LABORATORY NUMBER <i>X-7721</i>	
6. WHERE TAKEN	NAME OF ESTABLISHMENT <i>Certain-Tied Products Corp.</i>				
	STREET ADDRESS <i>600 St. Cyr Road</i>				
	CITY <i>Bellfontaine</i>		COUNTY <i>St. Louis</i>	STATE <i>Mo.</i>	
	Neighborhood				
7. OPERATION <i>Hand unloading type CCC asbestos from trailer</i>					
8. SAMPLING TECHNIQUE		IMPING ☐ BUBBLER ☐ ESP ☐ <i>Open face, AA, 0.8u</i> FILTER PAPER ☐ MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐			
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) <i>7 min @ 2 lpm = 14 l</i> BP (mm) T (C)					
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED <i>Asbestos fiber count longer than 5 um in fibers/cc. = 390</i>					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS <i>Personal sample on [redacted] laborer from 1412 to 1419 hrs, during handling of bags. Respirator used.</i> <i>Pump 003-371; R=6.0</i>					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017693

ANALYST WORKSHEET

236

1-7-73

☒ INTACT

DATE RECEIVED

721

☐ BROKEN

☐ NONE

1-4-73

1-7-73

3. REGION

1-7-73 D. 1012

VII

DESCRIPTION OF SAMPLE

Filter

REMARKS OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and grid reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{37.1 \text{ Fibers/field} \times 147}{14 \text{ liters air}} = 390. \text{ fibers/cc}$$

If this area is resampled, take about 3 liter air volume. (Note! a slide having greater than 20 fibers/field can't be counted accurately.)

1-7-73 SAMPLE

Used in analysis

11 Jan 73

ANALYST

W. Neville

11. CALCULATIONS CHECKED BY

12. DATE CHECKED

Willard Dixon 1/11/73

Form 100-1

CTD017694

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 238 N-7723		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM R. Smith & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{27.0 \text{ Fibers/field} \times 147}{12 \text{ liters air}} = 330. \text{ fibers/cc}$$

If resampled, we suggest an air volume of about 4 liters of air for this area.

8. RESERVE SAMPLE

Used in analysis

9. DATE REPORTED 11 Jan '73	10. ANALYST W. Neville	11. CALCULATIONS CHECKED BY Willard Dixon	12. DATE CHECKED 7/11/73
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U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-52-238		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7723	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Tied Products Corp.				
	STREET ADDRESS 600 St. Cyr. Road				
	CITY Bellefontaine		COUNTY St. Louis	STATE Mo.	
	Neighborhood				
7. OPERATION Hand unloading type C.C. asbestos from trailer.					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open face, AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 6 min @ 2 lpm = 12 l BP (mm) T (C)					
10. POSSIBLE INTERFERENCES					

11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc. = 330	
12. DATE REPORTED FROM LAB	13. CHEMISTS
14. REMARKS Personal sample on [redacted], Laborer, from 1419 to 1425 hrs. Handling bags in trailer. Resp. used. DO3-371; R=6.0.	

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017696

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-233		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN M. Spain				5. LABORATORY NUMBER X-7718	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Unloading asbestos bags from trailer					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 14 min @ 2 lpm = 28 l. BP (mm) T (C)					
10. POSSIBLE INTERFERENCES Packaged Cement & Gypsum					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 198					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] laborer, from 1757 to 1711 hrs during handling of bags of CCC asbestos from load to pallet. Respirator used B.M. 21B-129, Model Md. 7165. Pump DOJ-224; Plot 10-72; Rotometer @ 5.6 = 2 lpm.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017697

ANALYST WORKSHEET

7-SL 233

1. SAMPLE NUMBER X-7718	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. SOURCE FROM L. Spain & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{37.7 \text{ Fibers/Field} \times 147}{28 \text{ liters air}} = 198. \text{ fibers/cc}$$

This area is so high that an accurate count is difficult with the vol. of air taken. I suggest about 5 liters if you re sample at this location. The filter also contained visible loose fibers which may have been lost

RESERVE SAMPLE

Used in analysis

8. DATE RECEIVED 1/11/73	9. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. Neville	12. DATE CHECKED 1/22/73
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Form L8B 005 5

CTD017698

RECEIVED
 1-4-73

SAMPLE IDENTIFICATION SHEET

1. SAMPLE NUMBER (REGIONAL) 7-52-235		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7720	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Pertain-Ted Products Corp.				
	STREET ADDRESS 600 St. Cyr. Road				
	CITY Bellevue-Neighborhood		COUNTY St. Louis	STATE Mo.	
7. OPERATION Hand unloading bags of CCC asbestos					
8. SAMPLING TECHNIQUE		IMPING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒ <i>Open face</i> MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ <i>GRAB SAMPLE</i> ☐			
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 7.5 min @ 2 fpm = 15 l.					
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED Asbestos fibers count longer than 5 μ m in filter/cc = 793					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] labors, 1411 and 418.5 hrs during transfer of bags from trailer to pallet. Respirator used. Pump 003-224; R=0.6					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017699

ANALYST WORKSHEET

7-SL 235		2. SEALS		3. DATE RECEIVED	
SAMPLE NUMBER		☒ INTACT		1-4-73	
X-7720		☐ BROKEN		☐ NONE	
4. RECEIVED FROM			5. REGION		
W. Stain & D. Holt			VII		
6. DESCRIPTION OF SAMPLE					
Filter					
7. SUMMARY OF ANALYSIS					
Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{40.1 \text{ Fibers/field} \times 147}{15 \text{ liters air}} = 393. \text{ fibers/cc}$					
If this area is resampled, take about 3 liter air volume.					
8. RESERVE SAMPLE					
Used in analysis					
9. DATE REPORTED		10. ANALYST		11. CALCULATIONS CHECKED BY	
11 Jan '73		W. Neville		Willard Dixon	
				12. DATE CHECKED	
				1/11/73	

Form LSB-663 5

CTD017700

1-4-73

SAMPLE IDENTIFICATION SHEET

1. SAMPLE NUMBER (REGIONAL) 7-54-237		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. SPAIN				5. LABORATORY NUMBER X-7722	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellyfontaine neighbors		COUNTY St Louis		STATE Mo.
7. OPERATION Hand unloading bags of CCC asbestos from trailer.					
8. SAMPLING TECHNIQUE		IMPING ☐ BUBBLER ☐ ESP ☐ Open face, AA, 0.8 μ FILTER PAPER ☐			
		MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐			
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 5.5 min @ 2 lpm = 11 l. BP (mm) T (C)					
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED Asbestos fiber count, longer than 5 μ m in fibers/cc = 341					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS Personal sample on [redacted] laborer, from 1418.5 to 1424 hrs. Handling bags in trailer. Respirator used. Pump DO3-224, R=5.6.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017701

ANALYST WORKSHEET

1. ID NO. 237	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED 1-4-73
4. SAMPLE NO. 722	5. REGION VII	
6. NAME OF ANALYST S. D. Molt		
7. LOCATION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{25.5 \text{ Fibers/Field} \times 147}{// \text{liters air}} = 3710 \text{ fibers/cc}$$

*If this area is resampled, take about
2-3 liter's air volume.*

8. NAME OF SAMPLE	9. USED IN ANALYSIS
	Used in analysis

10. DATE REPORTED 11 Jan 73	11. ANALYST W. Neville	12. CALCULATIONS CHECKED BY Walter Dixon	13. DATE CHECKED 1/11/73
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Form LSB 003 5

CTD017702

H-7968, Rpt. No. 19, FY 73

No. 1 Coupling Sew

CERTAIN-TEED

Sample Evaluation - asbestos fibers

1972 P.S. No.	DATE	OPER. UNIT	Hour	Dur (min)	Conc. f/cc	Activity
7-52-180	12/19	P.P.	08:48 am.	37	17.5	NO RESPIRATOR Sanding
-182	"	PP	09:25	27	15.5	Sanding
-184	"	PP	09:57	42	8.0	Sanding incl. 10 min btk.
-188	"	P.P.	10:39	26	17.5	sanding
-192	"	P.P.	11:05	32	19.-	sanding
-198	"	P.P.	11:40	9	32.-	checking dust collector
-202	"	P.P.	1:20 pm	21	10.-	sanding
-208	"	P.P.	1:41 to 2:22	44	6.8	sanding

Total Sd. Time 238 min

TWA at operation = 13.7 f/cc 75u

Σ 8hr TWA

$$\begin{array}{r}
 440 \text{ min @ } 13.7 \\
 70 \text{ min @ } \sim 0 \\
 \hline
 480 \qquad \qquad 6028 \rightarrow 12.6 \text{ f/cc } 75u
 \end{array}$$

Respirator used.

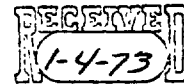
Sample evaluation shut on 3

3e x 2, 4e x 3, 1e x 7

8hr TWA =

No. 1 Coupling Sew ✓

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-190		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7667	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
	7. OPERATION #1 Couplings Saw Operator				
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐		Open Face AA, 0.8u FILTER PAPER Lot # 50585		
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐		GRAB SAMPLE ☐		
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 37 min. x 2.0 l/min = 74 l				BP (mm) ~ STP T (C)	
10. POSSIBLE INTERFERENCES Portland Cement & Silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 17.5					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G. Pump D03-377/NIOSH Calibrated 10-72 Sample Period: 848-925 Hrs. Actual Rotameter Readings @ 848 & 925 = 2.0 l/min 6" 150 Pressure Pipe					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017704

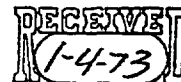
ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 180 X-7667		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM W. Spain & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{8.8 \text{ Fibers/field} \times 147}{74 \text{ liters air}} = 17.5 \text{ fibers/cc}$					
8. RESERVE SAMPLE Used in analysis					
9. DATE REPORTED 1/11/73		10. ANALYST Willard Dixon		11. CALCULATIONS CHECKED BY Willard Dixon W. H. H. H.	
12. DATE CHECKED 11 Jan '73					

Form L8B 603 5

CTD017705

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) T-SL-182		2. DATE TAKEN 12-14-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7669	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Belk Fontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Couplings Saw Operator					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ <i>Open Face AA, 0.8µ</i> FILTER PAPER <i>Filter Lot # 50585</i>				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 27 Min. x 2 l/m = 54 L BP (mm) ~ STP T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5µm in Fibers/cc = 15.5					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump DO3-377 Sample Period: 925-957 Hrs. Actual Rotameter Readings @ 925 & 957 Hrs = 2.0 l/m 6" 150 Pressure Pipe Wore disposable respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017706

ANALYST WORKSHEET

7-SL 182

1. SAMPLE NUMBER X-7669	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Sprain & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.		
$\frac{5.68 \text{ Fibers/Field} \times 147}{54 \text{ liters air}} = 15.5 \text{ fibers/cc}$		
8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED 1/11/73	10. ANALYST Wallard Dixon	11. CALCULATIONS CHECKED BY W. Neville
		12. DATE CHECKED 11 Jan '73

Form LSB 005 5

CTD017707

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL- 184		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7671	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Couplings Saw Operator					
8. SAMPLING TECHNIQUE	IMPING ☐		BUBBLER ☐	ESP ☐	Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585
	MATERIAL ☐		BAGS ☐	SETTLED DUST ☐	GRAB SAMPLE ☐
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 42 min. x 2.0 l/min = 84 l					
BP (mm) ~ STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 8.0					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump 003-311 Sample Period: 957-1039 Hrs. Actual Rotameter Readings @ 957 & 1039 = 2.0 l/min Went on 10 min. break @ 1000 Hrs. in # 3 Plant lunch area. Wore respirator while cutting 6" 150 Pressure Pipe					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017708

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-51 184 X-7671		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM W. Smith & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{4.6 \text{ Fibers/field} \times 147}{84 \text{ liters air}} = 8.0 \text{ fibers/cc}$					
8. RESERVE SAMPLES Used in analysis					
9. DATE REPORTED 1/11/73		10. ANALYST Willard Dixon		11. CALCULATIONS CHECKED BY W. Neville	
				12. DATE CHECKED 11 Jan '73	

Form LSB 008 5

CTD017709

SAMPLE IDENTIFICATION SHEET

 RECEIVED
 1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-100		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7675	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Coupling Saw Operator					
8. SAMPLING TECHNIQUE	IMPINGING ☐		BUBBLER ☐	ESP ☐	Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585
	MATERIAL ☐		BAGS ☐	SETTLED DUST ☐	GRAB SAMPLE ☐
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 26 min. $\times 2.0 \text{ l/min} = 52 \text{ l}$					
BP (mm) $\sim$ STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica $\sim 90\%$					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 17.5					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump D05-311 Sample Period: 1039-1105 Hrs. Actual Rotameter Readings @ 1039-1105 Hrs = 2.0 l/min Cutting 6" 150 Pressure Pipe wearing disposable respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017710

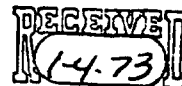
ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 188 -7675		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM S. D. Holt				5. REGION VII	
6. CONTAINER OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{6.2 \text{ Fibers/field} \times 147}{52 \text{ liters air}} = 17.5 \text{ fibers/cc}$					
8. RESERVE SAMPLE Used in analysis					
9. DATE REPORTED 1/11/73		10. ANALYST Willard Dixon		11. CALCULATIONS CHECKED BY W. Neville	
12. DATE CHECKED 1/20/73					

Form LSB 005 5

CTD017711

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-192		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7679	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Coupling Saw Operator					
8. SAMPLING TECHNIQUE	IMPINGING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒ Open Face AA, 0.8u Filter Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 32 Min. $\times$ 2.0 l/m = 64 l					
BP (mm) $\sim$ STP T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & silica $\sim$ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 19.					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump D03-377 Sample Period: 1105-1137 Hrs. Actual Rotameter Readings @ 1105 & 1137 Hrs = 2.0 l/m Cutting 6" 150 Pressure Pipe wearing disposable respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017712

ANALYST WORKSHEET

7-SE 192

1. SAMPLE NUMBER X-7679	2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE	3. DATE RECEIVED 1-4-73
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4. RECEIVED FROM E. Seain & D. Holt	5. REGION VII
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6. DESCRIPTION OF SAMPLE Filter

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{8400 \text{ Fibers/field} \times 147}{64 \text{ liters air}} = 19 \text{ fibers/cc}$$

8. RESERVE SAMPLE Used in analysis
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9. DATE REPORTED Jan 17	10. ANALYST W. G. Hill	11. CALCULATIONS CHECKED BY Wallard Dixon	12. DATE CHECKED 1/11/73
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Form LSB 005 5

CTD017713

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-198		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7685	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis		STATE Mo.
7. OPERATION #1 Coupling Saw Operator					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 9 Min. x 2.0 l/m = 18 l Very High BP (mm) ~ STP T (C) <i>Relative Humidity</i>					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 32					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: MSA Model G Pump D05-377 Sample Period: 1140 - 1149 Hrs. Actual Rotameter Readings @ 1140 & 1149 Hrs. = 2.0 l/m Emptying dust collector adjacent to w. Side of #3 Plant. Does not normally lean inside bag area. Elevator was broken down. Dumped "collection" from hopper into dumpster. Very light drizzle outside. Wore disposable respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017714

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 198 X-7685		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM W. Spohn & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{3.90 \text{ Fibers/Field} \times 147}{18 \text{ liters air}} = 32 \text{ fibers/cc}$					
8. ANALYST'S NAME Used in analysis					
9. ANALYST W. Spohn		11. CALCULATIONS CHECKED BY Willard Egan		12. DATE CHECKED 1/11/73	

Form LSH 003-5

CTD017715

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-202		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER Y-7689	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Coupling Saw Operator					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 21 min. $\times 2.0 \text{ l/m} = 42 \text{ l}$ BP (mm) $\approx$ STP T (C)					
POSSIBLE INTERFERENCES Portland cement & silica $\approx 90\%$					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 10.					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled. [REDACTED] MSA Model G Pump D03-377 Sample Period: 1320-1341 Hrs. Actual Rotameter Readings @ 1320 $\frac{1}{2}$ 1341 1341 Hrs. = 2.0 l/m Sawing 6" 150 Pressure Pipe. Wore disposable respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017716

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-50 202		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM W. Spain & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{2.88 \text{ Fibers/Field} \times 147}{42 \text{ liters air}} = 10. \text{ Fibers/cc}$					
8. RESERVE SAMPLE Used in analysis					
9. DATE REPORTED TO ANALYST 1/11/73		10. ANALYST W. J. Smith		11. CALCULATIONS CHECKED BY Willard D. Brown	
				12. DATE CHECKED 1/11/73	

Form L50-005-5

CTD017717

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL - 208		2. DATE TAKEN 12-14-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7695	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Coupling Saw operator					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 58408				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 44 Min. x 2.0 l/m = 88 l					
BP (mm) <u>STP</u> T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 6.8					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump D03-377 Sample Period: 1341-1425 Hrs. Actual Rotameter Readings @ 1341 Hrs = 2.0 l/m & @ 1425 Hrs. = 1.9 l/m Sawing 6" 150 Pressure Pipe - wore disposable respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017718

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 208 X-7695		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM K. Shain & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{408 \text{ Fibers/field} \times 147}{98 \text{ liters air}} = 6.8 \text{ fibers/cc}$$

7. RESERVE SAMPLE
Used in analysis

8. DATE REPORTED TO ANALYST 11 Jan 73	9. ANALYST W. Giville	10. CALCULATIONS CHECKED BY Willard Dixon	11. DATE CHECKED 1/11/73
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Form LSH QOS 5

CTD017719

H-7968, Apt. No. 019, BX73

Certain-Seed

(55)

Recovery Area - Saw Operator

Sample Evaluation - Cobaltas Filters

Sa. No.	Date	Hours	Duration (Min)	Conc f/cc _{5m}	Activity
7-52					
-217	12/19/72	08:12-08:02	50	7.5 ✓ LB	Sowing & 18min Away
-215	"	09:05-09:48	43	4.9 ✓ LB	Normal beh. Saw & Crusher
-205	"	09:51-10:28	37	5.5 ✓ LB	"
-195	"	11:29-11:59	30	4.1 ✓ LB	"
-197	"	12:00-12:51	51	4.0 ✓ LB	" (incl. 30min beh.)
-189	"	13:15-13:31	16	6.8 ✓ LB	Saw & Crusher
-191	"	13:32-13:39	7	7.1 ✓ LB	Area Support

234min sa. time

TVVA for 234min = 5.4 f/cc

Σ 8hr TVVA: 460×5.4 } $2 \times 96; \frac{2 \times 96}{480} = 5.2 \text{ f/cc } > 5m$
 (Broken only) 20×0.6

Recovery Area - Saw Operator Helper

Sa. No.	Date	Hours	Duration (Min)	Conc f/cc _{5m}	Activity
7-54					
-203	12-19-72	08:17-08:07	50	3.1 ✓	Normal
-211	"	09:09-09:54	45	4.1 ✓	"
-193	"	09:55-10:25	30	6.6 ✓	"
-201	"	11:34-12:04	30	1.8 ✓	"
-213	"	12:05-12:55	50	2.1 ✓	Norm (incl 30min beh.)

205min sa. time

TVVA for 205min = 3.4 f/cc

Σ 8hr TVVA: 460×3.4 } $1576; \frac{1576}{480} = 3.3 \text{ f/cc } > 5m$
 20×0.6

Recovery Area

Saw Oper - 7 sa, rg. 4.0 to 7.5; 8hr Avg = 5.2 ✓ f/cc

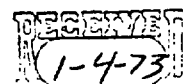
Helper - 5 sa, rg 1.8 to 6.6; 8hr Avg = 3.3 ✓ f/cc
 12 sa

5 sa > 5 & < 10

Sample evaluation shut vs. 5

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

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-217		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7704	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Recovery Room					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 50 min @ 2 lpm = 100 L BP (mm) 25 STP (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica - 30%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc 2.5					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] eraser area, from 08:270010-1100. Includes normal sanding & moving of pipe, plus 18 min away from job. Air purifying respirator worn (BM 21B-12.9)					

Pump 003-224; Polib 10-72, 2 lpm = 5.6 cfm

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017721

ANALYST WORKSHEET

7-SL 217		2. SEALS		3. DATE RECEIVED	
1. SAMPLE NUMBER		☒ INTACT			
X-7704		☐ BROKEN		☐ NONE	
4. RECEIVED FROM		5. REGION			
V. Spain & D. Holt		VII			
DESCRIPTION OF SAMPLE					
Filter					
7. SUMMARY OF ANALYSIS					
Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{5.10 \text{ Fibers/field} \times 147}{100 \text{ liters air}} = 7.5 \text{ fibers/cc}$					
8. RETEST SAMPLE					
Used in analysis					
9. DATE REPORTED		10. ANALYST		11. CALCULATIONS CHECKED BY	
1/1/73		W. Ferrell		Willard Dizon	
				12. DATE CHECKED	
				1/11/73	

Form LSB 005 5

CTD017722

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-215		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN <i>D. Helt</i>				5. LABORATORY NUMBER X-7702	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
	7. OPERATION <i>Recovery Saver</i>				
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) <i>43 min @ 2 lpm = 86 l</i> BP (mm) <i>~ 370</i> T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica <i>~ 30%</i>					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = <i>4.9</i>					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS <i>Personal sample on [redacted] in crusher area from 0900 to 0945 hrs. Normal work schedule. Respirator worn</i> <i>Comp 003-224, R=5.6</i>					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017723

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 215 A-7702		2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. H. H. H. H. H.			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{2.86 \text{ Fibers/field} \times 147}{86 \text{ liters air}} = 4.9 \text{ fibers/cc}$$

8. RESERVE SAMPLE

Used in analysis

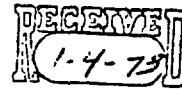
9. DATE REPORTED 11 Jan '73	10. ANALYST W. H. H. H. H.	11. CALCULATIONS CHECKED BY Willard Dixon	12. DATE CHECKED 1/11/73
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Form LSB 005 5

CTD017724

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

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-205		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN <i>D. Holt</i>				5. LABORATORY NUMBER X-7692	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION <i>Recovery Saw</i>					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) <i>37 min @ 2 l/min = 74 l</i> BP (mm) <i>~ 5 TD (C)</i>					
10. POSSIBLE INTERFERENCES Portland cement & silica <i>~ 30%</i>					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = <i>5.5</i>					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS <i>Personal sample on [redacted] in crusher area from 0951 to 1028 hrs. Normal work. Respirator worn</i> <i>Pump 003-224; R = 5.6</i>					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017725

ANALYST WORKSHEET

7-SL 205		
1. SAMPLE NUMBER X-7692	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM E. E. & D. Holt		5. REGION VII
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{2.76 \text{ Fibers/field} \times 147}{74 \text{ liters air}} = 5.5 \text{ fibers/cc}$		
8. RESERVE SAMPLE Used in analysis		
9. DATE RECEIVED 1/11/73	10. ANALYST W. F. F. F.	11. CALCULATIONS CHECKED BY Willard Dixon
		12. DATE CHECKED 1/11/73

Form LSB 005 5

CTD017726

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-195		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7682	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Missouri	
7. OPERATION Recovery saw					
8. SAMPLING TECHNIQUE	IMPIING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☐ Open Face AA, 0.8u MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 30 min @ 2 l/min = 60 l BP (mm) ~ 570 ^T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 4.1					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] in crusher area from 1129 to 1159 hrs. 10 min. at crusher, 8 min on bow, 7 min supporting duties. Camp 003-224; R=5.6.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017727

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 195 K-7682		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM W. Spain & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{1168 \text{ Fibers/field} \times 147}{60 \text{ liters air}} = 4.1 \text{ fibers/cc}$					
8. RESERVED SAMPLE Used in analysis					
9. DATE REPORTED Jan 1773		10. ANALYST W. H. H. H.		11. CALCULATIONS CHECKED BY Willard Dixon	
				12. DATE CHECKED 1/11/73	

Form LSB 005 5

CTD017728

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-197		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7684	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Missouri	
7. OPERATION Recovery from Area					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 51 min @ 2 lpm = 102 l BP (mm) = 510 ^T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 30%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 4.0					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [REDACTED] from 1200 to 1251 hrs including 30 min lunchbreak. Pump DO3-224; R = 5.6					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017729

ANALYST WORKSHEET

7-SL 197		2. SEALS		3. DATE RECEIVED	
1. SAMPLE NUMBER		☒ INTACT		1-4-73	
N-7684		☐ BROKEN		☐ NONE	
4. RECEIVED FROM				5. REGION	
W. Smith & D. Holt				VII	
6. DESCRIPTION OF SAMPLE					
Filter					
7. SUMMARY OF ANALYSIS					
Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{2.80}{2.80} \text{ Fibers/field} \times 147 = 4.0 \text{ fibers/cc}$ 102 liters air					
8. RESERVE SAMPLE					
Used in analysis					
9. DATE REPORTED		10. ANALYST		11. CALCULATIONS CHECKED BY	
1/11/73		W. F. Fiville		Willard Dixon	
				12. DATE CHECKED	
				1/11/73	

Form LSB 005 5

CTD017730

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-189		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN <i>D. Holt</i>				5. LABORATORY NUMBER X-7676	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Missouri	
7. OPERATION <i>Recovery saw/crusher area</i>					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) <i>16 min @ 2 lpm = 32 l</i> BP (mm) <i>~ 510</i> T(C)					
10. POSSIBLE INTERFERENCES Portland cement & silica <i>~ 90%</i>					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 6.8					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS <i>Personal ex. on [REDACTED]</i> <i>from 1315 to 1331 hrs.</i> <i>- 8 min. sawing, (Respirator worn)</i> <i>5 min. handling pipe</i> <i>3 min. operating crusher.</i> <i>Note: one flexible vent line become disconnected.</i> <i>Pump DDP-224; P = 5.6</i>					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017731

ANALYST WORKSHEET

7-51 189

1. SAMPLE NUMBER X-7676	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM M. Smith & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$\frac{1.47 \text{ Fibers/field} \times 147}{32 \text{ liters air}} = 6.8 \text{ fibers/cc}$

8. RESERVE SAMPLE

Used in analysis

9. DATE REPORTED 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. F. Felt	12. DATE CHECKED 11 Jan '73
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Form LSB 005 5

CTD017732

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-191		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN <i>J. Holt</i>				5. LABORATORY NUMBER X-7678	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Missouri	
7. OPERATION <i>Specimen Saw Area</i>					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☐ <i>Open Face AA, 0.8u</i> MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) <i>2 min @ 2 lpm = 14 l</i> BP (mm) <i>~ 570 (C)</i>					
10. POSSIBLE INTERFERENCES Portland cement & silica <i>~ 30%</i>					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc <i>= 7.1</i>					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS <i>Personal use on [redacted] from 12:30 to 1:30 hrs. Moving around area. Pump 003-224; R=5.6</i>					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017733

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-7678		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM E. Stein & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{0.68 \text{ Fibers/field} \times 147}{14 \text{ liters air}} = 7.1 \text{ fibers/cc}$$

8. RESERVE SAMPLE
Used in analysis

9. DATE RECEIVED BY ANALYST 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. Neville	12. DATE CHECKED 11 Jan 73
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U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-203		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7690	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Pipe crusher					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 50 min @ 2 lpm = 100 l BP (mm) ~ 870 T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 3.1					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 0817 to 0907 hrs. Includes pipe handling with fork lift, operating crusher and 10 min. break. Comp DO3-371; Calit. 10-72; 2 lpm = 6.0 arstom.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017735

U.S. DEPARTMENT OF LABOR
BUREAU OF LABOR STANDARDS
Office of Occupational Safety

ANALYST WORKSHEET

7-SL 203

1. SAMPLE NUMBER	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED
7-7690		1-4-73
4. RECEIVED FROM	5. REGION	
W. Spahn & D. Molt	VII	
6. DESCRIPTION OF SAMPLE		
Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{2.14 \text{ Fibers/Field} \times 147}{100 \text{ liters air}} = 3.1 \text{ fibers/cc}$$

8. SAMPLES USED
Used in analysis

9. DATE REPORTED TO ANALYST	10. CALCULATIONS CHECKED BY	11. DATE CHECKED
1/11/73	W. Spahn	1/11/73

Form LSH 005

CTD017736

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

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-203		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7690	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Pipe crusher					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 50 min @ 2 lpm = 100 l BP (mm) $\approx$ 870 T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica $\sim$ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 3.1					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 0817 to 0907 hrs. Includes pipe handling with fork lift, operating crusher and 10 min. break. Pump DOB-371; Calib. 10-72; 2 lpm = 6.0 ar/min.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017735

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 203		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spohn & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{2.14 \text{ Fibers/Field} \times 147}{100 \text{ liters air}} = 3.1 \text{ fibers/cc}$$

8. ANALYST'S SIGNATURE 1/11/73 W. Spohn			9. CALCULATIONS CHECKED BY William D. Dixon		10. DATE CHECKED 1/11/73
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Form LS11 005

CTD017736

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

SAMPLE IDENTIFICATION SHEET

1-473

1. SAMPLE NUMBER (REGIONAL) 7-SL-211		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7698	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
OPERATION Pipe crusher					
8. SAMPLING TECHNIQUE	IMPING ☐ _____ SUBBLER ☐ _____ ESP ☐ _____ Open Face AA, 0.8u FILTER PAPER ☐ _____				
	MATERIAL ☐ _____ BAGS ☐ _____ SETTLED DUST ☐ _____ GRAB SAMPLE ☐ _____				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 45 min @ 2 lpm = 90 l BP (mm) ~ 570 T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 4.1					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS Personal sample on [redacted] from 0909 to 0954 hrs. Comp DOJ-371; R-6.0					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017737

ANALYST WORKSHEET

7-S 211

1. SAMPLE NUMBER V-7698	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM J. Smith & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.		
$\frac{2.53 \text{ Fibers/field} \times 147}{90 \text{ liters air}} = 4.1 \text{ fibers/cc}$		
8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED 11 Jan 73	10. ANALYST W. Neville	11. CALCULATIONS CHECKED BY Willard Dixon
		12. DATE CHECKED 1/11/73

Form LSB 002 5

CTD017738

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

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL- 193		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7680	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellevue		COUNTY St. Louis	STATE Mo.	
	7. OPERATION Pipe Crusher				
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 30 min @ 2 lpm = 60 l. BP (mm) ~ 510 T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%.					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 6-6					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample from 0955 to 1025 hrs. showing pipe. Comp 003-371; R=6.0					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017739

ANALYST WORKSHEET

7-SL 193

1. SAMPLE NUMBER X-7680	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM M. Smith & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{2475 \text{ Fibers/field} \times 147}{60 \text{ liters air}} = 6.6 \text{ fibers/cc}$$

8. RESERVE SAMPLE Used in analysis			
9. DATE REPORTED 11 Jan 73	10. ANALYST W. Neville	11. CALCULATIONS CHECKED BY Willard Dixon	12. DATE CHECKED 1/11/73

Form L2B 063 3

CTD017740

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

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-201		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7688	
WHERE TAKEN	6. NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
OPERATION Pipe crushed					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 30 min @ 2 l/min = 60 l. BP (mm) T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 18					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 1134 to 1204 hrs. handling pipes. Pump 003-371; R=6.0					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017741

ANALYST WORKSHEET

7-SL 201		3. DATE RECEIVED	
1. SAMPLE NUMBER	2. SEALS	3. DATE RECEIVED	
X-7688	☐ BROKEN ☒ INTACT ☐ NONE	1-4-73	
4. RECEIVED FROM		5. REGION	
W. Spain & D. Hoic		VII	
6. DESCRIPTION OF SAMPLE			
Filter			
7. SUMMARY OF ANALYSIS			
Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.			
$\frac{0.736 \text{ Fibers/field} \times 147}{60 \text{ liters air}} = 1.8 \text{ fibers/cc}$			
8. RESERVE SAMPLE			
Used in analysis			
9. DATE REPORTED		10. DATE CHECKED	
11 Jan 73		11/11/73	
ANALYST		CHECKED BY	
W. Hoic		William D. Hoic	

Form L58 OCS 5

CTD017742

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-213		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN				5. LABORATORY NUMBER X-7700	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellevue		COUNTY St. Louis	STATE Mo.	
	7. OPERATION Pipe cleaner				
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☒				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 50 min @ 2.4 ft/min = 120 L BP (mm) 2570 T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica ~ 30%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 2.1					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 1205 to 1255 hrs. Includes 30 min in lunchroom. Pump 003-371 R=60.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017743

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U.S. DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION
Office of Occupational Safety

ANALYST WORKSHEET

7-80 213		3. DATE RECEIVED	
1. SAMPLE NUMBER	2. SEALS	3. DATE RECEIVED	
N-7700	☒ INTACT ☐ BROKEN	1-4-73	
4. RECEIVED FROM	5. REGION		
W. Smith & D. Holt	VII		
6. DESCRIPTION OF SAMPLE			
Filter			
7. SUMMARY OF ANALYSIS			
Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.			
$\frac{1.75 \text{ Fibers/field} \times 147}{100 \text{ liters air}} = 2.1 \text{ fibers/cc}$			
8. REMAINS SAMPLE			
Used in analysis			
9. DATE REPORTED	10. ANALYST	11. CALCULATIONS CHECKED BY	12. DATE CHECKED
11/9/73	W. Neville	William Dixon	11/11/73

Form LSB 005 5

CTD017744

No. 1 Pipe Machine
Fiber Mix Area

H-7968, Rpt. No. 19, FV 73
CANTAIN-TEED *SH*

Sample Evaluation - CANTAIN-TEED

<i>1972</i> S. No.	Date	How T3	DURATION (Min.)	CONC f/cc T34	ACTIVITY Rpt
-138	12/15	10:08-10:430"	34.5	7.4/ (G.T.) Fiber Feed	+
-148	12/18	11:53-12:26	33	8.2/ (G.C.) " " "	+
-152	"	12:26-12:52	26	5.3/ (G.C.) Inval. 16 min Brk* <i>plus...</i>	+
-156	"	12:52-13:08	16	17.1/ (G.C.) <i>Full-time</i> Fiber dump	+
-158	"	13:08-13:58	50	7.3/ (G.C.) + Fork Trk Rpt IN	+
-169	"	13:58-14:17	19	5.8/ (G.C.) Feed = Fiber + Fines	+
-164	"	14:38-15:20	42	11.1/ (G.S.) <i>25 vch degran</i> Fiber Area	±
-168	"	15:20-15:36	16	9.2/ (G.S.) Fiber Feed	+
-170	"	15:36-16:15	39	14.0/ (G.S.) Fiber Feed	+

Se. time 275 min Total

TWA = 9.3 f/cc ; Rg. 5.3 to 17 f/cc

Shift 6:30 to 2:30 p.m.

Σ 8 hr TWA = $440 \text{ min} @ 9.3$ $\frac{4116}{480} = 8.6 \text{ f/cc}$
(onk = 1414 kpd) $\frac{80 \text{ min} @ 0.6}{480}$

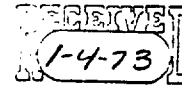
Sample Evaluation Shift No. 4

Se. Rg 5.3 to 17 #1 P.M. Fiber Feed ✓
6:30-10; 2:10-4:15; 1:45-2:20. 8 hr TWA = 8.6

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

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SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-138		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7627	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine Fiber Man					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 34.5 Min. x 2 l/min = 69 L				BP (mm) ~ STP T (C)	
POSSIBLE INTERFERENCES Portland Cement & Silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 7.4					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employees Sampled: [REDACTED] MSR Model G Pump DO3-373 / NIOSH Calibrated 10-72 Filter Lot # 50585 Sample Period 1008-1042.5 Hrs. Actual Rotameter Readings @ 1008, 1032, & 1042.5 Hrs = 2.0 l/min Used respirator part of time while feeding fiber, usually only while dumping bag of fiber: RESPIRATOR - WELSH MANUF. CO. U.S. Bur. of Min. App. Model 7100 - For Dusts & Mists No. 21B-114 9 Magnolia St., Providence, R.I. 02909 Static Wool Filter					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017746

ANALYST WORKSHEET

7-81138

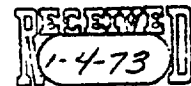
1. SAMPLE NUMBER N-7627		2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM H. Spain & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{3.46 \text{ Fibers/field} \times 147}{69 \text{ liters air}} = 7.4 \text{ fibers/cc}$					
8. COMMENTS Used in analysis					
9. DATE 1/11/73		10. ANALYST William E. Dixon		11. CALCULATIONS CHECKED BY W. J. J. J. J.	
				12. DATE CHECKED 1/15/73	

Form LSH 005 5

CTD017747

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

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-146		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7637	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis		STATE Mo.
7. OPERATION #1 Pipe Machine Fiber Man					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐		Open Face AA, 0.8u FILTER PAPER Filter Tot # 50565		
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐		GRAB SAMPLE ☐		
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 33 min. x 2.0 l/min = 66 L					
BP (mm) 25TP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 8.2					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled. [REDACTED] MSA Model G Pump 003-377 / NIOSH Calibrated 10-72 Sample Period 1153-1226 Hrs. Actual Rotameter Readings @ 1153, & 1226 Hrs. = 2.0 l/min Observed dumping asbestos during most of sample period. Wore respirator while actually dumping. WELSH Model 7165 Single Use - Disposable Bur. of Mines App. 21B-129					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017748

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SL 148 X-7637		2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM Sarin & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and a 10X reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{3.67 \text{ Fibers/field} \times 147}{66 \text{ liters air}} = 8.2 \text{ fibers/cc}$$

8. RESERVE SAMPLE Used in analysis		9. CALCULATIONS CHECKED BY William Dixon		10. DATE CHECKED 1/11/73
11. DATE REPORT TO ANALYST 1/11/73		12. ANALYST W. J. G. G. G.		

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-152		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN N. Spain				5. LABORATORY NUMBER X-7641	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis		STATE Mo.
	7. OPERATION #1 Pipe Machine Fiber Man				
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 26 min. x 2.0 l/min = 52 L BP (mm) 2 STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 5.3					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G. Pump D03-377 Sample Period: 1226-1252 Hrs. Actual Rotameter Readings @ 1226 & 1252 Hrs. = 2.0 l/min Employee on break from 1231 until 1247 Hrs.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017750

ANALYST WORKSHEET

7-52 152

1. SAMPLE NUMBER 8-7641	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. S. In & D. Holl	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and wire reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{1.97 \text{ Fibers/Field} \times 147}{52 \text{ liters air}} = 5.2 \text{ fibers/cc}$$

8. RESERVE SAMPLE

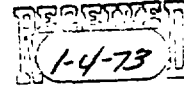
Used in analysis

9. REPORTED BY ANALYST W. S. In & D. Holl	10. CALCULATIONS CHECKED BY William Dixon	11. DATE CHECKED 1/11/73
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Form L5B J03 5

CTD017751

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL- 156		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7644	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine Fiber Man					
8. SAMPLING TECHNIQUE	IMPING ☐ _____ BUBBLER ☐ _____ ESP ☐ _____ Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585				
	MATERIAL ☐ _____ BAGS ☐ _____ SETTLED DUST ☐ _____ GRAB SAMPLE ☐ _____				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 16 Min. x 2 l/min = 32 L BP (mm) ~ STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 17					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump D03-377 Sample Period 1252-1308 Hrs. Actual Rotameter Readings @ 1252 & 1308 Hrs = 2.0 l/min Entire time @ fiber dumping station. Used respirator (WELSH Model 7165) While dumping.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017752

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-81 156 X-7644		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM L. Smith & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

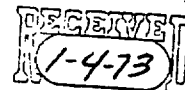
$$\frac{3.77 \text{ Fibers/field} \times 147}{3.2 \text{ liters air}} = 17. \text{ fibers/cc}$$

8. ANALYST W. J. Fevill		9. CALCULATIONS CHECKED BY Willard D. Jones		10. DATE CHECKED 1/11/73
11. REMARKS Used in analysis				

Form LSH 608 5

CTD017753

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-158		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7646	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine Fiber Man					
8. SAMPLING TECHNIQUE	IMPIG ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 50525				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 50 Min x 2.0 l/m = 100 l				BP (mm) ~ STP T (C)	
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 7.3					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS Employee Sampled: [REDACTED] MISA Model G Pump DO3-377 Sample Period 1308-1358 Hrs. Actual Rotameter Readings @ 1308 & 1358 Hrs = 2.0 l/m Used respirator while dumping fiber. Observed moving asbestos with fork truck @ 1348 Hrs.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017754

ANALYST WORKSHEET

7-SE 158		
1. SAMPLE NUMBER K-7646	2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM M. Spahn & D. Holt		5. REGION VII
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{4.96 \text{ Fibers/field} \times 147}{100 \text{ liters air}} = 7.3 \text{ fibers/cc}$$

8. RESERVE SAMPLE

Used in analysis

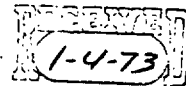
9. DATE REPORTED 11/11/73	10. ANALYST Richard Dixon	11. CALCULATIONS CHECKED BY W. F. J. G.	12. DATA CHECKED 11 Jan 73
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Form L5B CJS's

CTD017755

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

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-169		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spdin				5. LABORATORY NUMBER X-7657	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine Fiber Man					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 19 Min. x 2.0 l/min = 38 L BP (mm) 2 STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 5.8					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump D03-377 Sample Period 1358-1417 Hrs. Actual Rotameter Readings @ 1358 & 1417 Hrs = 2.0 l/min Observed dumping batch of asbestos fines @ 1407 Hrs. Observed @ Fiber dumping station @ 1415 Hrs.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017756

ANALYST WORKSHEET

7-32 169

1. SAMPLE NUMBER X-7657	2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Sogin & D. Molt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

1.51 Fibers/field x 147 = 5.8 fibers/cc
38 liters air

8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED 1 Jan 73	10. ANALYST W. Saville	11. CALCULATIONS CHECKED BY W. Clifford D. Egan
		12. DATE CHECKED 1/11/73

Form L8B 605 3

CTD017757

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

RECEIVED
1-4-73

SAMPLE IDENTIFICATION SHEET

1. SAMPLE NUMBER (REGIONAL) 7-SL- 164		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7652	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine Fiber Man					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 42 Min. x 2.0 l/min = 84 L BP (mm) ~ STP T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 11.					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump DO3-377 Sample Period: 1438 - 1520 Hrs. Actual Rotameter Readings @ 1438 & 1520 Hrs. = 2.0 l/min Observed in fiber feed area most of time.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017758

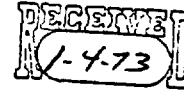
ANALYST WORKSHEET

1. SAMPLE NUMBER N-7652		2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Smith & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{6.05 \text{ fibers/field} \times 147}{24 \text{ liters air}} = 11 \text{ fibers/cc}$				
8. RESERVE SAMPLE Used in analysis				
9. DAY REPORTED TO ANALYST 11 Jan 73		10. CALCULATIONS CHECKED BY W. Wood Dixon		11. DATE CHECKED 1/11/73

Form LSR 005 S

CTD017759

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL- 168		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7656	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine - Fiber Man					
8. SAMPLING TECHNIQUE	IMPINGING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Lot # 50585 → 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 16 Min. x 2.0 l/min = 32 l					
BP (mm) ~ STP T (C)					
POSSIBLE INTERFERENCES Portland Cement & Silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 9.2					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled. [REDACTED] MSA Model G Pump D03-377 Sample Period: 1520-1536 Hrs. Actual Rotameter Readings @ 1520 & 1536 Hrs. = 2.0 l/min Had coat over sample for ~ 5 min. previous to detection @ 1535 Hrs. Removed Coat. Had been outside. Feeding asbestos wearing respirator @ Initial Sample Time. Dumped Pines @ 1535 Hrs. - wore respirator.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017760

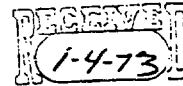
ANALYST WORKSHEET

7-SE 168		
1. SAMPLE NUMBER X-7656	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spain & D. Holt		5. REGION VII
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{2.50 \text{ Fibers/field} \times 167}{32 \text{ liters air}} = 7.2 \text{ fibers/cc}$		
8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED 11 Jan '73	10. ANALYST W. F. Fiville	11. CALCULATIONS CHECKED BY Willard Dixon
		12. DATE CHECKED 1/11/73

Form LSB 005 5

CTD017761

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL- 170		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7658	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION #1 Pipe Machine - Fiber Man					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Lot # 50585				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 39 m.a. x 2.0 l/m = 78 l BP (mm) 2 STPT (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 14.					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS Employee Sampled: [REDACTED] MSA Model G Pump D03-377 Sample Period: 1536 - 1615 Hrs. Actual Rotameter Readings: @ 1536 = 2.0 l/m & @ 1615 Hrs. = 1.9 l/m Observed: Feeding asbestos @ 1545 - wearing respirator Dumping fines @ 1601 - wearing respirator					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017762

ANALYST WORKSHEET

1. SAMPLE NUMBER 8-7658		2. SEALS ☒ INTACT ☐ BROKEN		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM M. Spain & D. Holt				5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{7.20 \text{ Fibers/Field} \times 147}{78 \text{ liters air}} = 14 \text{ fibers/cc}$					
8. RESERVE SAMPLES Used in analysis					
9. DATE REPORTED TO ANALYST 1/11/73		10. CALCULATIONS CHECKED BY William Dixon		11. DATE CHECKED 1/11/73	

Form LSB 005

CTD017763

H. 7968, No. 19, 73
 Certain-Teed

53

No. 2 Pipe Machine, Fiber Mix Area

Component A Sample Evaluation - Asbestos Fibers

Sample No.	DATE	Hour	Conc. f/cc (5m)	Activity
-153	12-15-72	09:55-10:44 = 49 min	2.9 ✓	(L.S.) 17 bags dumped
LUNCH*	"	10:44-11:11 = 27 min		
-147	"	11:11-11:41 = 30	3.3 ✓	(L.S.) " " "
-149	"	11:47-12:27 = 40	2.0 ✓	(L.S.) Control Board
-145	"	12:27-12:47 = 20	8.2 ✓	(L.S.) 17 bags dumped.
Break*		13:13-13:26 = [3]		
-161	"	13:13-13:26 = [3]	6.4 ✓	(M.B.) Control
-146	"	13:33-13:49 = 16	3.1 ✓	(L.S.) 17 bags dumped
-165	"	13:57-14:20 = 23	3.5 ✓	(L.S.) Control Board

So Time, 178 min on L.S. + 1 day

Total So Time 191 min in area; TWA = 3.6 f/cc

during work period. Range = 2.0 to 8.2.

8 hr TWA: 6:30 a.m. to 2:30 p.m., 50 min Lch + Brk.

$$\frac{3.6 \times 430}{0.6 \times 50} = 3.3 \text{ fibers/cc (cong'd)} \\ \text{Lunchroom (+ break area)}$$

-139	12-15-73	12:02-12:26	0.6	(M.B.) Lunchroom Area
Component B	Sample Evaluation - Fine SiO ₂ - No. 2 Fiber Man.			
7-52-230	12-20-72	11:03-12:48 pm = 105 min	Total Particulate weight 0.97 mg/M ³	2.6 mg/M ³ 1090
7-52-154	12-18-73	12:07-1:09 pm = 242 min	0.62	1090

347 min; TWA = 0.72 mg/M³ including

40 min. of break time, therefore result is taken as representative of 8 hr TWA including break periods.

$$TLV \text{ or Limit / Table G-3} = \frac{10}{10+2} = .83 \text{ mg/M}^3$$

Cumulative Exposure for Components A+B above:

$$\frac{5.02}{.83} \text{ Asbestos} + \frac{3.3}{.83} = .87 + .66 = 1.5 \times \text{Limit for Mixture}$$

Donner

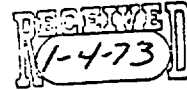
Sample evaluation sheet no. 6

Time 8:50 to 9:06 to 8:2, 8 hr TWA = 3.6 ✓

2:52 to 3:10

No 2 Pipe Mach Fiber Mix Man

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-56-153		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7642	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certaunted Products Corp.				
	STREET ADDRESS 600 St. Cyr Rd.				
	CITY Bellevue		COUNTY St. Louis	STATE Mo.	
	Neighborhood				
7. OPERATION Central station and fiber dump for no 2 pipe machine					
8. SAMPLING TECHNIQUE	IMPING N ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒ Open face AA, 0.8u				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 2 lpm for 47 min = 98 liters					
BP (mm) 510 T (C)					
10. POSSIBLE INTERFERENCES Portland cement and silica ~ 30%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 2.9					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS Personal sample on [redacted] from 9:55 am to 10:44 am 17 bags of "Cement" asbestos dumped using Mela 7185 respirator (B.M. 218-129). No respirator used during shitting bags and packing waste bags. Rest 30 min. lunch at 10:44. Pump 003-275, Calit 10-72; 2 lpm = 6.4 m/min.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017765

ANALYST WORKSHEET

1. SAMPLE NUMBER 153		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVING NAME W. Smith & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{1.75 \text{ Fibers/field} \times 147}{98 \text{ liters air}} = 2.7 \text{ fibers/cc}$$

8. ANALYST Used in analysis

9. ANALYST W. Smith	10. CALCULATION CHECKED BY William E. Brown	11. DATE CHECKED 1/11/73
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Form LNH-604-5

CTD017766

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

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 2-56-147		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Molt				5. LABORATORY NUMBER X-7636	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Tied Products Corp.				
	STREET ADDRESS 620 St. Py. Road				
	CITY Bellefontaine, Ohio		COUNTY St. Louis	STATE Mo.	
7. OPERATION Control station and fiber dump for 72.2 pipe machine					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒ open face RA, 0.8 μ				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 3000 @ 2 lpm = 60 l. BP (mm) ~ 5 T P T (C)					
10. POSSIBLE INTERFERENCES Portland cement and silica ~ 15%					
11. ANALYSIS REQUIRED asbestos fiber count larger than 5 μ m in fibers/cc = 3.3					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 11:11 to 11:41 a.m. 17, -100 lb. bags of asbestos were dumped; resp. used. Comp DO3-2.75, calib 10-72, 2 lpm = 6.4 oration.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017767

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-56 147		2. SEALS ☒ INTACT ☐ BROKEN		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM M. Smith & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. <u>1.33</u> Fibers/Field x 147 = <u>3.3</u> fibers/cc 60 liters air				
8. RESERVE SAMPLE Used in analysis				
9. ANALYST 1/11/73 Willard Dixon		10. CALCULATIONS CHECKED BY W. F. Fiville		11. DATE CHECKED 11 Jan '73

Form LSH OOS 5

CTD017768

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-52-149		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7638	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Sellefountain Heights		COUNTY St. Louis	STATE Mo.	
7. OPERATION Control via (wind) and use of fork truck to bring 2 loads from shed (asbestos) - filter man #2 machine open face RA, 0.8u					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 40 min @ 2 lpm = 80 L. BP (mm) 5-TF T (C)					
10. POSSIBLE INTERFERENCES portland cement and silica ~ 80%					
11. ANALYSIS REQUIRED asbestos fiber count < 5 u/m in fiber/c.c. = 2.0					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 11:47 to 12:27pm Control work primarily.					

Pump D03-275, Calib. 10-72; 2 lpm = 6.4 rotam.

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017769

ANALYST WORKSHEET

7-51 149

1. SAMPLE NUMBER X-7638	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM M. Edwin D. Holt		5. REGION VII
6. NATURE OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$\frac{100 \text{ Fibers/field} \times 147}{80 \text{ liters air}} = 210 \text{ fibers/cc}$

8. COMMENTS Used in analysis	9. CALCULATIONS CHECKED BY Willard Dixon	10. DATE CHECKED 1/11/73
--	--	------------------------------------

Form LSH 0003

CTD017770

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

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-145		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7634	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Control station (aria) and fiber dump for no. 2 pipe machine					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 2.2 aria @ 2 lpm = 40 l. BP (mm) 52-TP T(C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica [~ 55%]					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 8.2					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 12:27 to 12:47 PM opened & dumped 17, 100 lb bags of asbestos. Respirator used only at dump load Mix ratio was 624 silica, 936 cement, 240 f.b.e.t. Bump DOB-275; Calib 10-72; 2 lpm = 6.4 ft/min					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017771

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-51 145 7634		2. SEALS ☒ INTACT ☐ BROKEN		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM M. Smith & D. Holt			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{2.22 \text{ Fibers/field} \times 147}{40 \text{ liters air}} = 8.2 \text{ fibers/cc}$					
8. RESERVE SAMPLE Used in analysis					
9. DATE REPORTED 10. ANALYST 1/11/73 Willard Dixon			11. CALCULATIONS CHECKED BY W. Zerville		12. DATE CHECKED 11 Jan '73

Form L33 003 5

CTD017772

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL- 161		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D Holt + Wm. Spain				5. LABORATORY NUMBER X-7649	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION No. 2 pipe machine - ship control					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 13 min @ 2 lpm = 26 l BP (mm) ~ 5-10 ^T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica ~ 80%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 6.4					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS Personal sample on [redacted] from 1313 to 1326 hrs at fiber-man position. Pump D03-287. SF=6.0.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017773

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-161 K-7649		2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM M. S. & D. Holt			5. REGION VII	
6. LOCATION OF SAMPLE Filter				

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

$$\frac{113 \text{ Fibers/Field} \times 147}{26 \text{ liters air}} = 6.4 \text{ fibers/cc}$$

8. RESERVE SAMPLE Used in analysis			
9. DATE ANALYZED 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. Neville	12. DATE CHECKED 11 Jan '73

Form LSE 005 5

CTD017774

SAMPLE IDENTIFICATION SHEET

1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-146		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Helt				5. LABORATORY NUMBER X-7635	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellevue Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Control mix (mix) and fiber dump for no. 2 pipe machine.					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 16 min @ 2 lpm = 32 l. BP (mm) 5-T.P. T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica [5-5/10]					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 3.1					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 1733 to 1749 hrs. 1700 lbs. of fiber was dumped from 100 lb. bags, respirator used part-time. Pump 003-275, Calib. 10-72; 2 lpm = 6.4 l/min					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017775

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-146	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM H. Soehn & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.		
$\frac{0.68 \text{ Fibers/Field} \times 147}{32 \text{ liters air}} = 3.1 \text{ fibers/cc}$		
8. REMARKS Used in analysis		
9. DATE REPORTED 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. V. Gierke
		12. DATE CHECKED 17 Jan '73

Form LSH 035 5

CTD017776

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

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-165		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7653	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION Calculation (mix) for no. 2 pipe machine -- Fiberman.					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 23 min @ 2 lpm = 46 l BP (mm) 5-TP T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica [- 9070]					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers /cc = 3.5					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 1357 to 1420 hrs. (shift ended @ 1430). Pump DO3-275, Calib 10-72; 2 lpm = 6.4 l/min.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD01777

ANALYST WORKSHEET

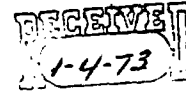
7-SL 165		2. SEALS		3. DATE RECEIVED	
SAMPLE NUMBER		☒ INTACT		1-4-73	
X-7653		☐ BROKEN		☐ NONE	
4. RECEIVED FROM			5. REGION		
A. Spain & D. Holt			VII		
DESCRIPTION OF SAMPLE					
Filter					
7. SUMMARY OF ANALYSIS					
Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.					
$\frac{1.08 \text{ Fibers/Field} \times 147}{4 \text{ liters air}} = 3.5 \text{ fibers/cc}$					
8. RESERVE SAMPLE					
Used in analysis					
9. DATE REPORTED		10. ANALYST		11. CALCULATIONS CHECKED BY	
11 Jan 73		W. J. Jeville		W. J. Jeville	
				12. DATE CHECKED	
				1/11/73	

Form LSB 005 5

CTD017778

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

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL- 139		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7628	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellevue		COUNTY St. Louis	STATE Mo.	
7. OPERATION No. 2 pipe machine + lunch room					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 23 min @ 2 lpm = 44 l BP (mm) 25-TP T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica ~ 90%					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc = 0.6					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Personal sample on [redacted] from 1204 to 1226 hrs representing lunchroom area. Remo DO3-287. Pico = 6.0					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017779

ANALYST WORKSHEET

1. SAMPLE NUMBER 7-SE 139 M-7 628		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. ORIGIN FROM Spain & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.				
$\frac{0.18 \text{ Fibers/field} \times 147}{44 \text{ liters air}} = 0.6 \text{ fibers/cc}$				
8. RESERVE SAMPLE Used in analysis				
9. DATE REPORTED 1/11/73		10. ANALYST Willard Dixon		11. CALCULATIONS CHECKED BY W. J. Fick
				12. DATE CHECKED 1/20/73

Form L8B 605 5

CTD017780

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

SAMPLE IDENTIFICATION SHEET

1. SAMPLE NUMBER (REGIONAL) 7-52-230		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Centinatural Products Corp				
	STREET ADDRESS 600 So. Cyr Road				
	CITY Bellfontaine Neighbors		COUNTY St. Louis		STATE Ill.
7. OPERATION No Pipe Machine mix operation					
8. SAMPLING TECHNIQUE					
IMPING ☐ BUBBLER ☐ 10 mm Cyclone ☒ VM-1, 5 u					
ESP ☐ FILTER PAPER ☐					
MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐					
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 1.5 lpm for 103 min = 0.190 M ³ BP (mm) ~ 5 TD T (C)					
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED straight → 0.77 mg/M ³ Gross = 15.556 mg Total = 15.402 (See also 4452 sample w/ bag back #1) .184 mg					
12. DATE REPORTED FROM LAB		13. CHEMISTS D. Helt			
14. REMARKS personal sample from 1103 to 1245 hrs. Machine shut down @ 11:45 a.m.					

CTD017781

Pump 003-275, Calix 10-72, 1.5 lpm = 6.1 sitting

ORIGINAL

Form OSHA-23
Dec. 1971

12-20-72
#2 MACHINE FIBER
FEED MAN

MIKE CUSICK

230-V106

MSA Model G. DO3 275

I. Time 1103 Hrs. Indicated Rot. 6.1 ℓ/m = 1.8 ℓ/m (actual)

12" 200 Pressure Pipe

Shut down both #1 & #2 machines @ ~ 1145 due
to low H_2O pressure caused by broken H_2O main
on Riverview Dr.

F. Time 1246 Hrs. F.R. 6.1 ℓ/m = 1.8 ℓ/m (actual)

Observed on top of #2 machine @ F.T.

231 - BLANK exposed and sealed immediately @ 1310 Hrs.
(107V) Filter

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-52-154		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB	
4. BY WHOM TAKEN W. Spinal				5. LABORATORY NUMBER X-7729	
6. WHERE TAKEN	NAME OF ESTABLISHMENT CERTAIN-TEED PRODUCTS Corp.				
	STREET ADDRESS 600 St Cyr Rd				
	CITY Bellevue		COUNTY St. Louis	STATE Mo	
	Neighborhood				
7. OPERATION No. 2 Pipe Machine Oil Operation					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ 10 mm cyclone ☒ VM-1, 5" ☐ FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) 472 Liters = 472 M ³ BP (mm) ☐ STP ^T (C) ☐					
10. POSSIBLE INTERFERENCES Area contains asbestos fibers, cement and silica sand					
11. ANALYSIS REQUIRED Percent Free Silica / Particle weight on filter = 0.300 mg. 0.3 mg ± 0.02 mg → 0.62 mg/M ³					
12. DATE REPORTED FROM LAB 1-11-73		13. CHEMISTS M. D.			
14. REMARKS NOTE: low sample weight is realized; however, please analyze and report any limitations on sample result. Refer to blank sample NOS. 7-52-174 & 7-52-231 Personal sample on [REDACTED] Pump 003-257; Calibrated 10-72; 1.8 lfm = 5.6 setting.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017783

ANALYST WORKSHEET

154

NUMBER

DATE

☒ INTACT

DATE RECEIVED

29

LOCATION

TIME

1-4-73

FROM

TO REGION

VII

OF SAMPLE

Filter

TYPE OF ANALYSIS

2 was determined colorimetrically by the methods of Talvitie given in "A.I.H.A.J.," 23, 623 and "A.I.H.A.J.," 19, 54.

$$\text{Wt} = 0.300 \text{ mg}$$

$$\text{SiO}_2 = 0.03 \text{ mg} \pm 0.02 \text{ mg}$$

$$\frac{(0.03 \pm 0.02) \times 100}{0.300} = 10.9\% \pm 5.0\% \text{ SiO}_2$$

REMARKS

Used in analysis

DATE

ANALYST

DATE

CHECKED BY

1-11-73

M. J. Dyke

W. J. Dwyer

1/11/73

Form ESB 005 5

CTD017784

12-18-72

MACHINE #2 FIBER MAN

[REDACTED]
[REDACTED]
[REDACTED]

Same Union

Employee Smokes Lucky Strikes
Non-filtered

154

MSA Model G Pump DO3-257

I. Time 1207 Hrs.

Filter Lot # 50585

I.R. 5.6 μm indicated = 1.8 μm actual

UMI Filter 101 V

1223 Hrs.

Checked rotameter (adjusted up .2) - using fork
truck to move pallet of asbestos.

1234 Hrs. Checked rotameter - observed standing

@ Silica station on #2 Pipe Machine.

Vehicle door in E. Wall at S.E. corner of Bldg
open during sample period.

On break @ ~1315 Hrs.

Adjusted rotameter up .2 at 1323 when Mr Cusick
returned from break.

Observed dumping fiber @ ~~1401~~ 1401 Hrs - wearing
respirator - adjusted rotameter up .2 μm

In fiber feed area @ 1430 Hrs. rotameter okay.

Observed @ feed control panel @ 1445 rotameter okay.

Foreman stated he was on break @ 1454.

Observed returning from break @ 1502 - adjusted rotameter
up .1 μm

Assisted in felt removal on #2 machine with fork truck

Finished felt @ 1607 Hrs.

F. Time ~~1409 Hrs.~~ 1609 Hrs. F.R. 5.8 μm = 1.95 μm

CTD017785

ANALYST WORKSHEET

7-SL- 231

1. SAMPLE NUMBER X-7728		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73	
4. RECEIVED FROM Spain			5. REGION VII		
6. DESCRIPTION OF SAMPLE Filter					
7. SUMMARY OF ANALYSIS SiO ₂ was determined colorimetrically by the methods of Talvitie given in "Anal. Chem.," 23, 623 and "A.I.H.A.J.," 19, 54. <i>SiO₂ = 0.01 mg</i> <i>all results have been blank corrected</i>					
8. RESERVE SAMPLE Used in analysis					
9. DATE REPORTED 1-11-73		10. ANALYST Myra Dye		11. CALCULATIONS CHECKED BY William Dixon	
				12. DATE CHECKED 1/11/73	

Form LSB 005 5

CTD017786

RECEIVED
1-4-73

SAMPLE IDENTIFICATION SHEET

1. SAMPLE NUMBER (REGIONAL) 7-52-231		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB	
4. BY WHOM TAKEN W. Spoin				5. LABORATORY NUMBER X-7728	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Curtain-Tied Products Corp				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellfontains Neighborhood		COUNTY St. Louis		STATE Mo
7. OPERATION Blank					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒ VM-1, 5u				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) None					
BP (mm)					
T (C)					
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED Blank for per SiO ₂ anal					
12. DATE REPORTED FROM LAB 1-1-73			13. CHEMISTS M.S.		
14. REMARKS Ref. se. no. 7-52-154.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017787

ROUTING AND TRANSMITTAL SLIP		ACTION
1 TO (Name, office symbol or location) Dr. Russel Hendricks NIOSH Salt Lake City, Utah	INITIALS	CIRCULATE
	DATE	COORDINATION
2	INITIALS	FILE
	DATE	INFORMATION
3	INITIALS	NOTE AND RETURN
	DATE	PER CON - VERSATION
4	INITIALS	SEE ME
	DATE	SIGNATURE
REMARKS RE: Certain-teed Products Corporation - Silica Please send results of enclosed samples to: A. F. Castranova, AD USDL - OSHA 210 North 12th Blvd., Room 554 St. Louis, Missouri 63101 Samples are numbered: 7-SL-154, 174, 231. Do NOT use this form as a RECORD of approvals, concurrences, disapprovals, clearances, and similar actions.		
FROM (Name, office symbol or location) A. F. Castranova, AD <i>AFC</i>		DATE 1-2-73 PHONE 314-622-5461

OPTIONAL FORM 47
AUGUST 1967
GSA FPMR (41CFR) 100-11.208

GPO 42-10-81118-1 619-015 5041-101

CTD017788

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
WESTERN AREA OCCUPATIONAL HEALTH LABORATORY
P. O. BOX 8137
SALT LAKE CITY, UTAH 84108

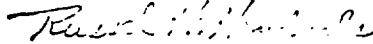
January 12, 1973

A. F. Castranova, AD
USDOL - OSHA
210 North 12th Blvd., Room 554
St. Louis, Missouri 63101

Dear Mr. Castranova:

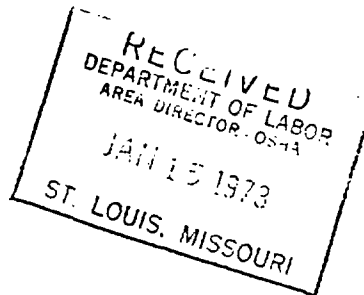
Enclosed are copies of the Analyst Worksheet and Sample Identification Sheet for samples No. X-7627 through X-7727 (Field Sample Nos. 7-SL-138 through 242).

Sincerely yours,



Russel H. Hendricks, Chief
Coord. Lab & Criteria Dev.

Enclosures



CTD017789

Dr. Russel Hendricks
NIOSH
Salt Lake City, Utah

RE: Certain-teed Products Corporation - Asbestos

As discussed in our telecon of 12-26-72, on any samples that appear to be overloaded in terms of maximum counting efficiency, please count, but show that the result may be low, i.e. equal to or greater than the number given.

Please note that the mixture for the manufacturing process is 11% asbestos fiber.

Please send results to: A. F. Castranova, AD
USDL - OSHA
210 North 12th Blvd., Room 554
St. Louis, Missouri 63101

Samples are numbered: 7-SL-138 thru 153,
7-SL-155 thru 173,
7-SL-175 thru 229,
7-SL-232 thru 242.

A. F. Castranova, AD

1-2-72

341-622-5461

Certified Mail
RRR No. 920646

JAN 1 1973

CTD017790

→ 11
FE

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PHS. HSMHA
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
WESTERN AREA OCCUPATIONAL HEALTH LABORATORY
P. O. BOX 8137
SALT LAKE CITY, UTAH 84108

January 11, 1973

A. F. Castranova, AD
USDOL - OSHA
210 North 12th Blvd., Rm. 554
St. Louis, Missouri 63101

Dear Mr. Castranova:

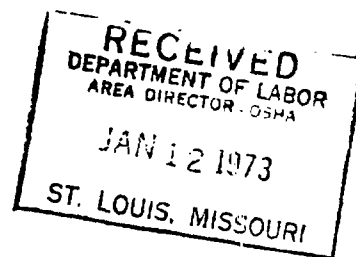
Enclosed are copies of the Analyst Worksheet and Sample Identification Sheet for samples No. X-7728 through X-7730 (Field • Sample Nos. 7-SL-231, 154, and 174).

Sincerely yours,

Russel H. Hendricks

Russel H. Hendricks, Chief
Coord. Lab & Criteria Dev.

Enclosures



CTD017791

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-52-154		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7730	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Continental Products Corp				
	STREET ADDRESS 600 St. Louis Road				
	CITY Bellefontaine		COUNTY St. Louis		STATE Mo.
	7. OPERATION Blank				
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ FILTER PAPER ☒ VM-1, 5u				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) None			BP (mm)		T (C)
10. POSSIBLE INTERFERENCES					
11. ANALYSIS REQUIRED Blank for free silica anal.					
12. DATE REPORTED FROM LAB 1-11-73			13. CHEMISTS M.D.		
14. REMARKS Ref. No. 7-52-154 VM-1, No. 105 taken @ 1623 hrs.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017792

ANALYST WORKSHEET

-SI- 174

NUMBER

SEALS

☒ INTACT

DATE RECEIVED

30

☐ BROKEN

☐ NONE

1-4-73

ORIGIN

S. REGION

VI

VII

DESCRIPTION OF SAMPLE

Filter

1. SUMMARY OF ANALYSIS

SiO₂ was determined colorimetrically by the methods of Talvitie given in "Anal. Chem.," 23, 623 and "A.I.H.A.J.," 19, 54.

SiO₂ = 0.01mg

REMAINING SAMPLE

Used in analysis

1-11-73	ANALYST <i>Marcia D. R.</i>	CALCULATIONS CHECKED BY <i>Willard Dixon</i>	DATE CHECKED <i>11/11/73</i>
---------	--------------------------------	---	---------------------------------

Form LSA 905 5

CTD017793

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

**SAMPLE
ACCOUNTABILITY RECORD**

1. SAMPLE NUMBER 7-52-154, 174, 231		2. NAME OF ESTABLISHMENT Certain-Teed Products Corp.					
3. ADDRESS OF ESTABLISHMENT 600 St. Cyr Road Bellevue, Mo.							
4. DATE SAMPLE RECEIVED 1-4-73		5. BY WHOM RECEIVED ALL				6. DATE RECORDS RECEIVED 1-4-73	
7. METHOD OF SHIPMENT	A. PERSONALLY FROM			C. SHIPPED FROM 210 N. 12th Blvd. St. Louis, Mo. 63101			
	B. VIA ☒ PP ☐ REA ☐ FREIGHT ☒ AIR			D. B/L NUMBER			
8. DESCRIPTION OF SHIPMENT	A. SHIPPING CONTAINERS	NUMBER 1	TYPE Cardboard	CONDITION			
	B. SAMPLE PACKAGES	NUMBER 3	SIZE AND TYPE 2 pc. cassettes	CONDITION			
	C. SEAL INSCRIPTION	COPY IN FULL W. N. Spaul			CONDITION		
9. SAMPLE DELIVERED				10. SAMPLE RETURNED			
DATE	AMOUNT	FROM	TO	DATE	AMOUNT	TO	FROM
11. SAMPLE DISPOSITION							

RECEIVED
 U.S. DEPARTMENT OF LABOR
 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
 ST. LOUIS, MO.
 JAN 10 1973

ORIGINAL

Form OSHA-22
Dec. 1971

CTD017794

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

**SAMPLE
ACCOUNTABILITY RECORD**

1. SAMPLE NUMBER 7-5L-130 through 153 7-5L-155 through 173 7-5L-175 through 229 &		2. NAME OF ESTABLISHMENT <i>CERTIN-TEED PRODUCTS CORP.</i> 7-5L-232 through 242					
3. ADDRESS OF ESTABLISHMENT 600 St. Cyr Road Bellefontaine Neighbors, Mo.							
4. DATE SAMPLE RECEIVED 1-4-73		5. BY WHOM RECEIVED <i>Anna Osburn</i>				6. DATE RECORDS RECEIVED 1-4-73	
7. METHOD OF SHIPMENT	A. PERSONALLY FROM			C. SHIPPED FROM 210 N. 12 th Blvd. St. Louis, Mo. 63101			
	B. VIA ☐ PP ☐ REA ☐ FREIGHT ☒ AIR			D. B/L NUMBER			
8. DESCRIPTION OF SHIPMENT	A. SHIPPING CONTAINERS	NUMBER 1	TYPE Cardboard	CONDITION			
	B. SAMPLE PACKAGES	NUMBER 101	SIZE AND TYPE 3 pc. cassettes	CONDITION			
	C. SEAL INSCRIPTION	COPY IN FULL <i>W. H. Spain</i> <i>D. L. Hatt (w/2), D. D. Holt</i>			CONDITION		
9. SAMPLE DELIVERED				10. SAMPLE RETURNED			
DATE	AMOUNT	FROM	TO	DATE	AMOUNT	TO	FROM
11. SAMPLE DISPOSITION							

ORIGINAL

Form OSHA-22
Dec. 1971

CTD017795

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL- 232		2. DATE TAKEN 12-20-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7717	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis		STATE Mo.
7. OPERATION BLANK					
8. SAMPLING TECHNIQUE					
IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 58400					
MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐					
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) BLANK					
BP (mm) ☐ STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: BLANK opened & sealed immediately @ 1312Hrs. MSA Model G Pump Sample Period: Actual Rotameter Readings					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017796

ANALYST WORKSHEET

7-SD 232

1. SAMPLE NUMBER	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED
X-7717	☐ NONE	1-4-73
4. RECEIVED FROM	5. REGION	
W. Smith & D. Holt	VII	
6. DESCRIPTION OF SAMPLE		
Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

101 Fibers/field x 147 = _____ fibers/cc
liters air

8. RESERVE SAMPLE
Used in analysis

9. DATE REPORTED	10. ANALYST	11. CALCULATIONS CHECKED BY	12. DATE CHECKED
1/11/73	Willard Dixon	W. Keville	11 Jan 73

Form LSB 005 5

CTD017797

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-214 BLANK		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7701	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION BLANK					
8. SAMPLING TECHNIQUE	IMPINGING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Filter Lot # 58408				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET)				BP (mm) ~ STP T (C)	
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: MSA Model G Pump Sample Period: Actual Rotameter Readings BLANK exposed in #3 Plant @ 1420 hrs. & sealed immediately.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017798

ANALYST WORKSHEET

7-SL 214 Blank

1. SAMPLE NUMBER 7701	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. ORIGIN FROM J. Seale & D. Holt		5. REGION VII
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

103 Fibers/field x 147 = fibers/cc
liters air

8. ANALYST Willard Dixon		9. CALCULATIONS CHECKED BY W. Neville	10. DATE CHECKED 11 Jan 73
11. COMMENTS Used in analysis			

Form LSB-603 5

CTD017799

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-199		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN D. Holt				5. LABORATORY NUMBER X-7686	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION (Recovery Samples) Blank					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) None BP (mm) T (C)					
10. POSSIBLE INTERFERENCES Portland cement and silica					
11. ANALYSIS REQUIRED (Re Asbestos fiber count longer than 5 um in fibers/cc) Blank					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Blank. (Millipore Lat 58408)					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017800

ANALYST WORKSHEET

7-SL 199

1. SAMPLE NUMBER X-7 686	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spain & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. 102 Fibers/field x 147 liters air = fibers/cc		
8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. Zeveloff
		12. DATE CHECKED 1/Jan'73

Form LSP 005 5

CTD017801

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL- 196 BLANK		2. DATE TAKEN 12-19-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7683	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION BLANK -					
8.					
SAMPLING TECHNIQUE	IMPING ☐		BUBBLER ☐	ESP ☐	Open Face AA, 0.8u FILTER PAPER Filter Lot # 50585
	MATERIAL ☐		BAGS ☐	SETTLED DUST ☐	GRAB SAMPLE ☐
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) BLANK					
BP (mm) ☐ STP T (C)					
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Employee Sampled: MSA Model G Pump Sample Period: Actual Rotameter Readings BLANK opened and exposed in #3 Plant and immediately sealed @ 1130 Hrs.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017802

ANALYST WORKSHEET

7-SL 196 Blank

1. SAMPLE NUMBER X-7683	2. SEALS ☒ INTACT ☐ BROKEN	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spain & D. Holt		5. REGION VII
6. DESCRIPTION OF SAMPLE Filter		

7. SUMMARY OF ANALYSIS

Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.

0.01
~~0.01~~ Fibers/field x 147 = fibers/cc
~~0.01~~ liters air

8. RESERVE SAMPLE

Used in analysis

9. DATE REPORTED 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. Neville	12. DATE CHECKED 11 Jan '73
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U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL-176 (BLANK)		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spdin				5. LABORATORY NUMBER X-7663	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis		STATE Mo.
7. OPERATION BLANK					
8. SAMPLING TECHNIQUE					
IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER Lot # 50585					
MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐					
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) BLANK					
BP (mm) 2 STP T (C)					
10. POSSIBLE INTERFERENCES Portland Cement & Silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc					
12. DATE REPORTED FROM LAB		13. CHEMISTS			
14. REMARKS Exposed & sealed @ 1628 Hrs. as a BLANK.					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017804

ANALYST WORKSHEET

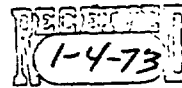
7-SL 176 Blank

1. SAMPLE NUMBER X-7663	2. SEALS ☐ BROKEN ☒ INTACT ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spain & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. $\frac{101 \text{ fibers/field} \times 147}{\text{liters air}} = \text{fibers/cc}$		
8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED TO ANALYST 1/11/73	11. CALCULATIONS CHECKED BY W. Neville	12. DATE CHECKED 11 Jan '73

Form LSE 005 5

CTD017805

SAMPLE IDENTIFICATION SHEET



1. SAMPLE NUMBER (REGIONAL) 7-SL-171 (BLANK)		2. DATE TAKEN 12-18-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN W. Spain				5. LABORATORY NUMBER X-7659	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine Neighbors		COUNTY St. Louis	STATE Mo.	
7. OPERATION					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER FILTER LOT # 50565				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET) BLANK				BP (mm) ~ 570 T(C)	
10. POSSIBLE INTERFERENCES Portland cement & silica					
11. ANALYSIS REQUIRED Asbestos fiber count longer than 5 um in fibers/cc					
12. DATE REPORTED FROM LAB			13. CHEMISTS		
14. REMARKS opened & Sealed @ 1428 Hrs. as BLANK					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017806

ANALYST WORKSHEET

7-SL 171 Blank

1. SAMPLE NUMBER N-7659	2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE	3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Smith & D. Holt	5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter		
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined.		
0.04 Fibers/field x 147 liters air		= fibers/cc
8. RESERVE SAMPLE Used in analysis		
9. DATE REPORTED 1/11/73	10. ANALYST Willard Dixon	11. CALCULATIONS CHECKED BY W. Neville
		12. DATE CHECKED 11 Jan '73

Form L8B 00S 5

CTD017807

SAMPLE IDENTIFICATION SHEET

RECEIVED
1-4-73

1. SAMPLE NUMBER (REGIONAL) 7-SL- 167		2. DATE TAKEN 12-15-72		3. DATE SUBMITTED TO LAB 1-2-73	
4. BY WHOM TAKEN <i>D. Holt</i>				5. LABORATORY NUMBER X-7655	
6. WHERE TAKEN	NAME OF ESTABLISHMENT Certain-Teed Products Corp.				
	STREET ADDRESS 600 St. Cyr Road				
	CITY Bellefontaine-Neighbors		COUNTY St. Louis		STATE Mo.
7. OPERATION <i>Blank</i>					
8. SAMPLING TECHNIQUE	IMPING ☐ BUBBLER ☐ ESP ☐ Open Face AA, 0.8u FILTER PAPER ☐				
	MATERIAL ☐ BAGS ☐ SETTLED DUST ☐ GRAB SAMPLE ☐				
9. AIR VOLUME SAMPLED (IN LITERS AND CUBIC FEET)				BP (mm)	T (C)
10. POSSIBLE INTERFERENCES Portland Cement & Silica					
11. ANALYSIS REQUIRED <i>re.</i> (Asbestos fiber count longer than 5 um in fibers/cc) <i>Blank</i>					
12. DATE REPORTED FROM LAB		13. CHEMISTS <i>[Signature]</i>			
14. REMARKS <i>Pipe machine areas - Taken @ 2:40 p.m.</i>					

ORIGINAL

Form OSHA-23
Dec. 1971

CTD017808

ANALYST WORKSHEET

7-SL 167

1. SAMPLE NUMBER X-7655		2. SEALS ☒ INTACT ☐ BROKEN ☐ NONE		3. DATE RECEIVED 1-4-73
4. RECEIVED FROM W. Spain & D. Holt			5. REGION VII	
6. DESCRIPTION OF SAMPLE Filter				
7. SUMMARY OF ANALYSIS Fibers greater than five microns in length were counted with a Zeiss phase contrast microscope having a 40X objective and a 10X eyepiece with a Patterson globe and circle reticle in the eyepiece. A minimum of 100 fields or 100 fibers were counted and the average number of fibers per field was determined. <u>103</u> Fibers/field x 147 — liters air = — fibers/cc				
8. RESERVE SAMPLE Used in analysis				
9. DATE REPORTED TO ANALYST 1/11/73		10. CALCULATIONS CHECKED BY W. Neville		11. DATE CHECKED 11 Jan '73

Form LSB 005 5

CTD017809



CERTAIN-TEED PRODUCTS CORPORATION 600 St. Cyr Road, St. Louis, Missouri 63137 314/UN7-6567

PIPING AND
PLASTICS INDUSTRIES

Pipe Plant
Pipe & Plastics Group

Corp.

Certain

Valley Forge, Pa.
19481

CTD017810