

CertainTeed	Date	To	Location and mail code
	July 14, 1980	Naaman Rhoades	Riverside, 260
Subject	INDUSTRIAL HYGIENE SURVEY-RIVERSIDE	From	Location and mail code
	April 21-25, 1980	<i>J. Woodson</i> Janis Woodson	VF Corp. #4

cc: F. Timpe - 2125/2B
 J. McGinley - 2125/2B
 W. Blakeslee - 2126/BB
 L. Megargee - Riverside, 260
 O. H. Kittilstad - VF 1125/4

Please find attached a completed log of personal/area air sample and audio-dosimetry results.

Of the air samples taken, one 115 minute sample taken on the Crusher Operator, T. Silva, was 2.76 f/cc (Sample 088) which is above the current OSHA 8-hour Time Weighted Average (TWA) exposure of 2.0 f/cc. The TWA for this employee was 1.39 f/cc.

L. Megargee resampled this position on 6/26 and 6/27/80 with results being 0.15 f/cc, 0.11 f/cc and 1.29 f/cc.

All other air samples taken were within the OSHA standard with only 3 samples being above 1.0 f/cc (samples were taken on the #3 Tester Operator and the Crush Operator - Samples 041, 042 and 089).

It is recommended that the areas with samples exceeding 1.0 f/cc be monitored regularly in order to be assured that the employee's exposure remains below the 2.0 f/cc level. If a level exceeding 2.0 f/cc is found, respirators are required until an acceptable level is again achieved.

The results of the audiodosimetry noise survey indicated 11 job positions with a daily dose percentage above 100% (90 dBA dosimetry).

Those positions are:

Machine Tender	Sample 101
Line #1 Lathe Operator	Sample 109
Line #1 Tester Operator	Sample 110
Line #3 Lathe Operator	Sample 111
Line #3 Tester Operator	Sample 113
Line #3 Beller	Sample 114
Line #3 Handler	Sample 116
Rework Saw	Sample 119
#1 Boring Mill Operator	Samples 120 and 122
Coupling Tester	Sample 127
Crusher	Samples 132 and 133

It is recommended that hearing protection be required at these positions until proper and permanent noise controls can be instituted.

A complete survey report is forthcoming detailing sample analysis and observations.

JW/ejb

Attachment



Thomas E. Case, CIH

0.038

$$F/cc = \frac{\text{fibers per 100 fields} \times 0.67}{\text{flowrate} \times \text{minutes}}$$

$$0.038 = \frac{0.67 \times}{370}$$

$$\frac{0.038}{\quad} =$$

20.99

Industrial Hygiene Survey
Riverside, A/C Pipe Plant
4/21-25/ 1980

TABLE
PERSONAL DUST EXPOSURES

Page 1.

No. 80	POSITION LOCATION (Date)	NAME/AREA	ANALYSIS FOR <i>Asbestos Fiber</i>	TIME	MIN. <i>LPM</i>	RESULT <i>f/cc</i>	TWA <i>f/cc</i>	RESULT
Manufacturing Department								
001A, 002A, 003C, 004D, 005E, 006F	4/24/80	J. James	<i>Asbestos Fiber 19A</i>	8:25a- 9:40a 9:40a- 9:55a 9:55a- 11:45a 11:45p- 1:45p 1:45p- 2:00p 2:00p- 2:54p	75 <i>192</i> 15 110 120 15 54	33.838 <i>0.16 f/cc</i> 7.695 <i>0.18 f/cc</i> 47.6418 <i>0.15</i> 100.3556 <i>0.29</i> 15.4886 <i>0.36</i> 34.7491 <i>0.22</i>	<i>0.21</i>	10 minute break 6", 12" & 14" 150 Staging & cleaning area. Felt and Cylinder change 1/2 hour lunch. Made 2 dumps Staging 11 minute dump, 15 minute staging, 28 minute cleanup
007 002A	4/21/80	F. Windsor	<i>Asbestos Fiber</i>	11:40a- 2:56p	196 <i>192</i>	72.568 <i>0.13</i>	-	8" 150 & 10" 200 pipe
008 003A, 009 003B, 010	4/23/80 2nd Shift.	A. Horton	<i>Asbestos Fiber</i>	4:15p- 6:35p 6:35p- 7:35p 7:35p- 8:50p	140 <i>2.0</i> 60 <i>2.0</i> 75 <i>2.0</i>	89.8774 <i>0.21</i> 59.8849 <i>0.33</i> -	-	6" 150/200 pipe VOID - Pump problems
011 004A	4/21/80	D. Marron	<i>Asbestos Fiber</i>	11:27a- 2:57p	210 <i>2.18</i>	60.0123 <i>0.09</i>	-	8" 150 & 10" 200 pipe.
012 005A, 013 006B, 014 006C	4/23/80 2nd Shift	W. Ashen	<i>Asbestos Fiber</i>	4:15p- 6:35p 6:35p- 7:35p 7:35p- 8:50p	140 <i>2.08</i> 60 <i>2.08</i> 75 <i>2.08</i>	85.5412 <i>0.20</i> 42.8466 <i>0.23</i> 37.9817 <i>0.16</i>	0.19	6" 150/200 pipe
015 006A	4/21/80	J. Clauson	<i>Asbestos Fiber</i>	11:42a- 2:58p	196 <i>2.04</i>	60.9259 <i>0.10</i>	-	8" 150/200 pipe
016 007A, 017 006B, 018 007C	4/23/80 2nd Shift	D. Braun	<i>Asbestos Fiber</i>	4:20p- 6:25p 6:25p- 7:40p 7:40p- 8:50p	125 <i>2.18</i> 75 <i>2.08</i> 70	66.5791 <i>0.16</i> -	-	6" 150/200 pipe VOID-Pump Problems VOID - Pump problems

CTD027316

TABLE
PERSONAL DUST EXPOSURES

No. 80	POSITION LOCATION (Date)	NAME/AREA <i>Method</i>	ANALYSIS FOR	TIME	MIN. <i>LPM</i>	RESULT f/cc	TWA f/cc	RESULT
Manufacturing Department (Continued...)								
008A 019	Mandrel Handler 4/25/80	J. Clauson <i>QA</i>	asbestos Fiber	1:35p- 1:53p	18 <i>1.96</i>	11.8385 0.22	-	14" 150 pipe
020 009A	Stripper 4/21/80	A. Chavez	Fiber	11:45a- 2:53p	188 <i>2.0</i>	0.005 <i>3.0994</i>	-	8" 150 & 10" 200 pipe
021 010A	Stripper 4/23/80	G. Soncrant	Fiber	4:25p- 6:30p	125 <i>1.21</i>	18.14406 0.08	0.07	6" 150/200 pipe Steamy
022 010B				6:30p- 7:45p	75 <i>1.21</i>	0.961875 0.007		30 minute break
023 010C	2nd Shift			7:45p- 8:00p	15 <i>1.21</i>	8.29487 0.31		
024 011A	Tray Loader 4/21/80	J. Butts	Fiber	12:30p- 1:30p	60 <i>2.04</i>	0.061 <i><6.0</i>	-	8" 150 & 200 pipe
025 012A	Tray Loader Truck Driver 4/21/80	L. Goodman	Fiber	11:50p- 2:53p	183 <i>2.08</i>	0.007 <i>3.856785</i>	-	8" 150 & 200 pipe
026 013A	Tray Loader 4/23/80	J. Ledford	Fiber	4:30p- 6:30p	120 <i>2.13</i>	0.061 <i><6.0</i>	0.052	6" 150/200 pipe
027 013B				6:30p- 7:45p	75 <i>2.13</i>	0.029 <i>7.06636</i>		
028 013C	2nd Shift			7:45p- 8:50p	65 <i>2.13</i>	0.061 <i><6.0</i>		
029 014A	Relief Operator 4/21/80	K. Aeschliman	Fiber	11:35a- 2:50p	195 <i>2.08</i>	0.07 <i>43.16805</i>	-	8" 150 & 10" 200
030 015A	Relief Operator 4/23/80	E. Renfro	Fiber	4:15p- 6:35p	140 <i>1.92</i>	70.24019 0.17	0.14	6" 150/200 pipe
031 015B				6:35p- 7:35p	60 <i>1.92</i>	15.39 0.089		Relieved Press Operator and Stripper
032 015C	2nd Shift			7:35p- 8:52p	75 <i>1.92</i>	28.01769 0.13		Relieved Mandrel Handler & Press Operator
Finishing Department								
033 016A	Line 1 Truck Driver 4/24/80	D. Glavin	Fiber	8:55a- 12:00N	185 <i>2.08</i>	0.021 <i>12.23085</i>	0.022	6" 150 Pipe
034 016B				12:00N 3:15p	195 <i>2.08</i>	0.023 <i>13.9566</i>		
035 017A	Line 3 Lathe Operator 4/23/80	D. Pastillas	Fiber	7:52a- 10:58a	186 <i>2.08</i>	19.405725 0.033	0.041	14" 150 pipe

CTD027317

No. 80	POSITION LOCATION (Date)	NAME/AREA <i>method</i>	ANALYSIS FOR	TIME	MIN.	RESULT f/cc	TWA f/cc	RESULT
Finishing Department <i>1st</i> <i>adaptor</i> <i>RPM</i> <i>fibers/100 fields</i>								
<i>036</i> <i>017B</i>	Continued... Line 3 Lathe Operator	D. Pasillas	Fiber	10:58a- 12:50p	112 <i>2.08</i>	0.053 <i>18.44827</i>		14" 150 pipe
<i>037</i>	4/23/80			12:50p- 3:20p	150			VOID -- Pump problems
<i>038</i> <i>018A</i>	Line 3 Lathe Assistant	J. Peterson	Fiber	7:47a- 11:00a	193 <i>2.08</i>	<i>23.775585</i> 0.039		14" 150 pipe
<i>039</i> <i>018B</i>	4/23/80			11:00a- 12:50p	110 <i>2.08</i>	<i>22.76844</i> 0.066	0.063	
<i>040</i> <i>018C</i>				12:50p- 3:20p	150 <i>2.08</i>	<i>43.309035</i> 0.093		
<i>041</i> <i>019A</i>	Line 3 Tester	J. Campbell	Fiber	7:45a- 11:00a	195 <i>2.04</i>	<i>685.01532</i> 1.45		14" 150 pipe
<i>042</i> <i>019B</i>	Operator			11:00a- 12:50p	110 <i>2.04</i>	<i>380.9025</i> 1.13	1.19	
<i>043</i> <i>019C</i>	4/23/80			12:50p- 3:20p	150 <i>2.04</i>	<i>407.62125</i> 0.89		
<i>044</i> <i>020A</i>	Line 3 Beller	D. Parr	Fiber	8:05a- 10:56a	171 <i>2.0</i>	<i>49.53657</i> 0.097		14" 150 pipe
<i>045</i> <i>020B</i>	4/23/80			10:56a- 12:45p	109 <i>2.0</i>	<i>36.91</i> 0.11	0.102	
<i>046</i>				12:45p- 3:20p	155			VOID-Pump problems
<i>047</i> <i>021A</i>	Line 3 Beller	J. Dobbs	Fiber	7:53a- 10:57a	184 <i>2.13</i>	<i>135.05712</i> 0.23		14" 150 pipe
<i>048</i> <i>021B</i>	4/23/80			10:57a- 12:47p	110 <i>2.13</i>	<i>58.850715</i> 0.17	0.18	
<i>049</i> <i>021C</i>				12:47p- 3:20p	153 <i>2.13</i>	<i>62.919375</i> 0.13		
<i>050</i> <i>022A</i>	Line 3 Handler	A. Amaro	Fiber	8:00a- 10:57a	177 <i>1.92</i>	<i>110.808</i> 0.22		14" 150 pipe
<i>051</i> <i>022B</i>	4/23/80			10:57a- 12:45p	108 <i>1.92</i>	<i>61.855965</i> 0.20	0.22	
<i>052</i> <i>022C</i>				12:45p- 3:20p	155 <i>1.92</i>	<i>105.36231</i> 0.24		
<i>053</i> <i>023A</i>	Line 3 Inspector	L. Gil	Fiber	7:50a- 10:55a	185 <i>2.0</i>	0.038		14" 150 pipe

CTD027318

TABLE
PERSONAL DUST EXPOSURES

No. 80	POSITION LOCATION (Date)	NAME/AREA	ANALYSIS FOR	TIME	MIN. 2PM	RESULT fibers/100 f/cc	TWA f/cc	RESULT
054 0230	Line 3 Inspector	L. Gil 19A	Fiber	10:55a- 12:45p	110 2.0	17.955 0.054	0.05	14" 150 pipe
055 0230	4/23/80			12:45p- 3:20	155 2.0	0.062 28.92924		
056 024A	Small Rework Saw Operator	M. Allen	Fiber	7:20a- 9:15a	115 1.92	0.06 19.82943	0.084	8" 150 Rework to 1/2 lengths
057 024B	4/22/80			9:15a- 11:50a	155 1.92	42.421155 0.095		
058				11:50a- 1:45p	115			Void Sample Used Twice
059 024C				1:45p- 3:20p	95 1.92	0.09 25.95945		On Sweeper
060 025A	Large Rework	M. Allen	Fiber	8:10a- 10:05a	115 1.32	0.28 63.793047	0.16	60 min. - large saw 14" 150 51 min. Small saw 8" 150
061 025B	Saw Operator			10:05a- 12:15p	130 1.32	0.061 6.0		1/2 hour sweeper, 30 min small saw, 15 min. large saw
062 026A	Large Rework Saw Operator	M. Allen	Fiber	9:35a- 10:15a	40 1.63	4.88495 0.05	--	30 min. large saw 14" 150 10 min. small saw
Fittings Department								
063 027A	#1 Boring Mill	A. Buenrostro	Fiber	8:05a- 10:20a	135 2.04	20.475 0.05	0.061	10" 150 couplings
064 027B	4/22/80			10:20a- 11:51a	91 2.0	21.77097 0.08		
065 027C				11:51a- 2:00p	129 2.04	0.052 20.61845		Down 1 hr. for repair
066 027D				2:00p- 2:45p	145 2.04	0.068 30.38538		Down 40 min. for repair
067 028A	#1 Boring Mill	M. Plaza	Fiber	8:07a- 10:20a	133		0.15	Void Sample used twice
068 028B	Helper			10:20a- 11:52a	92 2.13	0.17 50.585325		10" 150 Couplings (Dry)
069 028B	4/22/80			11:52a- 1:46p	115 2.13	36.403275 0.10		Working on plastic coupling machine
070 028C				1:46p- 4:26p	159 2.13	87.37074 0.17		10" 150 Couplings (Dry)

TABLE
PERSONAL DUST EXPOSURES

No. 80	POSITION LOCATION (Date)	NAME/AREA	ANALYSIS FOR	TIME	MIN.	RESULT f/cc	TWA f/cc	REMARKS
071 029A	#1 Boring Mill Operator 4/24/80	A. Buenrostro 19A	Fiber	10:25a- 10:40	15 1.63	0.10 3.8475	--	10" 150 Couplings (Wet)
072 030A	Big Mill Operator 4/22/80	E. Garcia	Fiber	8:11a- 10:22a	131 2.0	96.77943 0.25	0.42	12" Couplings
073 030B				10:22a- 11:55a	93 2.0	93.40815 0.34		
074 030C				11:55a- 2:05p	130 2.0	141.27731 0.36		
075 030D				2:05p- 4:25p	140 2.0	283.9257 0.68		
076 031A	Coupling Cut Off Saw Operator 4/22/80	B. Taylor	Fiber	8:20a- 11:57a	2.0 217	11.512835 0.17	0.13	10" 150 Couplings
077 031B				11:57a- 2:20p	143	24.95943 0.058		
078				2:20p- 4:27p	127			VOID Pump Problems.
079 032A	Coupling Tester Operator 4/22/80	T. Putnam	Fiber	8:30a- 10:00a	90 1.45	0.20 40.03532	0.13	12" 150 Couplings -Dry side of Coupling Tester
080 032B				10:00a- 11:57a	117 1.45	21.901155 0.086		10:00-11:30, Wet side of coupling tester, 11:30- 12 Noon Machine Down
081 032C				11:57a- 2:10p	133 1.45	0.071 20.52		12:30-4:30, Employee Handler Line 1.
082 032D				2:10p- 4:20p	130 1.45	0.19 53.766345		
083 033A	Fittings Maker 4/24/80	E. Hamilton	Fiber	8:45a- 12 N	195 2.09	276.309325 0.45	--	8" Tap couplings
084 034A	Large FM Lathe Operator 4/22/80	M. Garcia	Fiber	8:15a- 11:55a	220 2.04	0.025 16.53207	0.03	12" 150 1/2 length FM's
085 034B				11:55a- 2:15p	140 2.04	0.034 14.403165		
086 034C				2:15p- 4:27p	132 2.04	0.036 14.50212		

CTD027320

TABLE
 PERSONAL DUST EXPOSURES

No. 80	POSITION LOCATION (Date)	NAME/AREA Method	ANALYSIS FOR	TIME	MIN. LPM	RESULT f/cc	TWA f/cc	REMARKS
087 035A	Crusher Operator	T. Silva	Fiber	7:25a- 9:30a	125 2.08	0.77 301.8848	1.39	Crushing 3' X 3" pieces & end pieces.
088 035B	4/22/80			9:30a- 12 N	150	2.76 1289.34		Sprinkling off and on through out the day
089 035C				12N 1:55p	115	1.37 491.4208		
090 035D				1:55p- 4:20p	145	0.53 237.7663		
091 036A	Crusher Operator	E. Garcia	Fiber	2:00p- 3:20p	80 1.96	0.14 33.4303	--	2:00-2:30 - Crushing 2:30-2:45 - Break 2:45-3:20 - Crushing
Maintenance Department								
092 037A	Maintenance Oiler/Mechanic	S. Eltz	Fiber	8:20a- 12:10	230 2.09	25.63761 0.036	0.052	In baghouse 20 minutes
093 037B	4/24/80			12:10- 4:15p	245 2.09	52.483845 0.068		
Shipping Department								
094 038A	Loader	S. Atencio	Fiber	8:05a- 12:00N	235	--		VOID Sample=pump problems
095 038B	4/24/80			1:40p- 4:20p	160 1.17	64.7235 0.23		In yard
096 039A	Loader/Truck Driver	R. Corral	Fiber	8:05a- 12:00N	235	--		VOID Sample=pump problems
097 039B	4/24/80			1:40p- 4:20p	160 2.0	25.12803 0.05		In yard
098 040A	Loader/Truck Driver	R. Fonseca	Fiber	8:05a- 12:00N	238	7		VOID Sample=pump problems
099 040B	4/24/80			1:40p- 4:20p	160 2.09	0.04 18.95076		In yard

CTD027321

TABLE ____

ENVIRONMENTAL DUST RESULTS

CTD027322

Industry Hygiene Survey
 Riverside A/C Pipe Plant
 April 21-25, 1980

AUDIODOSIMETRY RESULTS

No. 80	POSITION LOCATION (DATE)	NAME	TIME	Min.	RESULTS Eight Hour 85 dBA 90 dBA Dosimeter		REMARKS
100	Mixer Operator 4/24/80	J. James	8:25a-2:54p	389	-	21 17	Running 6" 150 pipe.
101	Machine Tender 4/23/80 2nd Shift	A. Horton	4:15p-8:50p	275	-	105 21	Running 6" 150 pipe
102	Machine Tender 4/25/80	F. Windsor	8:20a-2:30p	370		62 9	Running 6" 150 pipe.
103	Control Operator 4/23/80 2nd shift	A. Askew	4:15p-8:50p	275	-	44 62	Running 6" 150 pipe
104	Mandrel Handler 4/23/80 2nd shift	D. Brown	4:20p-8:50p	270	-	71 87	Running 6" 150 pipe
105	Stripper Operator 4/23/80 2nd shift	G. Soncrant	4:25p-8:00p	215	-	78 11	Running 6" 150 pipe
106	Tray Loader 4/23/80 2nd Shift	J. Ledford	4:30p-8:50p	260	-	2 4	Running 6" 150 pipe
107	Relief Operator 4/23/80 2nd Shift	E. Renfro	4:15p-8:50p	275	-	94 12	Running 6" 150 pipe
108	Relief Operator 4/25/80	A. Aeschliman	8:20a-2:30p	370	-	58 12	Running 6" 150 pipe
109	Line #1 Lathe Operator 4/25/80	D. Pasillas	8:15a-3:15p	420	-	192	Running 6" 150 pipe
110	Line #1 Tester Operator 4/25/80	J. Campbell	8:15a-3:15p	420	-	187 11	Running 6" 150 pipe
111	Line #3 Lathe Operator 4/23/80	D. Pasillas	7:52a-3:20p	448	-	181 3	Running 14" 150 pipe
112	Line #3 Lathe Assistant 4/23/80	J. Peterson	7:47a-3:20p	453	-	96	Running 14" 150 pipe
113	Line #3 Tester Operator 4/23/80	J. Campbell	7:45a-3:20p	455	-	129 91	Running 14" 150 pipe
114	Line #3 Beller 4/23/80	D. Park	8:05a-3:20p	435	-	109	Running 14" 150 pipe
115	Line #3 Beller 4/23/80	J. Dobbs	7:53a-3:20p	447	-	97	Running 14" 150 pipe
116	Line #3 Handler 4/23/80	R. Amaro	8:00a-3:20p	440	-	124	Running 14" 150 pipe
117	Line #3 Inspector 4/23/80	L. Gil	7:50a-3:20p	450	-	77	Running 14" 150 pipe

CTD027323

Industrial Hygiene Survey
Riverside A/C Pipe Plant
April 21-25, 1980

AUDIODESIMETRY RESULTS

No. 80	POSITION LOCATION (DATE)	NAME	TIME	Min.	RESULTS Eight Hour 85 dBA 90 dBA Dosimeter		REMARKS
118	Small Rework Saw Operator 4/22/80	M. Allen	9:15a-3:20p	365	-	75 87.9	Running 8" 150 pipe
119	Large & Small Rework Saw Operator 4/22/80	M. Allen	8:10a-12:15p	245	-	102	Large Saw Running 14" 150 (75 min) Small saw running 8" 150 (80 min)
120	Boring Mill #1 Operator 4/22/80	A. Buenrostro	8:14a-4:25p	491	-	112	Running 10" 150 couplings (Dry) Machine down 2 hours
121	Boring Mill #1 Helper 4/22/80	M. Plaza	8:13a-4:25p	490	-	66	Running 10" 150 coupling (Dry) Machine down 2 hours.
122	Boring Mill #1 Operator 4/24/80	A. Buenrostro	9:00a-4:20p	440	-	113	Running 10" 150 couplings (wet)
123	Boring Mill #1 Operator 4/25/80	A. Buenrostro	10:25a-3:45p	320	-	51	Running 8" 150 couplings (wet)
124	Big Mill Operator 4/22/80	E. Garcia	8:11a-4:25p	494	-	93	Running 12" 150 couplings
125	Big Mill Operator 4/24/80	E. Garcia	8:30a-3:15p	405	-	82	Running 12" 150 couplings
126	Coupling cut off Operator 4/22/80	B. Taylor	9:20a-4:27p	427	-	37	Running 10" 150 couplings
127	Coupling Tester Operator 4/22/80	T. Putnam	9:15a-4:20p	425	-	122	Running 12" 150 couplings (4 hours) Line #1 Handler (4hrs)
128	Coupling Tester Operator 4/24/80	T. Putnam	8:10a-4:20p	490	-	65	Running 12" 150 couplings
129	Coupling Tester Operator 4/24/80	P. Martinez	8:10a-4:20p	490	-	61	Running 12" 150 Couplings
130	Fitting Maker 4/24/80	C. Hamilton	8:45a-4:20p	455	-	35	8" Top couplings
131	PM Lathe Operator 4/22/80	M. Garcia	9:20a-4:27p	427	-	90	Running 12" 150 1/2 length
132	Crusher Operator 4/22/80	T. Silva	9:14a-4:20p	426	-	153	
133	Crusher Operator 4/24/80	T. Silva	8:50a-4:20p	450	-	137	
134	Boiler Operator 4/25/80	D. DeAngelis	9:25a-2:30p	305	-	74	
135	Maintenance Oiler/Mechanic 4/24/80	Eltz	8:20a- 4:20p	480	-	37	

CTD027324