PLAINTIFF'S EXHIBIT

CT-652

INDUSTRIAL HYGIENE SURVEY
I.HS 87-9
RIVERSIDE A/C PIPE PLANT
AUGUST 10-13, 1987

IHS 87-9 Riverside A/C Pipe Plant August 10-13, 1987

Riverside Expenses

Travel $1218.81

Lab Analysis 1,905.75

CTD027389

INDUSTRIAL HYGIENE SURVEY
I.HS 87-9
RIVERSIDE A/C PIPE PLANT
AUGUST 10-13, 1987

Report

CertainTeed

To	Mail Code #260	From	Mail Code	Ext.
J. Burke	Riverside	Janis L. Woodson	1125/4	7713

Subject	Date
INDUSTRIAL HYGIENE SURVEY (IHS 87-9) **RIVERSIDE A/C PIPE PLANT - AUGUST 10-13, 1987**	September 25, 1987

cc: J. McGinley - 2125/2B

Attached is the report for the Industrial Hygiene Survey conducted at your plant the week of August 10-13, 1987.

If you have any questions or comments, please contact me.

JLW/lh

Attachment

Industrial Hygiene Survey (IHS 87-9)
Riverside A/C Pipe Plant
August 10 - 13, 1987

An Industrial Hygiene Survey was conducted at the Riverside A/C Pipe Plant by Janis Woodson of Corporate Health and Safety on August 10 - 13, 1987.

This survey was conducted to supplement the ongoing in-plant asbestos exposure surveillance program. In addition, area noise level readings were taken.

This report is an employee exposure record as defined in Corporate Procedure GE003.02 and OSHA Standard 29CFR1910.20 and must be retained for thirty years. Upon request, this record must be made available to those Federal officials, employee designees or employees as provided for in Corporate Procedure AD0111, Paragraphs 7 and 8.

Appendix I of this report documents the air sampling methodologies, the analysis techniques and the current standards used in evaluating the data. The field and in-house laboratory notes on this survey are on file in Corporate Health and Safety.

SUMMARY

Major improvements to reduce asbestos exposure have been made.

All 8 hour time weighted averages for asbestos were within the OSHA permissible exposure limit of 0.2 f/cc. Three exposures borderline the 0.1 f/cc OSHA action level. All employees were observed to wear the proper respiratory protection in required areas.

Sound levels at the coupling cut-off have been reduced by 3 to 7 dB. Other areas of the plant are relatively unchanged. All employees were observed to wear hearing protection in required areas.

RECOMMENDATIONS:

IHS 87-9 1. Coupling cut-off recycle material be misted prior to handling at the crusher.

IHS 87-9 2. Follow-up samples be conducted on a monthly basis for the positions of:

1/4 Lathe Operator
Coupling cut-off Operator
Wet Tester Operator
Crusher Operator
Saw Operator
Fittings Operator
Fittings Inspector

IHS 87-9 3. Employees be informed of the results of this survey.

IHS 87-9 4. A quarterly report of the status of these recommendations be made to Corporate Health and Safety.

ASBESTOS EXPOSURES

The exposure samples for asbestos ranged from less than detectable to .21 f/cc with all 8 hour time weighted average (TWA) exposures being within the OSHA permissible exposure limit (PEL) of 0.2 f/cc.

The Coupling Cut-off Operator, Wet Tester Operator and the Crusher Operator had TWA exposures at the action level of 0.1 f/cc. Each position is discussed in detail below.

Results for the personal asbestos monitoring samples are presented in Table I. Tables II and III compare the results of this survey and the survey of August, 1986 (IHS 86-11).

Since our last survey in August, 1986. The plant has made several major improvements to reduce the asbestos exposure levels:

* Enclosed the entire coupling cut-off operation.
* Installed slitted vinyl curtains on all major outside entrances to reduce wind currents.
* Installed a partition in the walk way between the Manufacturing and Finishing Departments to reduce wind currents.
* Cleaned and repaired the entire plant ventilation system.
* Upgraded and reinforced training on proper material handling and cleanup.
* Issued cartridge respirators to all employees.

Coupling Cut-off Operator

The coupling cut-off operation has undergone major engineering changes since our survey of August, 1986. The entire operation is now enclosed and under negative pressure. The samples taken during this survey show this effort has been positive in reducing the operators's exposure level.

Multiple samples were taken on three consecutive days during this survey to characterize the operator's exposure during each aspect of his job.

Samples 029A - E were taken during the first shift on 8/11. His exposure for these samples ranged from .07 to .208 f/cc, with a TWA of .101 f/cc.

There was a product change-over requiring a retooling, and mechanical problems at the take off end of the machine this day, both requiring the operator to make adjustments inside the hood. Since the operator worked both inside and outside the hood, separate TWA's have been fiqured for those time periods.

TWA Inside Hood:	.089 f/cc	87 minutes
TWA Outside Hood:	.104 f/cc	374 minutes
8 hour TWA:	.101 f/cc	461 minutes

This shows that working inside the hood is not necessarily when his highest exposure occurs. One observation I noted was that when the machine is not working effectively, as on this day, lace curtains/tailings are left on the edges of the couplings. Handling of these couplings would explain the elevated employee exposure outside the hood.

On the days following, the TWA's resulted in .04 and .067 f/cc.

From this data, it appears that engineering changes have reduced the exposures to 0.1 f/cc. We encourage further work to be accomplished to reduce the levels below the action level.

The employee was observed to wear a NIOSH approved 1/2 mask respirator with high efficiency particulate air (HEPA) filters at all times when working inside the hood.

Wet Tester Operator

During this survey there were mechanical problems with the wet tester so full 8 hour exposure samples could not be obtained. Employees were sampled but were often switched to other jobs such as cleanup, pallet repair and shipping, when the line was down. For this reason these samples were not considered representative exposures for this job position.

D. Hardgrave, a wet tester operator, had a TWA of .097 f/cc, borderline on the action level. The actual reason

for the increased exposure is unknown. She was observed to be cleaning the floor in the area of her work station during a down period.

Crusher Operator

The crusher operator was sampled on three consecutive days during this survey. The TWA's were .09, .068, and .098 f/cc, which are somewhat reduced from prior samples but still borderline on the action level.

In observing the crusher in operation I noted:

* Coupling stick ends/rings are transferred from the coupling cut-off operation to the crusher. The ends/rings have dust and tailings adhering from the cut-off process, these pieces are handled by the crusher operator in transferring them from the dumpster to the crusher chute.

  To reduce the dust, I recommend this material be misted with a light spray of water prior to handling.

* Dust was being generated in the pit below the crusher during the actual crushing operation.

  At the time of the survey, I recommended that maintenance check the system for leaks and make the necessary repairs. Subsequent to this survey, I have been informed by J. Burke that leaks in the crusher sealing plates have been repaired.

RESPIRATORY PROTECTION

Virtually every employee has been issued a respirator, equipped with a HEPA filter, specific to the type of work the job requires.

The plant has the following NIOSH approved, high efficiency respirators:

Full-face powered air: Racal Powerflow (TC-21C-353)

Full-face: Willson 1700 (TC-21C-184)

Half-face: HSC 1482-G108 (TC-21C-231) or
Willson 1200 (TC-21C-142)

IN-HOUSE SURVEILLANCE

Reviewing the results of all samples taken since the initial monitoring survey in August, 1986, asbestos exposures have been greatly reduced (Table I). Several positions originally found to exceed the PEL/Action level have been reduced below 0.1 f/cc (Table II). They are:

Press Operator
Hydrotester Operator
Pipe Handler
Shift Mechanic
Machine Tender
Mandrel Handler
Inspector

For the positions exceeding the action level, OSHA requires that additional monitoring be conducted at least every 6 months until the levels are reduced below 0.1 f/cc. We recommend follow-up sampling be conducted for those positions on a monthly basis for at least three months to confirm the levels are below 0.1 f/cc.

Positions which should be included in this monitoring program are:

1/4 Lathe Operator
Coupling Cut-off Operator
Wet Tester Operator
Crusher Operator
Saw Operator
Fittings Operator
Fittings Inspector

NOISE

Sound pressure level measurements were taken in the Finishing Department to determine the effect the engineering changes at the coupling cut-off has made to the sound levels in the area.

During the April, 1986 survey (IHS 86-1) the sound levels ranged 85 - 91 db at the coupling cut-off. Sound levels measured during this survey, 82 - 84 dB show reductions of 3 to 7 db. for this area. All other areas remain essentially unchanged.

Hearing protection was observed to be used by all employees working in required hearing protection areas as well as transient employees.

MISCELLANEOUS

It is our standard procedure in taking personal exposure samples, to inform each employee of the purpose of the sample and what they should and should not do to invalidate the results.

Specific do's and don'ts are: To go about their work as normal, not to remove the sampler, disconnect the tubing or filter holder, or purposely contaminate the sampling filter.

We request they inform us of any loss of integrity of the sample such as sampling tube or cassette accidentally coming off, dropping or otherwise subjecting the devices to unnecessary impacts. We strongly encourage plant management to similarly inform the employees when conducting their sampling programs.

We request that each employee be informed of exposure results in this survey as outlined in the corporate procedure. Employees whose asbestos exposures exceed the PEL and the action level respectively, must be informed according to OSHA regulation.

We suggest that a copy of the attached tables be posted on the employees bulletin board. Also, a Fiber Notification Form (FEN) must be completed as outlined in the Health Maintenance Manual, Asbestos Unit Program Section VII, for each employee sampled for asbestos. Alternately, the employees, including those in similar positions to those measured, can be informed personally.

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0001A	MIXER OPERATOR EATON, DONALD 565-78-9858	ASBESTOS 870810 2ND	15:17- 22:26	429	>.042 F/CC	.042	OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	.262 .157
0002A	MIXER OPERATOR REYES, PETER 560-04-6091	ASBESTOS 870812 1ST	8:10- 12:32	262	.002 F/CC		OSHA PEL = 0.2 F/CC	
0002B			12:32- 14:48	136	.002 F/CC	.002	OSHA PEL = 0.2 F/CC	.013 .009
`A	MACHINE TENDER MARRON, DOUG 550-78-8997	ASBESTOS 870810 2ND	15:19- 22:15	416	>.008 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	
0004A	MACHINE TENDER ABSCHLIMAN, KEN 573-76-0128	ASBESTOS 870812 1ST	7:10- 12:55	345	>.008 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	
0004B			12:55- 14:47	112	.039 F/CC	.015	OSHA PEL = 0.2 F/CC 12:55 CLEANING WET SLUDGE FROM DITCH	0.09 .062
0005A	PRESS OPERATOR LOYER, D. 570-43-6298	ASBESTOS 870810 2ND	15:12- 22:25	433	>.014 F/CC	.014	OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	.089 .054
0006A	PRESS OPERATOR SALAS, JOHN 570-76-5774	ASBESTOS 870812 1ST	7:11- 12:30	319	>.013 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0006B			12:30-14:46	136	.052 F/CC	.025	OSHA PEL = 0.2 F/CC	.146 .101
0007A	PRESS OPERATOR SALAS, JOHN 570-76-5774	ASBESTOS 870812 1ST	7:17-12:30	313	>.015 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	
0007B			12:30-14:45	135	.042 F/CC	.023	OSHA PEL = 0.2 F/CC	.134 .094
'A	MANDREL HANDLER CANTRELL, NORM 572-64-3309	ASBESTOS 870810 2ND	15:20-20:24	304	>.007 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	
0009A	MANDREL HANDLER PLAZA, MANUAL 570-58-2582	ASBESTOS 870812 1ST	7:07-12:29	322	.008 F/CC		OSHA PEL = 0.2 F/CC	
0009B			12:29-14:45	136	.033 F/CC	.015	OSHA PEL = 0.2 F/CC	0.09 .062
0010A	MANDREL HANDLER PLAZA, MANUAL 570-58-2582	ASBESTOS 870813 1ST	7:42-12:30	288	>.011 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION - 11:47 STARTED MFG LARGE DIAMETER PIPE	
0010B			12:30-14:45	135	.026 F/CC	.016	OSHA PEL = 0.2 F/CC	.096 .067

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NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0011A	RELIEF OPERATOR CASAS, JOHN 573-94-2307	ASBESTOS 870810 2ND	15:25- 17:20	115	.002 F/CC		OSHA PEL = 0.2 F/CC	
0011B			17:20- 22:15	295	<DET F/CC	.001	OSHA PEL = 0.2 F/CC	.007 .005
0012A	RELIEF OPERATOR BRADY, JEFF 551-02-9474	ASBESTOS 870812 1ST	7:15- 12:30	315	<DET F/CC		OSHA PEL = 0.2 F/CC	
"B			12:30- 14:49	139	.015 F/CC	.005	OSHA PEL = 0.2 F/CC	.032 .021
0013A	LATHE OPERATOR LINES 1 & 3 EVANS, GEORGE 566-04-8933	ASBESTOS 870811 1ST	7:03- 11:00	237	<DET F/CC		OSHA PEL = 0.2 F/CC	
0013B			11:37- 15:08	211	.005 F/CC	.002	OSHA PEL = 0.2 F/CC	.014 .008
0014A	ASSISTANT LATHE OPER LINE 1&3 HAMPTON, CHARLES 419-70-7035	ASBESTOS 870811 1ST	7:32- 11:00	208	.013 F/CC		OSHA PEL = 0.2 F/CC	
0014B			11:40- 15:08	208	.003 F/CC	.008	OSHA PEL = 0.2 F/CC	.048 .032

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0015A	HYDROTESTER LINES 1 & 3 BEY, GEORGE 546-98-9811	ASBESTOS 870810 2ND	15:31- 20:30	299	<DET F/CC		OSHA PEL = 0.2 F/CC EMPLOYEE WORKING ON LINE 1	
0015B			20:30- 20:57	27	.014 F/CC		OSHA PEL = 0.2 F/CC EMPLOYEE WORKING AS CRUSHER OPERATOR	
0015C			20:57- 22:31	94	.003 F/CC	.002	OSHA PEL = 0.2 F/CC EMPLOYEE WORKING ON LINE 3	.012 .009
°A	HYDROTESTER FOOSE, DENNIS 568-08-6676	ASBESTOS 870811 1ST	7:35- 11:00	205	--		SAMPLE VOID - PUMP MALFUNCTION	
0016B			11:42- 14:07	145	--		SAMPLE VOID - PUMP MALFUNCTION	
0017A	HYDROTESTER LINE 1 FOOSE, DENNIS 568-08-6676	ASBESTOS 870812 1ST	7:32- 11:00	208	.045 F/CC		OSHA PEL = 0.2 F/CC	
0017B			11:37- 15:12	215	.003 F/CC	.024	OSHA PEL = 0.2 F/CC	.148 .092
0018A	HYDROTESTER LINES 1 & 3 FOOSE, DENNIS 568-08-6676	ASBESTOS 870812 1ST	7:15- 11:00	225	.009 F/CC		OSHA PEL = 0.2 F/CC	

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0018B			12:03-15:23	200	.011 F/CC	0.01	OSHA PEL = 0.2 F/CC	.056 .039
0019A	INSPECTOR LINES 1 & 3 WILSON, CHARLES 422-56-9672	ASBESTOS 870811 1ST	7:26-15:08	462	.013 F/CC	.013	OSHA PEL = 0.2 F/CC	.079 .047
0020A	INSPECTOR WILSON, CHARLES 422-56-9672	ASBESTOS 870813 1ST	7:11-12:41	330	>.012 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION	
0020B			12:41-15:26	165	.021 F/CC	.015	OSHA PEL = 0.2 F/CC	.087 .061
0021A	PIPE HANDLER LINES 1 & 3 NEWPRASIT, SAM 564-88-3988	ASBESTOS 870810 2ND	15:30-21:05	335	.016 F/CC		OSHA PEL = 0.2 F/CC EMPLOYEE WORKED ON LINE 1	
0021B			21:05-22:30	85	.051 F/CC	.023	OSHA PEL = 0.2 F/CC EMPLOYEE WORKED ON LINE 3	.136 .095
0022A	PIPE HANDLER AMARO, RICHARD 560-98-0226	ASBESTOS 870813 1ST	7:34-12:40	306	.011 F/CC		OSHA PEL = 0.2 F/CC	
0022B			12:40-15:21	161	.008 F/CC	0.01	OSHA PEL = 0.2 F/CC	.061 .041

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0023A	PIPE HANDLER AVERY, ALBERT 572-82-0787	ASBESTOS 870813 1ST	7:35- 11:00	205	.002 F/CC		OSHA PEL = 0.2 F/CC	
0023B			12:01- 15:21	200	0.01 F/CC	.006	OSHA PEL = 0.2 F/CC	.035 .023
0024A	PIPE HANDLER LINE 1 AVERY, ALBERT 572-82-0787	ASBESTOS 870812 1ST	7:21- 15:11	470	.005 F/CC	.005	OSHA PEL = 0.2 F/CC	.033 0.02
[illegible]A	PIPE HANDLER LINE 1 AMARO, RICHARD 560-98-0226	ASBESTOS 870812 1ST	7:22- 15:10	468	.005 F/CC	.005	OSHA PEL = 0.2 F/CC	.029 .017
0026A	TRUCK DRIVER GALVIN, DENNIS 560-48-6590	ASBESTOS 870811 1ST	7:52- 15:11	439	<DET F/CC	<DET	OSHA PEL = 0.2 F/CC	.003 .002
0027A	REWORK SAW MEIER, STEVEN 568-06-9935	ASBESTOS 870811 1ST	7:15- 12:30	315	.011 F/CC		OSHA PEL = 0.2 F/CC EMPLOYEE WORKED ON BOTH SAWS THIS DAY	
0027B			12:30- 15:03	153	.055 F/CC	.025	OSHA PEL = 0.2 F/CC	0.15 .102
0028A	REWORK SAW MEIER, STEVEN 568-06-9935	ASBESTOS 870813 1ST	7:59- 10:55	176	--		SAMPLE VOID - PUMP MALFUNCTION	

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0028B			12:00-15:06	186	--		SAMPLE VOID - PUMP MALFUNCTION	
0029A	COUPLING CUT OFF COOLEY, DENNIS 344-30-3938	ASBESTOS 870811 1ST	7:10-8:47	97	.176 F/CC		OSHA PEL = 0.2 F/CC MFG 12 SERVER COUPLINGS - NORMAL OPERATION	
0029B			8:53-10:05	72	0.07 F/CC		OSHA PEL = 0.2 F/CC RESETTING TOOLS TO 8 150 - INSIDE HOOD - 9:00-9:15 EMPLOYEE ON BREAK EMPLOYEE WORE 1/2 FACE RESPIRATOR	
'C			10:05-13:57	232	.053 F/CC		OSHA PEL = 0.2 F/CC 10:10-11:30 MACHINE DOWN - REPAIRED BY MECHANIC	
0029D			13:57-14:12	15	.179 F/CC		OSHA PEL = 0.2 F/CC MACHINE DOWN - INSIDE HOOD EMPLOYEE WORE 1/2 FACE RESPIRATOR	
0029B			14:12-14:57	45	.208 F/CC	.101	OSHA PEL = 0.2 F/CC NORMAL OPERATION	.569 0.44
0030A	COUPLING CUT OFF COOLEY, DENNIS 344-30-3938	ASBESTOS 870812 1ST	7:20-12:38	318	.064 F/CC		OSHA PEL = 0.2 F/CC NORMAL OPERATION THIS DAY	
0030B			12:38-15:18	160	.002 F/CC	.043	OSHA PEL = 0.2 F/CC	.268 .162

NO. BY	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0031A	COUPLING CUT OFF COOLEY, DENNIS 344-30-3938	ASBESTOS 870813 1ST	7:21- 12:32	311	.039 F/CC		OSHA PEL = 0.2 F/CC NORMAL OPERATION THIS DAY	
0031B			12:32- 15:08	156	.121 F/CC	.067	OSHA PEL = 0.2 F/CC	.395 .274
0032A	B MILL OPERATOR DOBBS, PHILLIP 557-68-1875	ASBESTOS 870811 1ST	7:18- 15:05	467	.001 F/CC	.001	OSHA PEL = 0.2 F/CC	.008 .005
[illegible]A	WET TESTER BIVENS, JANET 547-72-9345	ASBESTOS 870812 1ST	7:35- 9:38	123	0.01 F/CC		OSHA PEL = 0.2 F/CC 9:10 - EMPLOYEE TRANSFERRED TO SHIPPING DEPARTMENT	
0034A	WET TESTER CONTRERAS, JOE 555-62-0421	ASBESTOS 870812 1ST	7:40- 9:40	120	<DET F/CC		OSHA PEL = 0.2 F/CC 9:10 - EMPLOYEE TRANSFERRED TO PALLET REPAIR	
0035A	WET TESTER HARDGRAVE, DEBBIE 559-92-5466	ASBESTOS 870813 1ST	7:40- 12:36	296	.066 F/CC		OSHA PEL = 0.2 F/CC	
0035B			12:36- 15:15	159	.153 F/CC	.097	OSHA PEL = 0.2 F/CC 2:15-3:15 LINE DOWN - CLEANUP	.569 .397
0036A	WET TESTER CONTRERAS, JOE 555-62-0421	ASBESTOS 870813 1ST	7:42- 12:36	294	.071 F/CC		OSHA PEL = 0.2 F/CC	

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0036B			12:36-15:10	154	.083 F/CC	.075	OSHA PEL = 0.2 F/CC 2:15-3:15 LINE DOWN - TRANSFERRED COUPLINGS TO PALLETS	.445 .308
0037A	1/4 LATHE OPERATOR SUAREZ, ANDRES 560-68-8273	ASBESTOS 870811 1ST	7:48-11:00	192	.014 F/CC		OSHA PEL = 0.2 F/CC 10 1/4 LENGTHS NORMAL OPERATION	
0037B			11:43-15:10	207	.027 F/CC	0.02	OSHA PEL = 0.2 F/CC 3:10 CHANGED OVER TO 6 1/4 LENGTHS	.121 .083
038A	1/4 LATHE OPERATOR SUAREZ, ANDRES 560-68-8273	ASBESTOS 870812 1ST	7:25-11:00	215	--		SAMPLE VOID - PUMP MALFUNCTION	
0038B			11:38-15:15	217	--		SAMPLE VOID - PUMP MALFUNCTION	
0039A	FM LATHE OPERATOR GIL, L. 570-58-4041	ASBESTOS 870813 1ST	7:57-12:35	278	.014 F/CC		OSHA PEL = 0.2 F/CC	
0039B			12:35-15:00	145	.018 F/CC	.015	OSHA PEL = 0.2 F/CC	0.09 .063
0040A	FITTINGS MAKER HAMILTON, CHRIS 555-74-5800	ASBESTOS 870812 1ST	7:41-12:40	299	<DET F/CC		OSHA PEL = 0.2 F/CC TBIC 6 150 X 3/4 NPT	

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NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0040B			12:40-15:17	157	.002 F/CC	<DET	OSHA PEL = 0.2 F/CC TBIC 8 150 COREDRILL	.005 .003
0041A	FITTINGS INSPECTOR GARCIA, MONTE 527-50-6060	ASBESTOS 870811 1ST	7:42-15:10	448	.021 F/CC	.021	OSHA PEL = 0.2 F/CC	.129 .077
0042A	FITTINGS INSPECTOR GARCIA, MONTE 527-50-6060	ASBESTOS 870813 1ST	7:25-10:55	210	.008 F/CC		OSHA PEL = 0.2 F/CC	
[illegible]B			11:57-15:14	197	.169 F/CC	.086	OSHA PEL = 0.2 F/CC	.534 .329
0043A	FITTINGS TRUCK OPERATOR SANDERS, ANZY 431-64-0728	ASBESTOS 870811 1ST	7:11-15:00	469	.017 F/CC	.017	OSHA PEL = 0.2 F/CC	.109 .066
0044A	CRUSHER OPERATOR JAMES, JIM 572-82-0622	ASBESTOS 870811 1ST	7:23-12:31	308	0.07 F/CC		OSHA PEL = 0.2 F/CC	
0044B			12:31-14:56	145	.132 F/CC	0.09	OSHA PEL = 0.2 F/CC	0.53 .371
0045A	CRUSHER OPERATOR JAMES, JIM 572-82-0622	ASBESTOS 870812 1ST	7:29-9:44	135	.065 F/CC		OSHA PEL = 0.2 F/CC	

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0045B			9:44-15:14	330	0.07 F/CC	.068	OSHA PEL = 0.2 F/CC	.409 .276
0046A	CRUSHER OPERATOR JAMES, JIM 572-82-0622	ASBESTOS 870813 1ST	7:09-9:30	141	.015 F/CC		OSHA PEL = 0.2 F/CC	
0046B			9:30-12:50	200	.091 F/CC		OSHA PEL = 0.2 F/CC	
[illegible]SC			12:50-15:10	140	.192 F/CC	.098	OSHA PEL = 0.2 F/CC	.575 .406
0047A	MECHANIC WHITAKER, WOODROW 294-40-4086	ASBESTOS 870812 1ST	7:49-12:40	291	0.01 F/CC		OSHA PEL = 0.2 F/CC 9:30-12:40 REPAIRING LARGE BORING MILL	
0047B			12:40-15:15	155	.013 F/CC	.011	OSHA PEL = 0.2 F/CC	.067 .047
0048A	MECHANIC STEEN, THEODORE 107-32-3415	ASBESTOS 870812 1ST	7:56-12:42	286	>.012 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION - EMPLOYEE SPENT MOST OF THE DAY IN SHOP	
0048B			12:42-15:10	148	.003 F/CC	.009	OSHA PEL = 0.2 F/CC	.056 .035

CTD027408

NO. 87	POSITION/AREA (NAME-CLOCK NO.) SOC SEC NBR	ANALYSIS/ DATE/SHIFT	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS	UCL LCL
0049A	MECHANIC STUCKEY, JACK 546-21-5084	ASBESTOS 870812 1ST	8:05- 12:45	280	.008 F/CC		OSHA PEL = 0.2 F/CC EMPLOYEE WORKED MOSTLY IN MFG DURING THIS SAMPLE	
0049B			12:45- 15:00	135	.014 F/CC	0.01	OSHA PEL = 0.2 F/CC EMPLOYEE WORKED MOSTLY ON LARGE BORING MILL AND #1 HYDRO	.057 0.04
0050A	MECHANIC DARNELL, WILLIAM 568-54-6818	ASBESTOS 870813 1ST	7:31- 12:54	323	>.002 F/CC		OSHA PEL = 0.2 F/CC HEAVY PARTICULATE - MAY BE AN UNDERESTIMATION EMPLOYEE WORKED ON 1/4 LATHE	
[illegible]0B			12:54- 15:24	150	.003 F/CC	.002	OSHA PEL = 0.2 F/CC TURNING DOWN ENDS OF MANDRELS	.014 0.01
0051A	MECHANIC WHITAKER, WOODROW 294-40-4086	ASBESTOS 870813 1ST	7:48- 12:39	291	.008 F/CC		OSHA PEL = 0.2 F/CC 11:30 WORKED ON #1 BORING MILL WORKED ON COREDRILL 1 HOUR	
0051B			12:39- 15:16	157	.013 F/CC	0.01	OSHA PEL = 0.2 F/CC WORKED ON WET TESTER 2 HOURS	.057 0.04
0052A	MECHANIC GEORGE, ALAN 561-90-0168	ASBESTOS 870813 1ST	8:11- 12:36	265	<DET F/CC		OSHA PEL = 0.2 F/CC WORKED MOSTLY IN SHOP THIS DAY	
0052B			12:46- 16:15	209	.007 F/CC	.003	OSHA PEL = 0.2 F/CC	.019 .011

CTD027409

TABLE II
Sample Results (8-hour TWA's - f/cc)
August, 1986 through August, 1987

	8/86	12/86	3/87	8/87
EXCEEDED 0.2 f/cc:				
Press Operator	.21 .13 .05	.17 .04		.03 .02 .01
Hydro. Oper.	.25 .07	.10		.02 .01 .002
Pipe Handler	.24 .14 .12 .11 .05 .05 .04	.04		.02 .01 .006 .005 .005
1/4 Lathe Oper.	.31	.23	.26	.02
Cplg C/O Oper.	1.6	.27	.05 .05 .22	.10 .07 .04
Wet Tester	.06 .03	.41		*
Crusher Oper.	.16	.31	.10	.10 .09 .07
Shift Mechanic	.26 .05 .004	<Dt <Dt .02		.01 .01 .01 .009 .003 .002
EXCEEDED 0.1 f/cc:				
Machine Tender	.13 .12 .11 .04			.008, .02
Mandrel Handler	.14 .06 .03	.03		.007 .02 .02
Inspector	.10 .05			.01 .02
Saw Operator	.12 .11			.03
Fittings Oper.	.12			<Dt
Fittings Insp.	.15			.09 .02

* Samples taken during this survey were not representative of normal operations due to mechanical problems.

TABLE III

Summary of Sample Results

August 10 - 13, 1987

Dept.	Total # TWA's	Range	Mean	OSHA PEL >.2	OSHA Action >.1 f/cc
Mfg.	11	.001-.025	.014	0	0
Finish.	26	<det.-.10	.03	0	2
Maint/Misc.	9	.002-.098	.03	0	1
	--			---	---
Plant(8/87)	46	<det.-.10	.026	0	3 (6%)
Plant(8/86)	73	.002-1.58	.09	6 (8%)	20 (27%)

CTD027411

Appendix I

Current Standards and Sampling Methods

Asbestos

The sampling and analysis was conducted following the current OSHA Standard 29CFR1910.1001, Appendix A ORM (Mandatory).

Personal samples were obtained open faced on a 25mm 0.8 micron mixed cellulose ester Millipore filter with a 50mm extension cowl. DuPont Alpha I air sampling pumps were calibrated before and after each sampling day to approximately 1 liter per minute. In most cases, a series of two, three or four different filter samples were obtained for the person, to establish an 8-hour time-weighted average (TWA) concentration.

The analysis was conducted by NATLSCO Labs, Long Grove, Illinois. The counts were made following the A counting rules as described in the Standard, Appendix A.

The current Standard calls for a personal exposure limit of 0.2 fibers, longer than 5 microns per cubic centimeter of air (f/cc) and an action limit of 0.1 f/cc.

Noise

A Bruel & Kjaer (B & K) 2209 precision sound level meter with a B & K 1613 octave band analyzer and B & K 4133 1/2-inch microphone was utilized to obtain sound pressure level measurements. Calibrations were made with B & K 4230 calibrator before and after this survey. When obtaining sound level measurements in the plant, a 3-inch foam sphere was used as a microphone windscreen. The reference for all sound pressure level measurements is 0.0002 microbar.

The permissible OSHA noise exposure, (29CFR1910.95), ranges between 90 decibels for 8 hours per day through 115 decibels for a maximum duration of 1/4-hour per day. The maximum permissible audiodosimeter dose is 100% on the 85 and 80 dBA modes.

FOLLOWUP

CertainTeed

To	Mail Code #260	From	Mail Code	Ext.
J. Burke	Riverside	Janis L. Woodson	1125/4	7713

Subject	Date
RIVERSIDE SIX MONTH FOLLOW-UP SAMPLES (IHS 87-9)	March 29, 1988

cc: L. Todd - Riverside
J. McGinley - 2125/2B

Attached are the results of the six month follow-up samples taken by L. Todd, February 23-25, 1988. (Table I)

The TWA's range 0.038 - 0.42 f/cc with two of the positions exceeding the OSHA PEL of 0.2 f/cc. They are the Wet Tester and Saw Operators. These employees should be required to wear respirators at these job positions until samples indicate exposure levels are below the PEL.

Two positions are still in need of six month follow-up samples. They are the Coupling Cut Off Operator and Crusher Operator. When submitting samples to Corporate Health and Safety, please use the Asbestos Monitoring Data Sheet, form No. 02-06-0009. An example of this form is given on page D-231 of the CertainTeed Health Maintenance Manual.

I have included a table showing all sample results since the initial monitoring in August, 1986 (Table II) for these seven follow-up positions. If you have any questions or comments, please contact me.

JLW/lh

Attachments

CTD027413

Riverside A/C Pipe Plant
Samples taken by L. Todd
February 23-25, 1988

TABLE I

SAMPLE RESULTS FOR ASBESTOS

NO.	POSITION/AREA (NAME-CLOCK NO.) DATE	ANALYSIS FOR	TIME	MIN	RESULT f/cc	TWA FOR SAMPLE PERIOD f/cc	REMARKS
	Fittings Maker C. Hamilton 2/23/88	Asbestos	8:30a 12:30p	240	.074	0.044	OSHA PEL = .2 f/cc
			12:30p 4:30p	240	.015		
	Fittings Inspector M. Garcia 2/23/88	Asbestos	7:30a 11:30a	240	.008	0.038	OSHA PEL = .2 f/cc
			11:30a 3:30p	240	.069		
	Wet Tester Operator J. Contreras 2/24/88	Asbestos	8:30a 11:30a	180	.23	0.21	OSHA PEL = .2 f/cc
			11:30a 3:30p	240	.19		
	¼ Lathe Operator A. Suarez 2/24/88	Asbestos	8:52a 11:25a	180	.007	0.07	OSHA PEL = .2 f/cc
			11:25a 3:25p	240	.12		
	Saw Operator S. Meier 2/25/88	Asbestos	8:00a 11:45a	225	.35	0.42	OSHA PEL = .2 f/cc
			11:45a 3:30p	225	.50		

CTD027414

TABLE II

Sample Results (8-hour TWA's - f/cc)
August, 1986 through February, 1988

POSITION	8/86	12/86	3/87	8/87	2/88	
1/4 Lathe Oper.	.31	.23	.26	.02	.07	
Cplg C/O Oper.	1.6	.27	.05 .05 .22	.10 .07 .04		.05
Wet Tester	.06 .03	.41		*	.21	.03
Crusher Oper.	.16	.31	.10	.10 .09 .07		.01
Saw Operator	.12 .11			.03	.42	.01
Fittings Oper.	.12			<Dt	.04	
Fittings Insp.	.15			.09 .02	.04	

* Samples taken during this survey were not representative of normal operations due to mechanical problems.

FOLLOWUP

CertainTeed

To	Mail Code #260	From	Mail Code	Ext.
J. Burke	Riverside	Janis L. Woodson	1125/4	7713

oject	Date
RIVERSIDE FOLLOW-UP SAMPLES (IHS 87-9)	May 24, 1988

cc: L. Todd - Riverside
J. McGinley - 2125/2B

Attached are the results of the samples L. Todd took in April. (Table I) The TWA's for the four positions range 0.01 - .05 f/cc with all samples in this batch being below the 0.1 f/cc OSHA action level.

Results for all samples taken on the seven follow-up positions since August, 1986 are listed in Table II.

In reviewing Table II, samples for five of the seven positions seem to have stabilized below the action level. However, the Wet Tester and the Saw Operators still have variable exposures which sometimes exceed the PEL. Employees in these two positions should continue to be monitored until the samples confirm levels are below the 0.1 f/cc action level.

A Corporate Industrial Hygiene Survey will be conducted within the next few months at which time multiple samples on the seven follow-up positions will be taken to further document the current levels.

If I can be of further assistance, please contact me.

JLW/lh

Attachments

RIVERS A/C PIPE PLANT

Samples Taken by L. Todd

April 5 - 22, 1988

TABLE I

SAMPLE RESULTS FOR ASBESTOS

NO.	POSITION/AREA (NAME-CLOCK NO.) DATE	ANALYSIS FOR	TIME	MIN	RESULT	TWA FOR SAMPLE PERIOD	REMARKS
	Wet Tester Operator J. Bivens 547-72-9345 4/5/88	Asbestos	8:30a 12:30p	240	.03 f/cc	.03 f/cc	Testing 18" 150 couplings.
			12:30p 3:30p	180	.03 f/cc		Set up and tested 12" 150 couplings. OSHA PEL = .2 f/cc.
	Saw Operator S. Meier 568-06-9935 4/21/88	Asbestos	8:00a 11:30a	210	.01 f/cc	.01 f/cc	Sawing 12" 150 pipe.
			11:30a 3:30p	240	.01 f/cc		OSHA PEL = .2 f/cc.
	Coupling Cut-Off Operator D. Cooley 344-30-3938 4/21/88	Asbestos	8:10a 11:40a	210	.04 f/cc	.05 f/cc	8" 150 couplings.
			11:40a 3:30p	230	.06 f/cc		Wears full face respirator when inside machine. OSHA PEL = .2 f/cc
	Crusher Operator T. Silva 4/22/88	Asbestos	8:15a 11:45a	210	.01 f/cc	.01 f/cc	Normal operations.
			11:45a 3:30p	225	.01 f/cc		Ran sweeper. OSHA PEL = .2 f/cc.

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TABLE II

Riverside A/C Pipe Plant
Asbestos Sample Results (8-hour TWA's - f/cc)
August, 1986 through April, 1988

	8/86	12/86	3/87	8/87	2/88	4/88
1/4 Lathe Oper.	.31	.23	.26	.02	.07	
Cplg C/O Oper.	1.6	.27	.05 .05 .22	.10 .07 .04		.05
Wet Tester	.06 .03	.41		*	.21	.03
Crusher Oper.	.16	.31	.10	.10 .09 .07		.01
Saw Operator	.12 .11			.03	.42	.01
Fittings Oper.	.12			<Dt	.04	
Fittings Insp.	.15			.09 .02	.04	

* Samples taken on employees working at this machine, during this survey, were not representative of normal operations due to mechanical problems.

NO. 87-9 | NAME Riverside 8/10 - 13/87

Seq T Name STEEN, THEODORE C. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0001 P Soc Sec 107-32-3415 Locn GENERAL TWA >0.009100 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MECHANIC Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1867	Q771	07:56	12:42	286	1.8600	13.5000/	100.0	>0.0120			HEAVY PARTICULATE - MAY BE AN UNDEREST. EMPLOYEE SPENT MOST OF TIME IN CLEAN ARE
2.	1867	Q779	12:42	15:10	148	1.8600	1.5000/	100.0	0.0027			

Seq T Name WHITTAKER, WOODROW Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0002 P Soc Sec 294-40-4086 Locn GENERAL TWA 0.011000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MECHANIC Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3866	Q763	07:49	12:40	291	2.0200	12.5000/	100.0	0.0100			9:30-12:40 REPAIRING LARGE BORING MILL
2.	3866	Q792	12:40	15:15	155	2.0200	8.5000/	100.0	0.0130			

Seq T Name WHITTAKER, WOODROW Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0003 P Soc Sec 294-40-4086 Locn GENERAL TWA 0.009600 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MECHANIC Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1864	Q789	07:48	12:39	291	1.6500	7.5000/	100.0	0.0077			11:30 WORKED ON #1 B ORING MILL WORKED ON COREDRILL 1 HOUR
2.	1864	Q816	12:39	15:16	157	1.6500	7.0000/	100.0	0.0130			WORKED ON WET TESTER 2 HOURS

Seq T Name COOLEY, DENNIS D. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0004 P Soc Sec 344-30-3938 Locn COUPLING CUT OFF TWA 0.100000 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4239	Q730	07:10	08:47	97	1.7700	62.0000/	100.0	0.1800			MFG 12" SEEVER COUPL INGS - NORMAL OPER.
2.	4239	Q736	08:53	10:05	72	1.7700	18.5000/	100.0	0.0710			RESETTING TOOLS TO 8 " 150 - INSIDE HOOD 9:00-9:15 EMPLOYEE ON BREAK EMPLOYEE
3.	4239	Q739	10:05	13:57	232	1.7700	45.0000/	100.0	0.0540			10:10-11:30 MACHINE DOWN - REPAIRED BY MECHANIC

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4.	4239	Q752	13:57	14:12	15	1.7700	10.0000/	100.0	0.1800		Y HALF MASK CARTRIDGE	MACHINE DOWN - INSID E HOOD
5.	4239	Q744	14:12	14:57	45	1.7700	34.0000/	100.0	0.2100			NORMAL OPERATION

Seq T Name COOLEY, DENNIS D.
0005 P Soc Sec 344-30-3938
Date 08/12/1987
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn COUPLING CUT OFF
Proc
Job OPERATOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.043000 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4237	Q758	07:20	12:38	318	1.7900	74.0000/	100.0	0.0640			NORMAL OPERATION THI S DAY
2.	4237	Q776	12:38	15:18	160	1.7900	1.0000/	100.0	0.0017			

Seq T Name COOLEY, DENNIS D.
0006 P Soc Sec 344-30-3938
Date 08/13/1987
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn COUPLING CUT OFF
Proc
Job OPERATOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.067000 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1899	Q764	07:21	12:32	311	1.7600	44.0000/	100.0	0.0390			NORMAL OPERATION THI S DAY
2.	1899	Q812	12:32	15:08	156	1.7600	68.0000/	100.0	0.1200			

Seq T Name HAMPTON, CHARLES P.
0007 P Soc Sec 419-70-7035
Date 08/11/1987
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn LATHE LINE
Proc LINES 1/3
Job OPERATOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.008400 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4978	Q728	07:32	11:00	208	1.8200	10.0000/	100.0	0.0130			
2.	4978	Q724	11:40	15:08	208	1.8200	3.0000/	100.0	0.0039			

Seq T Name WILSON, CHARLES R.
0008 P Soc Sec 422-56-9672
Date 08/11/1987
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn FINISHING
Proc LINES 1/3
Job INSPECTOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.013000 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	5828	Q735	07:26	15:08	462	1.7800	21.5000/	100.0	0.0130			

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Seq T Name WILSON, CHARLES R. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0009 P Soc Sec 422-56-9672 Locn FINISHING TWA >0.015000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job INSPECTOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1875	Q784	07:11	12:41	330	1.9800	15.5000/	100.0	>0.0120			HEAVY PARTICULATE - MAY BE AN UNDEREST.
2.	1875	Q805	12:41	15:26	165	1.9800	14.0000/	100.0	0.0210			

Seq T Name SANDERS, ANZY O. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0010 P Soc Sec 431-64-0728 Locn FITTINGS TWA 0.018000 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job FORKLIFT OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1876	Q727	07:11	15:00	469	0.5200	9.0000/	100.0	0.0180			

Seq T Name GARCIA, MONTY A. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0011 P Soc Sec 527-50-6060 Locn FITTINGS TWA 0.021000 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job INSPECTOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1870	Q712	07:42	15:10	448	1.7400	33.0000/	100.0	0.0210			

Seq T Name GARCIA, MONTY A. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0012 P Soc Sec 527-50-6060 Locn FITTINGS TWA 0.086000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job INSPECTOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3866	Q799	07:25	10:55	210	1.9500	7.0000/	100.0	0.0084			
2.	3866	Q818	11:57	15:14	197	1.9500	103.5000/	78.0	0.1700			

Seq T Name STUCKEY, JACK W. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0013 P Soc Sec 546-21-5084 Locn GENERAL TWA 0.009700 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MECHANIC Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4973	Q738	08:05	12:45	280	1.7100	7.5000/	100.0	0.0077			EMPLOYEE WORKED MOST LY IN MFG DURING THIS SAMPLE

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2.	Q765	12:45	15:00	135	1.7100	6.5000/	100.0	0.0140		EMPLOYEE WORKED MOST LY ON LRG BORING MILL AND #1 HYDRO

Seq T Name BEY, GEORGE M. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0015 P Soc Sec 546-98-9811 Locn HYDROTESTER TWA 0.002100 F/CC
Date 08/10/1987 Proc LINES 1/3 Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 2ND 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1875	Q683	15:31	20:30	299	1.9400	1.0000/	100.0	0.0009			EMPLOYEE WORKING ON LINE 1
2.	1875	Q769	20:30	20:57	27	1.9400	1.5000/	100.0	0.0140			EMPLOYEE WORKING AS CRUSHER OPERATOR
3.	1875	Q737	20:57	22:31	94	1.9400	1.0000/	100.0	0.0027			EMPLOYEE WORKING ON LINE 3

Seq T Name BIVENS, JANET R. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0016 P Soc Sec 547-72-9345 Locn COUPLING TESTER TWA 0.010000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	5828	Q745	07:35	09:38	123	1.9400	5.0000/	100.0	0.0100			9:10 - EMPLOYEE TRAN SFERED TO SHIPPING DEPARTMENT

Seq T Name MARRON, DOUGLAS J. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0017 P Soc Sec 550-78-8997 Locn PIPE MACHINE TWA >0.007800 F/CC
Date 08/10/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 2ND 8 HOUR Job TENDER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1867	Q718	15:19	22:15	416	1.8200	12.0000/	100.0	>0.0078			HEAVY PARTICULATE - MAY BE AN UNDEREST.

Seq T Name BRADY, SR, JEFFERY L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0018 P Soc Sec 551-02-9474 Locn MANUFACTURING TWA 0.005300 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job RELIEF Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3868	Q747	07:15	12:30	315	1.7300	1.0000/	100.0	0.0009			
2.	3868	Q770	12:30	14:49	139	1.7300	7.5000/	100.0	0.0150			

CTD027422

Seq T Name CONTRERAS, JOE L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0019 P Soc Sec 555-62-0421 Locn COUPLING TESTER TWA 0.000000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	B591	Q746	07:40	09:40	120	1.1100	0.0000/	100.0	0.0000			9:10 - EMPLOYEE TRAN SFERRED TO PALLET REPAIR

Seq T Name CONTRERAS, JOE L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0020 P Soc Sec 555-62-0421 Locn COUPLING TESTER TWA 0.075000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1861	Q781	07:42	12:36	294	1.5700	67.0000/	100.0	0.0710			
2.	1861	Q807	12:36	15:10	154	1.5700	41.0000/	100.0	0.0830			2:15-3:15 LINE DOWN - TRANSFERRED CPLGS TO PALLETS

Seq T Name HAMILTON, CHRISTOPHER Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0021 P Soc Sec 555-74-5800 Locn FITTINGS TWA 0.000860 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MAKER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4978	Q754	07:41	12:40	299	1.8800	0.0000/	100.0	0.0000			TBIC 6" 150 X 3/4 NP T
2.	4978	Q794	12:40	15:17	157	1.8800	1.5000/	100.0	0.0025			TBIC 8" 150 COREDRIL L

Seq T Name DOBBS, PHILLIP R. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0022 P Soc Sec 557-68-1875 Locn BORING MILL TWA 0.001500 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	B591	Q725	07:18	15:05	467	1.4300	2.0000/	100.0	0.0015			

CTD027423

Seq T Name HARDGRAVE (GASH), DEBBIE J. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0023 P Soc Sec 559-92-5466 Locn COUPLING TESTER TWA 0.097000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1870	Q798	07:40	12:36	296	1.5900	63.5000/	100.0	0.0660			
2.	1870	Q806	12:36	15:15	159	1.5900	79.0000/	100.0	0.1500			2:15-3:15 LINE DOWN - CLEANUP

Seq T Name REYES, PETER C. Dept BATCH/FORMING Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0024 P Soc Sec 560-04-6091 Locn MIXER TWA 0.002200 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	B590	Q750	08:10	12:32	262	1.6600	2.0000/	100.0	0.0023			
2.	B590	Q762	12:32	14:48	136	1.6600	1.0000/	100.0	0.0022			

Seq T Name GALVIN, DENNIS W. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0025 P Soc Sec 560-48-6590 Locn FINISHING TWA 0.000680 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job FORKLIFT OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3785	Q734	07:52	15:11	439	1.6500	1.0000/	100.0	0.0007			

Seq T Name SUAREZ, ANDRES L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0026 P Soc Sec 560-68-8273 Locn LATHE - 1/4 TWA 0.021000 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1899	Q726	07:48	11:00	192	1.8000	10.0000/	100.0	0.0140			10" 1/4 LENGTHS NORM AL OPERATION
2.	1899	Q751	11:43	15:10	207	1.8000	20.5000/	100.0	0.0270			3:10 CHANGED OVER TO 6" 1/4 LENGTHS

CTD027424

Seq T Name SUAREZ, ANDRES L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0027 P Soc Sec 560-68-8273 Locn LATHE - 1/4 TWA V0.000000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1876	Q800	07:25	11:00	215	0.0000	0.0000/	0.0	V0.0000			SAMPLE VOID - PUMP M ALFUNCTION
2.	1876	Q772	11:38	15:15	217	0.0000	0.0000/	0.0	V0.0000			SAMPLE VOID - PUMP M ALFUNCTION

Seq T Name AMARO, RICHARD Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0028 P Soc Sec 560-98-0226 Locn LATHE LINE TWA 0.004600 F/CC
Date 08/12/1987 Proc LINE 1 Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1861	Q768	07:22	15:10	468	1.5900	7.0000/	100.0	0.0046			

Seq T Name AMARO, RICHARD Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0029 P Soc Sec 560-98-0226 Locn LATHE LINE TWA 0.010000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4973	Q778	07:34	12:40	306	1.6900	12.0000/	100.0	0.0110			
2.	4973	Q809	12:40	15:21	161	1.6900	4.5000/	100.0	0.0081			

Seq T Name GEORGE, ALAN L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0030 P Soc Sec 561-90-0168 Locn GENERAL TWA 0.003000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MECHANIC Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	8591	Q785	08:11	12:36	265	1.0300	0.0000/	100.0	0.0000			WORKED MOSTLY IN SHO P THIS DAY
2.	8591	Q813	12:46	16:15	209	1.0300	3.0000/	100.0	0.0068			

CTD027425

Seq T Name NEWPRASIT, SUCHART
0031 P Soc Sec 564-88-3988
Date 08/10/1987
Shift 2ND 8 HOUR

Dept PRODUCTION
Locn LATHE LINE
Proc LINES 1/3
Job HANDLER

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.023000 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3588	Q697	15:30	21:05	335	1.8500	20.0000/	100.0	0.0160			EMPLOYEE WORKED ON L INE 1
2.	3588	Q757	21:05	22:30	85	1.8500	16.5000/	100.0	0.0510			EMPLOYEE WORKED ON L INE 3

Seq T Name EATON, ROLAND D.
0032 P Soc Sec 565-78-9858
Date 08/10/1987
Shift 2ND 8 HOUR

Dept BATCH/FORMING
Locn MIXER
Proc
Job OPERATOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA >0.042000 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	B590	Q721	15:17	22:26	429	1.6800	61.5000/	100.0	>0.0420			HEAVY PARTICULATE - MAY BE AN UNDEREST.

Seq T Name EVANS, GEORGE R.
0033 P Soc Sec 566-04-8933
Date 08/11/1987
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn LATHE LINE
Proc LINES 1/3
Job OPERATOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.002700 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1861	Q732	07:03	11:00	237	1.6400	0.0000/	100.0	0.0000			
2.	1861	Q731	11:37	15:08	211	1.6400	4.0000/	100.0	0.0057			

Seq T Name MEIER, STEVEN C.
0034 P Soc Sec 568-06-9935
Date 08/11/1987
Shift 1ST 8 HOUR

Dept PRODUCTION
Locn SAW - REWORK
Proc
Job OPERATOR

Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
TWA 0.026000 F/CC
Pel/Exp Limt OSHA PEL = 0.2 F/CC
Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4976	Q729	07:15	12:30	315	1.6600	11.5000/	100.0	0.0110			EMPLOYEE WORKED ON B OTH SAWS THIS DAY
2.	4976	Q802	12:30	15:03	153	1.6600	29.0000/	100.0	0.0560			

CTD027426

Seq T Name MEIER, STEVEN C. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0035 P Soc Sec 568-06-9935 Locn SAW - REWORK TWA V0.000000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4976	Q791	07:59	10:55	176	0.0000	0.0000/	0.0	V0.0000			SAMPLE VOID - PUMP M ALFUNCTION
2.	4976	Q815	12:00	15:06	186	0.0000	0.0000/	0.0	V0.0000			SAMPLE VOID - PUMP M ALFUNCTION

Seq T Name FOOSE, DENNIS J. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0036 P Soc Sec 568-08-6676 Locn HYDROTESTER TWA V0.000000 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	6595	Q657	07:35	11:00	205	0.0000	0.0000/	0.0	V0.0000			SAMPLE VOID - PUMP M ALFUNCTION
2.	6595	Q723	11:42	14:07	145	0.0000	0.0000/	0.0	V0.0000			SAMPLE VOID - PUMP M ALFUNCTION

Seq T Name FOOSE, DENNIS J. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0037 P Soc Sec 568-08-6676 Locn HYDROTESTER TWA 0.024000 F/CC
Date 08/12/1987 Proc LINE 1 Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4976	Q766	07:32	11:00	208	1.6400	31.5000/	100.0	0.0450			
2.	4976	Q775	11:37	15:12	215	1.6400	2.5000/	100.0	0.0035			

Seq T Name FOOSE, DENNIS J. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0038 P Soc Sec 568-08-6676 Locn HYDROTESTER TWA 0.009600 F/CC
Date 08/12/1987 Proc LINES 1/3 Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3868	Q786	07:15	11:00	225	1.7500	7.0000/	100.0	0.0087			
2.	3868	Q814	12:03	15:23	200	1.7500	7.5000/	100.0	0.0110			

CTD027427

Seq T Name DARNELL, WILLIAM C. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0039 P Soc Sec 568-54-6818 Locn GENERAL TWA >0.002300 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job MECHANIC Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4237	Q782	07:31	12:54	323	1.7800	2.5000/	100.0	>0.0021			HEAVY PARTICULATE - MAY BE AN UNDEREST. EMPLOYEE AT 1/4 LATHE 4 HRS.
2.	4237	Q810	12:54	15:24	150	1.7800	1.5000/	100.0	0.0028			TURNING DOWN ENDS OF MANDRELS

Seq T Name LOYER, DAVID F. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0040 P Soc Sec 570-43-6298 Locn PRESS TWA >0.014000 F/CC
Date 08/10/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 2ND 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4973	Q722	15:12	22:25	433	1.7800	22.5000/	100.0	>0.0140			HEAVY PARTICULATE - MAY BE AN UNDEREST.

Seq T Name PLAZA, MANUEL M. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0041 P Soc Sec 570-58-2582 Locn MANDREL TWA 0.015000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3588	Q759	07:07	12:29	322	1.8700	9.5000/	100.0	0.0077			
2.	3588	Q742	12:29	14:45	136	1.8700	17.0000/	100.0	0.0330			

Seq T Name PLAZA, MANUEL M. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0042 P Soc Sec 570-58-2582 Locn MANDREL TWA >0.016000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	5828	Q793	07:42	12:30	288	2.0000	13.5000/	100.0	>0.0110			HEAVY PARTICULATE - MAY BE AN UNDEREST. 11:47 STARTED MFG LARGE PIPE
2.	5828	Q819	12:30	14:45	135	2.0000	14.5000/	100.0	0.0260			

CTD027428

Seq T Name GIL, LARRY L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0043 P Soc Sec 570-58-4041 Locn LATHE - FM TWA 0.015000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3785	Q788	07:57	12:35	278	1.5900	12.5000/	100.0	0.0140			
2.	3785	Q811	12:35	15:00	145	1.5900	8.5000/	100.0	0.0180			

Seq T Name SALAS, JOHN Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0044 P Soc Sec 570-76-5774 Locn PRESS TWA >0.025000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1870	Q755	07:11	12:30	319	1.6200	13.5000/	100.0	>0.0130			HEAVY PARTICULATE - MAY BE AN UNDEREST.
2.	1870	Q767	12:30	14:46	136	1.6200	23.5000/	100.0	0.0520			

Seq T Name CANTRELL, NORMAN L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0045 P Soc Sec 572-64-3309 Locn MANDREL TWA >0.007100 F/CC
Date 08/10/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 2ND 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	4237	Q719	15:20	20:24	304	1.8100	8.0000/	100.0	>0.0071			HEAVY PARTICULATE - MAY BE AN UNDEREST.

Seq T Name JAMES, JIMMY L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0046 P Soc Sec 572-82-0622 Locn CRUSHER TWA 0.090000 F/CC
Date 08/11/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3868	Q733	07:23	12:31	308	1.7900	79.5000/	100.0	0.0710			
2.	3868	Q801	12:31	14:56	145	1.7900	70.0000/	100.0	0.1300			

CTD027429

Seq T Name JAMES, JIMMY L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0047 P Soc Sec 572-82-0622 Locn CRUSHER TWA 0.068000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3785	Q749	07:29	09:44	135	1.6100	29.0000/	100.0	0.0650			
2.	3785	Q761	09:44	15:14	330	1.6100	75.5000/	100.0	0.0700			

Seq T Name JAMES, JIMMY L. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0048 P Soc Sec 572-82-0622 Locn CRUSHER TWA 0.098000 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3588	Q780	07:09	09:30	141	1.8700	8.0000/	100.0	0.0150			
2.	3588	Q774	09:30	12:50	200	1.8700	69.5000/	100.0	0.0910			
3.	3588	Q808	12:50	15:10	140	1.8700	100.5000/	98.0	0.1900			

Seq T Name AVERY, JR, ALBERT Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0049 P Soc Sec 572-82-0787 Locn LATHE LINE TWA 0.005300 F/CC
Date 08/12/1987 Proc LINE 1 Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1899	Q777	07:21	15:11	470	1.7700	9.0000/	100.0	0.0053			

Seq T Name AVERY, JR, ALBERT Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0050 P Soc Sec 572-82-0787 Locn LATHE LINE TWA 0.005800 F/CC
Date 08/13/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job HANDLER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	B590	Q790	07:35	11:00	205	1.5700	1.0000/	100.0	0.0015			
2.	B590	Q820	12:01	15:21	200	1.5700	6.5000/	100.0	0.0100			

CTD027430

Seq T Name AESCHLIMAN, KENNETH M. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0051 P Soc Sec 573-76-0128 Locn PIPE MACHINE TWA >0.015000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job TENDER Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	1875	Q756	07:10	12:55	345	1.9800	10.5000/	100.0	>0.0075			HEAVY PARTICULATE - MAY BE AN UNDEREST.
2.	1875	Q760	12:55	14:47	112	1.9800	17.5000/	100.0	0.0390			12:55 CLEANING WET S LUDGE FROM DITCH

Seq T Name CASAS, JOHN A. Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0052 P Soc Sec 573-94-2307 Locn MANUFACTURING TWA 0.001200 F/CC
Date 08/10/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 2ND 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	3866	Q720	15:25	17:20	115	2.0000	1.0000/	100.0	0.0021			
2.	3866	Q804	17:20	22:15	295	2.0000	1.0000/	100.0	0.0008			

Seq T Name SALAS, JOHN Dept PRODUCTION Contaminant Asbestos / CEF 25mm .8u NATLSCO/N7400 NATLSCO A Rule
0055 P Soc Sec 570-76-5774 Locn PRESS TWA 0.023000 F/CC
Date 08/12/1987 Proc Pel/Exp Limt OSHA PEL = 0.2 F/CC
Shift 1ST 8 HOUR Job OPERATOR Product

	Equp	Samp	Start	Stop	Min	LPM	Analysis-F/FLD		Conc-F/CC	ST Exp Limit	Respirator	Comments
1.	6595	Q796	07:17	12:30	313	1.5600	14.5000/	100.0	0.0150			HEAVY PARTICULATE - MAY BE AN UNDEREST.
2.	6595	Q817	12:30	14:45	135	1.5600	18.0000/	100.0	0.0420			

* * * End Of Report * * * DREXLESL

CTD027431

NAME	MIN	CONC	TWA	LOCATION	DATE	AGENT	FM	MD	SAMPLE	START	STOP	LPM	ANALYSIS	
REYES, PETER C.	262	0.002	0.002	MIXER	08/12/87	ASB	D	FA	Q750	08:10	12:32	1.660000	2.000000	100.00000
REYES, PETER C.	136	0.002	0.002	MIXER	08/12/87	ASB	D	FA	Q762	12:32	14:48	1.660000	1.000000	100.00000
EATON, ROLAND D.	429	0.042	0.042	MIXER	08/10/87	ASB	D	FA	Q721	15:17	22:26	1.680000	61.500000	100.00000
DOBBS, PHILLIP R.	467	0.001	0.001	BORGMILL	08/11/87	ASB	D	FA	Q725	07:18	15:05	1.430000	2.000000	100.00000
COOLEY, DENNIS D.	97	0.177	0.102	CPLGCOFF	08/11/87	ASB	D	FA	Q730	07:10	08:47	1.770000	62.000000	100.00000
COOLEY, DENNIS D.	72	0.071	0.102	CPLGCOFF	08/11/87	ASB	D	FA	Q736	08:53	10:05	1.770000	18.500000	100.00000
COOLEY, DENNIS D.	232	0.054	0.102	CPLGCOFF	08/11/87	ASB	D	FA	Q739	10:05	13:57	1.770000	45.000000	100.00000
COOLEY, DENNIS D.	15	0.185	0.102	CPLGCOFF	08/11/87	ASB	D	FA	Q752	13:57	14:12	1.770000	10.000000	100.00000
COOLEY, DENNIS D.	45	0.209	0.102	CPLGCOFF	08/11/87	ASB	D	FA	Q744	14:12	14:57	1.770000	34.000000	100.00000
COOLEY, DENNIS D.	318	0.064	0.043	CPLGCOFF	08/12/87	ASB	D	FA	Q758	07:20	12:38	1.790000	74.000000	100.00000
COOLEY, DENNIS D.	160	0.002	0.043	CPLGCOFF	08/12/87	ASB	D	FA	Q776	12:38	15:18	1.790000	1.000000	100.00000
COOLEY, DENNIS D.	311	0.039	0.067	CPLGCOFF	08/13/87	ASB	D	FA	Q764	07:21	12:32	1.760000	44.000000	100.00000
COOLEY, DENNIS D.	156	0.121	0.067	CPLGCOFF	08/13/87	ASB	D	FA	Q812	12:32	15:08	1.760000	68.000000	100.00000
BIVENS, JANET R.	123	0.010	0.010	CPTESTER	08/12/87	ASB	D	FA	Q745	07:35	09:38	1.940000	5.000000	100.00000
CONTRERAS, JOE L.	120	0.000	0.000	CPTESTER	08/12/87	ASB	D	FA	Q746	07:40	09:40	1.110000	0.000000	100.00000
CONTRERAS, JOE L.	294	0.071	0.075	CPTESTER	08/13/87	ASB	D	FA	Q781	07:42	12:36	1.570000	67.000000	100.00000
CONTRERAS, JOE L.	154	0.083	0.075	CPTESTER	08/13/87	ASB	D	FA	Q807	12:36	15:10	1.570000	41.000000	100.00000
GASH (HARDGRAVE), DEBBIE J.	296	0.066	0.097	CPTESTER	08/13/87	ASB	D	FA	Q798	07:40	12:36	1.590000	63.500000	100.00000
GASH (HARDGRAVE), DEBBIE J.	159	0.153	0.097	CPTESTER	08/13/87	ASB	D	FA	Q806	12:36	15:15	1.590000	79.000000	100.00000
JAMES, JIMMY L.	308	0.071	0.090	CRUSHER	08/11/87	ASB	D	FA	Q733	07:23	12:31	1.790000	79.500000	100.00000
JAMES, JIMMY L.	145	0.132	0.090	CRUSHER	08/11/87	ASB	D	FA	Q801	12:31	14:56	1.790000	70.000000	100.00000
JAMES, JIMMY L.	135	0.065	0.068	CRUSHER	08/12/87	ASB	D	FA	Q749	07:29	09:44	1.610000	29.000000	100.00000
JAMES, JIMMY L.	330	0.070	0.068	CRUSHER	08/12/87	ASB	D	FA	Q761	09:44	15:14	1.610000	75.500000	100.00000
JAMES, JIMMY L.	141	0.015	0.098	CRUSHER	08/13/87	ASB	D	FA	Q780	07:09	09:30	1.870000	8.000000	100.00000
JAMES, JIMMY L.	200	0.091	0.098	CRUSHER	08/13/87	ASB	D	FA	Q774	09:30	12:50	1.870000	69.500000	100.00000
JAMES, JIMMY L.	140	0.192	0.098	CRUSHER	08/13/87	ASB	D	FA	Q808	12:50	15:10	1.870000	100.500000	98.00000
WILSON, CHARLES R.	330	0.012	0.015	FINISHNG	08/13/87	ASB	D	FA	Q784	07:11	12:41	1.980000	15.500000	100.00000
WILSON, CHARLES R.	165	0.021	0.015	FINISHNG	08/13/87	ASB	D	FA	Q805	12:41	15:26	1.980000	14.000000	100.00000
GALVIN, DENNIS W.	439	0.001	0.001	FINISHNG	08/11/87	ASB	D	FA	Q734	07:52	15:11	1.650000	1.000000	100.00000
WILSON, CHARLES R.	462	0.013	0.013	FINISHNG	08/11/87	ASB	D	FA	Q735	07:26	15:08	1.780000	21.500000	100.00000
SANDERS, ANZY O.	469	0.018	0.018	FITTINGS	08/11/87	ASB	D	FA	Q727	07:11	15:00	0.520000	9.000000	100.00000
GARCIA, MONTY A.	448	0.021	0.021	FITTINGS	08/11/87	ASB	D	FA	Q712	07:42	15:10	1.740000	33.000000	100.00000
GARCIA, MONTY A.	210	0.008	0.086	FITTINGS	08/13/87	ASB	D	FA	Q799	07:25	10:55	1.950000	7.000000	100.00000
GARCIA, MONTY A.	197	0.169	0.086	FITTINGS	08/13/87	ASB	D	FA	Q818	11:57	15:14	1.950000	103.500000	78.00000
HAMILTON, CHRISTOPHER	299	0.000	0.001	FITTINGS	08/12/87	ASB	D	FA	Q754	07:41	12:40	1.880000	0.000000	100.00000
HAMILTON, CHRISTOPHER	157	0.002	0.001	FITTINGS	08/12/87	ASB	D	FA	Q794	12:40	15:17	1.880000	1.500000	100.00000
STEEN, THEODORE C.	286	0.012	0.009	GENERAL	08/12/87	ASB	D	FA	Q771	07:56	12:42	1.860000	13.500000	100.00000
STEEN, THEODORE C.	148	0.003	0.009	GENERAL	08/12/87	ASB	D	FA	Q779	12:42	15:10	1.860000	1.500000	100.00000
WHITTAKER, WOODROW	291	0.010	0.011	GENERAL	08/12/87	ASB	D	FA	Q763	07:49	12:40	2.020000	12.500000	100.00000
WHITTAKER, WOODROW	155	0.013	0.011	GENERAL	08/12/87	ASB	D	FA	Q792	12:40	15:15	2.020000	8.500000	100.00000
WHITTAKER, WOODROW	291	0.008	0.010	GENERAL	08/13/87	ASB	D	FA	Q789	07:48	12:39	1.650000	7.500000	100.00000
WHITTAKER, WOODROW	157	0.013	0.010	GENERAL	08/13/87	ASB	D	FA	Q816	12:39	15:16	1.650000	7.000000	100.00000
STUCKEY, JACK W.	280	0.008	0.008	GENERAL	08/12/87	ASB	D	FA	Q738	08:05	12:45	1.710000	7.500000	100.00000
GEORGE, ALAN L.	265	0.000	0.003	GENERAL	08/13/87	ASB	D	FA	Q785	08:11	12:36	1.030000	0.000000	100.00000
GEORGE, ALAN L.	209	0.007	0.003	GENERAL	08/13/87	ASB	D	FA	Q813	12:46	16:15	1.030000	3.000000	100.00000
DARNELL, WILLIAM C.	323	0.002	0.002	GENERAL	08/13/87	ASB	D	FA	Q782	07:31	12:54	1.780000	2.500000	100.00000
DARNELL, WILLIAM C.	150	0.003	0.002	GENERAL	08/13/87	ASB	D	FA	Q810	12:54	15:24	1.780000	1.500000	100.00000
FOOSE, DENNIS J.	205	0.000	0.000	HYDROTES	08/11/87	ASB	D	FA	Q657	07:35	11:00	0.000000	0.000000	0.00000
FOOSE, DENNIS J.	145	0.000	0.000	HYDROTES	08/11/87	ASB	D	FA	Q723	11:42	14:07	0.000000	0.000000	0.00000
FOOSE, DENNIS J.	208	0.045	0.024	HYDROTES	08/12/87	ASB	D	FA	Q766	07:32	11:00	1.640000	31.500000	100.00000
FOOSE, DENNIS J.	215	0.003	0.024	HYDROTES	08/12/87	ASB	D	FA	Q775	11:37	15:12	1.640000	2.500000	100.00000
BEY, GEORGE M.	299	0.001	0.002	HYDROTES	08/10/87	ASB	D	FA	Q683	15:31	20:30	1.940000	1.000000	100.00000
BEY, GEORGE M.	27	0.014	0.002	HYDROTES	08/10/87	ASB	D	FA	Q769	20:30	20:57	1.940000	1.500000	100.00000
BEY, GEORGE M.	94	0.003	0.002	HYDROTES	08/10/87	ASB	D	FA	Q737	20:57	22:31	1.940000	1.000000	100.00000
FOOSE, DENNIS J.	225	0.009	0.010	HYDROTES	08/12/87	ASB	D	FA	Q786	07:15	11:00	1.750000	7.000000	100.00000
FOOSE, DENNIS J.	200	0.011	0.010	HYDROTES	08/12/87	ASB	D	FA	Q814	12:03	15:23	1.750000	7.500000	100.00000

NAME	MIN	CONC	TWA	LOCATION	DATE	AGENT	FM	MD	SAMPLE	START	STOP	LPM	ANALYSIS	
SUAREZ, ANDRES L.	192	0.014	0.021	LATHE1/4	08/11/87	ASB	D	FA	Q726	07:48	11:00	1.800000	10.000000	100.00000
SUAREZ, ANDRES L.	207	0.027	0.021	LATHE1/4	08/11/87	ASB	D	FA	Q751	11:43	15:10	1.800000	20.500000	100.00000
SUAREZ, ANDRES L.	215	0.000	0.000	LATHE1/4	08/12/87	ASB	D	FA	Q800	07:25	11:00	0.000000	0.000000	0.00000
SUAREZ, ANDRES L.	217	0.000	0.000	LATHE1/4	08/12/87	ASB	D	FA	Q772	11:38	15:15	0.000000	0.000000	0.00000
GIL, LARRY L.	278	0.014	0.015	LATHEFM	08/13/87	ASB	D	FA	Q788	07:57	12:35	1.590000	12.500000	100.00000
GIL, LARRY L.	145	0.018	0.015	LATHEFM	08/13/87	ASB	D	FA	Q811	12:35	15:00	1.590000	8.500000	100.00000
AMARO, RICHARD	306	0.011	0.010	LATHLINE	08/13/87	ASB	D	FA	Q778	07:34	12:40	1.690000	12.000000	100.00000
AMARO, RICHARD	161	0.008	0.010	LATHLINE	08/13/87	ASB	D	FA	Q809	12:40	15:21	1.690000	4.500000	100.00000
AVERY, JR, ALBERT	205	0.002	0.006	LATHLINE	08/13/87	ASB	D	FA	Q790	07:35	11:00	1.570000	1.000000	100.00000
AVERY, JR, ALBERT	200	0.010	0.006	LATHLINE	08/13/87	ASB	D	FA	Q820	12:01	15:21	1.570000	6.500000	100.00000
AMARO, RICHARD	468	0.005	0.005	LATHLINE	08/12/87	ASB	D	FA	Q768	07:22	15:10	1.590000	7.000000	100.00000
AVERY, JR, ALBERT	470	0.005	0.005	LATHLINE	08/12/87	ASB	D	FA	Q777	07:21	15:11	1.770000	9.000000	100.00000
HAMPTON, CHARLES P.	208	0.013	0.008	LATHLINE	08/11/87	ASB	D	FA	Q728	07:32	11:00	1.820000	10.000000	100.00000
HAMPTON, CHARLES P.	208	0.004	0.008	LATHLINE	08/11/87	ASB	D	FA	Q724	11:40	15:08	1.820000	3.000000	100.00000
NEWPRASIT, SUCHART	335	0.016	0.023	LATHLINE	08/10/87	ASB	D	FA	Q697	15:30	21:05	1.850000	20.000000	100.00000
NEWPRASIT, SUCHART	85	0.051	0.023	LATHLINE	08/10/87	ASB	D	FA	Q757	21:05	22:30	1.850000	16.500000	100.00000
EVANS, GEORGE R.	237	0.000	0.003	LATHLINE	08/11/87	ASB	D	FA	Q732	07:03	11:00	1.640000	0.000000	100.00000
EVANS, GEORGE R.	211	0.006	0.003	LATHLINE	08/11/87	ASB	D	FA	Q731	11:37	15:08	1.640000	4.000000	100.00000
PLAZA, MANUEL M.	322	0.008	0.015	MAMDREL	08/12/87	ASB	D	FA	Q759	07:07	12:29	1.870000	9.500000	100.00000
PLAZA, MANUEL M.	136	0.033	0.015	MAMDREL	08/12/87	ASB	D	FA	Q742	12:29	14:45	1.870000	17.000000	100.00000
PLAZA, MANUEL M.	288	0.011	0.016	MAMDREL	08/13/87	ASB	D	FA	Q793	07:42	12:30	2.000000	13.500000	100.00000
PLAZA, MANUEL M.	135	0.026	0.016	MAMDREL	08/13/87	ASB	D	FA	Q819	12:30	14:45	2.000000	14.500000	100.00000
CANTRELL, NORMAN L.	304	0.007	0.007	MAMDREL	08/10/87	ASB	D	FA	Q719	15:20	20:24	1.810000	8.000000	100.00000
BRADY, JEFFERY L.	315	0.001	0.005	MANUFACT	08/12/87	ASB	D	FA	Q747	07:15	12:30	1.730000	1.000000	100.00000
BRADY, JEFFERY L.	139	0.015	0.005	MANUFACT	08/12/87	ASB	D	FA	Q770	12:30	14:49	1.730000	7.500000	100.00000
CASAS, JOHN A.	115	0.002	0.001	MANUFACT	08/10/87	ASB	D	FA	Q720	15:25	17:20	2.000000	1.000000	100.00000
CASAS, JOHN A.	295	0.001	0.001	MANUFACT	08/10/87	ASB	D	FA	Q804	17:20	22:15	2.000000	1.000000	100.00000
MARRON, DOUGLAS J.	416	0.008	0.008	PIPEMACH	08/10/87	ASB	D	FA	Q718	15:19	22:15	1.820000	12.000000	100.00000
AESCHLIMAN, KENNETH M.	345	0.008	0.015	PIPEMACH	08/12/87	ASB	D	FA	Q756	07:10	12:55	1.980000	10.500000	100.00000
AESCHLIMAN, KENNETH M.	112	0.039	0.015	PIPEMACH	08/12/87	ASB	D	FA	Q760	12:55	14:47	1.980000	17.500000	100.00000
LOYER, DAVID F.	433	0.014	0.014	PRESS	08/10/87	ASB	D	FA	Q722	15:12	22:25	1.780000	22.500000	100.00000
SALAS, JOHN	319	0.013	0.024	PRESS	08/12/87	ASB	D	FA	Q755	07:11	12:30	1.620000	13.500000	100.00000
SALAS, JOHN	136	0.052	0.024	PRESS	08/12/87	ASB	D	FA	Q767	12:30	14:46	1.620000	23.500000	100.00000
SALAS, JOHN	313	0.015	0.024	PRESS	08/12/87	ASB	D	FA	Q796	07:17	12:30	1.560000	14.500000	100.00000
SALAS, JOHN	135	0.042	0.024	PRESS	08/12/87	ASB	D	FA	Q817	12:30	14:45	1.560000	18.000000	100.00000
MEIER, STEVEN C.	315	0.011	0.026	SAWREWRK	08/11/87	ASB	D	FA	Q729	07:15	12:30	1.660000	11.500000	100.00000
MEIER, STEVEN C.	153	0.056	0.026	SAWREWRK	08/11/87	ASB	D	FA	Q802	12:30	15:03	1.660000	29.000000	100.00000
MEIER, STEVEN C.	176	0.000	0.000	SAWREWRK	08/13/87	ASB	D	FA	Q791	07:59	10:55	0.000000	0.000000	0.00000
MEIER, STEVEN C.	186	0.000	0.000	SAWREWRK	08/13/87	ASB	D	FA	Q815	12:00	15:06	0.000000	0.000000	0.00000
STUCKEY, JACK W.	135	0.014	0.014	GENERAL	08/12/87	ASB	D	FA	Q765	12:45	15:00	1.710000	6.500000	100.00000

*** END OF REPORT *** 02/01/91 08:53:25