



ENVIRONMENTAL

September 9, 1998

David K. Kuhre
Division Manager
Oliver Rubber Company 1200 65th Street
Oakland, California 94608

RE: Asbestos Abatement Clearance Air Monitoring

IHI was contracted to perform clearance air monitoring for five phases of removal of asbestos-containing materials from the Oliver Rubber facility. Clearance air monitoring was conducted between August 14, 1998 and August 28, 1998 in the following contained areas: Phase I (first and second floor office areas); Phase II (Back warehouse/shipping); Phase III (second floor shower area); Phase IV (lobby and remaining first floor offices); Phase V (first floor offices - removal of previously undiscovered and concealed vinyl asbestos floor tile). IHI was not contracted to perform project oversight during the removal project.

The abatement contractor for the project was CST Environmental, Inc., of San Leandro, California. On-site asbestos air monitoring was conducted by IHI employees Peter Radzinski, SST, Environmental Field Technician (Site Surveillance Technician #93-0885) and Ann Nguyen, SST, Environmental Field Technician (SST #98-2332). Project management was provided by Peggy F. Kivel, CIH, REA, CAC, Regional Manager (Certified Asbestos Consultant #92-0587).

Bulk samples were collected in the first floor office area as directed by Mr. Kuhre after previously concealed vinyl asbestos floor tile and mastic were found underneath plywood. This material was also removed by CST.

Methods of Clearance Air Sampling and Analysis

PCM clearance air monitoring was conducted by IHI between August 14 and August 28, 1998. PCM clearance samples were collected on Millipore 25 mm diameter, 0.8 μ m pore sized, mixed cellulose membrane filters housed in open-faced, conductive cassettes.

Artificial agitation of the air inside the work area took place prior to and during clearance air monitoring in order to suspend any fibers present and to simulate typical future activity in the area. Before air sampling, all floors,

ceilings, walls, and other non-removable objects inside of the contained work area were swept with the exhaust of a one-horsepower, electrically operated leaf-blower. During clearance air sampling, stationary fans were directed at the ceiling, operated at low speed (to avoid high rates of air flow in the vicinity of the sampling equipment), and left on for the duration of sampling.

Clearance air samples were collected using Gast Manufacturing Corp. model 1531-107B-G-288X high volume air pumps (or equivalent). The flow rate of each pump was checked both before and after sampling using a Brooks Instrument Division model 1355EGA7B2A1A precision rotameter (or equivalent). The rotameter was previously calibrated against a primary standard. An average flow rate of less than 10 liters per minute was collected for at least 120 minutes, resulting in a total volume of more than 1,200 liters sampled.

These air sampling parameters comply with the requirements of the NIOSH 7400 Method as well as the general recommendations of the EPA publication *Measuring Airborne Asbestos Following an Abatement Action* (EPA 600/4-85-049). Appendix A contains the lab sample data sheets and chain-of-custody forms used for recording the raw PCM data in the field.

PCM analysis took place at Micro Analytical Laboratories, Inc. (MAL), of Emeryville, California, using an Olympus Optical Co. model CH-2 Phase Contrast Microscope with Walton-Beckett graticule. PCM sampling and analysis was performed in accordance with the NIOSH 7400 Method, Revision 3, Issue 2, dated August 15, 1994, while using the A counting rules.

Clearance Air Sampling Results

Clearance air sampling results are summarized below in Table 1. The original PCM laboratory analytical reports are included in Appendix A of this report.

**Table 1:
Clearance Air Sampling Results**

Sampling Date	Sample Number	Sample Location	Volume (liters)	PCM Results (f/cc)	Phase #: Pass/Fail
8/14/98	2120-8/14-01CL	Floor 1, south end of work areas near stairwell	1479	<0.002	Phase I: Passed
8/14/98	2120-8/14-02CL	Floor 1, in front of electrical panel	1470	<0.002	
8/14/98	2120-8/14-03CL	Floor 1, center of office area (E area)	1418	<0.002	
8/14/98	2120-8/14-04CL	Floor 1, near stairwell (above lobby)	1390	<0.002	
8/14/98	2120-8/14-05CL	Floor 1, w area office	1408	<0.002	
8/14/98	2120-8/14-06BL	Blank	NA	0 fibers	
8/19/98	2120-8/19-01C	Warehouse area: Southwest quadrant	1490	0.112	Phase II: Failed
8/19/98	2120-8/19-02C	Warehouse area: Southwest quadrant	1490	0.090	
8/19/98	2120-8/19-03C	Warehouse area: Southeast quadrant	1480	0.084	
8/19/98	2120-8/19-04C	Warehouse area: east side	1490	0.084	
8/19/98	2120-8/19-05C	Warehouse area: north side	1490	0.096	
8/19/98	2120-8/19-06BL	Blank	NA	0 fibers	
8/19/98	2120-8/19-07BL	Blank	NA	0 fibers	
8/20/98	2120-820-01C	Warehouse area: Southwest quadrant	1340	0.005	Phase II: Passed
8/20/98	2120-820-02C	Warehouse area: Southwest quadrant	1340	0.006	
8/20/98	2120-820-03C	Warehouse area: Southeast corner	1350	0.006	
8/20/98	2120-820-04C	Warehouse area: east side	1340	0.007	
8/20/98	2120-820-05C	Warehouse area: north side	1340	0.008	
8/20/98	2120-820-06BL	Blank	NA	0 fibers	
8/20/98	2120-820-07BL	Blank	NA	0 fibers	
8/20/98	2120-820-08C	Second floor, east side, north end	1280	0.007	Phase III: Passed
8/20/98	2120-820-09C	Second floor, east side, center	1280	0.006	
8/20/98	2120-820-10C	Second floor, east side, south end	1280	0.003	
8/21/98	2120-821-01C	Front hallway: northwest room	1238	0.076	Phase IV: Failed
8/21/98	2120-821-02C	Front hallway: southeast room	1238	0.083	

8/21/98	2120-821-03BL	Blank	NA	0 fibers	
8/21/98	2120-821-04BL	Blank	NA	0 fibers	
8/24/98	2120-824-01C	Front hallway: northwest room	1400	0.152	Phase IV; Failed
8/24/98	2120-824-02C	Front hallway: southeast room	1400	0.158	
8/24/98	2120-824-03BL	Blank	NA	0 fibers	
8/24/98	2120-824-04BL	Blank	NA	0 fibers	
8/24/98	2120-824-01C	Front hallway: northwest room	1400	0.005 f/cc	Phase IV; Passed after reanalysis by TEM
8/24/98	2120-824-02C	Front hallway: southeast room	1400	<0.005 f/cc	
8/28/98	2120-828-01C	D. Kuhre's office	1200	<0.002	Phase V: Passed
8/28/98	2120-828-01C	Foyer between D. Kuhre's office and Mary's office	1200	<0.002	
8/28/98	2120-828-01C	Mary's office	1200	0.004	
8/28/98	2120-828-04BL	Blank	NA	0 fibers	
8/28/98	2120-828-05BL	Blank	NA	0 fibers	

Discussion of Clearance Air Sampling Results

If PCM is used, the air testing criteria for determining work-site cleanliness after asbestos abatement is based on the limit of reliable quantification of the PCM analytical method. According to the EPA publication *Measuring Airborne Asbestos Following an Abatement Action* (EPA 600/4-85-049), the contractor is released if none of the samples are above the PCM limit of reliable quantification (0.01 f/cc), otherwise the entire work-site should be re-cleaned and retested.

PCM clearance air samples were collected from the inside of each interior containment. Some PCM samples resulted in airborne fiber concentrations of greater than the PCM clearance criteria of 0.01 fibers per cubic centimeter. In these cases, the contractor re-cleaned the area and another round of sampling was performed. All containments were cleared with PCM samples resulting in airborne fiber concentrations of less than the PCM clearance criteria of 0.01 f/cc. One area was cleared after re-analysis of the samples by transmission electron microscopy (TEM) indicated that asbestos fibers were below the clearance criteria of 0.1 f/cc.

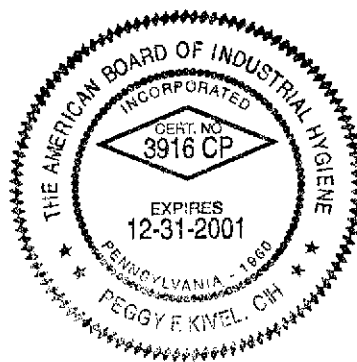
The work areas were successfully cleared by visual inspection and clearance air monitoring by PCM analysis. The work areas were returned to Oliver Rubber in a satisfactory condition after final clearances were achieved.

David, it was a pleasure working with you again. If you have any questions concerning this letter, please feel free to call me at (510) 923-1661.

Sincerely,

Peggy F. Kivel

Peggy F. Kivel, CIH, REA, CAC
Regional Manager



APPENDIX A

PCM Laboratory Analytical Reports

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
1200 - 65TH AVENUE
EMERYVILLE, CA
PHASE I CLEARANCE
PROJECT NO. 98B-2120-CM

Date Sampled 8/14/98
Date Received 8/15/98
Total Samples 6
Micro Log In 59223

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-8/14-01CL Micro: 59223-01 8/14/98 FLOOR 1, S. END OF WORK AREA NEAR STAIRWELL	Time 147 Rate 10.06 Liters 1479	Fibers 2 Fields 100 F/mm ² < 7.0	< 0.002	LCL 0.000 UCL 0.004 LOD 0.002 LOQ 0.026 CV 0.53
Client: 2120-8/14-02CL Micro: 59223-02 FB 8/14/98 FLOOR 1, IN FRONT OF ELECTRICAL PANEL	Time 147 Rate 10.00 Liters 1470	Fibers 1.5 Fields 100 F/mm ² < 7.0	< 0.002	LCL 0.000 UCL 0.004 LOD 0.002 LOQ 0.026 CV 0.53
Client: 2120-8/14-03CL Micro: 59223-03 8/14/98 FLOOR 1, CENTER OF OFFICE AREA (E AREA)	Time 141 Rate 10.06 Liters 1418	Fibers 0 Fields 100 F/mm ² < 7.0	< 0.002	LCL 0.000 UCL 0.004 LOD 0.002 LOQ 0.027 CV 0.53
Client: 2120-8/14-04CL Micro: 59223-04 8/14/98 FLOOR 1, NEAR STAIRWELL (ABOVE LOBBY)	Time 139 Rate 10.00 Liters 1390	Fibers 0 Fields 100 F/mm ² < 7.0	< 0.002	LCL 0.000 UCL 0.004 LOD 0.002 LOQ 0.028 CV 0.53
Client: 2120-8/14-05CL Micro: 59223-05 8/14/98 FLOOR 1, W AREA OFFICE	Time 140 Rate 10.06 Liters 1408	Fibers 2 Fields 100 F/mm ² < 7.0	< 0.002	LCL 0.000 UCL 0.004 LOD 0.002 LOQ 0.027 CV 0.53

Technical Supervisor: Frank Raviola, M.S. 8/15/98 Analyst: RB

Laboratory AIHA Accreditation / PAT ID No. 11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
1200 - 65TH AVENUE
EMERYVILLE, CA
PHASE I CLEARANCE
PROJECT NO. 98B-2120-CM

Date Sampled 8/14/98
Date Received 8/15/98
Total Samples 6
Micro Log In 59223


Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-8/14-06BL				LCL UCL
Micro: 59223-06	8/14/98	Time	Fibers 0	
FIELD BLANK		Rate	Fields 100	LOD LOQ
		Liters	F/mm ² 0.0	CV 0.53

Technical Supervisor: _____

8/15/98

Analyst: _____

RB


Frank Raviola, M.S.

Laboratory AIHA Accreditation / PAT ID No. 11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

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MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608
(510) 653-0824 - (510) 653-1361 - FAX

59223

1098

John Heim
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608-2907
(510) 923-1661 fax: (510) 923-1468

Job Site

OLIVER RUBBER COMPANY
1200 65th AVENUE
EMERYVILLE, CA
PHASE I CLEARANCE

P.O. Number 988-212001

Type PCM
TEM PLM RCM AA(Pb)

Number of Samples 6

Turn Around Time 8/15 Sat 7 p.m.
(24 hours)

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
<u>59223-01</u>	<u>2120-814-01 CL</u>	<u>Floor 1, S end of work area, near stairwell</u>	<u>8/14</u>	<u>15:15</u>	<u>17:43</u>	<u>10.06</u>	<u>1477.8</u>	<u>8µm</u>
				<u>197</u>				
<u>59223-02</u>	<u>2120-814-02 CL</u>	<u>Floor 1, in front of electrical panel</u>	<u>8/14</u>	<u>15:17</u>	<u>17:44</u>	<u>10.00</u>	<u>1470</u>	<u>"</u>
				<u>197</u>				
<u>59223-03</u>	<u>2120-814-03 CL</u>	<u>Floor 1, center of office area (E area)</u>	<u>8/14</u>	<u>15:26</u>	<u>17:47</u>	<u>10.06</u>	<u>1418.5</u>	<u>"</u>
				<u>439</u>	<u>191</u>		<u>1398.3</u>	
<u>59223-04</u>	<u>2120-814-04 CL</u>	<u>Floor 1, near stairwell (above lobby)</u>	<u>8/14</u>	<u>15:29</u>	<u>17:48</u>	<u>10.00</u>	<u>1390</u>	<u>"</u>
				<u>139</u>				
<u>59223-05</u>	<u>2120-814-05 CL</u>	<u>Floor 1, W area office</u>	<u>8/14</u>	<u>15:31</u>	<u>17:51</u>	<u>10.06</u>	<u>1408.4</u>	<u>"</u>
				<u>140</u>				
<u>59223-06</u>	<u>2120-814-06 CL</u>	<u>Field Blank</u>	<u>8/14</u>	<u>/</u>	<u>/</u>	<u>-</u>	<u>-</u>	<u>-</u>
				<u>:</u>	<u>:</u>			
				<u>:</u>	<u>:</u>			
				<u>:</u>	<u>:</u>			
				<u>:</u>	<u>:</u>			

Return Samples to Client: Yes No

Notes: Please page John Heim with 86 (6) 925-256-6546
the results (510) 702-2169 T = -75°F; Alt = 0

John Heim 8/14/98 1830
Relinquished by _____ Date / Time _____
Fidel Martinez 8-14-98 6:15pm
Received By _____ Date / Time _____



ENVIRONMENTAL

DAILY FIELD REPORT - ABATEMENT SERVICES

Project: OLIVER RUBBER ABATEMENT (ASBESTOS) Project No.: 98B-2120
 Client: OLIVER RUBBER COMPANY Date: 8/14/98 FRIDAY
 Contractor: CST ENVIRONMENTAL Shift: -
 IHI Personnel: JOHN HEIN
 Superintendent: GREGORY RAMIREZ Foreman: JUAN No. of Workers: ~8
 Visitors on Site: -

PHASE I
MAIN (SOUTH)

Today's Work: VISUAL CLEARANCE INSPECTION (10:00 - 12:45) and CLEARANCE AIR MONITORING (1500 - 1700)

(PETER RADZINSKI VISITED SITE ON THURSDAY 8/13 BUT CST WAS NOT READY)

(FLOOR TILES)
SOINT COMPOUND

VISUAL INSPECTION: FOUND MISC. AREAS OF GYPSUM BOARD JOINT COMPOUND. (FT CREW REMOVED PROMPTLY. OUR SECTION (~100 SF) HAD NOT BEEN REMOVED BY 1215, VISUAL CLEARANCE GIVEN, WITH FOLLOWING CONCERNS/QUESTIONS RAISED TO CST AND TO DAVID KUBRE (OLIVER RUBBER):

- ① Paper/felt backing and mastic (all black) under FT is non-asbestos, per Kubre
- ② Plaster is non-asbestos per Kubre.

- Significant Events:
- ③ Ward panels with paint or skin coat is non-asbestos, per Kubre.
 - ④ Gypsum wall nests under/behind counters/cabinets, showers, metal panels, utility and alarm panels may remain, per Kubre. (no joint compound expected behind these, will be evaluated later)
 - ⑤ Dust tape is non-asbestos, per Kubre (will be checked by Kubre)
 - ⑥ Mastic under H. 1 floor tile area (lattice) is non-asbestos, per Kubre.

Area encapsulated beginning ~ 12:00 - 12:30. SRH returned to site @ 1500, set up aggressive clearance air samples. PRA SRH returned to site ~ 1730, met with

Air Monitoring: Juan, and collected the samples. All 5 samples @ 1 field blank were ~~not~~ submitted to Micro Analytical for PCM analysis.

SATURDAY 8/14/98: Micro notified SRH that all 5 samples were <0.002 f/cc. Juan notified; David Kubre could not be contacted; will be notified Monday

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
2500 65TH STREET
EMERYVILLE, CALIFORNIA
PROJECT NO. 98B-2120

Date Sampled 8/19/98
Date Received 8/19/98
Total Samples 7
Micro Log In 59405

Sample ID	Field Data	Lab Data	Fibers / cc	Limits	
Client: 2120-819-01C Micro: 59405-01 8/19/98 INSIDE CONTAINMENT, SOUTHWEST QUADRANT CLEARANCE AIR SAMPLE	Time Rate Liters 1490	Fibers 116 Fields 34 F/mm ² 434.6	0.112	LCL 0.073 LOD 0.002 CV	UCL 0.152 LOQ 0.026 0.18
Client: 2120-819-02C Micro: 59405-02 8/19/98 INSIDE CONTAINMENT, SOUTHWEST QUADRANT CLEARANCE AIR SAMPLE	Time Rate Liters 1490	Fibers 101.5 Fields 37 F/mm ² 349.5	0.090	LCL 0.058 LOD 0.002 CV	UCL 0.122 LOQ 0.026 0.18
Client: 2120-819-03C Micro: 59405-03 8/19/98 INSIDE CONTAINMENT, SOUTHEAST QUADRANT CLEARANCE AIR SAMPLE	Time Rate Liters 1480	Fibers 101 Fields 40 F/mm ² 321.7	0.084	LCL 0.054 LOD 0.002 CV	UCL 0.113 LOQ 0.026 0.18
Client: 2120-819-04C Micro: 59405-04 YG 8/19/98 INSIDE CONTAINMENT, EAST SIDE CLEARANCE AIR SAMPLE	Time Rate Liters 1490	Fibers 102 Fields 40 F/mm ² 324.8	0.084	LCL 0.054 LOD 0.002 CV	UCL 0.114 LOQ 0.026 0.18
Client: 2120-819-05C Micro: 59405-05 8/19/98 INSIDE CONTAINMENT, NORTH SIDE CLEARANCE AIR SAMPLE	Time Rate Liters 1490	Fibers 102 Fields 35 F/mm ² 371.2	0.096	LCL 0.062 LOD 0.002 CV	UCL 0.130 LOQ 0.026 0.18

Technical Supervisor: Mark Olivares

8/19/98

Analyst: _____

YG

For Frank Raviola, M.S.

Laboratory AIHA Accreditation / PAT ID No. 11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

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MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
2500 65TH STREET
EMERYVILLE, CALIFORNIA
PROJECT NO. 98B-2120

Date Sampled 8/19/98
Date Received 8/19/98
Total Samples 7
Micro Log In 59405

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-819-06BL Micro: 59405-06 BLANK	8/19/98 Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53
Client: 2120-819-07BL Micro: 59405-07 BLANK	8/19/98 Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53

Technical Supervisor: _____

Frank Raviola
For Frank Raviola, M.S.

8/19/98

Analyst: _____

YG

Laboratory AIHA Accreditation / PAT ID No.11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608

(510) 653-0824 - (510) 653-1361 - FAX

59405

1098

Job Site

P.O. Number 98B-A120

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608-2907
(510) 923-1661 fax: (510) 923-1468

Oliver Rubber Company
2500 65th Street
Emeryville, California

Type TEM PLM (PCM) AA(Pb)

Number of Samples 7

Turn Around Time Rush

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
D1	2120-819-01C	inside containment, south west quadrant/clearance air sample	19 August 1998	11:55	2:24	10	1490.0	.8µm 25mm
D2	2120-819-02C	inside containment, south west quadrant/clearance air sample	19 August 1998	11:55	2:24	10	1490.0	.8µm 25mm
D3	2120-819-03C	inside containment, south east corner/clearance air sample	19 August 1998	11:57	2:25	10	1480.0	.8µm 25mm
D4	2120-819-04C	inside containment, east side/clearance air sample	19 August 1998	11:55	2:24	10	1490.0	.8µm 25mm
D5	2120-819-05C	inside containment, north side/clearance air sample	19 August 1998	11:56	2:25	10	1490.0	.8µm 25mm
D6	2120-819-06B2	blank	19 August 1998	:	:			.8µm 25mm
D7	2120-819-07B2	blank	19 August 1998	:	:			.8µm 25mm
				:	:			
				:	:			
				:	:			

Return Samples to Client: Yes No

Notes: Please page Peter Radzinski w/results at (510) 702-2176 with results

Relinquished by Radzinski Date/Time 19 August 1998/2:50
Received By [Signature] Date/Time 19 Aug 198 2:50

Relinquished by _____ Date/Time _____
Received By _____ Date/Time _____

IHI ENVIRONMENTAL

Field Data Form:

Date: 19 August 1998

Page) of

Project: 98B-2120

Name of Establishment: Oliver Rubber Company

Pump # Inst. No.	Field No.	Location, Process Operator, OBZ, etc.	Condition/Observations Comments/Sketch	Flowrate		Sampling Time (Minutes)		Total Volume (Liters)
				Start	Stop	On	Off	
	2120-819-01C	inside containment, south west quadrant	clearance air sample	119 10	119	11:55	2:24	1490.0
				lpm		149		
	2120-819-02C	inside containment, south west quadrant	clearance air sample	119 10	119	11:55	2:24	1490.0
				lpm		149		
	2120-819-03C	inside containment, south east corner	clearance air sample	119 10	119	11:57	2:25	1480.0
				lpm		148		
	2120-819-04C	inside containment, east side	clearance air sample	119 10	119	11:55	2:24	1490.0
				lpm		149		
	2120-819-05C	inside containment, north side	clearance air sample	119 10	119	11:56	2:25	1490.0
				lpm		149		
	2120-819-06BL		field blank					
	2120-819-07BL		field blank					

Sampled by: 93-0885

Rotameter No.: 0002

Temp: _____ % R.H. _____

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
2500 65TH STREET
EMERYVILLE, CA
WAREHOUSE AREA
PROJECT NO. 98B-2120

Date Sampled 8/20/98
Date Received 8/20/98
Total Samples 7
Micro Log In 59437

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-820-01C Micro: 59437-01 8/20/98 INSIDE CONTAINMENT SOUTHWEST QUADRANT	Time 134 Rate 10.0 Liters 1340	Fibers 13.5 Fields 100 F/mm ² 17.2	0.005	LCL UCL 0.000 0.010 LOD LOQ 0.002 0.029 CV 0.53
Client: 2120-820-02C Micro: 59437-02 8/20/98 INSIDE CONTAINMENT SOUTHWEST QUADRANT	Time 134 Rate 10.0 Liters 1340	Fibers 15.5 Fields 100 F/mm ² 19.7	0.006	LCL UCL 0.000 0.012 LOD LOQ 0.002 0.029 CV 0.53
Client: 2120-820-03C Micro: 59437-03 8/20/98 INSIDE CONTAINMENT SOUTHEAST CORNER	Time 135 Rate 10.0 Liters 1350	Fibers 17.5 Fields 100 F/mm ² 22.3	0.006	LCL UCL 0.000 0.013 LOD LOQ 0.002 0.029 CV 0.53
Client: 2120-820-04C Micro: 59437-04 HD 8/20/98 INSIDE CONTAINMENT EAST SIDE	Time 134 Rate 10.0 Liters 1340	Fibers 18.5 Fields 100 F/mm ² 23.6	0.007	LCL UCL 0.002 0.011 LOD LOQ 0.002 0.029 CV 0.35
Client: 2120-820-05C Micro: 59437-05 8/20/98 INSIDE CONTAINMENT NORTH SIDE	Time 134 Rate 10.0 Liters 1340	Fibers 23 Fields 100 F/mm ² 29.3	0.008	LCL UCL 0.003 0.014 LOD LOQ 0.002 0.029 CV 0.35

Technical Supervisor: _____

Mark Oliver
For Frank Raviola, M.S.

8/20/98

Analyst: _____

HD

Laboratory AIHA Accreditation / PAT ID No.11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

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MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
2500 65TH STREET
EMERYVILLE, CA
WAREHOUSE AREA
PROJECT NO. 98B-2120

Date Sampled 8/20/98
Date Received 8/20/98
Total Samples 7
Micro Log In 59437

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-820-06BL Micro: 59437-06 8/20/98 BLANK	Time Rate Liters	Fibers 0.0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53
Client: 2120-820-07BL Micro: 59437-07 8/20/98 BLANK	Time Rate Liters	Fibers 0.0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53

Technical Supervisor: _____

Mark Oliver
For Frank Raviola, M.S.

8/20/98

Analyst: _____

OD

Laboratory AIHA Accreditation / PAT ID No.11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608
(510) 653-0824 - (510) 653-1361 - FAX

59437

1098

Job Site

P.O. Number 98B-2120

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608-2907
(510) 923-1661 fax: (510) 923-1468

Oliver Rubber Company
2500 65th Street
Emeryville, California
Warehouse Area

Type TEM PLM PCM AA(Pb)

Number of Samples 7

Turn Around Time Rush

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
	2120-820-01C	inside containment, south west quadrant	20 August 1998	9:02	11:16	10.0	1340.0	0.8µm / 25µm
	2120-820-02C	inside containment, south west quadrant	20 August 1998	9:02	11:16	10.0	1340.0	0.8µm / 25µm
	2120-820-03C	inside containment, south east corner	20 August 1998	9:02	11:17	10.0	1350.0	0.8µm / 25µm
	2120-820-04C	inside containment, east side	20 August 1998	9:02	11:16	10.0	1340.0	0.8µm / 25µm
	2120-820-05C	inside containment, north side	20 August 1998	9:03	11:17	10	1340.0	0.8µm / 25µm
	2120-820-06BL	blank	20 August 1998	:	:			0.8µm / 25µm
	2120-820-07BL	blank	20 August 1998	:	:			0.8µm / 25µm
				:	:			
				:	:			
				:	:			

Return Samples to Client: Yes No

Notes: _____

Relinquished by Relinquish - 20 August 1998
Julie Siefong 8-20-98 11:31a
Date / Time

Relinquished by _____ Date / Time
Received By _____ Date / Time

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER COMPANY
2500 65TH STREET
EMERYVILLE, CA
2ND FLOOR, EAST SIDE
PHASE 3
PROJECT NO. 98B-2120

Date Sampled 8/20/98
Date Received 8/20/98
Total Samples 3
Micro Log In 59451

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-820-08C Micro: 59451-01 HD 8/20/98 INSIDE CONTAINMENT, NORTH END OF SPACE CLEARANCE AIR SAMPLE	Time 128 Rate 10.0 Liters 1280	Fibers 17 Fields 100 F/mm ² 21.7	0.007	LCL 0.002 UCL 0.011 LOD 0.002 LOQ 0.030 CV 0.35
Client: 2120-820-09C Micro: 59451-02 8/20/98 INSIDE CONTAINMENT, CENTER OF SPACE CLEARANCE AIR SAMPLE	Time 128 Rate 10.0 Liters 1280	Fibers 16 Fields 100 F/mm ² 20.4	0.006	LCL 0.000 UCL 0.013 LOD 0.002 LOQ 0.030 CV 0.53
Client: 2120-820-10C Micro: 59451-03 8/20/98 INSIDE CONTAINMENT, SOUTH END OF SPACE CLEARANCE AIR SAMPLE	Time 128 Rate 10.0 Liters 1280	Fibers 7.5 Fields 100 F/mm ² 9.6	0.003	LCL 0.000 UCL 0.006 LOD 0.002 LOQ 0.030 CV 0.53

Technical Supervisor: *Mark Oliver* 8/20/98 Analyst: _____ HD

For Frank Raviola, M.S.

Laboratory AIHA Accreditation / PAT ID No. 11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608
(510) 653-0824 - (510) 653-1361 - FAX

59451

1098

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608-2907
(510) 923-1661 fax: (510) 923-1466

Job Site

Oliver Rubber Company
2500 65th Street
Emeryville, California
2nd floor, east side, Phase 3

P.O. Number 98B-2120
Type TEM PLM PCM AA(Pb)
Number of Samples 3
Turn Around Time Rush

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
	2120-820-08C	inside containment, north end of space/clearance air sample	20 August 1998	1:27	3:35	10.0	1280.0	0.8 μm 25 μm
	2120-820-09C	inside containment, center of space/clearance air sample	20 August 1998	1:27	3:35	10.0	1280.0	0.8 μm 25 μm
	2120-820-10C	inside containment, south end of space/clearance air sample	20 August 1998	1:27	3:35	10.0	1280.0	0.8 μm 25 μm
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			

Return Samples to Client: Yes No

Notes: _____

Relinquished by <u>R. Walsh</u> Date/Time <u>20 August 1998 / 3:50</u>	Relinquished by _____ Date/Time _____
Received By <u>[Signature]</u> Date/Time <u>8-22-98 3:50</u>	Received By _____ Date/Time _____

IHI ENVIRONMENTAL

Field Data Form:

Date: 20 August 1998

Page 1 of 1

Project: 98B - 2120

Warehouse

Name of Establishment: Oliver Rubber Company

Pump # Inst. No.	Field No.	Location, Process Operator, OBZ, etc.	Condition/Observations Comments/Sketch	Flowrate		Sampling Time (Minutes)		Total Volume (Liters)
				Start	Stop	On	Off	
	2120-820-01C	inside containment, southwest quadrant	clearance air sample	119	119	9:02	11:16	1340.0
				10				
				lpm		134		
	2120-820-02C	inside containment, southwest quadrant	clearance air sample	119	119	9:02	11:16	1340.0
				10				
				lpm		134		
	2120-820-03C	inside containment, south east corner	clearance air sample	119	119	9:02	11:16.7	1350.0
				10				
				lpm		135		
	2120-820-04C	inside containment, east side	clearance air sample	119	119	9:02	11:16	1340.0
				10				
				lpm		134		
	2120-820-05C	inside containment, north side	clearance air sample	119		9:03	11:17	1340.0
				lpm		134		
	2120-820-06BL							
	2120-820-07BL							
				lpm				

Sampled by: 93-0885

Rotameter No.: 0002

Lot # R8HM87358

Temp: _____ % R.H. _____

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CA
FRONT HALLWAY, PHASE IV

Date Sampled 8/21/98
Date Received 8/21/98
Total Samples 4
Micro Log In 59507

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-0821-01C Micro: 59507-01 8/21/98 NORTHWEST ROOM	Time Rate Liters 1238	Fibers 111 Fields 58 F/mm ² 243.8	0.076	LCL 0.049 UCL 0.103 LOD 0.002 LOQ 0.031 CV 0.18
Client: 2120-0821-02C Micro: 59507-02 8/21/98 SOUTHEAST ROOM	Time Rate Liters 1238	Fibers 100 Fields 48 F/mm ² 265.4	0.083	LCL 0.053 UCL 0.112 LOD 0.002 LOQ 0.031 CV 0.18
Client: 2120-0821-03BL Micro: 59507-03 YG 8/21/98 BLANK	Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53
Client: 2120-0821-04BL Micro: 59507-04 8/21/98 BLANK	Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53

Technical Supervisor: *Bagate* 8/21/98 Analyst: YG
for Frank Raviola, M.S.

Laboratory AIHA Accreditation / PAT ID No. 11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608

(510) 653-0824 • (510) 653-1361 • FAX

59507

1098

Job Site

Oliver Rubber
2500 65th Street
Emeryville, CA
Front hallway, Phase IV

P.O. Number 98B-2120
 Type PCM Clearance
 TEM PLM/PCM AA(Pb)

Number of Samples 4
 Turn Around Time RUSH

IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608-2907
 (510) 923-1661 fax: (510) 923-1468

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
	2120-0821-01C	northwest room	8/21	12:15	2:20	9.9	1237.5	1.8
	2120-0821-02C	southeast room		12:15	:	9.9	1237.5	1.8
	2120-0821-03BL	Blank		:	:			
	2120-0821-04BL	Blank		:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			

Return Samples to Client: Yes No
 Notes: Fax results & page John @ (510) 702-2169

Andrew 8/21/98
 Relinquished by _____ Date / Time _____
John Ayer 8/21/98
 Received By _____ Date / Time _____

Relinquished by _____ Date / Time _____
 Received By _____ Date / Time _____

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CA
FRONT HALLWAY, PHASE IV
PROJECT NO. 98B-2120

Date Sampled 8/24/98
Date Received 8/24/98
Total Samples 4
Micro Log In 59563

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-824-01C Micro: 59563-01 8/24/98 NORTHWEST ROOM CLEARANCE AIR SAMPLE	Time Rate Liters 1400	Fibers 100 Fields 23 F/mm ² 553.9	0.152	LCL UCL 0.098 0.206 LOD LOQ 0.002 0.028 CV 0.18
Client: 2120-824-02C Micro: 59563-02 8/24/98 SOUTHEAST ROOM CLEARANCE AIR SAMPLE	Time Rate Liters 1400	Fibers 105.5 Fields 22 F/mm ² 610.9	0.168	LCL UCL 0.109 0.227 LOD LOQ 0.002 0.028 CV 0.18
Client: 2120-824-03BL Micro: 59563-03 8/24/98 BLANK	Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53
Client: 2120-824-04BL Micro: 59563-04 8/24/98 BLANK	Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53

Technical Supervisor: Mark Oliver 8/24/98

For Frank Raviola, M.S.

Analyst: YG

Laboratory AIHA Accreditation / PAT ID No.11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608

(510) 653-0824 - (510) 653-1361 - FAX

59563

1098

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608-2907
(510) 923-1661 fax: (510) 923-1463

Job Site

Oliver Rubber
2500 65th Street
Emeryville, California
Front Hallway, Phase IV

P.O. Number 98B-2120

Type TEM PLM PCM AA(Pb)

Number of Samples air 4, bak 1, MO 1

Turn Around Time RUSH 24 hr

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
-01	2120-824-01C	South Northwest Room/ Clearance air Sample	24 August 1998	10:24-12:44 140		10	1400.0	.8µm 25µm
-02	2120-824-02C	Southeast Room/clearance air sample	24 August 1998	10:24-12:44 140		10	1400.0	.8µm 25µm
-03	2120-824-03B		24 August 1998	/	/	/	/	.8µm 25µm
-04	2120-824-04B		24 August 1998	/	/	/	/	.8µm 25µm
		blank						
		blank						
	2120-824-05W	NE corner, Mary's office/yellow- brown floor tile on black mastic on green floor tile on black mastic						
	2120-824-52W	NW corner, Mary's office/yellow-brown Floor tile on black mastic on 1/8" thick black material						
	2120-824-53W	SE corner, Mary's office/yellow-brown floor tile w/black mastic on 1/8" thick black material						
	2120-824-54W	NE corner, Mary's office/yellow-brown Floor tile on black mastic on green floor tile on black mastic						
(PLM)	2120-824-55W	Hall outside of Mary's office/yellow- brown floor tile on black mastic						
	2120-824-56W	Top of stairs/yellow-brown floor tile on black mastic						
	2120-824-57W	N well center, Mary's office/yellow brown floor tile on black mastic on green floor tile on black mastic						

Return Samples to Client: Yes No

Notes: Please page Peter Radzinski at (510) 702-2176 with sample analysis results.

<p style="text-align: center;"><u>Radzinski</u> 24 August 1998/2:05</p>	<p style="text-align: center;">Relinquished by _____ Date / Time _____</p>
<p style="text-align: center;"><u>SMK</u> 8/24/98 2:05</p>	<p style="text-align: center;">Relinquished by _____ Date / Time _____</p>
<p style="text-align: center;">Received By _____ Date / Time _____</p>	<p style="text-align: center;">Received By _____ Date / Time _____</p>

IHI**ENVIRONMENTAL**

1260 45th Street, Suite L

Emeryville, CA 94608

59586Date: 8/24/98Number of pages: 2 total**To: Micro Analytical Laboratories**Phone: (510) 653-0824
Facsimile: (510) 653-1361**From: John Heim, CIH
IHI Environmental**Phone: (510) 923-1661
Facsimile: (510) 923-1468
Pager: (510) 702-2169**RE: Micro Log In No. 59563
Request for TEM re-analysis (rush turnaround)**

Thank you for the analytical results for the PCM samples in #59563, and the subsequent TEM re-analysis of one of these samples (#59580).

Per Peggy Kivel, please re-analyze the other sample by TEM on a RUSH turnaround basis.

Micro #
59563-01IHI #
2120-824-01C

Please charge to the same P.O. number (IHI #98B-2120).

If you have any questions, please contact John Heim (see above) by pager.

Thanks -

- John Heim

IHI**ENVIRONMENTAL**

1260 45th Street, Suite L

Emeryville, CA 94608

59586

Date: 8/24/98Number of pages: 2 total**To: Micro Analytical Laboratories**Phone: (510) 653-0824
Facsimile: (510) 653-1361**From: John Heim, CIH
IHI Environmental**Phone: (510) 923-1661
Facsimile: (510) 923-1468
Pager: (510) 702-2169**RE: Micro Log In No. 59563
Request for TEM re-analysis (rush turnaround)**

Thank you for the analytical results for the PCM samples in #59563, and the subsequent TEM re-analysis of one of these samples (#59580).

Per Peggy Kivel, please re-analyze the other sample by TEM on a RUSH turnaround basis.

<u>Micro #</u>	<u>IHI #</u>
59563-01	2120-824-01C

Please charge to the same P.O. number (IHI #98B-2120).

If you have any questions, please contact John Heim (see above) by pager.

Thanks -

- John Heim

MICRO ANALYTICAL LABORATORIES, INC.

TEM AIRBORNE ASBESTOS ANALYSIS

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CA
FRONT HALLWAY, PHASE IV
PROJECT NO. 98B-2120

Date Sampled 8/24/98
Date Received 8/24/98
Total Samples 1
Micro Log In 59586

SAMPLE INFORMATION	ASBESTOS STRUCTURE COUNT	CALCULATED ASBESTOS STRUCTURE CONCENTRATION										
CLIENT ID	ASBESTOS TYPE	PER mm²	PER cc									
2120-824-01C	CHRYSOTILE <input style="width: 30px; text-align: center;" type="text" value="0"/>	< 17.4	< 0.005									
MICRO ID 59586-01	GRUNERITE (AMOSITE) <input style="width: 30px; text-align: center;" type="text" value="0"/>	ASBESTOS STRUCTURES SUBDIVIDED BY LENGTH <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Length</th> <th style="text-align: left;">No. Str./mm²</th> <th style="text-align: left;">Str./cc</th> </tr> </thead> <tbody> <tr> <td>0.5 - 5 μm</td> <td style="text-align: center;">0</td> <td style="text-align: center;">< 17.4 < 0.005</td> </tr> <tr> <td>≥ 5 μm</td> <td style="text-align: center;">0</td> <td style="text-align: center;">< 17.4 < 0.005</td> </tr> </tbody> </table>		Length	No. Str./mm ²	Str./cc	0.5 - 5 μm	0	< 17.4 < 0.005	≥ 5 μm	0	< 17.4 < 0.005
Length	No. Str./mm ²			Str./cc								
0.5 - 5 μm	0			< 17.4 < 0.005								
≥ 5 μm	0			< 17.4 < 0.005								
Time	RIEBECKITE (CROCIDOLITE) <input style="width: 30px; text-align: center;" type="text" value="0"/>											
LPM	TREMOLITE <input style="width: 30px; text-align: center;" type="text" value="0"/>											
Liters 1400.0	ACTINOLITE <input style="width: 30px; text-align: center;" type="text" value="0"/>											
DESCRIPTION	ANTHOPHYLLITE <input style="width: 30px; text-align: center;" type="text" value="0"/>											
NORTHWEST ROOM	TOTAL ASBESTOS <input style="width: 30px; text-align: center;" type="text" value="0"/>											
CLEARANCE AIR SAMPLE												
REANALYSIS OF PCM 59563-01												
COMMENTS												
NO ASBESTOS DETECTED												
The particulate loading is heavy.												
Gypsum is present in the sample; >100 particulates (estimated total) were observed.												
OPERATING PARAMETERS	FILTER DATA	ANALYTICAL SENSITIVITY	ADDITIONAL DATA									
Magnification 16,000X ± 5%	Type MCE	Structures per cc 0.005	SAED Photo No. / Identification									
Grid Squares 5	Diameter 25 mm		NON-ASBESTOS STRUCTURES									
Grid Square Area 0.0115 mm ²	Collection Area 385 mm ²		Gypsum Other									
Scan Area 0.0575 mm ²			0 0									

Technical Supervisor: Frank Raviola, M.S. 8/24/98 Analyst: AL

Laboratory analyses follow the analytical procedures of the U.S. EPA's "Interim Transmission Electron Microscopy Method" (1987), 40 CFR Part 763, Appendix A to Subpart E. Analysis may be terminated after scanning an area corresponding to an analytical sensitivity of 0.005 str./cc, or a maximum of 10 grid squares. Sampling parameters may differ from the AHERA method. Non-asbestos counts are approximate; specific characterization of non-asbestos particles is not applicable to this analysis. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. N/A = not available.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

TEM AIRBORNE ASBESTOS ANALYSIS

1098
 IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608

PROJECT:
OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CA
FRONT HALLWAY, PHASE IV
PROJECT NO. 98B-2120

Date Sampled 8/24/98
 Date Received 8/24/98
 Total Samples 1
 Micro Log In 59580

SAMPLE INFORMATION	ASBESTOS STRUCTURE COUNT	CALCULATED ASBESTOS STRUCTURE CONCENTRATION	
CLIENT ID	ASBESTOS TYPE	PER mm²	PER cc
2120-824-02C	CHRYSOTILE 1	17.4	0.005
MICRO ID 59580-01	GRUNERITE (AMOSITE) 0		
Time	RIEBECKITE (CROCIDOLITE) 0		
LPM	TREMOLITE 0		
Liters 1400.0	ACTINOLITE 0		
DESCRIPTION	ANTHOPHYLLITE 0		
SOUTHEAST ROOM	TOTAL ASBESTOS 1		
CLEARANCE AIR SAMPLE			
(RE-ANALYSIS OF PCM			
#59563-02)			
		ASBESTOS STRUCTURES SUBDIVIDED BY LENGTH	
		Length	No.
		S/mm²	S/cc
		0.5 - 5 μm	1
		≥ 5 μm	0
		< 17.4	< 0.005
		< 0.005	
COMMENTS			
ASBESTOS IDENTIFIED AS CHRYSOTILE			
The reported asbestos concentration should be regarded as a minimum value, due to heavy particulate loading. Gypsum is present in the sample; >500 particulates (estimated total) were observed.			
OPERATING PARAMETERS	FILTER DATA	ANALYTICAL SENSITIVITY	ADDITIONAL DATA
Magnification 16,000X ± 5%	Type MCE	Structures per cc	SAED Photo No. / Identification
Grid Squares 5	Diameter 25 mm	0.005	
Grid Square Area 0.0115 mm ²	Collection Area 385 mm ²		NON-ASBESTOS STRUCTURES
Scan Area 0.0575 mm ²			Gypsum Other
			0 0

Technical Supervisor: Frank Raviola, M.S. 8/24/98 Analyst: OD

Micro Analytical Laboratories, Inc. is accredited for airborne asbestos analysis by NIST under the NVLAP program (Lab Code #101872). NVLAP accreditation is limited to laboratory analyses. Analyses follow the analytical procedures of the U.S. EPA's "Interim Transmission Electron Microscopy Method" (1987), 40 CFR Part 763, Appendix A to Subpart E. Non-asbestos counts are approximate; specific characterization of non-asbestos particles is not applicable to this analysis. This report must not be used to claim product endorsement by NIST or any other U.S. Government agency. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This report pertains only to listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volume data are reported as given by the client. N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608
(510) 653-0824 - (510) 653-1361 - FAX

TEM

59586
~~59580~~
59563

1098

Job Site

Oliver Rubber
2500 65th Street
Emeryville, California
Front Hallway, Phase IV

P.O. Number 98B-2120

Type TEM/PLM/SEM/AA(TD)

Number of Samples 2 air 1 blk 1 TMO

Turn Around Time RUSH 24 hr

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608-2907
(510) 923-1661 fax: (510) 923-1468

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
01-01	2120-824-01C	South Northwest Room/ Clearance air sample	24 August 1998	10:24-12:44	140	10	1400.0	0.8 0.5µm
01-02	2120-824-02C	Southeast Room/clearance air sample	24 August 1998	10:24-12:44	140	10	1400.0	0.8 0.5µm
01-03	2120-824-03B	blank	24 August 1998	:	:			0.8 0.5µm
01-04	2120-824-04B	blank	24 August 1998	:	:			0.8 0.5µm
	2120-824-51W	NE corner, Mary's office/yellow brown floor tile on black mastic on green floor tile on black mastic		:	:			
	2120-824-52W	NW corner, Mary's office/yellow-brown Floor tile on black mastic on 1/8" thick black material		:	:			
	2120-824-53W	SE corner, Mary's office/yellow-brown floor tile w/black mastic on 1/8" thick black material		:	:			
	2120-824-54W	NE corner, Mary's office/yellow-brown Floor tile on black mastic on green floor tile on black mastic		:	:			
	2120-824-55W	Hall outside of Mary's office/yellow- brown floor tile on black mastic		:	:			
	2120-824-56W	Top of stairs/yellow-brown floor tile on black mastic		:	:			
	2120-824-57W	N well, center, Mary's office/yellow brown floor tile on black mastic on green floor tile on black mastic		:	:			

Return Samples to Client: Yes No

Notes: Please page Peter Redzinski at (510) 702-2176 with sample analysis results.

Relinquished by Redzinski Date/Time 24 August 1998/2:05
 Received By SMK Date/Time 8/24/98 2:05

IHI ENVIRONMENTAL

Field Data Form:

Date: 24 August 1998

Page 1 of

Project: 98B-2120

Phase IV

Name of Establishment: Oliver Rubber Company

Pump # Inst. No.	Field No.	Location, Process Operator, OBZ, etc.	Condition/Observations Comments/Sketch	Flowrate		Sampling Time (Minutes)		Total Volume (Liters)
				Start	Stop	On	Off	
	2120-824-01C	Southwest Room Northwest	clearance air sample	119	119	10:24	12:44	1400.0
				10				
				lpm		140		
	2120-824-02C	Northwest Room Southeast	clearance air sample	119	119	10:24	12:44	1400.0
				10				
				lpm		140		
	2120-824-03BL		blank					
				lpm				
	2120-824-04BL		blank					
				lpm				
				lpm				

Sampled by: Radzinski

Rotameter No.: 8002

Temp: _____ % R.H. _____

MICRO ANALYTICAL LABORATORIES, INC.

PHASE CONTRAST MICROSCOPY

1098
IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:
OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CALIFORNIA
MARY'S OFFICE, DAVID'S
OFFICE AND FOYER AREAS

Date Sampled 8/28/98
Date Received 8/28/98
Total Samples 5
Micro Log In 59743

Sample ID	Field Data	Lab Data	Fibers / cc	Limits
Client: 2120-8/28-01C Micro: 59743-01 8/28/98 DAVID'S OFFICE	Time 120 Rate 10.0 Liters 1200	Fibers 4.5 Fields 100 F/mm ² < 7.0	< 0.002	LCL UCL 0.000 0.005 LOD LOQ 0.002 0.032 CV 0.53
Client: 2120-8/28-02C Micro: 59743-02 8/28/98 FOYER BETWEEN DAVID'S AND MARY'S OFFICE	Time 120 Rate 10.0 Liters 1200	Fibers 5 Fields 100 F/mm ² < 7.0	< 0.002	LCL UCL 0.000 0.005 LOD LOQ 0.002 0.032 CV 0.53
Client: 2120-8/28-03C Micro: 59743-03 HD 8/28/98 MARY'S OFFICE	Time 120 Rate 10.0 Liters 1200	Fibers 10.5 Fields 100 F/mm ² 13.4	0.004	LCL UCL 0.000 0.009 LOD LOQ 0.002 0.032 CV 0.53
Client: 2120-8/28-04BL Micro: 59743-04 8/28/98 BLANK	Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53
Client: 2120-8/28-05BL Micro: 59743-05 8/28/98 BLANK	Time Rate Liters	Fibers 0 Fields 100 F/mm ² 0.0		LCL UCL LOD LOQ CV 0.53

Technical Supervisor: Frank Raviola, M.S. 8/28/98 Analyst: HD

Laboratory AIHA Accreditation / PAT ID No.11150. Samples are analyzed using the NIOSH 7400 Method (NIOSH Manual of Analytical Methods, 4th Ed., Issue 2 of Rev. 3, 8/15/1994). The "A" Rules are used, unless otherwise noted. The limit of detection (LOD) is 7 fibers/mm². Limits of quantification for optimal precision and accuracy are 100 (LOQ) and 1300 fibers/mm². The 95% UCL and LCL (Upper and Lower Confidence Limits of the Two-sided 95% Confidence Interval) represent the highest and lowest expected concentrations (in fibers/cc) for a given fiber count, based on the reported concentration. Coefficients of variation (CV) for various fiber loadings are reported. Limits for compliance testing may be calculated by the client, using the CV and an appropriate regulatory standard, e.g. UCL = (Concentration + [1.645 x CV x Standard]). Concentrations are field blank-corrected. Time is in minutes, flow rate is in liters per minute. 8 Hour TWA: calculated time weighted average concentration (in fibers/cc) based on 8 hours. Note: the 8 hour TWA may not be statistically accurate for actual total times less than 8 hours; zero concentration is assumed for remaining time if no information is given. Micro Analytical Laboratories, Inc. assumes no responsibility for clients' interpretation of any requested TWA data or calculations in this report. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories. This report pertains only to the listed samples, as submitted to and analyzed by Micro Analytical Laboratories, Inc. Air volumes are reported as given by the client. The lab's verifiability of results is limited to fibers per mm². N/A = not applicable.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608
 (510) 653-0824 - (510) 653-1361 - FAX

59743

1098

Job Site

P.O. Number 98B-2120

IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608-2907
 (510) 923-1661 fax: (510) 923-1468

Oliver Rubber
2500 65th Street
Emeryville, California
Mary's office, David's office
and Foyer Areas

Type TEM PLM PCM AA(Pb)

Number of Samples 5

Turn Around Time Rush

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
59743-01	2120-828-01C	David's office	28 August 1998	2:14	4:14	10.0	1200.0	0.8 μm 25m
02	2120-828-02C	Foyer between David's and Mary's office	28 August 1998	2:14	4:14	10.0	1200.0	0.8 μm 25m
03	2120-828-03C	Mary's office	28 August 1998	2:14	4:14	10.0	1200.0	0.8 μm 25m
04	2120-828-04BL	blank	28 August	/	/	/	/	0.8 μm 25m
05	2120-828-05BL	blank	28 August 1998	/	/	/	/	0.8 μm 25m
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			
				:	:			

Return Samples to Client: Yes No
 Notes: Please page Peter Robinski at (510) 702-2176, with sample analysis results

Robinski 28 August 1998 / 4:30
 Relinquished by _____ Date / Time _____
Stankovic 28 August 98 / 4:30
 Received By _____ Date / Time _____

Relinquished by _____ Date / Time _____
 Received By _____ Date / Time _____

IHI ENVIRONMENTAL

Field Data Form

Date: 28 August 1998

Page 1 of

Project: 98B-2120

Name of Establishment: Oliver Robber Company

Pump # Inst. No.	Field No.	Location, Process Operator, OBZ, etc.	Condition/Observations Comments/Sketch	Flowrate		Sampling Time (Minutes)		Total Volume (Liters)
				Start	Stop	On	Off	
	2120-828-01C	David's office	clearance air sample	119	119	2:14	4:14	1200.0
				10				
				10 lpm		120		
	2120-828-02C	Foyer between David's and Mary's office	clearance air sample	119	119	2:14	4:14	1200.0
				10				
				10 lpm		120		
	2120-828-03C	Mary's office	clearance air sample	119	119	2:14	4:14	1200.0
				10				
				10 lpm		120		
	2120-828-04BL							
			blank					
				10 lpm				
	2120-828-05BL							
			blank					
				10 lpm				

Sampled by: Radzinski

Rotameter No.: 0002

Temp: _____ % R.H. _____

APPENDIX B

Post Abatement Visual Inspections



ENVIRONMENTAL

CERTIFICATE OF

POST ABATEMENT VISUAL INSPECTION

BUILDING: 1200 65th Street, Emeryville
 SPECIFIC AREA: Back Warehouse/Shipping
 PROJECT NUMBER: 98B-2120
 CONTRACTOR: CST Environmental

CONTRACTOR'S CERTIFICATION

In accordance with the contract documents, the contractor certifies that the work area has been visually inspected (all surfaces including pipes, beams, ledges, walls, ceiling and floor, decontamination unit, sheet plastic, etc.) and has found no dust, debris, or residue.

BY: Juan Bustamante DATE: 8-19-98
 (signature)

Juan Bustamante TITLE: FORMJENT
 (print name)

ABATEMENT INSPECTOR'S CERTIFICATE

The abatement inspector hereby certifies that the contractor was accompanied on the visual inspection and verifies that the inspection has been thorough and to the best of the inspector's knowledge and belief, the contractor's certification above is a true and honest one.

BY: Radzinski DATE: 19 August 1995
 (signature)

Peter Radzinski TITLE: Industrial Hygienist
 (print name) SST 93-0885

FINAL CLEARANCE SAMPLING

Final clearance sampling has been completed and the sample results are in accordance with the contract documents. Final clearance samples were analyzed by:

PCM, TEM, or AAS.

(PCM = NIOSH 7400 Method/TEM = AHERA Protocol/AAS = HUD Protocol)



ENVIRONMENTAL

CERTIFICATE OF

POST ABATEMENT VISUAL INSPECTION

BUILDING: 1200 65th Street, Emeryville
SPECIFIC AREA: 2nd floor, East, Phase 3
PROJECT NUMBER: 98B-2120
CONTRACTOR: CST Environmental

CONTRACTOR'S CERTIFICATION

In accordance with the contract documents, the contractor certifies that the work area has been visually inspected (all surfaces including pipes, beams, ledges, walls, ceiling and floor, decontamination unit, sheet plastic, etc.) and has found no dust, debris, or residue.

BY: [Signature] (signature) DATE: 20 August 1998

[Print Name] (print name) TITLE: Industrial Hygienist SST 93-0885

ABATEMENT INSPECTOR'S CERTIFICATE

The abatement inspector hereby certifies that the contractor was accompanied on the visual inspection and verifies that the inspection has been thorough and to the best of the inspector's knowledge and belief, the contractor's certification above is a true and honest one.

BY: [Signature] (signature) DATE: 8-20-98

[Print Name] (print name) TITLE: FORM-NT

FINAL CLEARANCE SAMPLING

Final clearance sampling has been completed and the sample results are in accordance with the contract documents. Final clearance samples were analyzed by:

___ PCM, ___ TEM, or ___ AAS.

(PCM = NIOSH 7400 Method/TEM = AHERA Protocol/AAS = HUD Protocol)



DAILY FIELD REPORT - ABATEMENT SERVICES

Project: Oliver Rubber Abatement Project No.: 98B-2120
 Client: Oliver Rubber Company Date: 20 August 1998
 Contractor: CST Environmental Shift: 7-3:30 (EST's)
 IHI Personnel: 93-0885
 Superintendent: _____ Foreman: Juan Bustamante No. of Workers: _____
 Visitors on Site: unknown

Today's Work: visual clearance in second floor, run 2nd set of clearance samples in Warehouse, run samples (clearance) in 2nd floor location (East side of bldg)

Significant Events: 2nd floor area ceiling dripping encap, many puddles of encap throughout space

Air Monitoring: Yes



ENVIRONMENTAL

CERTIFICATE OF

POST ABATEMENT VISUAL INSPECTION

BUILDING: 2500 65th Street, Emeryville
SPECIFIC AREA: forward hallway, Mary's office
PROJECT NUMBER: 98B-2120
CONTRACTOR: CST

CONTRACTOR'S CERTIFICATION

In accordance with the contract documents, the contractor certifies that the work area has been visually inspected (all surfaces including pipes, beams, ledges, walls, ceiling and floor, decontamination unit, sheet plastic, etc.) and has found no dust, debris, or residue.

BY: Juan Bustamante (signature) DATE: 28th August 1998
Juan Bustamante (print name) TITLE: Foreman

ABATEMENT INSPECTOR'S CERTIFICATE

The abatement inspector hereby certifies that the contractor was accompanied on the visual inspection and verifies that the inspection has been thorough and to the best of the inspector's knowledge and belief, the contractor's certification above is a true and honest one.

BY: Radzinski (signature) DATE: 28th August 1998
Peter Radzinski (print name) TITLE: Industrial Hygienist
55T-93-0885

FINAL CLEARANCE SAMPLING

Final clearance sampling has been completed and the sample results are in accordance with the contract documents. Final clearance samples were analyzed by:

PCM, TEM, or AAS.

(PCM = NIOSH 7400 Method/TEM = AHERA Protocol/AAS = HUD Protocol)

APPENDIX C
Bulk Sample Results

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS BY PLM

1098

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:

OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CA
FRONT HALLWAY, PHASE IV
PROJECT NO. 98B-2120

Date Sampled 8/24/98

Date Received 8/24/98

Date Analyzed 8/24/98

Total Samples 7

Micro Log In 59564

SAMPLE INFORMATION		ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: 2120-824-51W Micro: 59564-01 Analyst: MO NE CORNER, MARY'S OFFICE / YELLOW BROWN FLOOR TILE ON BLACK MASTIC ON GREEN FLOOR TILE ON BLACK MASTIC	See Descriptions	WHITE MASTIC: ND TAN TILE: ND BLACK MASTIC: 15% CHRYSOTILE GREEN TILE: 20% CHRYSOTILE BLACK MASTIC: ND		CARBONATE BINDER SYNTHETIC MATERIAL TAR
Client: 2120-824-52W Micro: 59564-02 Analyst: MO NE CORNER, MARY'S OFFICE / YELLOW BROWN FLOOR TILE ON BLACK MASTIC 1/8" THICK BLACK MATERIAL	See Descriptions	WHITE MASTIC: ND TAN TILE: ND BLACK MASTIC: 15% CHRYSOTILE BLACK TILE: 15% CHRYSOTILE BROWN MASTIC: ND		CARBONATE BINDER SYNTHETIC MATERIAL TAR
Client: 2120-824-53W Micro: 59564-03 Analyst: MO SE CORNER, MARY'S OFFICE / YELLOW BROWN FLOOR TILE W/ BLACK MASTIC ON 1/8" THICK BLACK MATERIAL	See Descriptions	GRAY MASTIC: ND TAN TILE: ND BLACK MASTIC: 15% CHRYSOTILE BLACK TILE: 15% CHRYSOTILE BLACK MASTIC: ND		CARBONATE BINDER SYNTHETIC MATERIAL TAR
Client: 2120-824-54W Micro: 59564-04 Analyst: MO NE CORNER, MARY'S OFFICE / YELLOW BROWN FLOOR TILE ON BLACK MASTIC ON GREEN FLOOR TILE ON BLACK MASTIC	See Descriptions	WHITE MASTIC: ND TAN TILE: ND BLACK MASTIC: 15% CHRYSOTILE GREEN TILE: 20% CHRYSOTILE BROWN MASTIC: ND		CARBONATE BINDER SYNTHETIC MATERIAL TAR
Client: 2120-824-55W Micro: 59564-05 Analyst: MO HALL OUTSIDE OF MARY'S OFFICE YELLOW-BROWN FLOOR TILE ON BLACK MASTIC	See Descriptions	GRAY MASTIC: ND TAN TILE: ND INSUFFICIENT BLACK MASTIC FOR ANALYSIS		CARBONATE BINDER SYNTHETIC MATERIAL

Technical Supervisor:  8/24/98

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples, and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). *Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1876 Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872. This report must not be used to claim product endorsement by NIST or any agency of the

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS BY PLM

1098

IHI Environmental
1260 45th Street, Suite L
Emeryville, CA 94608

PROJECT:

**OLIVER RUBBER
2500 65TH STREET
EMERYVILLE, CA
FRONT HALLWAY, PHASE IV
PROJECT NO. 98B-2120**

Date Sampled 8/24/98

Date Received 8/24/98

Date Analyzed 8/24/98

Total Samples 7

Micro Log In 59564

SAMPLE INFORMATION		ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: 2120-824-56W		See Descriptions		CARBONATE BINDER SYNTHETIC MATERIAL TAR QC Result: A
Micro: 59564-06 Analyst: YG MO		BROWN MASTIC: ND TAN TILE: ND BLACK MASTIC : ND		
TOP OF STAIRS /YELLOW-BROWN FLOOR TILE ON BLACK MASTIC				
Client: 2120-824-57W		See Descriptions		CARBONATE BINDER SYNTHETIC MATERIAL TAR
Micro: 59564-07 Analyst: YG		GRAY MATERIAL: ND WHITE MASTIC: ND; TAN TILE: ND BLACK MASTIC: 15% CHRYSOTILE GREEN TILE: 20% CHRYSOTILE BROWN MASTIC: ND		
N WALL, CENTER, MARY'S OFFICE YELLOW-BROWN FLOOR TILE ON BLACK MASTIC ON GREEN FLOOR TILE ON BLACK MASTIC				

Technical Supervisor:

Mark Oliver 8/24/98
For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples, and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). *Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1876 Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872. This report must not be used to claim product endorsement by NIST or any agency of the

MICRO ANALYTICAL LABORATORIES, INC.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608

(510) 653-0824 - (510) 653-1361 - FAX

59564

1098

IHI Environmental
 1260 45th Street, Suite L
 Emeryville, CA 94608-2907
 (510) 923-1661 fax: (510) 923-1468

Job Site

Oliver Rubber
2500 65th Street
Emeryville, California
Front Hallway, Phase IV

P.O. Number 98B-2120

Type TEM PLM PCM AA(Pb)

Number of Samples air 4 / bulk 7

Turn Around Time Rush / 24hr

Micro ID #	Client ID#	Location / Description	Date Sampled	Time Total	on/off Minutes	Average L.P.M.	Total Liters	Filter Pore Size
	2120-824-01C	South Northwest Room / Clearance air Sample	24 August 1998	10:24	12:44	10	1400.0	0.8µm / 25µm
	2120-824-02C	Southeast Room / Clearance air sample	24 August 1998	10:24	12:44	10	1400.0	0.8µm / 25µm
	2120-824-03B	blank	24 August 1998	:	:			0.8µm / 25µm
	2120-824-04B	blank	24 August 1998	:	:			0.8µm / 25µm
				:	:			
	2120-824-51W	NE corner, Mary's office / yellow-brown floor tile on black mastic on green floor tile on black mastic		:	:			
	2120-824-52W	NW corner, Mary's office / yellow-brown floor tile on black mastic on 1/8" thick black material		:	:			
	2120-824-53W	SE corner, Mary's office / yellow-brown floor tile w/ black mastic on 1/8" thick black material		:	:			
	2120-824-54W	NE corner, Mary's office / yellow-brown floor tile on black mastic on green floor tile on black mastic		:	:			
	2120-824-55W	Hall outside of Mary's office / yellow-brown floor tile on black mastic		:	:			
	2120-824-56W	Top of stairs / yellow-brown floor tile on black mastic		:	:			
	2120-824-57W	N well center, Mary's office / yellow-brown floor tile on black mastic on green floor tile on black mastic		:	:			

Return Samples to Client: Yes No

Notes: Please page Peter Radzinski at (510) 702-2176 with sample analysis results.

<p style="font-size: 24pt; margin: 0;"><i>Radzinski</i></p>	<p style="font-size: 24pt; margin: 0;">24 August 1998 / 2:05</p>	<p style="font-size: 24pt; margin: 0;">8/24/98 2:05</p>	<p style="font-size: 24pt; margin: 0;"><i>SMK</i></p>
Relinquished by	Date / Time	Date / Time	Date / Time
Received By	Date / Time	Date / Time	Date / Time