

ASBESTOS-CONTAINING MATERIALS SURVEY

**Port Townsend Main Post Office
Port Townsend, Washington 98368-9998**

September 1997



Prepared For:

SEATTLE DISTRICT
415 1st Avenue North
Seattle, WA 98109-9991

Prepared By:

Roy F. Weston, Inc.
215 Union Boulevard
Suite 600
Lakewood, CO 80228-1842



Contract No. 072976-95-B-0016
Project No.: E89196

WESTON
MANAGERS DESIGNERS/CONSULTANTS

U.S. Postal Service
Routing Slip

To	Dept., Office or Room No.	<input type="checkbox"/> Approval <input type="checkbox"/> Signature <input type="checkbox"/> Comment <input type="checkbox"/> See Me <input type="checkbox"/> As Requested <input type="checkbox"/> Information <input checked="" type="checkbox"/> Read and Return <input type="checkbox"/> Read and File <input type="checkbox"/> Necessary Action <input type="checkbox"/> Investigate <input type="checkbox"/> Recommendation <input type="checkbox"/> Prepare Reply
1. TO: Jim Espenson	PM, Port Townsend	
2. CC: Neil Stahfest	Adm. Services Mgr	
3. CC: John Patten	MPO, Area III	
4. CC: Norman Gibson	Senior Safety	
5. CC: Linda Smith	HR Manager	
6. CC: Dale R. Zinser	Distr. Manager	
From: Sydney C. Randell, DECC <i>(Signature)</i> 10/30/97		Extension 206-625-7004 Room No.
Date 10/30/97		
Remarks <p>Jim,</p> <p>Attached is a report prepared by Shumacher & Associates pertaining to the small scale asbestos abatement that occurred at your facility...summarizing the report (and I quote)- "Based upon the observation made and air samples collected during the work, the abatement was performed safely and in a timely manner."</p> <p>Please retain this report indefinitely...this report provides objective evidence that the abatement project performed on Oct. 27th, 1997 was done safely.</p>		

RECEIVED
 OCT 31 1997
 ADMINISTRATIVE SUPPORT
 Seattle, WA

SCHUMACHER & ASSOCIATES, INC.

October 28th, 1997

Sydney Randell
District Environmental Coordinator
Seattle District
United States Postal Service
415 1st Ave North
Seattle, WA 98109-9997

**COPY FOR YOUR
INFORMATION**

**BOILER ROOM CLEANUP PORT TOWNSEND POST OFFICE
S&A Project #970391**

Dear Sydney,

At your request, on October 27, 1997, Schumacher and Associates Inc. observed the cleanup of the boiler room in the Port Townsend Post Office by Walker Specialty Contractors. The cleanup was done in areas previously identified as areas of concern by L. Scott of the Weston Company. During the cleanup air samples were collected and analyzed on site. Also, a post-cleanup inspection was conducted and an air sample was collected and analyzed.

The pipe ends penetrating the ceiling, the debris on the wall and the piece of insulation left in the heat exchanger was abated by the abatement contractor, Walker Specialty Contractors.

All air samples collected in the boiler room during the cleanup were analyzed and found to be clean ($<0.08f/cc$, $0.005f/cc$ and $<0.05f/cc$). The breathing zone ceiling sample (BZ-C), a 30 minute sample, and the 8-hour time weighted average breathing zone (BZ-TWA), sample were both collected using a personnel pump worn by the worker. These samples represent the worker's exposure to asbestos during the cleanup work.

The area sample was taken using a high volume air pump drawing air across a cellulose filter at a rate of 15 liters per minute (lpm). The breathing zone sample was taken using a medium flow air pump drawing air across a cellulose filter at a rate of 2 liters per minute. The samples were taken at the breathing zone level. Clearance air monitoring criteria are specified in WAC 296-62-07713 and in the EPA (Environmental Protection Agency) AHERA regulations for schools (40 CFR Part 763, Appendices A and B to subpart E). The EPA also recommends a maximum exposure level of 0.01 fiber / cc for personnel not working with asbestos in public buildings. This limit was not exceeded.

Corporate Headquarters
4209 21st West, Suite 200
Seattle, WA 98199-1254
Fax 206.511.8992
Phone 206.501.8989

Dallas Metroplex Offices
1025 North Central Expressway
Suite 300-330
Plano, Texas 75075
Fax 972.422.5427
Phone 214.215.1225

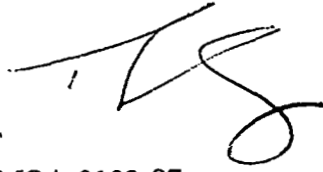
P.O. Box 879
Ashland, OR 97520
Phone 541.488.5731

SCHUMACHER & ASSOCIATES, INC.

Based upon the observations made and air samples collected during the work, the abatement was performed safely and in a timely manner.

Thank you for this opportunity to have been of service. Please call me at our office (206) 301-8989, or voice mail (206) 399-1002, or my digital pager (206) 787-3529 with any questions which you might have.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'TE' followed by a stylized flourish.

Thea Ewing, IHT
Certificate # WAMOA-0102-97

TABLE 1

AIR SAMPLE RESULTS -

BOILER ROOM CLEANUP - PORT TOWNSEND POST OFFICE

Air samples collected by Schumacher & Associates, Inc. On October 27, 1997.

TYPE OF SAMPLE	NAME/LOCATION	LITERS OF AIR SAMPLED	AIR SAMPLE RESULTS - FIBERS PER CUBIC CENTIMETER OF AIR (F/cc)
Area Sample	Boiler Room	1,200	0.004
Breathing Zone Ceiling Sample	Tobias Arroyo	60	<0.08
Breathing Zone TWA Sample	Tobias Arroyo	100	<0.05
Blank #1	N/A	N/A	0.5/100
Blank #2	N/A	N/A	0/100

FROM: SCHUMACHER & ASSOCIATES, INC DATE: Oct. 29th 1997 JOB#:

CLIENT: Pt. Townsend Post Office TECHNICIAN: Tessa Ewing

LOCATION: Boiler Room SHIFT: Day-Mon

TIME (24HR)

0745	Arrived at Pt. Townsend Post office met with the postmaster Jim Espenson & loaded all equipment into the boiler room.
1052	Insulation and residual sand etc. from bottom of flue was bagged, vacuumed & encapsulated. 2 junctions in the ceiling on pipe penetrations over sink removed via glove bag, area encapsulated. Wall was wet wiped and encapsulated where minor debris was found.
1130	Area/clearance sample taken and analyzed. Boiler room is clear and O.K. for normal personnel.

7 Hrs. 5 Samples, 2 crew

TECHNICIAN: Tessa Ewing DATE: 10-29-97

Schumacher & Associates, Inc.	Building <u>Post Office</u>	Location <u>Post Townsend</u>
Technician <u>Ther</u>	Shift <u>Day - Monday</u>	Date <u>10-29-97</u>
Order #	# of People on Shift <u>2</u>	

Circle One: Original Count/Second Recount

PT 102997-f
Blanks N/A

Sample #	PT 102997-1	PT 102997-2	PT 102997-3		
Lab #	1	2	3		4 5
Sample Type	BZIC	Air/Clean	BZT		
Job/Activity	G+D	G+D	G+D		
Location	Boiler Room				
Emp. Name	Tobias Araya	NA	Tobias Araya		
CAW #	16642		16642		
SS #	539-98-5832		539-98-5832		
PPE	H, FS		H, FS		
Pump/ID #	Gillian	Gust Hill	Gillian		
Start Time (Use 24 hr clock)	10:10	10:10	10:40		
Stop Time (Use 24 hr clock)	10:40	11:30	11:30		
Total Min.	30	80	50		
Flow Rate	2.0, 2.0	15.0, 15.0	2.0, 2.0		
Total Liters	60	1200	100		

Laboratory Use

Fibers/Field	2/100	1/100	5/100		0.5/100 0/100
Limit of Quantification	0.08	0.004	0.05		
Actual F/CC	2.08	0.004	2.05		
Field Area: 2-00317	Comments: Area cleaned & ready for regular person activity				Blank Avg. 0/100
Technician: Ther Kwing	Microscopist:				Date: 10-29-97

- | | | |
|---|--|--|
| Job: G = Glovebag
D = Debris Cleaning
C = CAB
A = Surface Scrape | V = VAT
O = Other
T = TSI Removal | R = Roof Tar
S = Set Up
F = Final Clean |
| PPE: H = Half Mask
N = Negative Air
O = Type "O" Containment | P = PAPR
FS = Full Suit
M = Mini-Enclosure | S = Supplied Air
V = HEPA Vac
D = Decon Facility |

Approved By: _____ Asbestos Division Manager
Approved By: _____ Certified Industrial Hygienist

Copy Provided to Client (date/time) _____

ACKNOWLEDGMENT

This asbestos survey report was prepared by Roy F. Weston, Inc. (WESTON) in a report format called "USPS Asbestos Survey Tracking Report", version 4.2, dated October 21, 1996. This format was developed by the United States Postal Service (USPS) and the Genoa Group using the Microsoft database program "Access", version 2.0. This report was prepared and delivered to USPS in both hard copy and electronic format with the intent that the report be updated following any asbestos abatement actions. Please contact Mr. Dan Bryant (USPS) at (303) 313-5189 if you have any questions regarding this report or to verify that this report contains the most current information.

Inspection Report

Asbestos

Port Townsend Main Post Office

1322 Washington St.

Port Townsend, WA 98368-9998

**UNITED STATES POSTAL SERVICE
ASBESTOS SURVEY**

SURVEY CONTRIBUTORS / CONTRACT INFORMATION

USER AGENCY: **United States Postal Service**
FACILITY NAME: **Port Townsend Main Post Office**
FINANCE/SUB #: **546776-G01**
FACILITY ADDRESS: **1322 Washington St.**
Port Townsend, WA 98368-9998
FACILITY TELEPHONE #: **(360) 385-1600**
USPS SITE CONTACT: **Jim Esperson**
DATE OF SURVEY: **09/11/1997**
CONSULTING FIRM NAME: **Roy F. Weston, Inc.**
CONSULTING FIRM ADDRESS: **215 Union Blvd. Suite 600**
Lakewood, CO 80228-1842
CONSULTING FIRM PHONE #: **(303) 980-6800**
CONTRACT NUMBER: **072976-95-B-0016**
PROJECT NUMBER: **E89196**
WORK ORDER NUMBER: **165.00**
LABORATORY ADDRESS: **EMC Laboratories**
7342 E. Thomas Rd.
Scottsdale, AZ 85251-7216
LABORATORY PHONE #: **(800)362-3373**

The following Asbestos Survey Report was compiled and written by:

Inspector's Signature: *L. Scott*

L. Scott

EPA Accredited Building Inspector

State Accreditation No.: **524586127**

This Asbestos Survey Report was reviewed by:

Certified Industrial Hygienist Signature: *Brian Benson*

Brian Benson

Certified Industrial Hygienist

ABIH Cert. #: **C7021**

TABLE OF CONTENTS

Introduction

Executive Summary

Purpose and Scope of Work

SECTION A: BUILDING CHARACTERIZATION

A.1. Section Summary

A.2. Building Information Report

A.3. Functional Area Summary

A.4. Site Location Map

A.5. Floor Plan Layout for Facility

SECTION B: FUNCTIONAL AREA REVIEW DESCRIPTION

B.1. Section Summary

B.2. Functional Area Survey

B.3. Representative List of Materials likely to contain Asbestos

SECTION C: ASBESTOS LOCATIONS

C.1. Section Summary

C.2. ACBM Homogeneous Area Locations - Floor Plans

**C.3. Homogeneous Material Summary by Functional Floor
and Area Location**

SECTION D: BULK SAMPLING

D.1. Section Summary

D.2. Bulk Sample and Photograph Locations

D.3. Bulk Sample Analysis Results

D.4. Bulk Sample Chain of Custody

SECTION E: PHOTOGRAPHS

E.1. Section Summary

E.2. Photographs of Homogeneous ACBM Areas

SECTION F: REMOVAL COST ESTIMATE

F.1. Section Summary

F.2. Removal Cost Estimate

SECTION G: REFERENCES

Hazard Potential Classification Decision Tree

Classifications for Hazard Potential

Response Actions Based on Hazard Ranking

Suspected Materials List

General Categories of Functional Areas

Glossary

Certifications

INTRODUCTION

An inspection of the Port Townsend Main Post Office located at 1322 Washington St., Port Townsend, WA 98368-9998, was conducted to identify friable and nonfriable known or suspected asbestos-containing building materials (ACBM). The scope of the inspection included:

1) Pre-survey Tasks

· Inform employees, management, and union representatives, of the ACBM inspection process.

· Review existing as-built drawings and develop a preliminary sampling plan.

2) An ACBM Inspection

· Inspect, identify, and sample suspect ACBM

· Photographic documentation of ACBM

3) A report documenting sampling procedures and results of ACBM

EXECUTIVE SUMMARY

Roy F. Weston, Inc. was retained by the United States Postal Service to perform asbestos inspection services at the Port Townsend Main Post Office located at 1322 Washington St., Port Townsend, WA 98368-9998.

The Port Townsend Main Post Office was constructed in 1893. The facility is a three-story rock and brick structure with an attic and a basement. It encompasses a total of 35,776 square feet of building space.

The Port Townsend Post Office building original heating system was wood hot water. This system is currently diesel hot water. Most of the original equipment has been removed. The current system has fiberglass and other non asbestos pipe and duct insulation. Removal of the original equipment was incomplete. Remnants of old insulation are found in the chimney, heat exchangers, floor trenches, the spaces between floors, and on the wall in the boiler room. Two areas are exposed hazards. Both are in the boiler room. One is a portion of the hallway wall. The other is two exposed pipe insulation ends that protrude from the ceiling above the sink. Other areas of potential exposure are in the heat exchangers, chimney, and floor trenches (all in the basement). This inspection was not able to determine the total amount of residual insulation that may remain in the walls, floors and ceilings of the building. The oldest plans available indicate that the heat exchangers were lined with transite. This area was inaccessible and the presence of transite is assumed. In some of the rooms the flooring underlying the top surface was oversprayed with paint and the color was not discernable. Removing the surface layers would have caused significant damage to these tenant occupied areas. In these areas (212-216 and 202) the closest discernable flooring was assumed as the underlayment. Rooms 217 and 309 are not part of the room numbering scheme. Interior finishes include floor tile, linoleum, carpet, baseboard, plaster, wallboard and ceiling tile.

Asbestos

Roy F. Weston, Inc. conducted an asbestos inspection at the Port Townsend Main Post Office on 9/11/97. Laboratory analysis confirmed the presence of asbestos in concentrations greater than one percent (regulated asbestos) in the following homogeneous areas. For particular locations see C.2 and C.3.

Materials Confirmed to Contain Asbestos

12" x 12" Floor Tile	12"x12" Brown Floor Tile
12" x 12" Floor Tile	12"x12" Tan Floor Tile
Boiler Insulation	Remnant Debris
Caulking	Exterior Caulk
Gasket Materials	Boiler Gaskets and Sealants (sets) - Assumed ACBM
Mastic under Floor Tile/etc.	12"x12" Brown Floor Tile Mastic
Other	Chimney Debris
Other	Heat Exchanger Debris
Other	Window Glaze
Pipe Joint Insulation	Pipe Insulation Ends
Plaster	Plaster
Roofing Materials	Roll Roofing and Sealants - Assumed ACBM
Roofing Materials	Roof Vapor Barrier - Assumed ACBM
Straight Pipe Insulation	Old Pipe Insulation (cloth)
Straight Pipe Insulation	Trench Insulation and Debris
Transite	Heat Exchanger Transite - Assumed ACBM

The following blind quality assurance (QA) duplicate (side by side) samples are part of this survey.

Sample ID	Corresponding QA ID
POR-007	POR-116
POR-038	POR-117
POR-059	POR-118
POR-080	POR-119
POR-095	POR-120
POR-113	POR-121

Based on WESTON's assessment of the building, we recommend that a formal, written Operations and Maintenance program be developed to assist in maintaining the ACBMs within the building. This program would include provisions for routine re-inspection of the identified ACBM, appropriate maintenance and cleaning procedures for the facility and a method for informing in-house and contract workers of the hazards associated with ACBM, as well as proper work methods. The presence of ACBM within the building should be included in hazard communication information provided to all building occupants and USPS personnel.

PURPOSE AND SCOPE OF WORK

The purpose of this survey is to determine the amount, location, and condition of all friable and non-friable ACBMs located in the Port Townsend Main Post Office located at 1322 Washington St., Port Townsend, WA. Once ACBMs are identified, recommended response actions (based upon Hazard Rankings) are included for each Homogeneous Material in each Functional Space.

SECTION A

A.1. SECTION SUMMARY

The Building Information Report (Section A.2.) provides information on the age of the facility, type of construction, and type of heating ventilation and cooling system employed along with the facility's typical hours of operation and percentage of the facility surveyed.

The Functional Area Summary (Section A.3.) lists the Floor and Room number and Description of all Functional Areas addressed in this Survey.

A Site Location Map and a Floor Plan Layout for the Facility (Sections A.4. and A.5.) are also found in this section. Actual homogeneous areas and functional spaces are identified in the floor plan. Floor plans relate directly to all following sections and will assist with identifying asbestos locations described in Section C.

A.2. BUILDING INFORMATION

FACILITY ID: 546776-G01
CLIENT: UNITED STATES POSTAL SERVICE
USPS CONTRACT WORK: Roy F. Weston, Inc.,E89196

WORK ORDER #: 165.00
FACILITY NAME: Port Townsend Main Post Office
ADDRESS: 1322 Washington St.

Port Townsend, WA 98368-9998

TELEPHONE: (360) 385-1600
CONTACT NAME: Jim Esperson
DATE OF INSPECTION: 09/11/1997
ON-SITE INSPECTORS: L. Scott

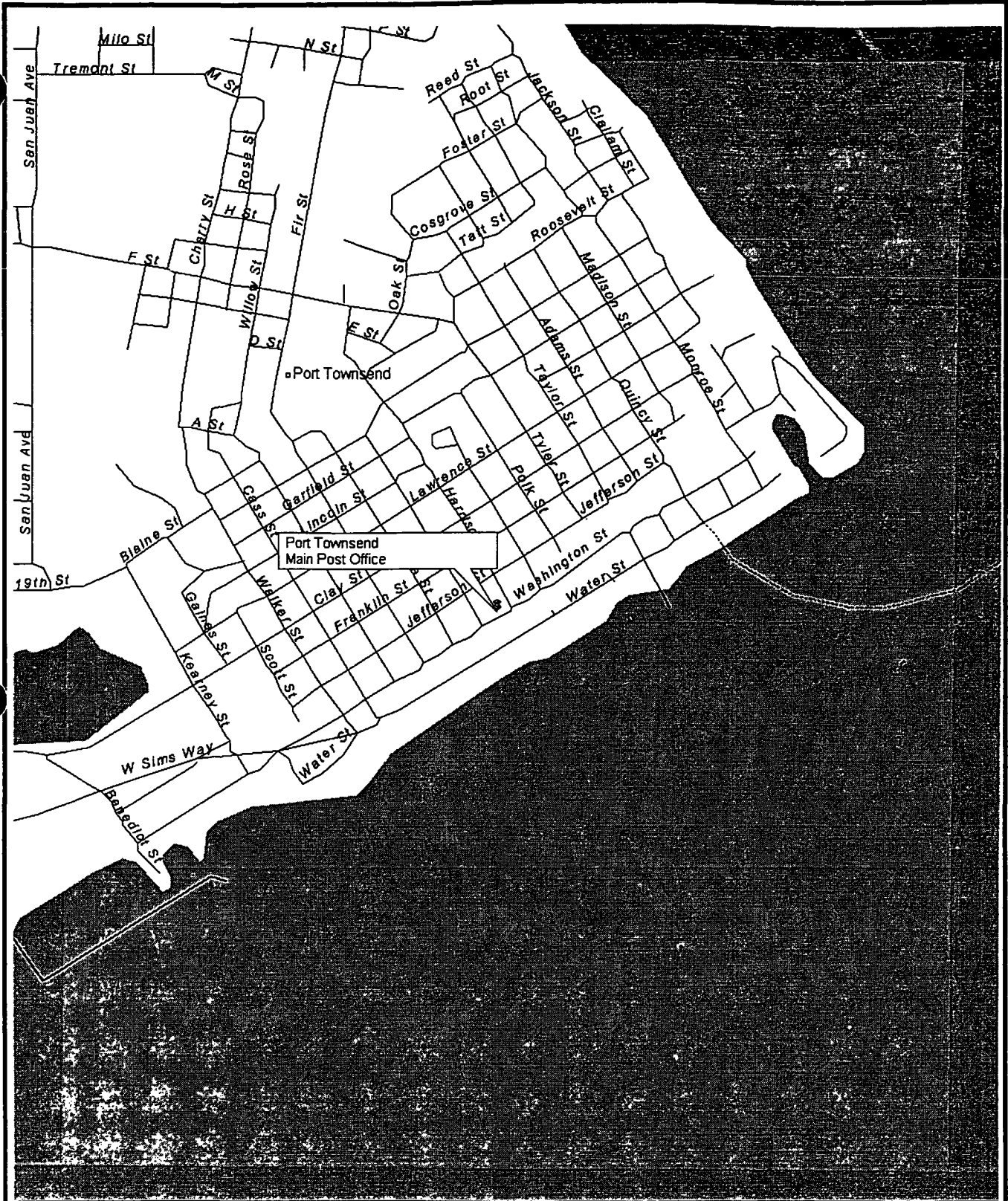
DATE(S) OF CONSTRUCTION: 1893
PORTION OF BUILDING INSPECTED (PERCENTAGE): 100%
SQUARE FOOTAGE: 35,776
BUILDING CONSTRUCTION: rock and brick
HVAC SYSTEM: oil hot water
HOURS OF OPERATION: 07:30 til 18:00 M-S
FACILITY DRAWINGS AVAILABLE: Yes
FMS (FVS) PRINTOUT: Yes

A.3. FUNCTIONAL AREA SUMMARY

Floor:	Room:	Desc of Functional Area:	Comments:
1	101	WORK-ROOM/MAIL PROC.	Work Room
1	102	ENTRANCES AND EXIT AREAS	Vestibule
1	103	WORK-ROOM/MAIL PROC.	Work Room
1	104	WORK-ROOM/MAIL PROC.	Work Room
1	105	VAULTS/ACCT. PAPERS	Vault
1	106	KITCHEN AREA	Lunch Room
1	107	LOADING DOCK/STORAGE	Storage
1	108	LOBBIES	Box Lobby
1	109	HALLWAYS	Hallway
1	110	OFFICES/COMP. ROOMS	Office
1	111	RESTROOMS	Womans Restroom
1	112	VAULTS/ACCT. PAPERS	Vault
1	113	ENTRANCES AND EXIT AREAS	Entry
1	114	ENTRANCES AND EXIT AREAS	Entry
2	201	HALLWAYS	Hallway
2	202	OFFICES/COMP. ROOMS	Office
2	203	RESTROOMS	Woman's Restroom
2	204	OFFICES/COMP. ROOMS	Office
2	205	LOADING DOCK/STORAGE	Storage
2	206	OFFICES/COMP. ROOMS	Office
2	207	RESTROOMS	Men's Restroom
2	208	VAULTS/ACCT. PAPERS	Vault
2	209	OFFICES/COMP. ROOMS	Office
2	210	OFFICES/COMP. ROOMS	Office
2	211	OFFICES/COMP. ROOMS	Office
2	212	OFFICES/COMP. ROOMS	Office
2	213	VAULTS/ACCT. PAPERS	Vault
2	214	OFFICES/COMP. ROOMS	Office
2	215	OFFICES/COMP. ROOMS	Office
2	216	OFFICES/COMP. ROOMS	Office
2	218	STAIRWELLS	Stairwell
3	301	HALLWAYS	Hallway
3	302	OFFICES/COMP. ROOMS	Office
3	303	OFFICES/COMP. ROOMS	Office
3	304	OFFICES/COMP. ROOMS	Office
3	305	LOADING DOCK/STORAGE	Storage
3	306	HALLWAYS	Hallway
3	307	LOADING DOCK/STORAGE	Storage
3	308	LOADING DOCK/STORAGE	Storage

A.3. FUNCTIONAL AREA SUMMARY

Floor:	Room:	Desc of Functional Area:	Comments:
3	310	LOADING DOCK/STORAGE	Storage - No Suspect ACBM
3	311	LOADING DOCK/STORAGE	Storage - No Suspect ACBM
3	312	HALLWAYS	Hallway - No Suspect ACBM
A	A01	ATTICS	Attic
B	B01	BOILER/CHILLER ROOMS	Boiler Room
B	B02	LOADING DOCK/STORAGE	Storage
B	B03	LOADING DOCK/STORAGE	Storage
B	B04	LOADING DOCK/STORAGE	Storage
B	B05	LOADING DOCK/STORAGE	Storage
B	B06	WORK-ROOM/MAIL PROC.	Mail Sorting
B	B07	WORK-ROOM/MAIL PROC.	Mail Sorting
B	B08	LOADING DOCK/STORAGE	Storage
B	B09	LOADING DOCK/STORAGE	Storage
B	B10	ENTRANCES AND EXIT AREAS	Entry
B	B11	LOADING DOCK/STORAGE	Maintenance
B	B12	JANITOR CLOSET	Janitor
B	B13	LOADING DOCK/STORAGE	Storage
B	B14	RESTROOMS	Mens Restroom
B	B15	STAIRWELLS	Stairwell
B	B16	AIR DUCT SHAFTS	Chimney
B	B17	HALLWAYS	Hallway
E	E01	ROOFS, SIDING AND PANELING	Exterior
M	M01	OFFICES/COMP. ROOMS	Office
R	R01	ROOFS, SIDING AND PANELING	Dock Overhang Roof - Not Sampled
R	R02	ROOFS, SIDING AND PANELING	Roof Vapor Barrier - Not Sampled



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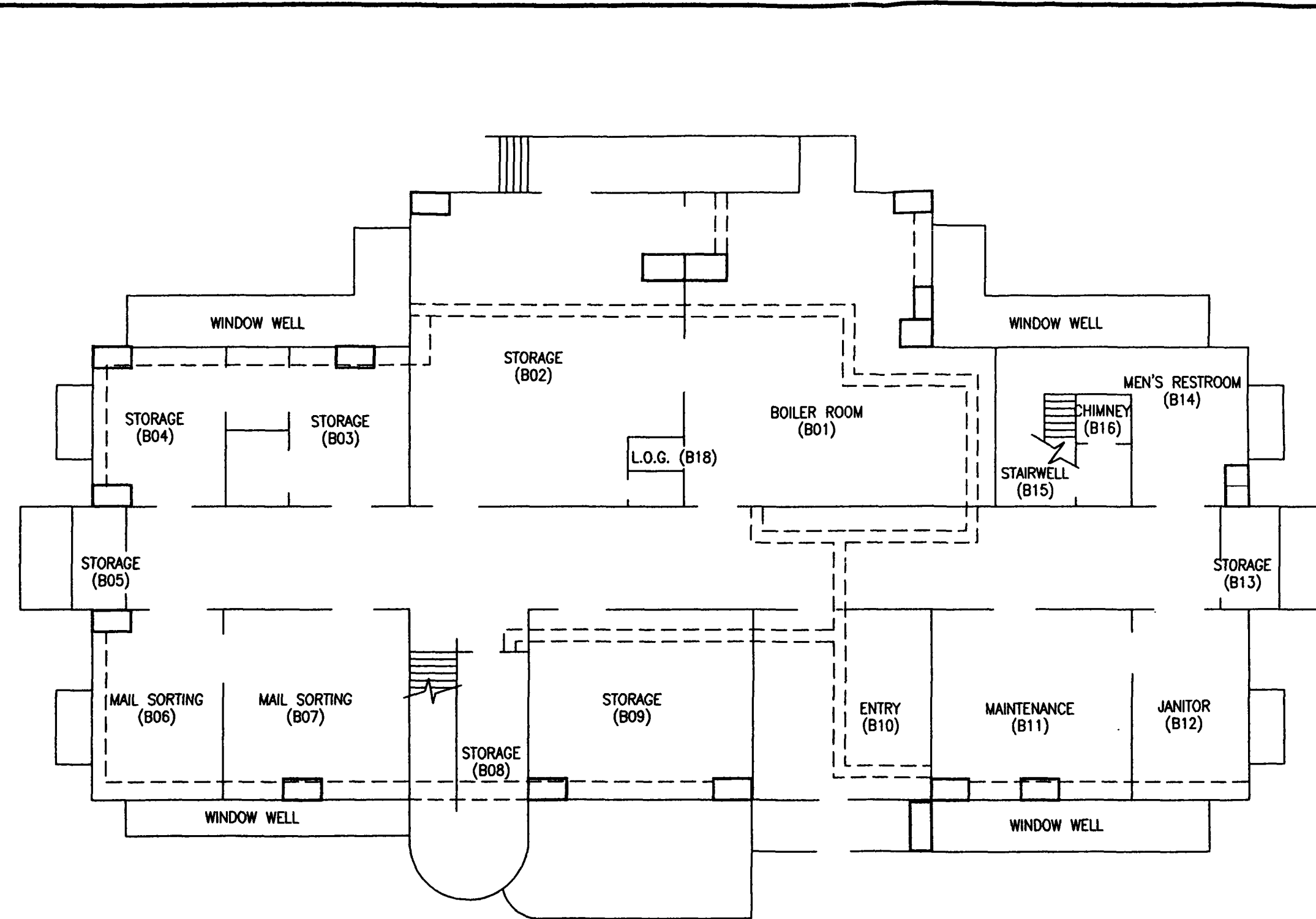


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(303) 980-6800

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Date: September, 1997

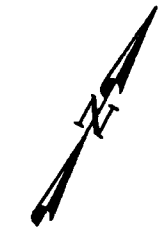
Port Townsend Main Post Office
1322 Washington St.
Port Townsend, WA 98368-9998

ASBESTOS
SITE LOCATION MAP
FIGURE A.4



EXPLANATION

- TRENCH
- HEAT EXCHANGER



NOT TO SCALE



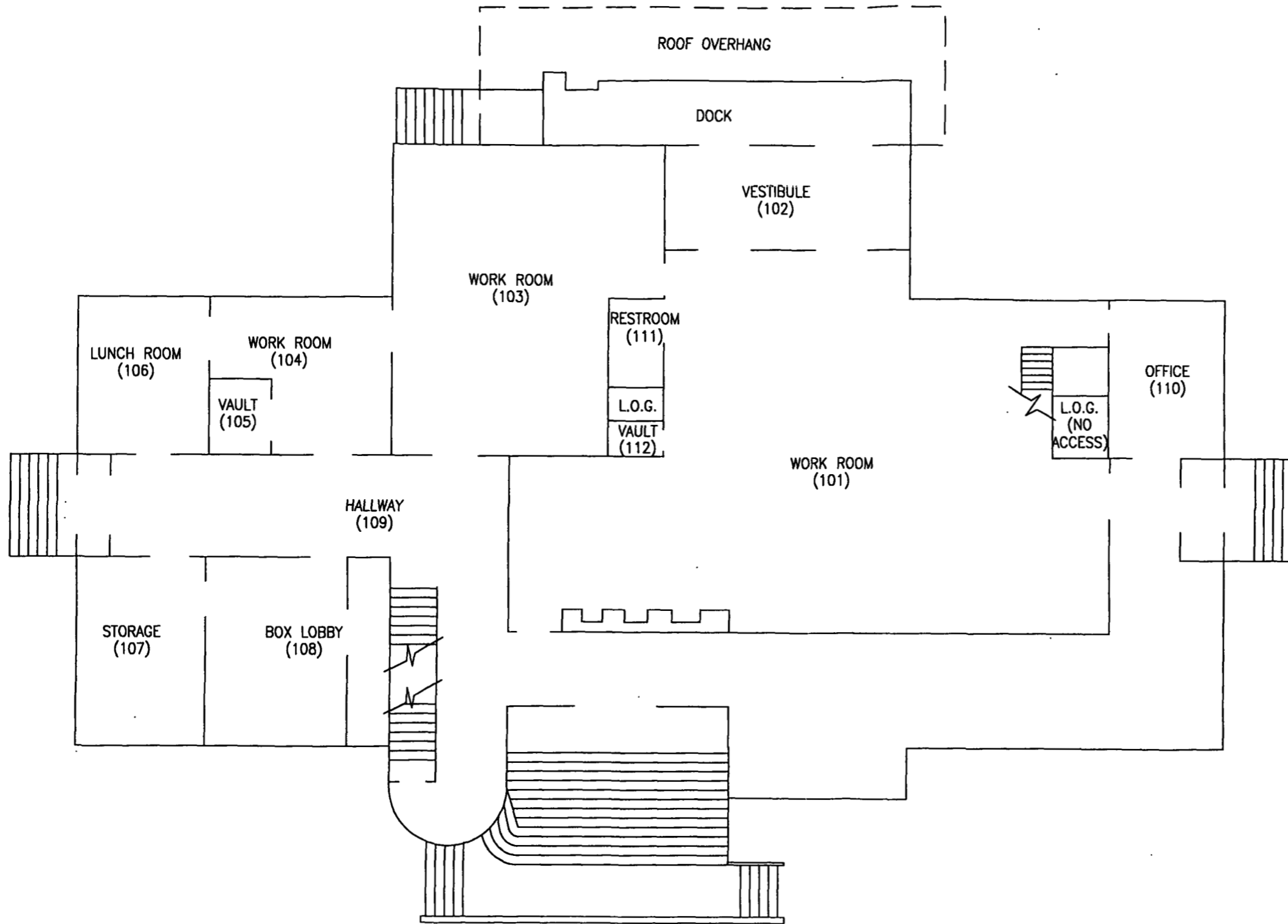
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 Date: October 1997

**BASEMENT FLOOR PLAN
 LAYOUT FOR FACILITIES
 FIGURE A.5**

1779453a.pj-100897

1779454a.pj-100797



EXPLANATION



NOT TO SCALE

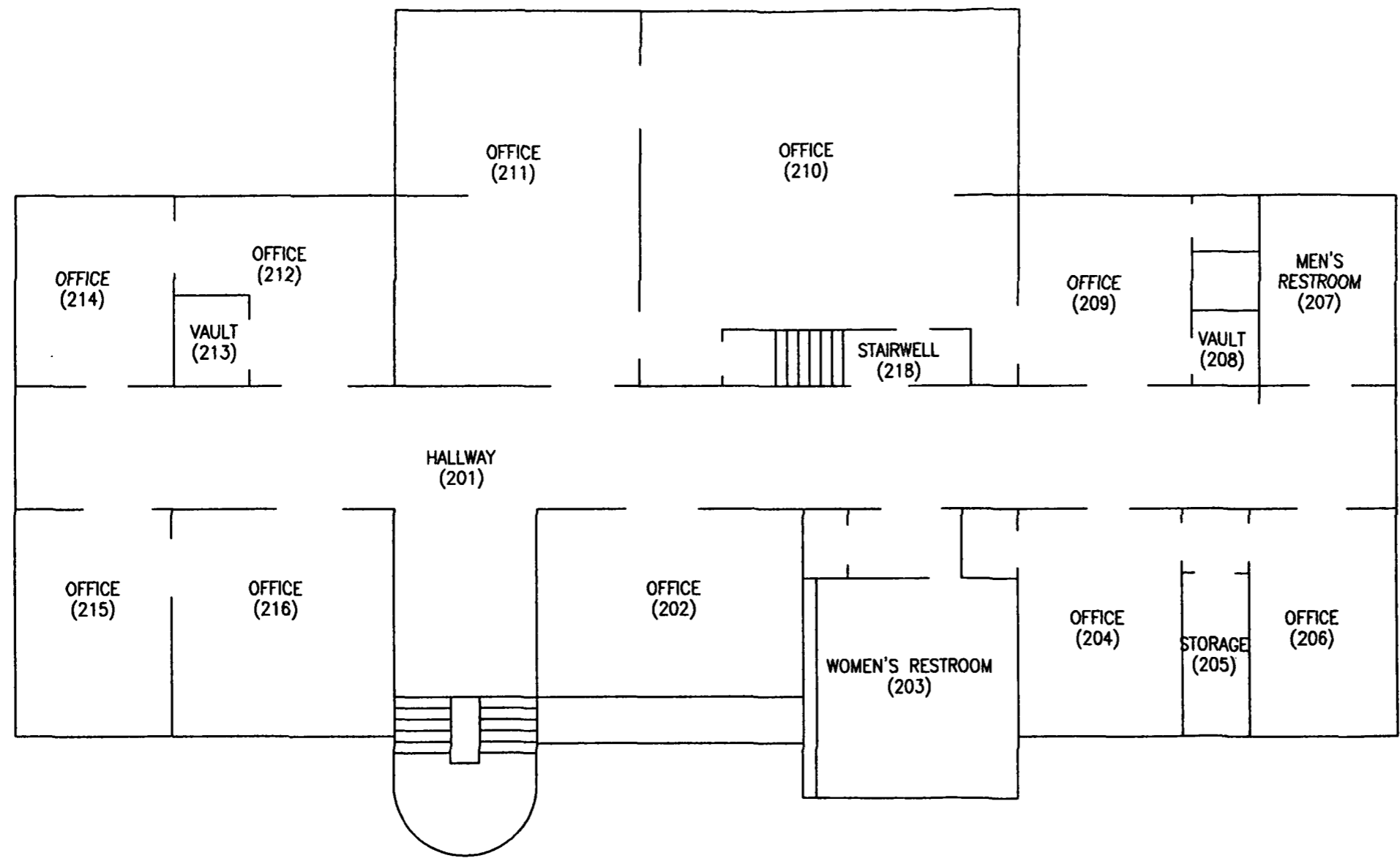


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FIRST FLOOR PLAN
 LAYOUT FOR FACILITIES
 FIGURE A.5

EXPLANATION



NOT TO SCALE

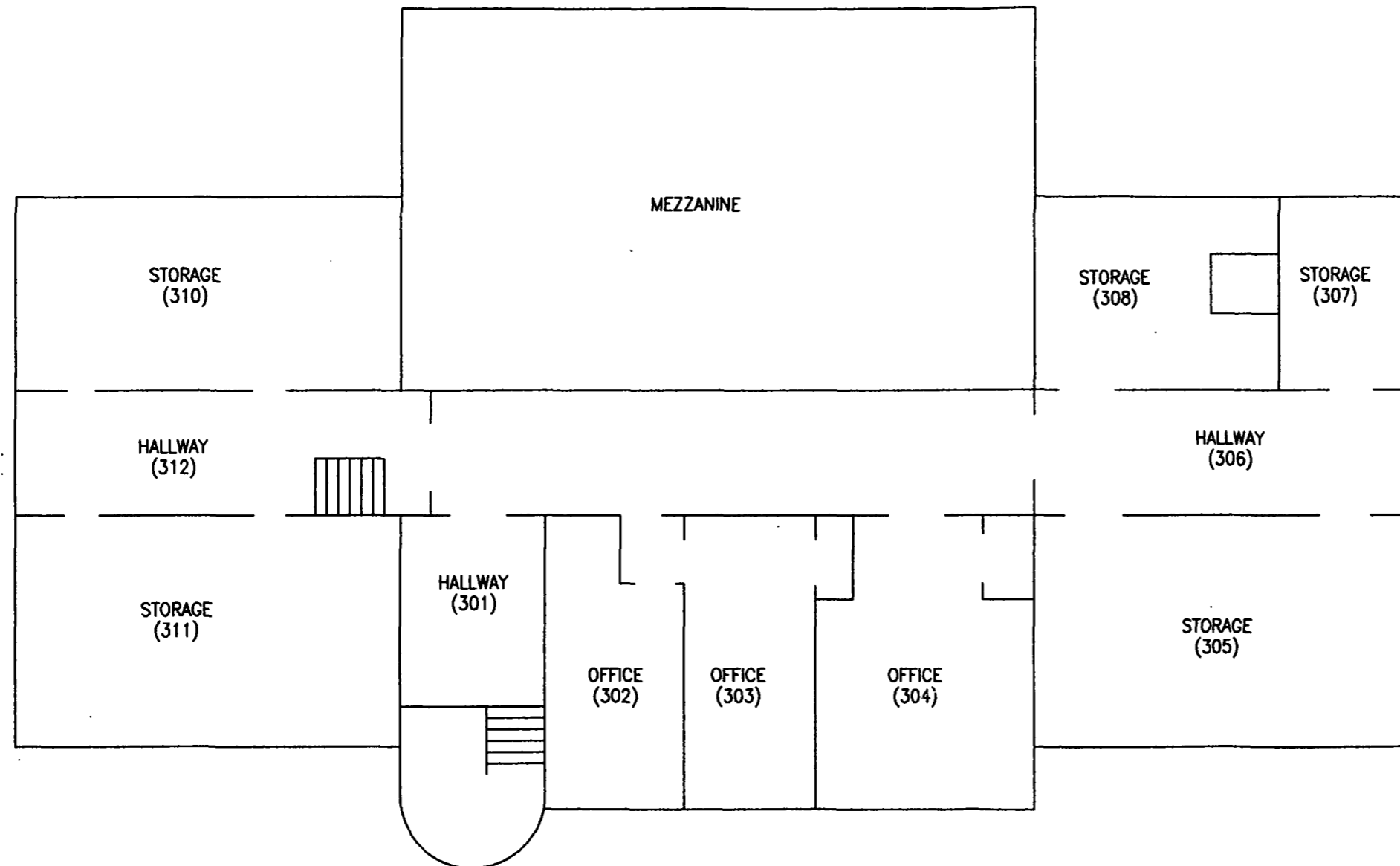


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1322 Washington Street
Port Townsend, Washington 98368-9998
Finance/Sub. No.: 546776-G01
Date: October 1997

SECOND FLOOR PLAN
LAYOUT FOR FACILITIES
FIGURE A.5

1779455a.pj-100297



EXPLANATION



NOT TO SCALE

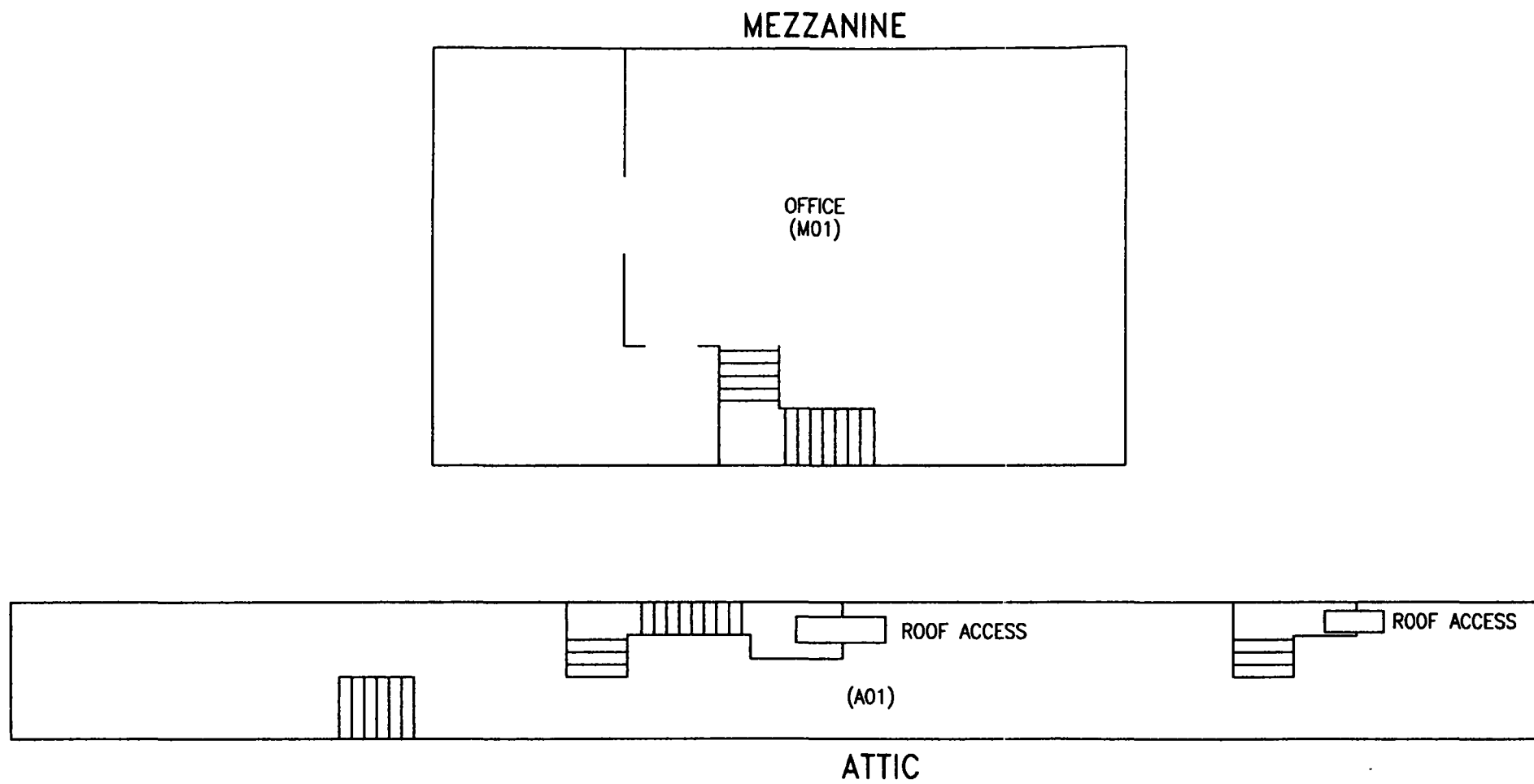


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Finance/Sub. No.: 546776-G01
Date: October 1997

THIRD FLOOR PLAN
LAYOUT FOR FACILITIES
FIGURE A.5

EXPLANATION



NOT TO SCALE



215 Union Boulevard
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Lakewood, CO 80228
(303) 980-6800

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USPS Project No.: E89196
USPS Work Order No.: 165.00
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1322 Washington Street
Port Townsend, Washington 98368-9998
Finance/Sub. No.: 546776-G01
Date: October 1997

ATTIC AND MEZZANINE FLOOR PLAN
LAYOUT FOR FACILITIES
FIGURE A.5

SECTION B

B.1. SECTION SUMMARY

This Section explains the entries in Section C.3. Examples of Functional Area categories are provided in Section G: References "General Categories of Functional Areas". The facility Functional Areas (by floor) are described in the Section A.3.

B.2. FUNCTIONAL AREA SURVEY

In Section C, the reader will find the inspection data in detail organized by Functional Floor and Area Location. Section A.3. provides the Functional Area Summary for the facility.

FUNCTIONAL AREA

The floor and location number together make up the functional space identification.

FUNCTIONAL AREA DESCRIPTION

This describes the use of the functional area.

HOMOGENEOUS MATERIAL DESCRIPTION

This column will provide a description of the material which will consider such factors as size, application, and color. This description will also aid in distinguishing between different homogeneous materials within a functional area.

SACBM

Suspected Asbestos-Containing Building Materials (SACBM) are materials identified for sampling which may or may not be regulated ACM.

Thermal System Insulation (TSI) is any insulation applied to heating or mechanical system components.

Surfacing material (S) refers to a wide range of products applied to building surfaces.

Floor Covering (F).

Miscellaneous Material (M) is any material not included in the first three (3) categories.

QUANTITY

This will have the approximate linear footage (LF), square footage(SF) or number of insulated fittings (FTGS) of ACM.

IS THE MATERIAL FRIABLE?

Y = Yes N = No

ASSOCIATED BULK SAMPLE No.

This will list the sample number associated with the particular material.

RISK ASSESSMENT/HAZARD RANKING

Each known or assumed asbestos-containing material is assessed for condition. The Hazard Potential Classification Decision Tree is presented in Section G, References. It identifies the procedure for assigning hazard rankings of materials as related to the degree of damage observed.

B.2. Risk Assessment Hazard/Ranking (Continued)

In Table C.3. a Hazard Ranking of 0 means the material is not asbestos (i.e. not regulated - less than or equal to one percent). A Hazard Ranking of 1 to 7 in Table C.3, means that the material is asbestos (greater than one percent).

B.3. REPRESENTATIVE LIST OF MATERIALS LIKELY TO CONTAIN ASBESTOS

T.S.I.

<u>S</u>	T1 Gasket Materials
<u>S</u>	T2 Pipe Joint Insulation
<u>S</u>	T3 Straight Pipe Insulation
<u>NE</u>	T4 HVAC Connector Material (adjoining air ducts)
<u>NE</u>	T5 Tank Insulation
<u>S</u>	T6 Boiler Insulation
<u>NE</u>	T7 Boiler Breaching / Ductwork / Firebrick
<u>S</u>	T8 Duct Insulation
<u>NE</u>	T9 Patching Material

SURFACING MATERIALS (SPRAY-ON)

<u>NE</u>	S1 Surfaced-Sprayed, Applied or Troweled-on Materials, Ceilings and Beams
<u>NE</u>	S2 Spray-on Fireproofing

MISCELLANEOUS MATERIALS

<u>S</u>	M1 Roofing Materials (only sample without damage to the roofing material)
<u>NE</u>	M2 Exterior Siding Material
<u>S</u>	M3 Wallboard / Taping Material
<u>S</u>	M4 Transite (cooling tower on roof, soffits, pipes, etc.)
<u>S</u>	M5 Ceiling Panels (special attention to dock areas)
<u>S</u>	M6 Ceiling Tiles
<u>S</u>	M7 Plaster
<u>S</u>	M8 Caulking
<u>NE</u>	M9 Fire Door Insulation (assumed to be ACM if fire doors are present)
<u>NE</u>	M10 Undercoating / Stainless Steel Sinks / etc.
<u>S</u>	M11 Electrical Insulation
<u>NE</u>	M12 Baseboard
<u>NE</u>	M13 Tile Debris
<u>NE</u>	M14 Metalbestos Chimney
<u>NE</u>	M15 Stucco
<u>S</u>	M16 Other

FLOOR COVERING

<u>S</u>	F1 Linoleum (seamless floor covering)
<u>S</u>	F2 12" x 12" Floor Tile
<u>NE</u>	F3 9" x 9" Floor Tile
<u>NE</u>	F4 12" x 24" Floor Plank
<u>S</u>	F5 Mastic under Floor Tile / Seamless / Ceiling Tiles / Carpet / Plank-Tile

<u>S</u>	Inspector collected (a) bulk sample(s) of the material
<u>NE</u>	Material was not observed to be present during inspection

SECTION C

**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**

Facility Name: Port Townsend Main Post Office
 Address: 1322 Washington St.
 City, State, ZIP Code: Port Townsend, WA 98368-9998
 Finance No./Sub-Loc. No 546776-G01
 Date of Inspection: 09/11/1997
 Site Inspected By: L. Scott

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
1	101	Work-Room/Mail Proc.	M	Plaster	5770	Yes	No	NS This Room	1b	Plaster
1	102	Entrances and Exit Areas	M	Plaster	1683	Yes	No	NS This Room	1b	Plaster
1	103	Work-Room/Mail Proc.	F	12" x 12" Floor Tile	1034	No	No	047	0	12"x12" Black Painted Floor Tile
1	103	Work-Room/Mail Proc.	F	12" x 12" Floor Tile	1034	Yes	No	047	1b	12"x12" Brown Floor Tile
1	103	Work-Room/Mail Proc.	F	Mastic under Floor Tile/etc.	1034	No	No	047	0	12"x12" Black Painted Floor Tile Mastic
1	103	Work-Room/Mail Proc.	F	Mastic under Floor Tile/etc.	1034	Yes	No	047	1b	12"x12" Brown Floor Tile Mastic
1	103	Work-Room/Mail Proc.	M	Other	138	No	No	107,108,109	0	3" Black Baseboard Mastic
1	103	Work-Room/Mail Proc.	M	Plaster	3200	Yes	No	NS This Room	1b	Plaster
1	104	Work-Room/Mail Proc.	F	12" x 12" Floor Tile	466	Yes	No	048	1b	12"x12" Brown Floor Tile
1	104	Work-Room/Mail Proc.	F	12" x 12" Floor Tile	466	No	No	048	0	12"x12" Black Painted Floor Tile
1	104	Work-Room/Mail Proc.	F	Mastic under Floor Tile/etc.	466	Yes	No	048	1b	12"x12" Brown Floor Tile Mastic
1	104	Work-Room/Mail Proc.	F	Mastic under Floor Tile/etc.	466	No	No	048	0	12"x12" Black Painted Floor Tile Mastic
1	104	Work-Room/Mail Proc.	M	Plaster	1922	Yes	No	NS This Room	1b	Plaster

A Risk Assessment/Hazard Ranking of zero (0) means that the material is not Asbestos (less than or equal to one percent - not regulated). A Risk Assessment/Hazard Ranking of one (1) to seven (7) means that the material is Asbestos. NS This Room - indicates bulk sample for homogeneous area taken in another room.

**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
1	105	Vaults/Acct. Papers	M	Plaster	524	Yes	No	NS This Room	1b	Plaster
1	106	Kitchen Area	F	12" x 12" Floor Tile	280	Yes	No	049	1b	12"x12" Brown Floor Tile
1	106	Kitchen Area	F	12" x 12" Floor Tile	280	No	No	049	0	12"x12" Black Painted Floor Tile
1	106	Kitchen Area	F	Mastic under Floor Tile/etc.	280	No	No	049	0	12"x12" Black Painted Floor Tile/Mastic
1	106	Kitchen Area	F	Mastic under Floor Tile/etc.	280	Yes	No	049	1b	12"x12" Brown Floor Tile Mastic
1	106	Kitchen Area	M	Plaster	1108	Yes	No	NS This Room	1b	Plaster
1	107	Loading Dock/Storage	F	Linoleum	354	No	No	NS This Room	0	Brown Linoleum
1	107	Loading Dock/Storage	F	Mastic under Floor Tile/etc.	350	No	No	050,051,052	0	Red Carpet Mastic
1	107	Loading Dock/Storage	F	Mastic under Floor Tile/etc.	354	No	No	NS This Room	0	Brown Linoleum Mastic
1	107	Loading Dock/Storage	M	Plaster	1694	Yes	No	NS This Room	1b	Plaster
1	107	Loading Dock/Storage	T	Pipe Joint Insulation	4	No	Yes	012	0	Pipe Insulation Sealant
1	108	Lobbies	F	Linoleum	408	No	No	NS This Room	0	Tan Linoleum
1	108	Lobbies	F	Mastic under Floor Tile/etc.	408	No	No	056,057,058	0	Gray Carpet Mastic
1	108	Lobbies	F	Mastic under Floor Tile/etc.	408	No	No	NS This Room	0	Tan Linoleum Mastic
1	108	Lobbies	M	Plaster	2052	Yes	No	NS This Room	1b	Plaster
1	109	Hallways	M	Celling Tiles	2289	No	Yes	059,060,118	0	12"x12" Celling Tile
1	109	Hallways	M	Plaster	4552	Yes	No	035	1b	Plaster
1	110	Offices/Comp. Rooms	M	Plaster	1200	Yes	No	NS This Room	1b	Plaster
1	110	Offices/Comp. Rooms	T	Pipe Joint Insulation	4	No	Yes	NS This Room	0	Pipe Insulation Sealant
1	111	Restrooms	M	Caulking	4	No	No	053,054,055	0	Inside Caulk
1	111	Restrooms	M	Plaster	320	Yes	No	NS This Room	1b	Plaster
1	112	Vaults/Acct. Papers	M	Plaster	200	Yes	No	NS This Room	1b	Plaster
1	113	Entrances and Exit Areas	M	Celling Tiles	55	No	Yes	NS This Room	0	12"x12" Celling Tile

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**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
1	113	Entrances and Exit Areas	M	Plaster	250	Yes	No	NS This Room	1b	Plaster
1	114	Entrances and Exit Areas	M	Celling Tiles	55	No	Yes	NS This Room	0	12"x12" Celling Tile
1	114	Entrances and Exit Areas	M	Plaster	250	Yes	No	NS This Room	1b	Plaster
2	201	Hallways	M	Celling Tiles	2142	No	Yes	061	0	12"x12" Celling Tile
2	201	Hallways	M	Plaster	5082	Yes	No	034	1b	Plaster
2	201	Hallways	T	Pipe Joint Insulation	2	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	202	Offices/Comp. Rooms	F	Linoleum	800	No	No	NS This Room	0	Brown Linoleum
2	202	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	800	No	No	NS This Room	0	Brown Linoleum Mastic
2	202	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	800	No	No	NS This Room	0	Red-Orange Carpet Mastic
2	202	Offices/Comp. Rooms	M	Plaster	2124	Yes	No	NS This Room	1b	Plaster
2	202	Offices/Comp. Rooms	T	Pipe Joint Insulation	7	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	203	Restrooms	F	Linoleum	60	No	No	083,084,085	0	Tan Linoleum
2	203	Restrooms	F	Linoleum	225	No	No	092,093,094	0	Gray Linoleum
2	203	Restrooms	F	Mastic under Floor Tile/etc.	60	No	No	083,084,085	0	Tan Linoleum Mastic
2	203	Restrooms	F	Mastic under Floor Tile/etc.	225	No	No	092,093,094	0	Gray Linoleum Mastic
2	203	Restrooms	M	Other	60	No	No	089,090,091	0	3" Gray Baseboard Mastic
2	203	Restrooms	M	Plaster	1664	Yes	No	031	1b	Plaster
2	203	Restrooms	M	Wallboard/Taping Material	310	No	No	086,087,088	0	Wallboard (2)
2	203	Restrooms	M	Wallboard/Taping Material	310	No	No	086,087,088	0	Wallboard (2) Joint Compound
2	203	Restrooms	T	Pipe Joint Insulation	4	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	204	Offices/Comp. Rooms	F	Linoleum	388	No	No	NS This Room	0	Brown Linoleum
2	204	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	388	No	No	NS This Room	0	Brown Linoleum Mastic
2	204	Offices/Comp. Rooms	M	Plaster	1478	Yes	No	NS This Room	1b	Plaster

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**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
2	204	Offices/Comp. Rooms	T	Pipe Joint Insulation	4	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	205	Loading Dock/Storage	F	Linoleum	80	No	No	NS This Room	0	Brown Linoleum
2	205	Loading Dock/Storage	F	Mastic under Floor Tile/etc.	80	No	No	NS This Room	0	Brown Linoleum Mastic
2	205	Loading Dock/Storage	M	Plaster	546	Yes	No	NS This Room	1b	Plaster
2	205	Loading Dock/Storage	T	Pipe Joint Insulation	2	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	206	Offices/Comp. Rooms	F	Linoleum	356	No	No	077,078,079,039	0	Brown Linoleum
2	206	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	356	No	No	077,078,079	0	Lite Brown Carpet Mastic
2	206	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	356	No	No	077,078,079	0	Brown Linoleum Mastic
2	206	Offices/Comp. Rooms	M	Plaster	1224	Yes	No	NS This Room	1b	Plaster
2	206	Offices/Comp. Rooms	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	207	Restrooms	M	Plaster	1080	Yes	No	NS This Room	1b	Plaster
2	207	Restrooms	T	Pipe Joint Insulation	5	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	208	Vaults/Acct. Papers	M	Plaster	368	Yes	No	NS This Room	1b	Plaster
2	209	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	415	No	No	110,111,112	0	Red-Gold Carpet Mastic
2	209	Offices/Comp. Rooms	M	Plaster	1132	Yes	No	NS This Room	1b	Plaster
2	209	Offices/Comp. Rooms	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	210	Offices/Comp. Rooms	F	12" x 12" Floor Tile	1568	Yes	No	062,064	1b	12"x12" Tan Floor Tile
2	210	Offices/Comp. Rooms	F	Linoleum	52	No	No	074,075,076	0	Gold Ocligon Linoleum
2	210	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	1568	No	No	062,064	0	Tan Carpet Mastic
2	210	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	1568	No	No	062,064	0	12"x12" Tan Floor Tile Mastic
2	210	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	52	No	No	074,075,076	0	Gold Ocligon Linoleum Mastic
2	210	Offices/Comp. Rooms	M	Ceiling Panels	1568	No	Yes	068,069,070	0	4'x8' Ceiling Boards
2	210	Offices/Comp. Rooms	M	Other	52	No	No	072,073	0	4" Tan Baseboard Mastic

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C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Frlable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
2	210	Offices/Comp. Rooms	M	Plaster	1275	Yes	No	NS This Room	1b	Plaster
2	210	Offices/Comp. Rooms	M	Wallboard/Taping Material	244	No	No	065,067	0	Wallboard (1) Joint Compound
2	210	Offices/Comp. Rooms	M	Wallboard/Taping Material	244	No	No	065,067	0	Wallboard (1)
2	210	Offices/Comp. Rooms	T	Pipe Joint Insulation	16	No	Yes	011	0	Pipe Insulation Sealant
2	211	Offices/Comp. Rooms	F	12" x 12" Floor Tile	990	Yes	No	063	1b	12"x12" Tan Floor Tile
2	211	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	990	No	No	063	0	Tan Carpet Mastic
2	211	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	990	No	No	063	0	12"x12" Tan Floor Tile Mastic
2	211	Offices/Comp. Rooms	M	Ceiling Panels	990	No	Yes	NS This Room	0	4'x8' Ceiling Boards
2	211	Offices/Comp. Rooms	M	Other	36	No	No	071	0	4" Tan Baseboard Mastic
2	211	Offices/Comp. Rooms	M	Plaster	1104	Yes	No	NS This Room	1b	Plaster
2	211	Offices/Comp. Rooms	T	Pipe Joint Insulation	10	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	212	Offices/Comp. Rooms	F	12" x 12" Floor Tile	470	Yes	No	NS This Room	1b	12"x12" Tan Floor Tile
2	212	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	470	No	No	NS This Room	0	12"x12" Tan Floor Tile Mastic
2	212	Offices/Comp. Rooms	M	Plaster	1518	Yes	No	NS This Room	1b	Plaster
2	212	Offices/Comp. Rooms	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	213	Vaults/Acct. Papers	M	Plaster	418	Yes	No	NS This Room	1b	Plaster
2	214	Offices/Comp. Rooms	F	12" x 12" Floor Tile	300	Yes	No	NS This Room	1b	12"x12" Tan Floor Tile
2	214	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	300	No	No	NS This Room	0	12"x12" Tan Floor Tile Mastic
2	214	Offices/Comp. Rooms	M	Plaster	954	Yes	No	NS This Room	1b	Plaster
2	214	Offices/Comp. Rooms	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	215	Offices/Comp. Rooms	F	12" x 12" Floor Tile	414	Yes	No	NS This Room	1b	12"x12" Tan Floor Tile
2	215	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	414	No	No	NS This Room	0	12"x12" Tan Floor Tile Mastic
2	215	Offices/Comp. Rooms	M	Plaster	1350	Yes	No	NS This Room	1b	Plaster

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C.3. Homogeneous Material Summary By Functional Floor and Area Locations

Port Townsend Main Post Office

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Frlable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
2	215	Offices/Comp. Rooms	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	216	Offices/Comp. Rooms	F	12" x 12" Floor Tile	516	Yes	No	NS This Room	1b	12"x12" Tan Floor Tile
2	216	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	516	No	No	NS This Room	0	12"x12" Tan Floor Tile Mastic
2	216	Offices/Comp. Rooms	M	Plaster	1650	Yes	No	NS This Room	1b	Plaster
2	216	Offices/Comp. Rooms	T	Pipe Joint Insulation	6	No	Yes	NS This Room	0	Pipe Insulation Sealant
2	218	Stairwells	F	12" x 12" Floor Tile	66	Yes	No	NS This Room	1b	12"x12" Tan Floor Tile
2	218	Stairwells	F	Mastic under Floor Tile/etc.	66	No	No	NS This Room	0	12"x12" Tan Floor Tile Mastic
2	218	Stairwells	F	Mastic under Floor Tile/etc.	88	No	No	NS This Room	0	Tan Carpet Mastic
2	218	Stairwells	M	Plaster	50	Yes	No	NS This Room	1b	Plaster
2	218	Stairwells	M	Wallboard/Taping Material	300	No	No	066	0	Wallboard (1) Joint Compound
2	218	Stairwells	M	Wallboard/Taping Material	300	No	No	066	0	Wallboard (1)
3	301	Hallways	M	Plaster	3608	Yes	No	033	1b	Plaster
3	302	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	315	No	No	080,081,119	0	Orange Carpet Mastic
3	302	Offices/Comp. Rooms	M	Plaster	1010	Yes	No	NS This Room	0	Plaster
3	303	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	300	No	No	082	0	Orange Carpet Mastic
3	303	Offices/Comp. Rooms	M	Plaster	984	Yes	No	NS This Room	1b	Plaster
3	304	Offices/Comp. Rooms	F	Mastic under Floor Tile/etc.	348	No	No	113,114,115,121	0	Orange Green Carpet Mastic
3	304	Offices/Comp. Rooms	M	Plaster	1422	Yes	No	NS This Room	1b	Plaster
3	304	Offices/Comp. Rooms	T	Pipe Joint Insulation	6	No	Yes	NS This Room	0	Pipe Insulation Sealant
3	305	Loading Dock/Storage	M	Electical Insulation	50	No	No	045,046	0	Electric Wire Insulation
3	305	Loading Dock/Storage	M	Other	20	No	Yes	095,120	0	White Insulation
3	306	Hallways	F	Linoleum	380	No	No	040	0	Brown Linoleum
3	307	Loading Dock/Storage	M	Wallboard/Taping Material	796	No	No	098,099,100	0	Wallboard (3)

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**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
3	308	Loading Dock/Storage	T	Pipe Joint Insulation	1	No	Yes	NS This Room	0	Pipe Insulation Sealant
3	310	Loading Dock/Storage	N/A	N/A	0	No	No		0	No Suspect ACBM
3	311	Loading Dock/Storage	N/A	N/A	0	No	No		0	No Suspect ACBM
3	312	Halfways	N/A	N/A	0	No	No		0	No Suspect ACBM
A	A01	Attics	M	Other	3783	No	Yes	096,097	0	White Insulation
B	B01	Boiler/Chiller Rooms	M	Other	4	Yes	Yes	016	4	Heat Exchanger Debris
B	B01	Boiler/Chiller Rooms	T	Boiler Insulation	10	Yes	Yes	001,002,003	7	Remnant Debris
B	B01	Boiler/Chiller Rooms	T	Duct Insulation	113	No	Yes	004,005	0	Hard Cloth Covered Duct Insulation
B	B01	Boiler/Chiller Rooms	T	Duct Insulation	480	No	Yes	019	0	Heat Exchanger Trowled lining
B	B01	Boiler/Chiller Rooms	T	Gasket Materials	3	Yes	No	Assumed	1b	Boiler Gaskets and Sealants (sets) - Assumed ACBM
B	B01	Boiler/Chiller Rooms	T	Pipe Joint Insulation	2	Yes	Yes	007,008,009,116	7	Pipe Insulation Ends
B	B01	Boiler/Chiller Rooms	T	Pipe Joint Insulation	44	No	Yes	010	0	Pipe Insulation Sealant
B	B01	Boiler/Chiller Rooms	T	Straight Pipe Insulation	116	Yes	Yes	013	4	Trench Insulation and Debris
B	B01	Boiler/Chiller Rooms	T	Transite	96	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B02	Loading Dock/Storage	F	12" x 12" Floor Tile	27	No	No	028,029,030	0	12"x12" Black Floor Tile (boxed)
B	B02	Loading Dock/Storage	M	Other	2	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B02	Loading Dock/Storage	T	Duct Insulation	320	No	Yes	NS This Room	0	Heat Exchanger Trowled lining
B	B02	Loading Dock/Storage	T	Pipe Joint Insulation	22	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B02	Loading Dock/Storage	T	Straight Pipe Insulation	40	No	Yes	NS This Room	0	Old Fiberglass Insulation (tar)
B	B02	Loading Dock/Storage	T	Straight Pipe Insulation	30	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B02	Loading Dock/Storage	T	Transite	48	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B03	Loading Dock/Storage	M	Other	1	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B03	Loading Dock/Storage	T	Duct Insulation	160	No	Yes	NS This Room	0	Heat Exchanger Trowled lining

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Port Townsend Main Post Office**

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
B	B03	Loading Dock/Storage	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B03	Loading Dock/Storage	T	Straight Pipe Insulation	30	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B03	Loading Dock/Storage	T	Transite	24	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B04	Loading Dock/Storage	M	Other	2	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B04	Loading Dock/Storage	T	Duct Insulation	320	No	Yes	NS This Room	0	Heat Exchanger Trowled Lining
B	B04	Loading Dock/Storage	T	Pipe Joint Insulation	10	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B04	Loading Dock/Storage	T	Straight Pipe Insulation	22	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B04	Loading Dock/Storage	T	Transite	48	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B05	Loading Dock/Storage	M	Plaster	360	Yes	No	037	1b	Plaster
B	B05	Loading Dock/Storage	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B06	Work-Room/Mail Proc.	M	Other	3	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B06	Work-Room/Mail Proc.	M	Plaster	950	Yes	No	NS This Room	1b	Plaster
B	B06	Work-Room/Mail Proc.	M	Transite	72	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B06	Work-Room/Mail Proc.	T	Pipe Joint Insulation	3	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B06	Work-Room/Mail Proc.	T	Straight Pipe Insulation	28	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B07	Work-Room/Mail Proc.	M	Other	1	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B07	Work-Room/Mail Proc.	M	Plaster	1640	Yes	No	NS This Room	1b	Plaster
B	B07	Work-Room/Mail Proc.	M	Transite	24	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B07	Work-Room/Mail Proc.	T	Duct Insulation	160	No	Yes	NS This Room	0	Heat Exchanger Trowled Lining
B	B07	Work-Room/Mail Proc.	T	Pipe Joint Insulation	22	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B07	Work-Room/Mail Proc.	T	Straight Pipe Insulation	28	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B08	Loading Dock/Storage	M	Pipe Joint Insulation	38	No	Yes	023	0	Old Fiber Glass Insulation (tar)
B	B08	Loading Dock/Storage	M	Plaster	920	Yes	No	NS This Room	1b	Plaster

A Risk Assessment/Hazard Ranking of zero (0) means that the material is not Asbestos (less than or equal to one percent - not regulated). A Risk Assessment/Hazard Ranking of one (1) to seven (7) means that the material is Asbestos. NS This Room - Indicates bulk sample for homogeneous area taken in another room.

**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
B	B08	Loading Dock/Storage	T	Pipe Joint Insulation	3	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B08	Loading Dock/Storage	T	Straight Pipe Insulation	28	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B09	Loading Dock/Storage	M	Other	2	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B09	Loading Dock/Storage	T	Duct Insulation	240	No	Yes	NS This Room	0	Heat Exchanger Trowled Lining
B	B09	Loading Dock/Storage	T	Pipe Joint Insulation	3	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B09	Loading Dock/Storage	T	Straight Pipe Insulation	80	Yes	Yes	014	4	Trench Insulation and Debris
B	B09	Loading Dock/Storage	T	Transite	48	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B10	Entrances and Exit Areas	M	Other	1	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B10	Entrances and Exit Areas	M	Plaster	1572	Yes	No	NS This Room	1b	Plaster
B	B10	Entrances and Exit Areas	T	Duct Insulation	160	No	Yes	NS This Room	0	Heat Exchanger Trowled Lining
B	B10	Entrances and Exit Areas	T	Pipe Joint Insulation	10	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B10	Entrances and Exit Areas	T	Straight Pipe Insulation	33	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B10	Entrances and Exit Areas	T	Transite	24	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B11	Loading Dock/Storage	M	Linoleum	540	No	No	038,117	0	Brown Linoleum
B	B11	Loading Dock/Storage	M	Other	2	Yes	Yes	NS This Room	4	Heat Exchanger Debris
B	B11	Loading Dock/Storage	M	Plaster	1510	Yes	No	NS This Room	1b	Plaster
B	B11	Loading Dock/Storage	T	Duct Insulation	320	No	Yes	NS This Room	0	Heat Exchanger Trowled Lining
B	B11	Loading Dock/Storage	T	Pipe Joint Insulation	10	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B11	Loading Dock/Storage	T	Straight Pipe Insulation	25	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B11	Loading Dock/Storage	T	Transite	48	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B12	Janitor Closet	M	Pipe Joint Insulation	35	No	Yes	024	0	Old Fiber Glass Insulation (tar)
B	B12	Janitor Closet	M	Plaster	804	Yes	No	NS This Room	1b	Plaster
B	B12	Janitor Closet	T	Pipe Joint Insulation	14	No	Yes	NS This Room	0	Pipe Insulation Sealant

A Risk Assessment/Hazard Ranking of zero (0) means that the material is not Asbestos (less than or equal to one percent - not regulated). A Risk Assessment/Hazard Ranking of one (1) to seven (7) means that the material is Asbestos. NS This Room - indicates bulk sample for homogeneous area taken in another room.

C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office

Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
B	B12	Janitor Closet	T	Straight Pipe Insulation	16	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B13	Loading Dock/Storage	M	Plaster	380	Yes	Yes	NS This Room	1b	Plaster
B	B14	Restrooms	M	Other	2	Yes	Yes	017,018	4	Heat Exchanger Debris
B	B14	Restrooms	M	Plaster	830	Yes	No	NS This Room	1b	Plaster
B	B14	Restrooms	T	Duct Insulation	240	No	Yes	020,021	0	Heat Exchanger Trowled lining
B	B14	Restrooms	T	Pipe Joint Insulation	17	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B14	Restrooms	T	Straight Pipe Insulation	51	No	No	022	0	Old Fiberglass Insulation (tar)
B	B14	Restrooms	T	Straight Pipe Insulation	14	Yes	Yes	NS This Room	4	Trench Insulation and Debris
B	B14	Restrooms	T	Transite	48	Yes	No	Assumed	1b	Heat Exchanger Transite - Assumed ACBM
B	B15	Stairwells	M	Plaster	990	Yes	No	NS This Room	1b	Plaster
B	B15	Stairwells	T	Duct Insulation	90	No	Yes	006	0	Cloth Wrapped Hard Duct Insulation
B	B15	Stairwells	T	Pipe Joint Insulation	8	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B16	Air Duct Shafts	M	Other	50	Yes	Yes	041,042,043	7	Chimney Debris
B	B16	Air Duct Shafts	T	Electical Insulation	30	No	Yes	044	0	Electric Wire Insulation
B	B16	Air Duct Shafts	T	Straight Pipe Insulation	50	Yes	Yes	025,026,027	2	Old Pipe Insulation (cloth)
B	B17	Hallways	M	Pipe Joint Insulation	120	No	Yes	NS This Room	0	Old Fiber Glass Insulation (tar)
B	B17	Hallways	M	Plaster	4700	Yes	No	036	1b	Plaster
B	B17	Hallways	T	Pipe Joint Insulation	32	No	Yes	NS This Room	0	Pipe Insulation Sealant
B	B17	Hallways	T	Straight Pipe Insulation	44	Yes	Yes	015	4	Trench Insulation and Debris
E	E01	Roofs, Siding and Paneling	M	Caulking	3300	Yes	No	101,102,103	1b	Exterior Caulk
E	E01	Roofs, Siding and Paneling	M	Other	4100	Yes	No	104,105,106	1b	Window Glaze
M	M01	Offices/Comp. Rooms	M	Plaster	4800	Yes	No	032	1b	Plaster
M	M01	Offices/Comp. Rooms	T	Pipe Joint Insulation	16	No	Yes	NS This Room	0	Pipe Insulation Sealant

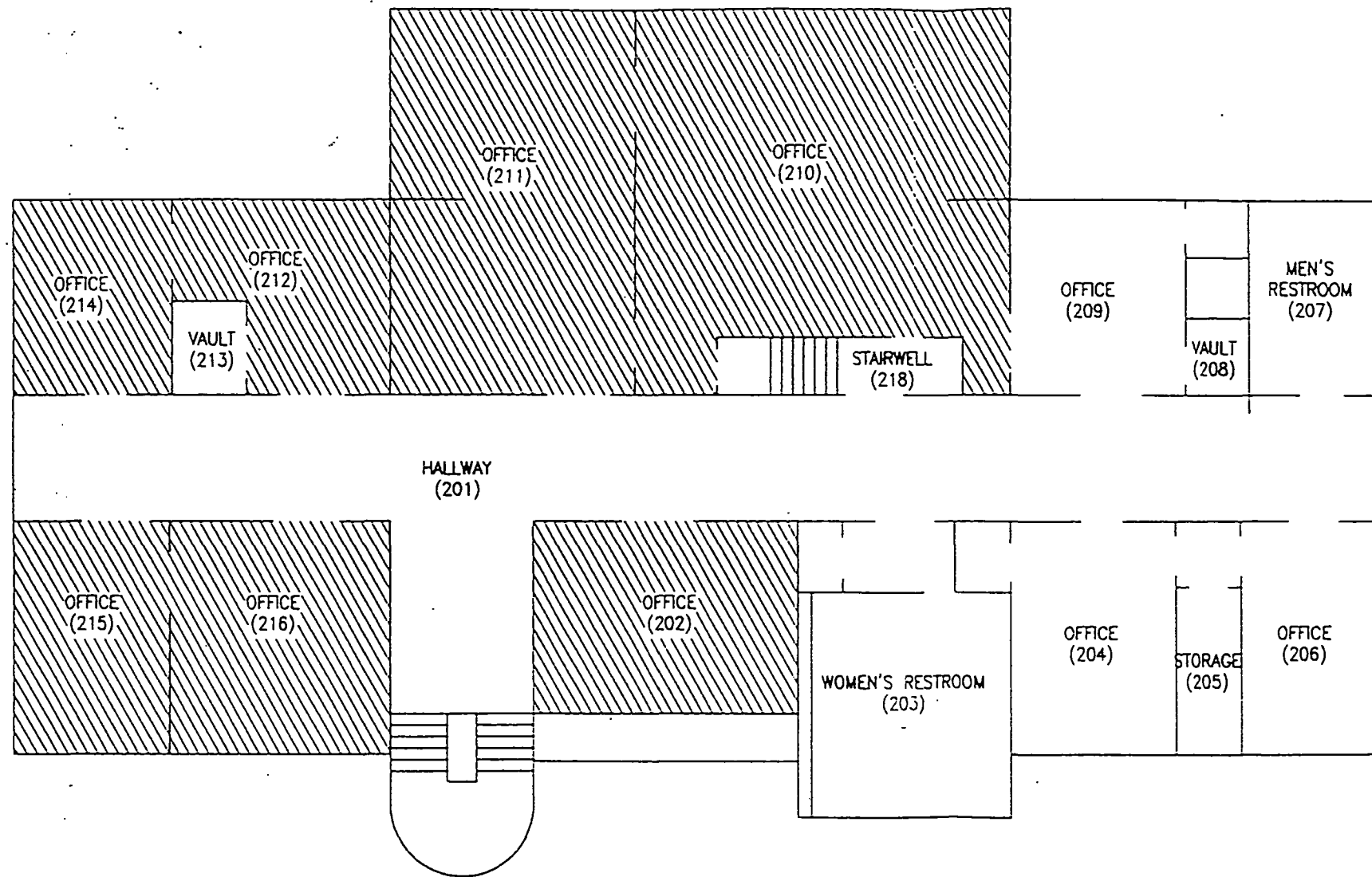
A Risk Assessment/Hazard Ranking of zero (0) means that the material is not Asbestos (less than or equal to one percent - not regulated). A Risk Assessment/Hazard Ranking of one (1) to seven (7) means that the Material is Asbestos. NS This Room - Indicates bulk sample for homogeneous area taken in another room.

**C.3. Homogeneous Material Summary By Functional Floor and Area Locations
Port Townsend Main Post Office**


Floor No	Room No	Functional Area	SACBM Type	Homogeneous Material Description	QTY	ACBM	Friable	Associated Bulk Sample No	Risk Assess./ Hazard Ranking	Comments
R	R01	Roofs, Siding and Paneling	M	Roofing Materials	1100	Yes	No	Assumed	1b	Roll Roofing and Sealants - Assumed ACBM
R	R02	Roofs, Siding and Paneling	M	Roofing Materials	14090	Yes	No	Assumed	1b	Roof Vapor Barrier - Assumed ACBM

A Risk Assessment/Hazard Ranking of zero (0) means that the material is not Asbestos (less than or equal to one percent - not regulated). A Risk Assessment/Hazard Ranking of one (1) to seven (7) means that the Material is Asbestos. NS This Room - Indicates bulk sample for homogeneous area taken in another room.

1779456C-pj-100297



EXPLANATION

 12"x12" TAN FLOOR TILE UNDER CARPET

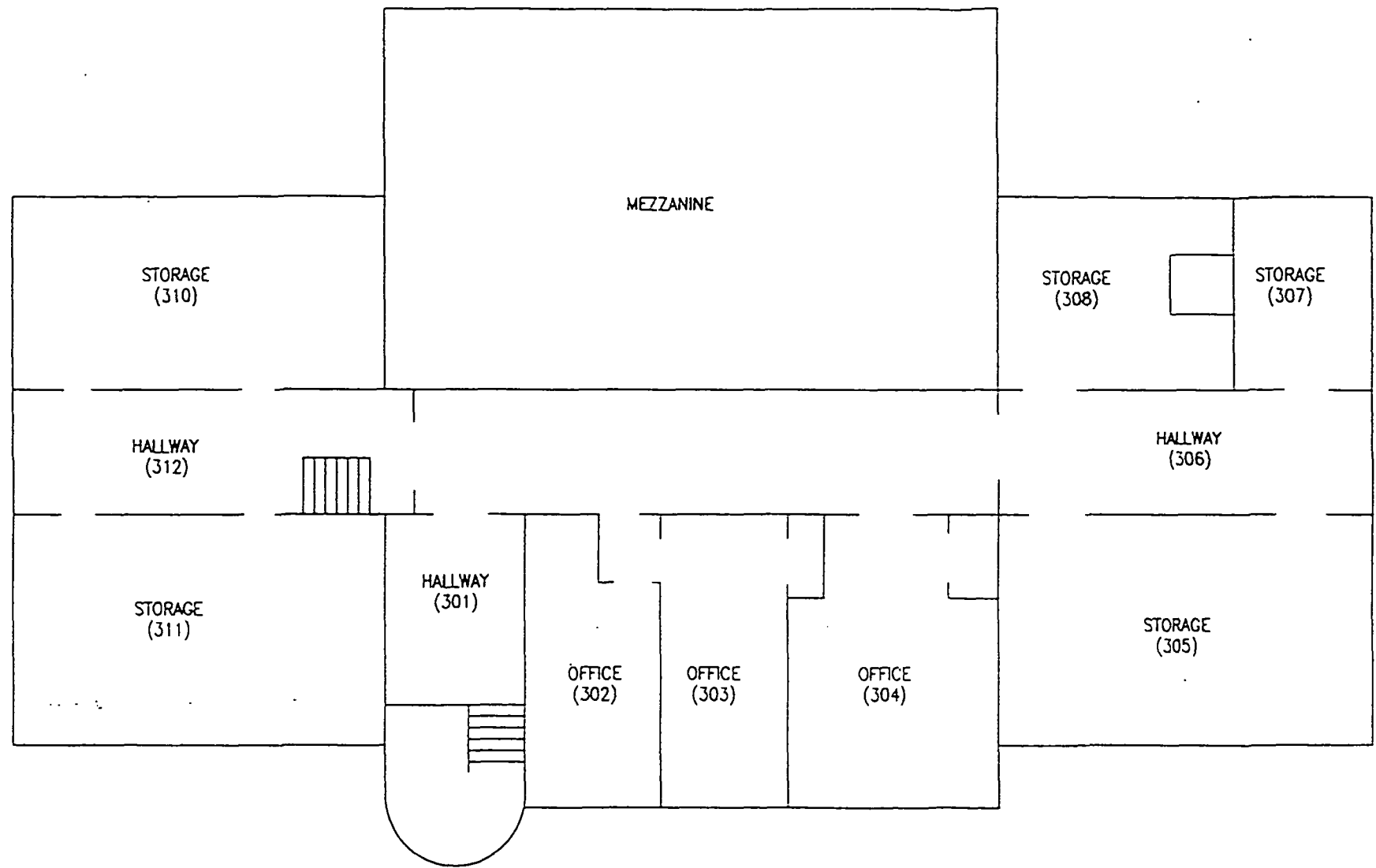
PLASTER THROUGHOUT, EXTERIOR CAULK, AND WINDOW GLAZE (EXTERIOR), ALL CONFIRMED ACBM.

NOT TO SCALE

WESTON
MANAGERS DESIGNERS/CONSULTANTS
 215 Union Boulevard
 Suite 500
 Lakewood, CO 80228
 (303) 980-6800

USPS Contract No.: 072976-95-B-0016
 USPS Project No.: E89196
 USPS Work Order No.: 165.00
 Port Townsend Main Post Office
 1322 Washington Street
 Port Townsend, Washington 98368-9998
 Finance/Sub. No.: 546776-G01
 Date: October 1997
 ACBM HOMOGENEOUS AREA LOCATIONS
 SECOND FLOOR PLAN
 FIGURE C.2

1779456c.pl-100897



EXPLANATION

PLASTER THROUGHOUT, EXTERIOR CAULK,
AND WINDOW GLAZE (EXTERIOR),
ALL CONFIRMED ACBM.

ROOF VAPOR BARRIER--ASSUMED ACBM



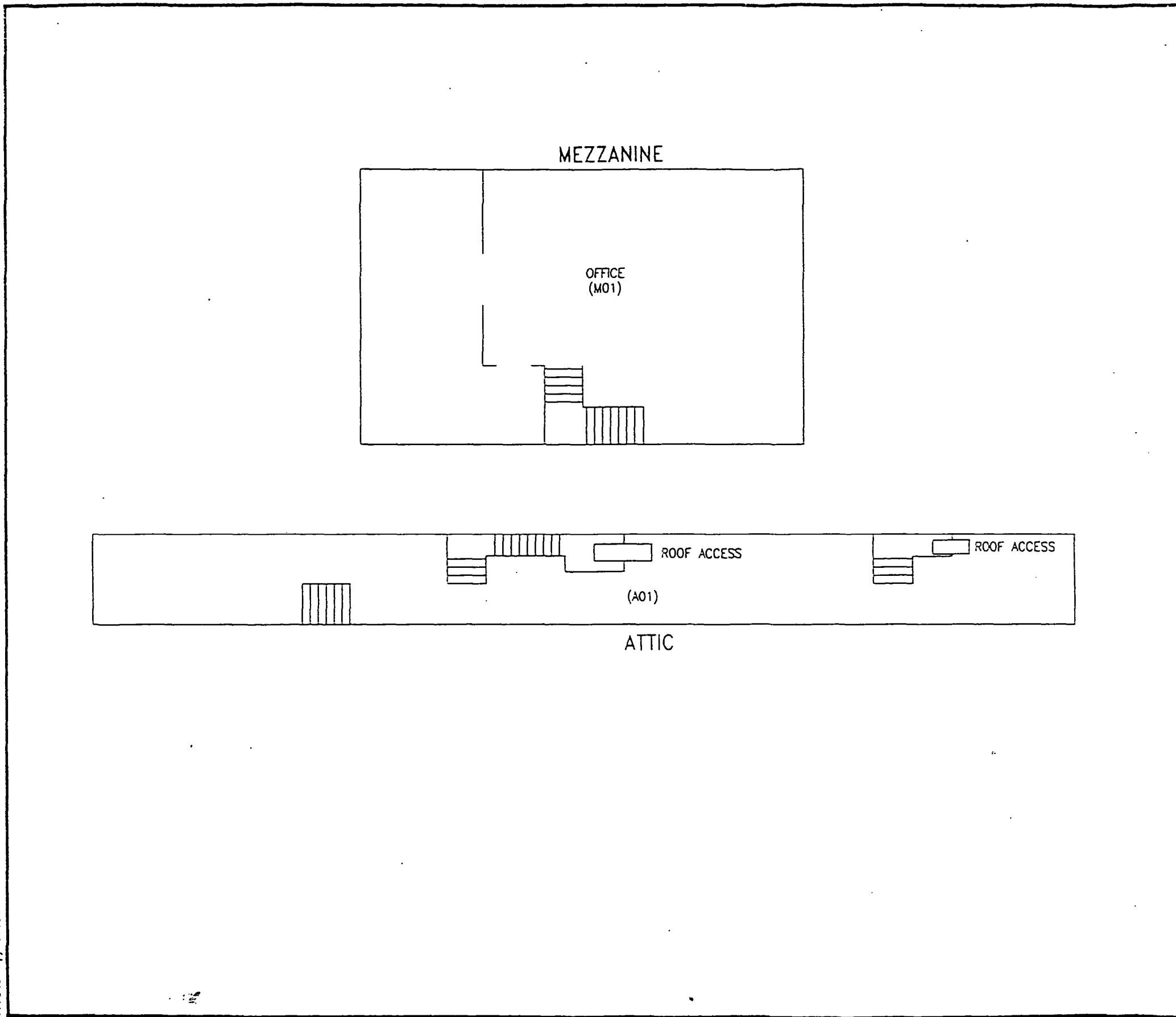
NOT TO SCALE

WESTON
MANAGERS DESIGNERS/CONSULTANTS

215 Union Boulevard
Suite 500
Lakewood, CO 80228
(303) 980-8200

USPS Contract No.: 072976-95-B-0016
 USPS Project No.: E89196
 USPS Work Order No.: 165.00
 Port Townsend Main Post Office
 1322 Washington Street
 Port Townsend, Washington 98368-9998
 Finance/Sub. No.: 546776-G01
 Date: October 1997

ACBM HOMOGENEOUS AREA LOCATIONS
 THIRD FLOOR PLAN
 FIGURE C.2



EXPLANATION

PLASTER THROUGHOUT, EXTERIOR CAULK,
AND WINDOW GLAZE (EXTERIOR),
ALL CONFIRMED ACBM.

ROOF VAPOR BARRIER—ASSUMED ACBM



NOT TO SCALE



215 Union Boulevard
Suite 500
Lakewood, CO 80223
(303) 980-6800

USPS Contract No.: 072976-95-8-0016
USPS Project No.: E89196
USPS Work Order No.: 165.00

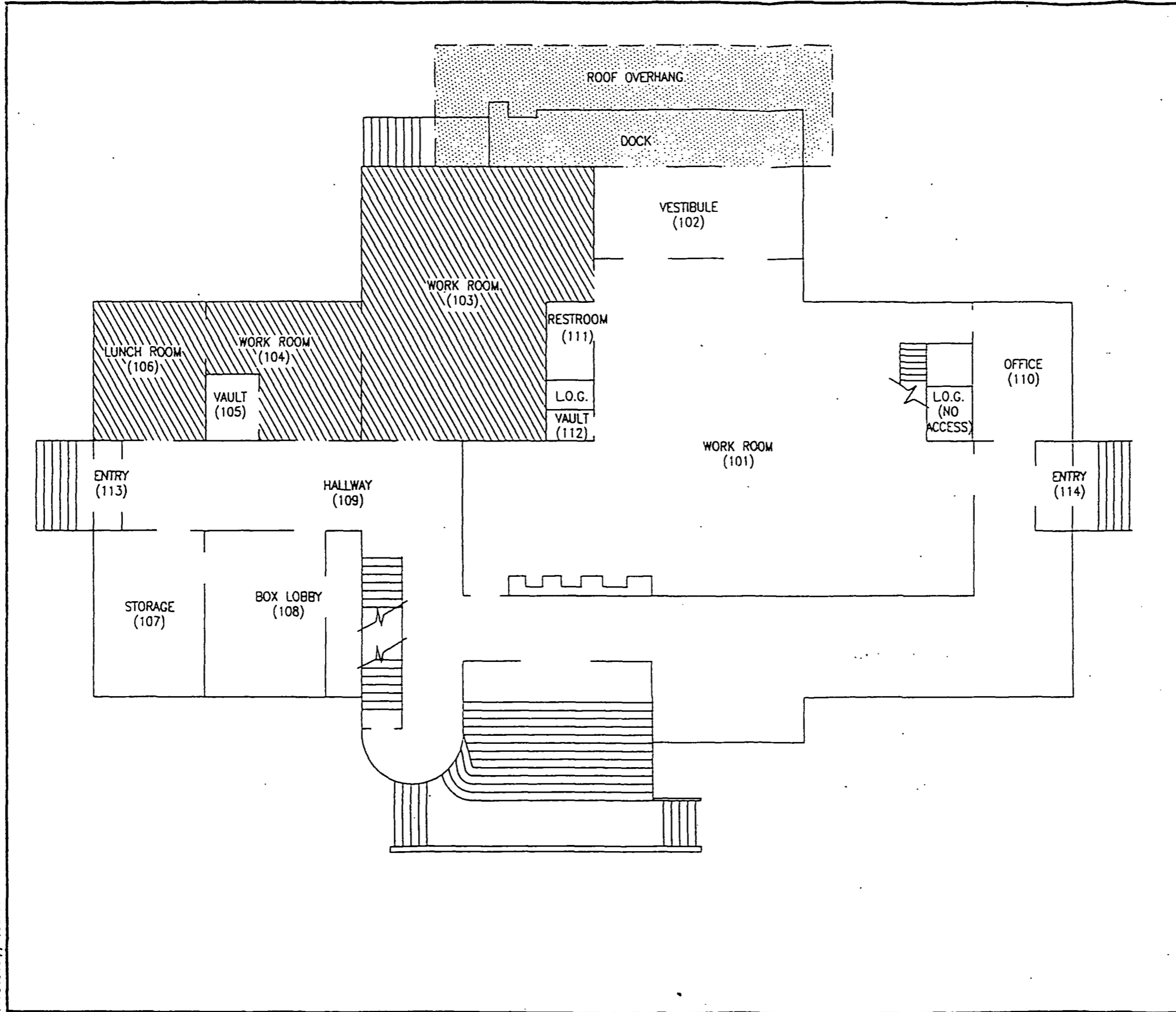
Port Townsend Main Post Office
1322 Washington Street
Port Townsend, Washington 98368-9998

Finance/Sub. No.: 546776-G01
Date: October 1997

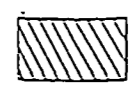

ACBM HOMOGENEOUS AREA LOCATIONS
ATTIC AND MEZZANINE FLOOR PLANS

FIGURE C.2

1779457C.pj-100897



EXPLANATION

-  12"x12" BROWN FLOOR TILE AND MASTIC UNDER 12" x 12" BLACK PAINTED FLOOR TILE
-  ROLL ROOF—ASSUMED ACBM (ROOF OVERHANG)

PLASTER THROUGHOUT, EXTERIOR CAULK, NO WINDOW GLAZE (EXTERIOR)
 L CONFIRMED ACBM.



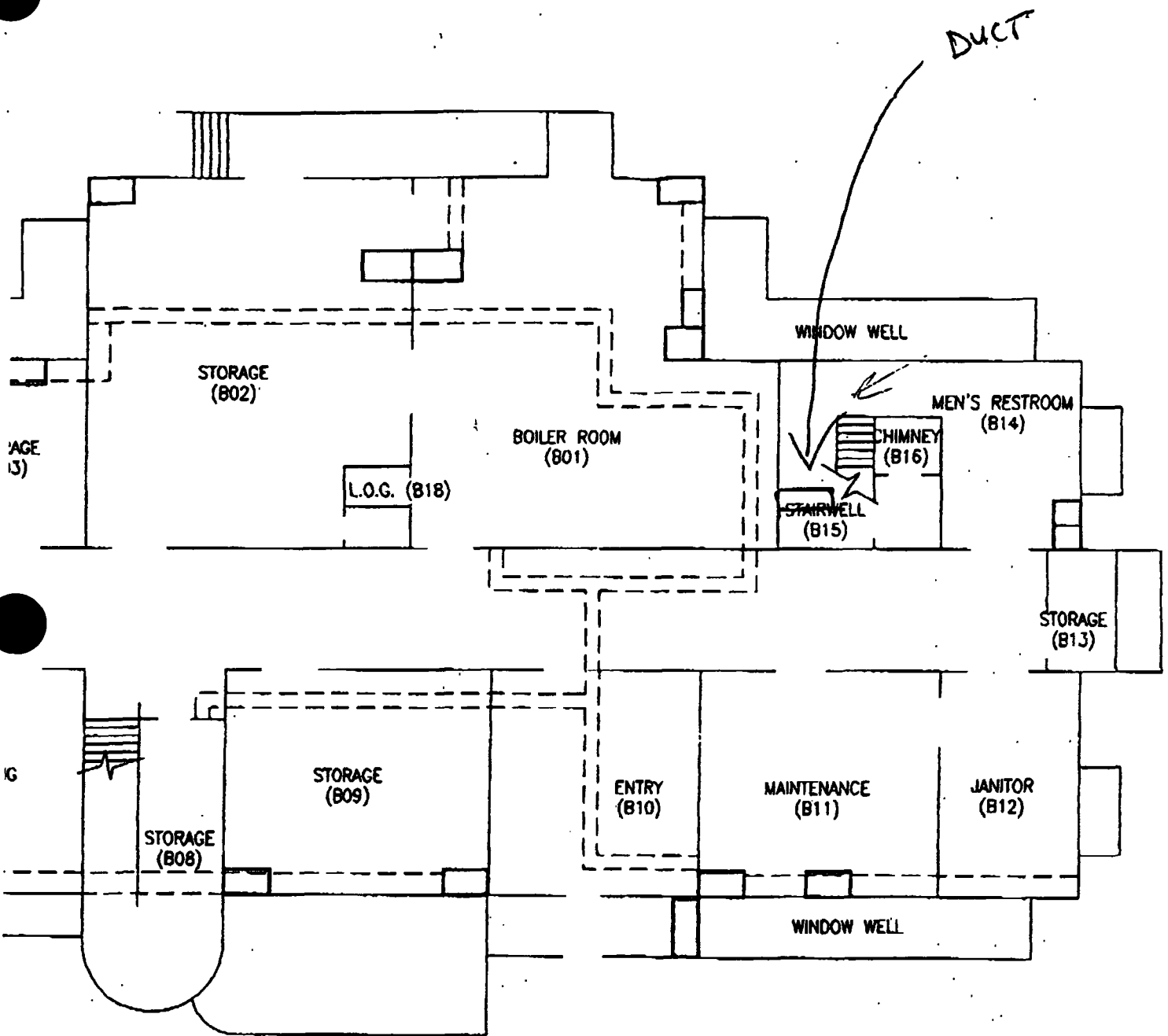
NOT TO SCALE

WESTON
 DESIGNERS/CONSULTANTS
 215 Union Boulevard
 Suite 500
 Lakewood, CO 80228
 (303) 980-5800

USPS Contract No.: 072976-95-B-0016
 USPS Project No.: E89196
 USPS Work Order No.: 165.00
 Port Townsend Main Post Office
 1322 Washington Street
 Port Townsend, Washington 98368-9998
 Finance/Sub. No.: 546776-G01
 Date: October 1997

ACBM HOMOGENEOUS AREA LOCATIONS
 FIRST FLOOR PLAN
 FIGURE C.2

1779454C.pj-100797



SECTION D

D.1. SECTION SUMMARY

This section documents the proper handling of collected bulk samples (D4.) and provides associated analytical results (D3.).

Section D.2. provides a facility floor plan where all bulk sample collections and photographs are identified by photograph and sample numbers. Sampling followed AHERA protocols. The method of analysis is contained within the laboratory's report.

BULK MATERIAL REPORT

REPORT Laboratory Analysis: BULK MATERIAL

Client: ROY F. WESTON, INC.

Reported to: LAVELL SCOTT

Sampled from: USPS-PORT TOWNSEND

Shipped via: FEDERAL EXPRESS

LAB: 41812

Methodology: EPA 600/M4-82-020

P/O#:

Proj: 0177907957600100

By: Client

Received: 9/17/97

Reported: 9/25/97

SAMPLE	IDENTIFICATION	PARAMETER	TEST RESULTS
119	POR-119 carpet mastic blue	Asbestos	None detected. This sample contains approx. 1% Cellulose, 1% Synthetics, 98% CaCO ₃ , Binder
120	POR-120 debris white	Asbestos	None detected. This sample contains approx. 95% Mineral Wool, 5% Binder
121	POR-121 carpet mastic dk. brown	Asbestos	None detected. This sample contains approx. trace Cellulose, 99% CaCO ₃ , CaSO ₄ , Binder

THE REPORT APPLIES TO THE STANDARDS OR PROCEDURES IDENTIFIED AND TO THE SAMPLE(S) TESTED. THE TEST RESULTS ARE NOT NECESSARILY INDICATIVE OR REPRESENTATIVE OF THE QUALITIES OF THE LOT FROM WHICH THE SAMPLE WAS TAKEN OR OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS, NOR DO THEY REPRESENT AN ONGOING QUALITY ASSURANCE PROGRAM UNLESS SO NOTED. THESE REPORTS ARE FOR THE EXCLUSIVE USE OF THE ADDRESSED CLIENT AND ARE RENDERED UPON THE CONDITION THAT THEY WILL NOT BE REPRODUCED WHOLLY OR IN PART FOR ADVERTISING OR OTHER PURPOSES OVER OUR SIGNATURE OR IN CONNECTION WITH OUR NAME WITHOUT SPECIAL WRITTEN PERMISSION. SAMPLES NOT DESTROYED IN TESTING ARE RETAINED A MAXIMUM OF THIRTY DAYS.

ACCREDITED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, VOLUNTARY LABORATORY ACCREDITATION PROGRAM FOR SELECTED TEST METHOD FOR ASBESTOS. THE ACCREDITATION OR ANY REPORTS GENERATED BY THIS LABORATORY IN NO WAY CONSTITUTES OR IMPLIES PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY. ALL ANALYSES ARE DERIVED FROM CALIBRATED VISUAL ESTIMATE UNLESS OTHERWISE NOTED. POLARIZED-LIGHT IS NOT CONSISTENTLY RELIABLE IN DETECTING ASBESTOS IN FLOOR COVERINGS AND SIMILAR NON-FRIABLE ORGANICALLY BOUND MATERIALS. QUANTITATIVE TRANSMISSION ELECTRON MICROSCOPY IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO DETERMINE IF THIS MATERIAL CAN BE CONSIDERED OR TREATED AS NON-ASBESTOS-CONTAINING.


Analyst: Ken Scheske


By: Kurt Kettler

NVLAP Accreditation #1926, CA ELAP #1913, TX DOH #30-0094

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 1 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-001 Lab Sample ID# 41812-01 Sample Description debris, brick

Colors beige, off white Materials debris, brick

FIBROUS MATERIAL 45% NONFIBROUS 55% HOMOGENEOUS Y

Textures fibrous, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% amosite, 35% chrysotile

PLM ANALYSIS

Chrysotile 25%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - Blue
X Becke Line Used
n || 1.556 n 1.548
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 10%

X Straight Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Mediu
X w blue e yellow
X D.St. - || Gold- Blue
X Becke Line Used
n || n 1.675
X Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 2 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-002 Lab Sample ID# 41812-02 Sample Description debris, brick

Colors beige, off white Materials debris, brick

FIBROUS MATERIAL 45% NONFIBROUS 55% HOMOGENEOUS Y

Textures fibrous, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% amosite, 35% chrysotile

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 3 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-003 Lab Sample ID# 41812-03 Sample Description decorative, brick

Colors beige, off white Materials decorative, brick

FIBROUS MATERIAL 45% NONFIBROUS 55% HOMOGENEOUS Y

Textures fibrous, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% amosite, 35% chrysotile

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow | Yellow
Becke Line Used
n || n |
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 4 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-004 Lab Sample ID# 41812-04 Sample Description hard, cloth, cover

Colors lt. beige, off white Materials hard, cloth, cover

FIBROUS MATERIAL 85% NONFIBROUS 15% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 85% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 85%

X Straight Fibers

X Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 5 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-004 Lab Sample ID# 41812-04 Sample Description duct insulation

Colors off white, black Materials duct insulation

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures powdery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 6 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-005 Lab Sample ID# 41812-05 Sample Description hard, cloth, cover

Colors beige, off white Materials hard, cloth, cover

FIBROUS MATERIAL 85% NONFIBROUS 15% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 85% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 85%
X Straight Fibers
X Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 7 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-005 Lab Sample ID# 41812-05 Sample Description duct insulation

Colors beige, tan Materials duct insulation

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures powdery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow _ Yellow
Becke Line Used
n || n _
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 25%

X Irregular Shapes
X Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Handwritten signature: K S

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 8 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-006

Lab Sample ID# 41812-06

Sample Description hard, cloth, cover

Colors off white

Materials hard, cloth, cover

FIBROUS MATERIAL 85%

NONFIBROUS

15%

HOMOGENEOUS

N

Textures fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 85% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 85%

X Straight Fibers

X Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 9 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-006 Lab Sample ID# 41812-06 Sample Description duct insulation

Colors off white, black Materials duct insulation

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS N

Textures powdery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 2%
X Straight Fibers
X Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 10 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-007 Lab Sample ID# 41812-07 Sample Description pipe insulation, end

Colors dk. beige Materials pipe insulation, end

FIBROUS MATERIAL 90% NONFIBROUS 10% HOMOGENEOUS Y

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 30% chrysotile, 50% cellulose, 10% synthetic

PLM ANALYSIS

Chrysotile 15%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - || Blue
X Becke Line Used
n || 1.557 n ⊥ 1.549
N Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 30%

X Flat Twisted Fibers
X Anisotropic
___ Synthetics 0%
___ Even Edges
___ High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic
___ Glass Fibers 0%
___ Straight Fibers
___ Isotropic

Crocidolite 0%

___ Straight Fibers
___ Sign of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow || Yellow
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

___ Quartz
___ Wollastonite 0%
___ CaCO X
___ CaSO
___ Mica
___ Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 11 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-008 Lab Sample ID# 41812-08 Sample Description pipe insulation, end

Colors dk. beige Materials pipe insulation, end

FIBROUS MATERIAL 90% NONFIBROUS 10% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 30% chrysotile, 50% cellulose, 10% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request



Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 12 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-009 Lab Sample ID# 41812-09 Sample Description pipe insulation, end

Colors dk. beige Materials pipe insulation, end

FIBROUS MATERIAL 90% NONFIBROUS 10% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 30% chrysotile, 50% cellulose, 10% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 13 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-010 Lab Sample ID# 41812-10 Sample Description pipe insulation

Colors yellow Materials pipe insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 95%

X Straight Fibers

X Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 14 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-010 Lab Sample ID# 41812-10 Sample Description sealant

Colors off white, silver Materials sealant

FIBROUS MATERIAL 40% NONFIBROUS 60% HOMOGENEOUS N

Textures fibrous Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 30% cellulose, 10% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
Sign of Elongation (+) _____
Parallel Extinction _____
Perpendicular Extinction _____
Birefringence Low
w blue e yellow _____
D.St. - || Mag. - l Blue _____
Becke Line Used _____
n || _____ n l _____
N Pleochroic @ 40X _____

Amosite 0%

Straight Fibers _____
Sign of Elongation (+) _____
Parallel Extinction _____
Perpendicular Extinction _____
Birefringence Mediu
w blue e yellow _____
D.St. - || Gold- l Blue _____
Becke Line Used _____
n || _____ n l _____
Pleochroic @ 40X _____

Crocidolite 0%

Straight Fibers _____
Sign of Elongation (-) _____
Parallel Extinction _____
Perpendicular Extinction _____
Birefringence Mediu
w tan e Blue _____
D.St. - || Yellow l Yellow _____
Becke Line Used _____
n || _____ n l _____
Pleochroic @ 40X _____

Anthophyllite 0%

Straight Fibers _____
Sign of Elongation (+) _____
Parallel Extinction _____
Birefringence Mediu
w Blue e yellow _____
D.St. - || Gold - l Blue _____
Becke Line Used _____
n || _____ n l _____
N Pleochroic @ 40X _____

Actinolite 0%

Straight Fibers _____
Sign of Elongation (+) _____
Parallel Extinction _____
Birefringence Low
w Blue e Yellow _____
D.St. - || Gold - l Blue _____
Becke Line Used _____
n || _____ n l _____
Pleochroic @ 40X _____

Tremolite 0%

Straight Fibers _____
Sign of Elongation (+) _____
Parallel Extinction _____
Oblique Extinction 0 Angle _____
Birefringence Low
w Blue e Yellow _____
D.St. - || Gold - l Blue _____
Becke Line Used _____
n || _____ n l _____
N Pleochroic @ 40X _____

Cellulose 35%

X Flat Twisted Fibers _____
X Anisotropic _____
Synthetics 0% _____
Even Edges _____
High Birefringence _____

Mineral Wool 0%

Irregular Shapes _____
Isotropic _____
Glass Fibers 5% _____
X Straight Fibers _____
X Isotropic _____

Perlite _____

Quartz _____
Wollastonite 0% _____
CaCO X _____
CaSO _____
Mica _____
Binder X _____

Other Fibers _____

Other nonfibers _____

Comments _____

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 15 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-011 Lab Sample ID# 41812-11 Sample Description pipe insulation

Colors yellow Materials pipe insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow | Yellow
Becke Line Used
n || n |
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 95%
X Straight Fibers
X Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Handwritten signature: K S

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 16 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-011 Lab Sample ID# 41812-11 Sample Description sealant

Colors off white, silver Materials sealant

FIBROUS MATERIAL 40% NONFIBROUS 60% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 30% cellulose, 10% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 35%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 5%
X Straight Fibers
X Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 17 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-012 Lab Sample ID# 41812-12 Sample Description pipe insulation

Colors yellow Materials pipe insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 85%
X Straight Fibers
X Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 18 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-012 Lab Sample ID# 41812-12 Sample Description sealant

Colors off white Materials sealant

FIBROUS MATERIAL 15% NONFIBROUS 85% HOMOGENEOUS N

Textures rubbery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 15% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 25%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 2%
X Straight Fibers
X Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 19 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-013 Lab Sample ID# 41812-13 Sample Description insulation

Colors lt. beige Materials insulation

FIBROUS MATERIAL 15% NONFIBROUS 85% HOMOGENEOUS N

Textures powdery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 15% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 20 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-013 Lab Sample ID# 41812-13 Sample Description debris, 1st layer

Colors dk. beige, tan, black Materials debris, 1st layer

FIBROUS MATERIAL 2% NONFIBROUS 98% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS 2% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica X

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 21 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-013 Lab Sample ID# 41812-13 Sample Description debris, 2nd layer

Colors gold, tan Materials debris, 2nd layer

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS N

Textures flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% actinolite

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite TR%

X Straight Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Birefringence Low
X w Blue e Yellow
X D.St. - || Gold - Blue
X Becke Line Used
n || 1.635 n 1.625
X Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica X

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 22 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-014 Lab Sample ID# 41812-14 Sample Description insulation

Colors off white, gold Materials insulation

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures powdery, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO x
CaSO x
Mica x
Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 23 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-015 Lab Sample ID# 41812-15 Sample Description insulation

Colors off white Materials insulation

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS N

Textures fibrous, fibrous Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 20% chrysotile

PLM ANALYSIS

Chrysotile 10%

- Wavy Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Low
- w blue e yellow
- D.St. - || Mag. - ⊥ Blue
- Becke Line Used
- n || 1.556 n ⊥ 1.549
- Pleochroic @ 40X

Amosite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Mediu
- w blue e yellow
- D.St. - || Gold- ⊥ Blue
- Becke Line Used
- n || _____ n ⊥ _____
- Pleochroic @ 40X

Crocidolite 0%

- Straight Fibers
- Sign of Elongation (-)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Mediu
- w tan e Blue
- D.St. - || Yellow ⊥ Yellow
- Becke Line Used
- n || _____ n ⊥ _____
- Pleochroic @ 40X

Anthophyllite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Birefringence Mediu
- w Blue e yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || _____ n ⊥ _____
- Pleochroic @ 40X

Actinolite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || _____ n ⊥ _____
- Pleochroic @ 40X

Tremolite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Oblique Extinction 0 Angle
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || _____ n ⊥ _____
- Pleochroic @ 40X

Cellulose 0%

- Flat Twisted Fibers
- Anisotropic
- Synthetics 0%
- Even Edges
- High Birefringence

Mineral Wool 0%

- Irregular Shapes
- Isotropic
- Glass Fibers 0%
- Straight Fibers
- Isotropic

Perlite _____

- Quartz X
- Wollastonite 2%
- CaCO X
- CaSO _____
- Mica _____
- Binder X

Other Fibers _____

Other nonfibers _____

Comments _____

K S

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 24 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-015 Lab Sample ID# 41812-15 Sample Description debris, 1st layer

Colors dk. beige Materials debris, 1st layer

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 25 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-015 Lab Sample ID# 41812-15 Sample Description debris, 2nd layer

Colors gold, tan Materials debris, 2nd layer

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS N

Textures flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% actinolite

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow | Yellow
Becke Line Used
n || n |
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request

Handwritten signature of Ken Scheske

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 26 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-016 Lab Sample ID# 41812-16 Sample Description heat exchanger, debris

Colors off white Materials heat exchanger, debris

FIBROUS MATERIAL 55% NONFIBROUS 45% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 40% chrysotile, 15% cellulose

PLM ANALYSIS

Chrysotile 30%

Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - || Blue
 Becke Line Used
n || 1.557 n || 1.548
N Pleochroic @ 40X

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || ___ n || ___
___ Pleochroic @ 40X

Crocidolite 0%

___ Straight Fibers
___ Sign of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow || Yellow
___ Becke Line Used
n || ___ n || ___
___ Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || ___ n || ___
N Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || ___ n || ___
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - || Blue
___ Becke Line Used
n || ___ n || ___
N Pleochroic @ 40X

Cellulose 15%

Flat Twisted Fibers
 Anisotropic
___ Synthetics 0%
___ Even Edges
___ High Birefringence

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic
___ Glass Fibers 0%
___ Straight Fibers
___ Isotropic

Perlite

___ Quartz
___ Wollastonite 0%
___ CaCO
___ CaSO X
___ Mica
___ Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 27 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-017 Lab Sample ID# 41812-17 Sample Description heat exchanger, debris

Colors dk. beige, black Materials heat exchanger, debris

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular, hard, powdery Location Description _____

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Low
 w blue e yellow _____
 D.St. - || Mag. - ┐ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Amosite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w blue e yellow _____
 D.St. - || Gold- ┐ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Crocidolite 0%

Straight Fibers _____
 Sign of Elongation (-) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w tan e Blue _____
 D.St. - || Yellow ┐ Yellow _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Anthophyllite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Mediu
 w Blue e yellow _____
 D.St. - || Gold - ┐ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Actinolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ┐ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Tremolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Oblique Extinction 0 Angle _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ┐ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Cellulose 2%

X Flat Twisted Fibers _____
 X Anisotropic _____
Synthetics 0%
 Even Edges _____
 High Birefringence _____

Mineral Wool 0%

Irregular Shapes _____
 Isotropic _____
Glass Fibers 0%
 Straight Fibers _____
 Isotropic _____

Perlite _____

Quartz X
Wollastonite 0%
CaCO X
CaSO X
Mica X
Binder X

Other Fibers _____

Other nonfibers _____

Comments _____

L. Rosenberg

Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 28 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-018 Lab Sample ID# 41812-18 Sample Description heat exchanger, debris

Colors dk. beige, black Materials heat exchanger, debris

FIBROUS MATERIAL 5% NONFIBROUS 95% HOMOGENEOUS Y

Textures granular, hard, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 5% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- || Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 3%

X Flat Twisted Fibers
X Anisotropic
Synthetics 2%
X Even Edges
X High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO X
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments



Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 29 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-019 Lab Sample ID# 41812-19 Sample Description heat exchanger, trowel, line

Colors off white, black, tan Materials heat exchanger, trowel, line

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 30 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-020 Lab Sample ID# 41812-20 Sample Description heat exchanger, trowel, line

Colors off white, black, tan Materials heat exchanger, trowel, line

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n ||
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n ||
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 31 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-021 Lab Sample ID# 41812-21 Sample Description heat exchanger, trowel, line

Colors off white, black, tan Materials heat exchanger, trowel, line

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 32 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-022 Lab Sample ID# 41812-22 Sample Description tar, wrap

Colors off white, black, silver Materials tar, wrap

FIBROUS MATERIAL 35% NONFIBROUS 65% HOMOGENEOUS Y

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 35% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Cellulose 35%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow | Yellow
Becke Line Used
n || n |
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 33 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-023 Lab Sample ID# 41812-23 Sample Description tar, wrap

Colors beige, silver, black Materials tar, wrap

FIBROUS MATERIAL 35% NONFIBROUS 65% HOMOGENEOUS Y

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 35% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 35%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers Al. Foil

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 34 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-024 Lab Sample ID# 41812-24 Sample Description wrap

Colors beige, black, silver Materials wrap

FIBROUS MATERIAL 35% NONFIBROUS 65% HOMOGENEOUS N

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 35% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 35%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers Al. Foil

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 35 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-025 Lab Sample ID# 41812-25 Sample Description old, pipe insulation

Colors gray Materials old, pipe insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% chrysotile, 65% cellulose, 10% synthetic

PLM ANALYSIS

Chrysotile 15%

Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - Blue
 Becke Line Used
n || 1.557 n 1.548
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
 Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 70%

Flat Twisted Fibers
 Anisotropic
Synthetics 0%
 Even Edges
 High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
 Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
 Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
 Isotropic
Glass Fibers 0%
 Straight Fibers
 Isotropic

Crocidolite 0%

Straight Fibers
 Sign of Elongation (-)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
 Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Oblique Extinction 0 Angle
 Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
 Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

41812

Pg 36 of 18

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPRESS

Client Sample ID# POR-026 Lab Sample ID# 41812-26 Sample Description old, pipe insulation

Colors beige, gray Materials old, pipe insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS Y

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% chrysotile, 65% cellulose, 10% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 37 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-027 Lab Sample ID# 41812-27 Sample Description old, pipe insulation

Colors beige, gray Materials old, pipe insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS Y

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% chrysotile, 65% cellulose, 10% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 38 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-028 Lab Sample ID# 41812-28 Sample Description 12"x12" floor tile

Colors black, white Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures smooth, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments insufficient mastic/adhesive for analysis

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 39 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-029 Lab Sample ID# 41812-29 Sample Description 12"x12" floor tile

Colors black Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures hard, smooth Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO x
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments insufficient mastic/adhesive for analysis

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 40 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-030 Lab Sample ID# 41812-30 Sample Description 12"x12" floor tile

Colors black, white Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures smooth, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments insufficient mastic/adhesive for analysis

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow - || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 41 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-031 Lab Sample ID# 41812-31 Sample Description plaster - scratch coat

Colors lt. gray, black, tan Materials plaster - scratch coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 42 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-031 Lab Sample ID# 41812-31 Sample Description plaster - finish coat

Colors off white Materials plaster - finish coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics TR%
X Even Edges
X High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 43 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-032 Lab Sample ID# 41812-32 Sample Description plaster - scratch coat

Colors gray, black, tan Materials plaster - scratch coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO

CaSO X

Mica X

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 44 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-032 Lab Sample ID# 41812-32 Sample Description plaster - finish coat

Colors off white Materials plaster - finish coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics TR%
X Even Edges
X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 45 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-032 Lab Sample ID# 41812-32 Sample Description plaster, compound

Colors lt. beige Materials plaster, compound

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 3%
X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - ⊥ Blue
X Becke Line Used
n || 1.557 n ⊥ 1.548
N Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%
Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz
Wollastonite 0%
CaCO X
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 46 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-032 Lab Sample ID# 41812-32 Sample Description plaster, texture

Colors white Materials plaster, texture

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures fine grained Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n ||

N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n ||

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%

CaCO

CaSO X

Mica X

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 47 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-033 Lab Sample ID# 41812-33 Sample Description plaster, compound

Colors lt. beige Materials plaster, compound

FIBROUS MATERIAL 2% NONFIBROUS 98% HOMOGENEOUS N

Textures powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 2% chrysotile

PLM ANALYSIS

Chrysotile 2%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - ⊥ Blue
X Becke Line Used
n || 1.556 n ⊥ 1.547
N Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

___ Flat Twisted Fibers
___ Anisotropic
___ Synthetics 0%
___ Even Edges
___ High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic
___ Glass Fibers 0%
___ Straight Fibers
___ Isotropic

Crocidolite 0%


___ Straight Fibers
___ Sign of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow ⊥ Yellow
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

___ Quartz X
___ Wollastonite 0%
___ CaCO
___ CaSO X
___ Mica
___ Binder X



Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 48 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-033 Lab Sample ID# 41812-33 Sample Description plaster, texture

Colors white Materials plaster, texture

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures fine grained Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments

L. Rosenberger

Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 49 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-034 Lab Sample ID# 41812-34 Sample Description plaster - scratch coat

Colors gray, black, tan Materials plaster - scratch coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments



Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 50 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-034 Lab Sample ID# 41812-34 Sample Description plaster - finish coat

Colors off white Materials plaster - finish coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz X

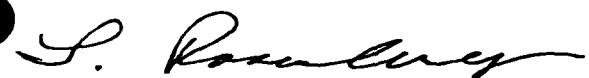
Wollastonite 0%

CaCO

CaSO X

Mica

Binder X



Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 51 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-034 Lab Sample ID# 41812-34 Sample Description compound

Colors lt. beige Materials compound

FIBROUS MATERIAL 2% NONFIBROUS 98% HOMOGENEOUS N

Textures powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 2% chrysotile

PLM ANALYSIS

Chrysotile 2%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - ⊥ Blue
X Becke Line Used
n || 1.556 n ⊥ 1.547
N Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

___ Flat Twisted Fibers
___ Anisotropic

Synthetics 0%

___ Even Edges
___ High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold- ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic

Glass Fibers 0%

___ Straight Fibers
___ Isotropic

Crocidolite 0%

___ Straight Fibers
___ Sign. of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow ⊥ Yellow
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

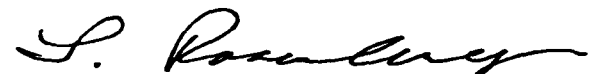
Wollastonite 0%

CaCO x

CaSO x

Mica x

Binder x



Analyst Larry Rosenberger

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 52 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-034 Lab Sample ID# 41812-34 Sample Description texture

Colors white Materials texture

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 2%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - ⊥ Blue
X Becke Line Used
n || 1.557 n ⊥ 1.548
N Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

___ Flat Twisted Fibers
___ Anisotropic
___ Synthetics 0%
___ Even Edges
___ High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic
___ Glass Fibers 0%
___ Straight Fibers
___ Isotropic

Crocidolite 0%

___ Straight Fibers
___ Sign of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow ⊥ Yellow
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

___ Quartz X
___ Wollastonite 0%
___ CaCO X
___ CaSO
___ Mica X
___ Binder X

Analyst Larry Rosenberger

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 53 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-035 Lab Sample ID# 41812-35 Sample Description plaster - scratch coat

Colors gray, black, tan Materials plaster - scratch coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments



Analyst Larry Rosenberger

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 54 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-035 Lab Sample ID# 41812-35 Sample Description plaster - finish coat

Colors off white Materials plaster - finish coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n ||
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n ||
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 1%
CaCO
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments



Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 55 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-035 Lab Sample ID# 41812-35 Sample Description texture

Colors white Materials texture

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow _ Yellow
Becke Line Used
n || n _
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz x
Wollastonite 0%
CaCO
CaSO x
Mica
Binder x

Other Fibers

Other nonfibers

Comments

[Signature]

Analyst Larry Rosenberger

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 56 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-036 Lab Sample ID# 41812-36 Sample Description plaster

Colors off white Materials plaster

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 57 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-037 Lab Sample ID# 41812-37 Sample Description plaster - scratch coat

Colors gray, black, tan Materials plaster - scratch coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 1%

CaCO

CaSO X

Mica X

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 58 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

at ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-037 Lab Sample ID# 41812-37 Sample Description plaster - finish coat

Colors off white Materials plaster - finish coat

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular, hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 59 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-038 Lab Sample ID# 41812-38 Sample Description linoleum

Colors brown Materials linoleum

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures rubbery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 60 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-039 Lab Sample ID# 41812-39 Sample Description linoleum

Colors brown Materials linoleum

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS N

Textures rubbery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose 15%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 61 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-040 Lab Sample ID# 41812-40 Sample Description linoleum

Colors brown Materials linoleum

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures rubbery, fibrous Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Low
 w blue e yellow _____
 D.St. - || Mag. - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X

Amosite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w blue e yellow _____
 D.St. - || Gold- ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X

Crocidolite 0%

Straight Fibers _____
 Sign of Elongation (-) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w tan e Blue _____
 D.St. - || Yellow ⊥ Yellow _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Mediu
 w Blue e yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X

Actinolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X

Tremolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Oblique Extinction 0 Angle _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X

Cellulose 15%

X Flat Twisted Fibers _____
 X Anisotropic _____
Synthetics 0%
 Even Edges _____
 High Birefringence _____

Mineral Wool 0%

Irregular Shapes _____
 Isotropic _____
Glass Fibers 0%
 Straight Fibers _____
 Isotropic _____

Perlite _____

Quartz X
Wollastonite 0%
CaCO X
CaSO _____
Mica _____
Binder X

Other Fibers _____

Other nonfibers _____

Comments _____

Ken Scheske

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 62 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-041 Lab Sample ID# 41812-41 Sample Description chimney, debris

Colors dk. gray, black Materials chimney, debris

FIBROUS MATERIAL 5% NONFIBROUS 95% HOMOGENEOUS Y

Textures granular, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 5% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 5%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 63 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-042 Lab Sample ID# 41812-42 Sample Description chimney, debris

Colors dk. beige Materials chimney, debris

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS Y

Textures fibrous, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% chrysotile, 60% cellulose

PLM ANALYSIS

Chrysotile 20%

- Wavy Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Low
- w blue e yellow
- D.St. - || Mag. - ⊥ Blue
- Becke Line Used
- n || 1.556 n ⊥ 1.548
- N Pleochroic @ 40X

Amosite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Mediu
- w blue e yellow
- D.St. - || Gold- ⊥ Blue
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Crocidolite 0%

- Straight Fibers
- Sign of Elongation (-)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Mediu
- w tan e Blue
- D.St. - || Yellow ⊥ Yellow
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Anthophyllite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Birefringence Mediu
- w Blue e yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Actinolite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Tremolite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Oblique Extinction 0 Angle
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Cellulose 60%

- Flat Twisted Fibers
- Anisotropic
- Synthetics 0%**
- Even Edges
- High Birefringence

Mineral Wool 0%

- Irregular Shapes
- Isotropic
- Glass Fibers 0%**
- Straight Fibers
- Isotropic

Perlite

- Quartz**
- Wollastonite 0%**
- CaCO**
- CaSO x**
- Mica**
- Binder x**

Other Fibers

Other nonfibers

Comments

K S

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 64 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-043 Lab Sample ID# 41812-43 Sample Description

Colors Materials
FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle.
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

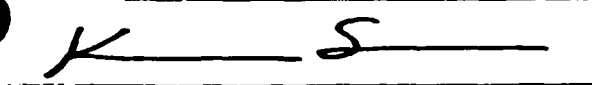
Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request



Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 65 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-044 Lab Sample ID# 41812-44 Sample Description wire, insulation

Colors black Materials wire, insulation

FIBROUS MATERIAL 85% NONFIBROUS 15% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 85% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 85%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 66 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-044 Lab Sample ID# 41812-44 Sample Description wire, coating

Colors black Materials wire, coating

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica X

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 67 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-044 Lab Sample ID# 41812-44 Sample Description wire wrap

Colors black Materials wire wrap

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 95%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 68 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-045 Lab Sample ID# 41812-45 Sample Description wire, insulation

Colors beige Materials wire, insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Cellulose 95%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 69 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-045 Lab Sample ID# 41812-45 Sample Description wire, coating

Colors black Materials wire, coating

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO x
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 70 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-045 Lab Sample ID# 41812-45 Sample Description wire wrap

Colors brown Materials wire wrap

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 95%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 71 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-046 Lab Sample ID# 41812-46 Sample Description wire, insulation

Colors beige Materials wire, insulation

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 95%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 72 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-046 Lab Sample ID# 41812-46 Sample Description wire, coating

Colors black Materials wire, coating

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 73 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-046 Lab Sample ID# 41812-46 Sample Description wire wrap

Colors brown Materials wire wrap

FIBROUS MATERIAL 95% NONFIBROUS 5% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 95%
X Even Edges
X High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 74 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-047 Lab Sample ID# 41812-47 Sample Description 12"x12" floor tile

Colors black Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Medium

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 75 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-047 Lab Sample ID# 41812-47 Sample Description mastic

Colors yellow Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

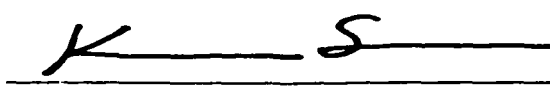
Perlite

Quartz
Wollastonite 0%
CaCO x
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 76 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-048 Lab Sample ID# 41812-48 Sample Description 12"x12" floor tile

Colors black Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow || Yellow
Becke Line Used
n || n ||
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - || Blue
Becke Line Used
n || n ||
Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz x
Wollastonite 0%
CaCO x
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments

Handwritten signature

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 77 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-048 Lab Sample ID# 41812-48 Sample Description mastic

Colors yellow Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz X
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 78 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-048 Lab Sample ID# 41812-48 Sample Description 12"x12" floor tile

Colors brown Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 10%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - ⊥ Blue
X Becke Line Used
n || 1.556 n ⊥ 1.548
N Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

___ Flat Twisted Fibers
___ Anisotropic
___ Synthetics 0%
___ Even Edges
___ High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic
___ Glass Fibers 0%
___ Straight Fibers
___ Isotropic

Crocidolite 0%

___ Straight Fibers
___ Sign of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow ⊥ Yellow
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

___ Quartz
___ Wollastonite 0%
___ CaCO X
___ CaSO
___ Mica
___ Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 79 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-048 Lab Sample ID# 41812-48 Sample Description mastic

Colors black Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 10%

X Wavy Fibers
X Sign of Elongation (+)
X Parallel Extinction
X Perpendicular Extinction
X Birefringence Low
X w blue e yellow
X D.St. - || Mag. - ⊥ Blue
X Becke Line Used
n || 1.557 n ⊥ 1.548
N Pleochroic @ 40X

Amosite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Crocidolite 0%

___ Straight Fibers
___ Sign of Elongation (-)
___ Parallel Extinction
___ Perpendicular Extinction
___ Birefringence Mediu
___ w tan e Blue
___ D.St. - || Yellow ⊥ Yellow
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Anthophyllite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Mediu
___ w Blue e yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
___ Pleochroic @ 40X

Tremolite 0%

___ Straight Fibers
___ Sign of Elongation (+)
___ Parallel Extinction
___ Oblique Extinction 0 Angle
___ Birefringence Low
___ w Blue e Yellow
___ D.St. - || Gold - ⊥ Blue
___ Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 5%

X Flat Twisted Fibers
X Anisotropic
___ Synthetics 0%
___ Even Edges
___ High Birefringence

Mineral Wool 0%

___ Irregular Shapes
___ Isotropic
___ Glass Fibers 0%
___ Straight Fibers
___ Isotropic

Perlite

___ Quartz
___ Wollastonite 0%
___ CaCO x
___ CaSO
___ Mica
___ Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 80 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-049 Lab Sample ID# 41812-49 Sample Description 12"x12" floor tile

Colors black Materials 12"x12" floor tile

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz x

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 81 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-049 Lab Sample ID# 41812-49 Sample Description mastic

Colors yellow Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 5%

X Flat Twisted Fibers

X Anisotropic

Synthetics 2%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz x

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 82 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-049** Lab Sample ID# **41812-49** Sample Description

Colors _____ Materials _____

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures _____ Location Description _____

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%
Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - 1 Blue
Becke Line Used
n || n 1
Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- 1 Blue
Becke Line Used
n || n 1
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow 1 Yellow
Becke Line Used
n || n 1
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - 1 Blue
Becke Line Used
n || n 1
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - 1 Blue
Becke Line Used
n || n 1
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - 1 Blue
Becke Line Used
n || n 1
N Pleochroic @ 40X

Cellulose 0%
Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

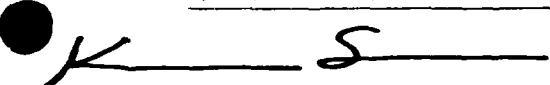
Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder

Other Fibers

Other nonfibers

Comments not analyzed per client request



Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 83 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-049 Lab Sample ID# 41812-49 Sample Description

Colors Materials

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 84 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-050 Lab Sample ID# 41812-50 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 85 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-051 Lab Sample ID# 41812-51 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 5%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 86 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-052 Lab Sample ID# 41812-52 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 3%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 87 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-053 Lab Sample ID# 41812-53 Sample Description caulk

Colors off white Materials caulk

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 88 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-054 Lab Sample ID# 41812-54 Sample Description caulk

Colors gray, orange Materials caulk

FIBROUS MATERIAL 3% NONFIBROUS 97% HOMOGENEOUS N

Textures granular Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica X

Binder X

Analyst Ken Scheske

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 89 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-055 Lab Sample ID# 41812-55 Sample Description caulk

Colors off white, white Materials caulk

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures granular Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Low
 w blue e yellow _____
 D.St. - || Mag. - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Amosite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w blue e yellow _____
 D.St. - || Gold- ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Crocidolite 0%

Straight Fibers _____
 Sign of Elongation (-) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w tan e Blue _____
 D.St. - || Yellow ⊥ Yellow _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Anthophyllite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Mediu
 w Blue e yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Actinolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Tremolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Oblique Extinction 0 Angle _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Cellulose 2%

X Flat Twisted Fibers _____
 X Anisotropic _____
Synthetics 0%
 Even Edges _____
 High Birefringence _____

Mineral Wool 0%

Irregular Shapes _____
 Isotropic _____
Glass Fibers 0%
 Straight Fibers _____
 Isotropic _____

Perlite _____

Quartz _____
Wollastonite 0%
CaCO X
CaSO X
Mica X
Binder X

Other Fibers

Other nonfibers _____

Comments _____

K S

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 90 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-056

Lab Sample ID# 41812-56

Sample Description carpet mastic

Colors gray, black

Materials carpet mastic

FIBROUS MATERIAL 3%

NONFIBROUS 97%

HOMOGENEOUS Y

Textures resinous, fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - _ Blue

Becke Line Used

n || n _

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w blue e yellow

D.St. - || Gold - _ Blue

Becke Line Used

n || n _

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w tan e Blue

D.St. - || Yellow _ Yellow

Becke Line Used

n || n _

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Medium

w Blue e yellow

D.St. - || Gold - _ Blue

Becke Line Used

n || n _

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - _ Blue

Becke Line Used

n || n _

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - _ Blue

Becke Line Used

n || n _

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 3%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 91 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-056

Lab Sample ID# 41812-56

Sample Description carpet mastic, backing

Colors tan

Materials carpet mastic, backing

FIBROUS MATERIAL 20%

NONFIBROUS

80%

HOMOGENEOUS N

Textures fibrous, granular

Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 20%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 92 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-056

Lab Sample ID# 41812-56

Sample Description linoleum

Colors tan

Materials linoleum

FIBROUS MATERIAL 1%

NONFIBROUS 99%

HOMOGENEOUS Y

Textures granular

Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 35%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 93 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-056 Lab Sample ID# 41812-56 Sample Description linoleum mastic

Colors tan Materials linoleum mastic

FIBROUS MATERIAL 6% NONFIBROUS 94% HOMOGENEOUS N

Textures resinous, fibrous, rubbery Location Description

ESTIMATED FIBROUS CONSTITUENTS 5% synthetic, 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- Blue

Becke Line Used

n || n

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow Yellow

Becke Line Used

n || n

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Cellulose 3%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 94 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-057 Lab Sample ID# 41812-57 Sample Description carpet mastic

Colors gray, black Materials carpet mastic

FIBROUS MATERIAL 4% NONFIBROUS 96% HOMOGENEOUS Y

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% cellulose, 1% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers
X Anisotropic

Synthetics 3%

X Even Edges
X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 95 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-057 Lab Sample ID# 41812-57 Sample Description carpet mastic, backing

Colors tan Materials carpet mastic, backing

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS N

Textures fibrous, granular Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 10%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 96 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-057 Lab Sample ID# 41812-57 Sample Description linoleum

Colors tan Materials linoleum

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures granular Location Description _____

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - ⊥ Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Amosite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w blue e yellow
 D.St. - || Gold- ⊥ Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
 Sign of Elongation (-)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w tan e Blue
 D.St. - || Yellow ⊥ Yellow
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Mediu
 w Blue e yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Tremolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Oblique Extinction 0 Angle
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Cellulose 40%

X Flat Twisted Fibers
 X Anisotropic
Synthetics 0%
 Even Edges
 High Birefringence

Mineral Wool 0%

Irregular Shapes
 Isotropic
Glass Fibers 0%
 Straight Fibers
 Isotropic

Perlite _____

Quartz _____

Wollastonite 0%

CaCO x

CaSO _____

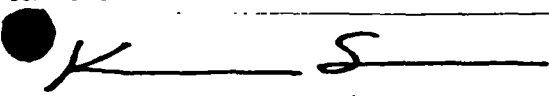
Mica _____

Binder x

Other Fibers

Other nonfibers _____

Comments _____



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 97 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-057 Lab Sample ID# 41812-57 Sample Description linoleum mastic

Colors tan Materials linoleum mastic

FIBROUS MATERIAL 4% NONFIBROUS 96% HOMOGENEOUS N

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% synthetic, 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Cellulose 5%

X Flat Twisted Fibers

X Anisotropic

Synthetics 2%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO x

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 98 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-058

Lab Sample ID# 41812-58

Sample Description carpet mastic

Colors gray, black

Materials carpet mastic

FIBROUS MATERIAL 5%

NONFIBROUS 95%

HOMOGENEOUS N

Textures resinous, fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% synthetic, 2% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Medium

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers

X Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w tan e Blue

D.St. - || Yellow - || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 99 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-058 Lab Sample ID# 41812-58 Sample Description carpet mastic, backing

Colors tan Materials carpet mastic, backing

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS N

Textures fibrous, granular Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 20% synthetic

PLM ANALYSIS

Chrysotile 0%
 Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Amosite 0%
 Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w blue e yellow
 D.St. - || Gold- Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Crocidolite 0%
 Straight Fibers
 Sign of Elongation (-)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w tan e Blue
 D.St. - || Yellow Yellow
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Anthophyllite 0%
 Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Mediu
 w Blue e yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Actinolite 0%
 Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Tremolite 0%
 Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Oblique Extinction 0 Angle
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Cellulose 0%
 Flat Twisted Fibers
 Anisotropic
Synthetics 10%
 X Even Edges
 X High Birefringence

Mineral Wool 0%
 Irregular Shapes
 Isotropic
Glass Fibers 0%
 Straight Fibers
 Isotropic

Perlite _____
Quartz _____
Wollastonite 0%
 CaCO X
 CaSO X
Mica _____
Binder X

Other Fibers _____

Other nonfibers _____

Comments _____

K S

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2089 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 100 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-058 Lab Sample ID# 41812-58 Sample Description linoleum

Colors tan Materials linoleum

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 40%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 101 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-058 Lab Sample ID# 41812-58 Sample Description linoleum mastic

Colors tan Materials linoleum mastic

FIBROUS MATERIAL 5% NONFIBROUS 95% HOMOGENEOUS N

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% synthetic, 2% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers

X Anisotropic

Synthetics 2%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 102 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-059 Lab Sample ID# 41812-59 Sample Description 12x12 ceiling tile

Colors beige, white Materials 12x12 ceiling tile

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS N

Textures fibrous, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 40% mineral wool, 40% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 50%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments insufficient mastic/adhesive for analysis

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 30%

X Irregular Shapes
X Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite X

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 103 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-060 Lab Sample ID# 41812-60 Sample Description 12x12 ceiling tile

Colors beige, white Materials 12x12 ceiling tile

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS N

Textures fibrous, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 40% mineral wool, 40% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 50%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 30%

X Irregular Shapes

X Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite X

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments insufficient mastic/adhesive for analysis

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 104 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-061 Lab Sample ID# 41812-61 Sample Description 12x12 ceiling tile

Colors beige, white Materials 12x12 ceiling tile

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS N

Textures fibrous, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 40% mineral wool, 40% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 50%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments insufficient mastic/adhesive for analysis

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 25%

X Irregular Shapes
X Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite X

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 105 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-062

Lab Sample ID# 41812-62

Sample Description carpet mastic

Colors tan

Materials carpet mastic

FIBROUS MATERIAL 1%

NONFIBROUS 99%

HOMOGENEOUS Y

Textures powdery

Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers

X Anisotropic

Synthetics 3%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w.Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 106 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-062 Lab Sample ID# 41812-62 Sample Description floor tile

Colors tan Materials floor tile

FIBROUS MATERIAL 4% NONFIBROUS 96% HOMOGENEOUS Y

Textures fine grained Location Description

ESTIMATED FIBROUS CONSTITUENTS 3% cellulose, 1% synthetic

PLM ANALYSIS

Chrysotile 15%

- X Wavy Fibers
- X Sign of Elongation (+)
- X Parallel Extinction
- X Perpendicular Extinction
- X Birefringence Low
- X w blue e yellow
- X D.St. - || Mag. - ⊥ Blue
- X Becke Line Used
- n || 1.555 n ⊥ 1.548
- Pleochroic @ 40X

Amosite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Mediu
- w blue e yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- Pleochroic @ 40X

Crocidolite 0%

- Straight Fibers
- Sign of Elongation (-)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Mediu
- w tan e Blue
- D.St. - || Yellow ⊥ Yellow
- Becke Line Used
- n || n ⊥
- Pleochroic @ 40X

Anthophyllite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Birefringence Mediu
- w Blue e yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Actinolite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- Pleochroic @ 40X

Tremolite 0%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Oblique Extinction 0 Angle
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Cellulose 0%

- Flat Twisted Fibers
- Anisotropic
- Synthetics 0%**
- Even Edges
- High Birefringence

Mineral Wool 0%

- Irregular Shapes
- Isotropic
- Glass Fibers 0%**
- Straight Fibers
- Isotropic

Perlite

- Quartz**
- Wollastonite 0%**
- CaCO** X
- CaSO** X
- Mica**
- Binder** X

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 107 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-062 Lab Sample ID# 41812-62 Sample Description floor tile mastic

Colors black Materials floor tile mastic

FIBROUS MATERIAL 4% NONFIBROUS 96% HOMOGENEOUS Y

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 2% cellulose, 2% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers

X Anisotropic

Synthetics 2%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO x

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 108 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order # _____

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-063** Lab Sample ID# **41812-63** Sample Description **carpet mastic**

Colors **tan** Materials **carpet mastic**

FIBROUS MATERIAL 5% NONFIBROUS 95% HOMOGENEOUS Y

Textures **resinous, fibrous** Location Description _____

ESTIMATED FIBROUS CONSTITUENTS **3% cellulose, 2% synthetic**

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - Blue
 Becke Line Used
 n || n
 Pleochroic @ 40X

Amosite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Medium
 w blue e yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n
 Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
 Sign of Elongation (-)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Medium
 w tan e Blue
 D.St. - || Yellow Yellow
 Becke Line Used
 n || n
 Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Medium
 w Blue e yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n
 N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n
 Pleochroic @ 40X

Tremolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Oblique Extinction 0 Angle
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - Blue
 Becke Line Used
 n || n
 N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers
 X Anisotropic

Synthetics 2%

X Even Edges
 X High Birefringence

Mineral Wool 0%

Irregular Shapes
 Isotropic

Glass Fibers 0%

Straight Fibers
 Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

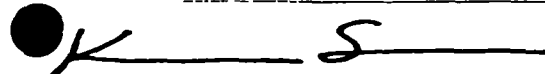
Mica

Binder X

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 109 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-063 Lab Sample ID# 41812-63 Sample Description floor tile

Colors tan Materials floor tile

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures hard, granular Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - ⊥ Blue
 Becke Line Used
 n || n ⊥ _____

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Mediu
 w Blue e yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥ _____

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
 Anisotropic
Synthetics 0%
 Even Edges
 High Birefringence

Other Fibers

Other nonfibers _____

Comments not analyzed per client request

Amosite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w blue e yellow
 D.St. - || Gold- ⊥ Blue
 Becke Line Used
 n || n ⊥ _____

Actinolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥ _____

Mineral Wool 0%

Irregular Shapes
 Isotropic
Glass Fibers 0%
 Straight Fibers
 Isotropic

Crocidolite 0%

Straight Fibers
 Sign of Elongation (-)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w tan e Blue
 D.St. - || Yellow ⊥ Yellow
 Becke Line Used
 n || n ⊥ _____

Tremolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Oblique Extinction 0 Angle
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥ _____

N Pleochroic @ 40X

Perlite _____

Quartz _____

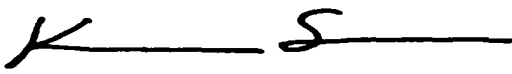
Wollastonite 0%

CaCO _____

CaSO _____

Mica _____

Binder _____


 Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 110 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-063** Lab Sample ID# **41812-63** Sample Description **floor tile mastic**

Colors **tan** Materials **floor tile mastic**

FIBROUS MATERIAL **4%** NONFIBROUS **96%** HOMOGENEOUS **N**

Textures **resinous, fibrous** Location Description

ESTIMATED FIBROUS CONSTITUENTS **2% cellulose, 2% synthetic**

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 5%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 111 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-064

Lab Sample ID# 41812-64

Sample Description carpet mastic

Colors tan

Materials carpet mastic

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS Y

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 2%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 112 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-064 Lab Sample ID# 41812-64 Sample Description floor tile

Colors tan Materials floor tile

FIBROUS MATERIAL 2% NONFIBROUS 98% HOMOGENEOUS Y

Textures Location Description

ESTIMATED FIBROUS CONSTITUENTS 2% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow || Yellow

Becke Line Used

n || n ||

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ||

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 113 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-064 Lab Sample ID# 41812-64 Sample Description floor tile mastic

Colors black Materials floor tile mastic

FIBROUS MATERIAL 4% NONFIBROUS 96% HOMOGENEOUS N

Textures resinous, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 2% cellulose, 2% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- Blue

Becke Line Used

n || n

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow Yellow

Becke Line Used

n || n

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Cellulose 4%

X Flat Twisted Fibers

X Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-065

Lab Sample ID# 41812-65

Sample Description wallboard

Colors white

Materials wallboard

FIBROUS MATERIAL 5%

NONFIBROUS 95%

HOMOGENEOUS Y

Textures granular, fibrous

Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 5% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____

Sign of Elongation (+) _____

Parallel Extinction _____

Perpendicular Extinction _____

Birefringence Low

w blue e yellow

D.St. - || Mag. - Blue

Becke Line Used _____

n || _____ n ⊥ _____

Pleochroic @ 40X _____

Anthophyllite 0%

Straight Fibers _____

Sign of Elongation (+) _____

Parallel Extinction _____

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - Blue

Becke Line Used _____

n || _____ n ⊥ _____

N Pleochroic @ 40X _____

Cellulose 5%

X Flat Twisted Fibers _____

X Anisotropic _____

Synthetics 0%

Even Edges _____

High Birefringence _____

Other Fibers

Other nonfibers _____

Comments _____

Amosite 0%

Straight Fibers _____

Sign of Elongation (+) _____

Parallel Extinction _____

Perpendicular Extinction _____

Birefringence Mediu

w blue e yellow

D.St. - || Gold - Blue

Becke Line Used _____

n || _____ n ⊥ _____

Pleochroic @ 40X _____

Actinolite 0%

Straight Fibers _____

Sign of Elongation (+) _____

Parallel Extinction _____

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used _____

n || _____ n ⊥ _____

Pleochroic @ 40X _____

Mineral Wool 0%

Irregular Shapes _____

Isotropic _____

Glass Fibers 2%

X Straight Fibers _____

X Isotropic _____

Crocidolite 0%

Straight Fibers _____

Sign of Elongation (-) _____

Parallel Extinction _____

Perpendicular Extinction _____

Birefringence Mediu

w tan e Blue

D.St. - || Yellow Yellow

Becke Line Used _____

n || _____ n ⊥ _____

Pleochroic @ 40X _____

Tremolite 0%

Straight Fibers _____

Sign of Elongation (+) _____

Parallel Extinction _____

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used _____

n || _____ n ⊥ _____

N Pleochroic @ 40X _____

Perlite _____

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica _____

Binder _____

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 115 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-065 Lab Sample ID# 41812-65 Sample Description joint compound

Colors white Materials joint compound

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures granular, powdery Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica x

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 116 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-066 Lab Sample ID# 41812-66 Sample Description wallboard

Colors white, gray Materials wallboard

FIBROUS MATERIAL 2% NONFIBROUS 98% HOMOGENEOUS N

Textures granular, powdery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose, 1% synthetic

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 8%

X Flat Twisted Fibers
X Anisotropic
Synthetics 1%
X Even Edges
X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 1%
X Straight Fibers
X Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 117 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-066

Lab Sample ID# 41812-66

Sample Description joint compound

Colors white

Materials joint compound

FIBROUS MATERIAL 1%

NONFIBROUS 99%

HOMOGENEOUS Y

Textures granular, powdery

Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica X

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 118 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-067 Lab Sample ID# 41812-67 Sample Description wallboard

Colors white, beige, blue Materials wallboard

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS N

Textures granular, powdery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 1%

X Straight Fibers

X Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 119 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-067

Lab Sample ID# 41812-67

Sample Description joint compound

Colors white

Materials joint compound

FIBROUS MATERIAL 4%

NONFIBROUS 96%

HOMOGENEOUS N

Textures granular, powdery, fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 4% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- Blue

Becke Line Used

n || n

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow Yellow

Becke Line Used

n || n

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - Blue

Becke Line Used

n || n

N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 120 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-068 Lab Sample ID# 41812-68 Sample Description ceiling, board

Colors tan, white Materials ceiling, board

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS Y

Textures fibrous, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 80% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 90%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 121 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-069 Lab Sample ID# 41812-69 Sample Description ceiling, board

Colors tan, white Materials ceiling, board

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS Y

Textures fibrous, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 80% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 90%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 122 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-070 Lab Sample ID# 41812-70 Sample Description ceiling, board

Colors tan, white Materials ceiling, board

FIBROUS MATERIAL 80% NONFIBROUS 20% HOMOGENEOUS Y

Textures fibrous, flaky Location Description

ESTIMATED FIBROUS CONSTITUENTS 80% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - ⊥ Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Amosite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w blue e yellow
 D.St. - || Gold- ⊥ Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
 Sign of Elongation (-)
 Parallel Extinction
 Perpendicular Extinction
 Birefringence Mediu
 w tan e Blue
 D.St. - || Yellow ⊥ Yellow
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Mediu
 w Blue e yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥
 Pleochroic @ 40X

Tremolite 0%

Straight Fibers
 Sign of Elongation (+)
 Parallel Extinction
 Oblique Extinction 0 Angle
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used
 n || n ⊥
 N Pleochroic @ 40X

Cellulose 90%

X Flat Twisted Fibers
 X Anisotropic

Synthetics 0%

Even Edges
 High Birefringence

Mineral Wool 0%

Irregular Shapes
 Isotropic

Glass Fibers 0%

Straight Fibers
 Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO x

Mica

Binder x

Other Fibers

Other nonfibers

Comments

[Handwritten signature]

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 123 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-071 Lab Sample ID# 41812-71 Sample Description 4", baseboard mastic

Colors tan Materials 4", baseboard mastic

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures resinous Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Low
 w blue e yellow
 D.St. - || Mag. - ⊥ Blue
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Amosite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w blue e yellow
 D.St. - || Gold- ⊥ Blue
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Crocidolite 0%

Straight Fibers _____
 Sign of Elongation (-) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w tan e Blue
 D.St. - || Yellow ⊥ Yellow
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Anthophyllite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Mediu
 w Blue e yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Actinolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Tremolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Oblique Extinction 0 Angle
 Birefringence Low
 w Blue e Yellow
 D.St. - || Gold - ⊥ Blue
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Cellulose 0%

Flat Twisted Fibers _____
 Anisotropic _____
Synthetics 0%
 Even Edges _____
 High Birefringence _____

Mineral Wool 0%

Irregular Shapes _____
 Isotropic _____
Glass Fibers 0%
 Straight Fibers _____
 Isotropic _____

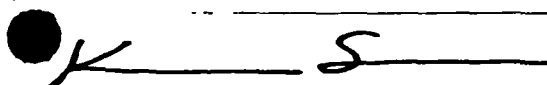
Perlite _____

Quartz X
Wollastonite 0%
CaCO X
CaSO _____
Mica _____
Binder X

Other Fibers

Other nonfibers _____

Comments _____



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 124 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-072

Lab Sample ID# 41812-72

Sample Description 4", baseboard mastic

Colors tan, off white

Materials 4", baseboard mastic

FIBROUS MATERIAL 1%

NONFIBROUS 99%

HOMOGENEOUS Y

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 125 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-073 Lab Sample ID# 41812-73 Sample Description 4", baseboard mastic

Colors tan, off white Materials 4", baseboard mastic

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite

Quartz
Wollastonite 0%
CaCO x
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-074 Lab Sample ID# 41812-74 Sample Description linoleum

Colors gold, red, black Materials linoleum

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures hard, rubbery Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - _ _ Blue

Becke Line Used

n || n _ _

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- _ _ Blue

Becke Line Used

n || n _ _

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow _ _ Yellow

Becke Line Used

n || n _ _

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - _ _ Blue

Becke Line Used

n || n _ _

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - _ _ Blue

Becke Line Used

n || n _ _

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - _ _ Blue

Becke Line Used

n || n _ _

N Pleochroic @ 40X

Cellulose 35%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 127 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-074 Lab Sample ID# 41812-74 Sample Description linoleum mastic

Colors red, gold Materials linoleum mastic

FIBROUS MATERIAL 12% NONFIBROUS 88% HOMOGENEOUS N

Textures granular, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% synthetic, 2% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 3%
X Even Edges
X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow _ Yellow
Becke Line Used
n || n _
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-075 Lab Sample ID# 41812-75 Sample Description linoleum

Colors gold, red, black Materials linoleum

FIBROUS MATERIAL 1% NONFIBROUS 99% HOMOGENEOUS Y

Textures hard, rubbery Location Description

ESTIMATED FIBROUS CONSTITUENTS 1% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 30%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 129 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-075 Lab Sample ID# 41812-75 Sample Description linoleum mastic

Colors red, gold Materials linoleum mastic

FIBROUS MATERIAL 12% NONFIBROUS 88% HOMOGENEOUS N

Textures granular, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% synthetic, 2% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 3%

X Flat Twisted Fibers
X Anisotropic
Synthetics 2%
X Even Edges
X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 130 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-076

Lab Sample ID# 41812-76

Sample Description linoleum

Colors gold, black, red

Materials linoleum

FIBROUS MATERIAL 10%

NONFIBROUS 90%

HOMOGENEOUS N

Textures rubbery, fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 20%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 131 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-076 Lab Sample ID# 41812-76 Sample Description mastic

Colors red Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%
Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow _ Yellow
Becke Line Used
n || n _
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Cellulose 5%
X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 132 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-077 Lab Sample ID# 41812-77 Sample Description carpet mastic

Colors lt. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - | Blue

Becke Line Used

n || n |

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- | Blue

Becke Line Used

n || n |

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow | Yellow

Becke Line Used

n || n |

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - | Blue

Becke Line Used

n || n |

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - | Blue

Becke Line Used

n || n |

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - | Blue

Becke Line Used

n || n |

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments no linoleum and/or mastic present

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 133 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-078

Lab Sample ID# 41812-78

Sample Description carpet mastic

Colors lt. brown

Materials carpet mastic

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS N

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments no linoleum and/or mastic present

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 134 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-079 Lab Sample ID# 41812-79 Sample Description carpet mastic

Colors lt. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%
Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 0%
Flat Twisted Fibers
Anisotropic
Synthetics 1%
X Even Edges
X High Birefringence

Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz
Wollastonite 0%
CaCO X
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments no linoleum and/or mastic present



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 135 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-080** Lab Sample ID# **41812-80** Sample Description **carpet mastic, foam**

Colors **off white, black** Materials **carpet mastic, foam**

FIBROUS MATERIAL **0%** NONFIBROUS **100%** HOMOGENEOUS **N**

Textures **spongy** Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers **Foam**

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO₃ X
CaSO₄
Mica
Binder X

Analyst **Ken Scheske**

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 136 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-081

Lab Sample ID# 41812-81

Sample Description carpet mastic, foam

Colors off white, black

Materials carpet mastic, foam

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS N

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers Foam

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 137 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-082 Lab Sample ID# 41812-82 Sample Description carpet mastic, foam

Colors off white, black Materials carpet mastic, foam

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 2%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers Foam

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 138 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-083 Lab Sample ID# 41812-83 Sample Description linoleum, mastic, caulk

Colors beige Materials linoleum, mastic, caulk

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures rubbery Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments sample does not match clients' chain of custody

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n

Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

N Pleochroic @ 40X

Perlite

Quartz x

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 139 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-084 Lab Sample ID# 41812-84 Sample Description linoleum

Colors tan Materials linoleum

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS Y

Textures rubbery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose, 10% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Medium

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 15%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 5%

X Straight Fibers

X Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 140 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-084 Lab Sample ID# 41812-84 Sample Description mastic, caulk

Colors beige Materials mastic, caulk

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures rubbery Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - || Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments sample does not match clients' chain of custody

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 141 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-085** Lab Sample ID# **41812-85** Sample Description **linoleum, mastic, caulk**

Colors **off white** Materials **linoleum, mastic, caulk**

FIBROUS MATERIAL **0%** NONFIBROUS **100%** HOMOGENEOUS **N**

Textures **chalky, hard** Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers 1% Antigorite

Other nonfibers

Comments **no linoleum and/or mastic present**

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst **Ken Scheske**

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 142 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-086 Lab Sample ID# 41812-86 Sample Description wallboard

Colors off white, lt. brown Materials wallboard

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures chalky, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 143 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-086 Lab Sample ID# 41812-86 Sample Description joint compound

Colors white Materials joint compound

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures chalky Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%
Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow _ Yellow
Becke Line Used
n || n _
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Cellulose 0%
Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

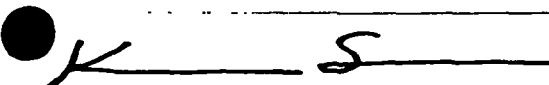
Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz
Wollastonite 0%
CaCO x
CaSO x
Mica
Binder x

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-087 Lab Sample ID# 41812-87 Sample Description waferboard

Colors off white, lt. brown Materials waferboard

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures chalky, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 145 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-087 Lab Sample ID# 41812-87 Sample Description joint compound

Colors white Materials joint compound

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures chalky Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 146 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-088 Lab Sample ID# 41812-88 Sample Description joint compound

Colors white Materials joint compound

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures chalky Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments wallboard not present in sample

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 147 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client: ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-088 Lab Sample ID# 41812-88 Sample Description texture

Colors white Materials texture

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures chalky Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica X

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 148 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-089 Lab Sample ID# 41812-89 Sample Description mastic

Colors lt. brown Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 149 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-090 Lab Sample ID# 41812-90 Sample Description mastic

Colors lt. brown Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 150 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-091 Lab Sample ID# 41812-91 Sample Description mastic

Colors lt. brown Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO X
CaSO
Mica
Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 151 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-092 Lab Sample ID# 41812-92 Sample Description linoleum

Colors gray Materials linoleum

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS Y

Textures rubbery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose, 10% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Medium

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Medium

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 15%

X Flat Twisted Fibers

X Anisotropic

Synthetics 3%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 2%

X Straight Fibers

X Isotropic

Perlite

Quartz

Wollastonite 3%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 152 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-092 Lab Sample ID# 41812-92 Sample Description mastic

Colors cream Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 153 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-093 Lab Sample ID# 41812-93 Sample Description linoleum

Colors gray Materials linoleum

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS Y

Textures rubbery, fibrous Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose, 10% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Low
 w blue e yellow _____
 D.St. - || Mag. - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Amosite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w blue e yellow _____
 D.St. - || Gold- ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Crocidolite 0%

Straight Fibers _____
 Sign of Elongation (-) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w tan e Blue _____
 D.St. - || Yellow ⊥ Yellow _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Anthophyllite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Mediu
 w Blue e yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Actinolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 Pleochroic @ 40X _____

Tremolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Oblique Extinction 0 Angle _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || _____ n ⊥ _____
 N Pleochroic @ 40X _____

Cellulose 15%

X Flat Twisted Fibers _____
 X Anisotropic _____
Synthetics 5%
 X Even Edges _____
 X High Birefringence _____

Mineral Wool 0%

Irregular Shapes _____
 Isotropic _____
Glass Fibers 2%
 X Straight Fibers _____
 X Isotropic _____

Perlite _____

Quartz _____
Wollastonite 3%
CaCO _____
CaSO X
Mica _____
Binder X

Other Fibers

Other nonfibers _____

Comments _____

K S

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 154 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-093

Lab Sample ID# 41812-93

Sample Description mastic

Colors cream

Materials mastic

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS Y

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 155 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-094 Lab Sample ID# 41812-94 Sample Description linoleum

Colors gray Materials linoleum

FIBROUS MATERIAL 20% NONFIBROUS 80% HOMOGENEOUS Y

Textures rubbery, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose, 10% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 15%

X Flat Twisted Fibers
X Anisotropic

Synthetics 3%

X Even Edges
X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 2%

X Straight Fibers
X Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 3%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 156 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-094 Lab Sample ID# 41812-94 Sample Description mastic

Colors cream Materials mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 157 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-095 Lab Sample ID# 41812-95 Sample Description insulation

Colors white Materials insulation

FIBROUS MATERIAL 90% NONFIBROUS 10% HOMOGENEOUS N

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 90% mineral wool

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 95%

X Irregular Shapes
X Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

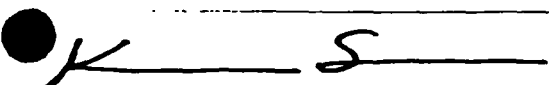
Perlite

Quartz
Wollastonite 0%
CaCO
CaSO
Mica
Binder x

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 158 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-096 Lab Sample ID# 41812-96 Sample Description insulation

Colors white Materials insulation

FIBROUS MATERIAL 90% NONFIBROUS 10% HOMOGENEOUS Y

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 90% mineral wool

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 95%

X Irregular Shapes

X Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 159 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-097 Lab Sample ID# 41812-97 Sample Description insulation

Colors white Materials insulation

FIBROUS MATERIAL 90% NONFIBROUS 10% HOMOGENEOUS Y

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 90% mineral wool

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 95%

X Irregular Shapes
X Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 160 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-098

Lab Sample ID# 41812-98

Sample Description wallboard

Colors white, lt. brown

Materials wallboard

FIBROUS MATERIAL 10%

NONFIBROUS 90%

HOMOGENEOUS N

Textures chalky, fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments insufficient amount of joint compound for analysis

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 161 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-099 Lab Sample ID# 41812-99 Sample Description wallboard

Colors white, lt. brown Materials wallboard

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures chalky, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%
Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 10%
X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz X
Wollastonite 0%
CaCO X
CaSO X
Mica
Binder X

Other Fibers

Other nonfibers

Comments insufficient amount of joint compound for analysis



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 162 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-100 Lab Sample ID# 41812-100 Sample Description wallboard

Colors white Materials wallboard

FIBROUS MATERIAL 10% NONFIBROUS 90% HOMOGENEOUS Y

Textures chalky, fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 10% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments insufficient amount of joint compound for analysis

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 163 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-101** Lab Sample ID# **41812-101** Sample Description **exterior, caulk**

Colors **black** Materials **exterior, caulk**

FIBROUS MATERIAL **0%** NONFIBROUS **100%** HOMOGENEOUS **N**

Textures **spongy** Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 164 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-102 Lab Sample ID# 41812-102 Sample Description exterior, caulk

Colors gray Materials exterior, caulk

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS N

Textures granular, chalky Location Description _____

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 5%

- Wavy Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Perpendicular Extinction
- Birefringence Low
- w blue e yellow
- D.St. - || Mag. - ⊥ Blue
- Becke Line Used
- n || 1.557 n ⊥ 1.549
- N Pleochroic @ 40X

Amosite 0%

- ____ Straight Fibers
- ____ Sign of Elongation (+)
- ____ Parallel Extinction
- ____ Perpendicular Extinction
- ____ Birefringence Mediu
- ____ w blue e yellow
- ____ D.St. - || Gold- ⊥ Blue
- ____ Becke Line Used
- n || _____ n ⊥ _____
- ____ Pleochroic @ 40X

Crocidolite 0%

- ____ Straight Fibers
- ____ Sign of Elongation (-)
- ____ Parallel Extinction
- ____ Perpendicular Extinction
- ____ Birefringence Mediu
- ____ w tan e Blue
- ____ D.St. - || Yellow ⊥ Yellow
- ____ Becke Line Used
- n || _____ n ⊥ _____
- ____ Pleochroic @ 40X

Anthophyllite 0%

- ____ Straight Fibers
- ____ Sign of Elongation (+)
- ____ Parallel Extinction
- ____ Birefringence Mediu
- ____ w Blue e yellow
- ____ D.St. - || Gold - ⊥ Blue
- ____ Becke Line Used
- n || _____ n ⊥ _____
- N Pleochroic @ 40X

Actinolite 0%

- ____ Straight Fibers
- ____ Sign of Elongation (+)
- ____ Parallel Extinction
- ____ Birefringence Low
- ____ w Blue e Yellow
- ____ D.St. - || Gold - ⊥ Blue
- ____ Becke Line Used
- n || _____ n ⊥ _____
- ____ Pleochroic @ 40X

Tremolite TR%

- Straight Fibers
- Sign of Elongation (+)
- Parallel Extinction
- Oblique Extinction 21 Angle
- Birefringence Low
- w Blue e Yellow
- D.St. - || Gold - ⊥ Blue
- Becke Line Used
- n || 1.619 n ⊥ 1.604
- N Pleochroic @ 40X

Cellulose 0%

- ____ Flat Twisted Fibers
- ____ Anisotropic

Synthetics 0%

- ____ Even Edges
- ____ High Birefringence

Other Fibers 1% Talc

Other nonfibers _____

Comments _____

Mineral Wool 0%

- ____ Irregular Shapes
- ____ Isotropic

Glass Fibers 0%

- ____ Straight Fibers
- ____ Isotropic

Perlite _____

Quartz X

Wollastonite 3%

CaCO X

CaSO _____

Mica _____

Binder X

K S

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 165 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-103** Lab Sample ID# **41812-103** Sample Description **exterior, caulk**

Colors **brown** Materials **exterior, caulk**

FIBROUS MATERIAL **0%** NONFIBROUS **100%** HOMOGENEOUS **N**

Textures **rubbery** Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 166 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-104 Lab Sample ID# 41812-104 Sample Description window glazing

Colors gray Materials window glazing

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures chalky Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 5%

- X Wavy Fibers
- X Sign of Elongation (+)
- X Parallel Extinction
- X Perpendicular Extinction
- X Birefringence Low
- X w blue e yellow
- X D.St. - || Mag- ⊥ Blue
- X Becke Line Used
- n || 1.557 n ⊥ 1.549
- N Pleochroic @ 40X

Amosite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Perpendicular Extinction
- ___ Birefringence Mediu
- ___ w blue e yellow
- ___ D.St. - || Gold- ⊥ Blue
- ___ Becke Line Used
- n || ___ n ⊥ ___
- ___ Pleochroic @ 40X

Crocidolite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (-)
- ___ Parallel Extinction
- ___ Perpendicular Extinction
- ___ Birefringence Mediu
- ___ w tan e Blue
- ___ D.St. - || Yellow ⊥ Yellow
- ___ Becke Line Used
- n || ___ n ⊥ ___
- ___ Pleochroic @ 40X

Anthophyllite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Birefringence Mediu
- ___ w Blue e yellow
- ___ D.St. - || Gold - ⊥ Blue
- ___ Becke Line Used
- n || ___ n ⊥ ___
- N Pleochroic @ 40X

Actinolite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Birefringence Low
- ___ w Blue e Yellow
- ___ D.St. - || Gold - ⊥ Blue
- ___ Becke Line Used
- n || ___ n ⊥ ___
- ___ Pleochroic @ 40X

Tremolite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Oblique Extinction 0 Angle
- ___ Birefringence Low
- ___ w Blue e Yellow
- ___ D.St. - || Gold - ⊥ Blue
- ___ Becke Line Used
- n || ___ n ⊥ ___
- N Pleochroic @ 40X

Cellulose 0%

- ___ Flat Twisted Fibers
- ___ Anisotropic

Synthetics 0%

- ___ Even Edges
- ___ High Birefringence

Mineral Wool 0%

- ___ Irregular Shapes
- ___ Isotropic

Glass Fibers 0%

- ___ Straight Fibers
- ___ Isotropic

Perlite ___

Quartz ___

Wollastonite 0%

CaCO x

CaSO ___

Mica ___

Binder x

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 167 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-105** Lab Sample ID# **41812-105** Sample Description

Colors **FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y**

Textures _____ Location Description _____

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 168 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-106 Lab Sample ID# 41812-106 Sample Description

Colors Materials

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments not analyzed per client request

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder

Analyst Ken Scheske

NVLAP #1926

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 169 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-107

Lab Sample ID# 41812-107

Sample Description baseboard mastic

Colors lt. brown

Materials baseboard mastic

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS Y

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 170 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-108 Lab Sample ID# 41812-108 Sample Description baseboard mastic

Colors lt. brown Materials baseboard mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 171 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-109 Lab Sample ID# 41812-109 Sample Description baseboard mastic

Colors lt. brown Materials baseboard mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 172 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim: EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-110 Lab Sample ID# 41812-110 Sample Description carpet mastic

Colors black Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle.

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 173 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-111 Lab Sample ID# 41812-111 Sample Description carpet mastic

Colors black Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag- _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Medium
w Blue e yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w blue e yellow
D.St. - || Gold- _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Medium
w tan e Blue
D.St. - || Yellow _ Yellow
Becke Line Used
n || n _
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - _ Blue
Becke Line Used
n || n _
N Pleochroic @ 40X

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 174 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-112

Lab Sample ID# 41812-112

Sample Description carpet mastic

Colors black

Materials carpet mastic

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS Y

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Other Fibers

Other nonfibers

Comments

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz X

Wollastonite 0%

CaCO X

CaSO

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 175 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-113 Lab Sample ID# 41812-113 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures hard Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers
Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 176 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-114 Lab Sample ID# 41812-114 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - l Blue

Becke Line Used

n || n l

N Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - l Blue

Becke Line Used

n || n l

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold- l Blue

Becke Line Used

n || n l

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - l Blue

Becke Line Used

n || n l

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow l Yellow

Becke Line Used

n || n l

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - l Blue

Becke Line Used

n || n l

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 177 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-115 Lab Sample ID# 41812-115 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Cellulose TR%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic

Glass Fibers 0%

Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow | Yellow
Becke Line Used
n || n |
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - | Blue
Becke Line Used
n || n |
N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO X

Mica

Binder X

Analyst Ken Scheske

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 178 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-116 Lab Sample ID# 41812-116 Sample Description insulation, repair

Colors gray Materials insulation, repair

FIBROUS MATERIAL 82% NONFIBROUS 18% HOMOGENEOUS Y

Textures fibrous Location Description

ESTIMATED FIBROUS CONSTITUENTS 20% chrysotile, 2% synthetic, 60% cellulose

PLM ANALYSIS

Chrysotile 20%

- X Wavy Fibers
- X Sign of Elongation (+)
- X Parallel Extinction
- X Perpendicular Extinction
- X Birefringence Low
- X w blue e yellow
- X D.St. - || Mag. - ⊥ Blue
- X Becke Line Used
- n || 1.557 n ⊥ 1.548
- N Pleochroic @ 40X

Amosite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Perpendicular Extinction
- ___ Birefringence Mediu
- ___ w blue e yellow
- ___ D.St. - || Gold- ⊥ Blue
- ___ Becke Line Used
- n || n ⊥
- ___ Pleochroic @ 40X

Crocidolite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (-)
- ___ Parallel Extinction
- ___ Perpendicular Extinction
- ___ Birefringence Mediu
- ___ w tan e Blue
- ___ D.St. - || Yellow ⊥ Yellow
- ___ Becke Line Used
- n || n ⊥
- ___ Pleochroic @ 40X

Anthophyllite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Birefringence Mediu
- ___ w Blue e yellow
- ___ D.St. - || Gold - ⊥ Blue
- ___ Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Actinolite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Birefringence Low
- ___ w Blue e Yellow
- ___ D.St. - || Gold - ⊥ Blue
- ___ Becke Line Used
- n || n ⊥
- ___ Pleochroic @ 40X

Tremolite 0%

- ___ Straight Fibers
- ___ Sign of Elongation (+)
- ___ Parallel Extinction
- ___ Oblique Extinction 0 Angle
- ___ Birefringence Low
- ___ w Blue e Yellow
- ___ D.St. - || Gold - ⊥ Blue
- ___ Becke Line Used
- n || n ⊥
- N Pleochroic @ 40X

Cellulose 55%

- X Flat Twisted Fibers
- X Anisotropic
- Synthetics 10%**
- X Even Edges
- X High Birefringence

Mineral Wool 0%

- ___ Irregular Shapes
- ___ Isotropic
- Glass Fibers 0%**
- ___ Straight Fibers
- ___ Isotropic

Perlite

- Quartz**
- Wollastonite 0%**
- CaCO**
- CaSO X**
- Mica**
- Binder X**

Other Fibers

Other nonfibers

Comments



Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 179 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client **ROY F. WESTON, INC.**

Purchase Order #

Reported To **LAVELL SCOTT**

Date Received **09/17/97**

Sampled From **USPS-PORT TOWNSEND** Sampled By **Client**

Shipped Via **FEDERAL EXPR**

Client Sample ID# **POR-117** Lab Sample ID# **41812-117** Sample Description **linoleum**

Colors **red, brown** Materials **linoleum**

FIBROUS MATERIAL **0%** NONFIBROUS **100%** HOMOGENEOUS **Y**

Textures **spongy** Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Cellulose 10%

X Flat Twisted Fibers
X Anisotropic

Synthetics 0%

Even Edges
High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Actinolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Crocidolite 0%

Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow Yellow
Becke Line Used
n || n
Pleochroic @ 40X

Tremolite 0%

Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - Blue
Becke Line Used
n || n
N Pleochroic @ 40X

Perlite

Quartz X
Wollastonite 0%
CaCO
CaSO X
Mica
Binder X

Analyst **Ken Scheske**

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

Pg 180 of 183

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order # _____

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-118 Lab Sample ID# 41812-118 Sample Description 12x12 ceiling tile

Colors beige Materials 12x12 ceiling tile

FIBROUS MATERIAL 75% NONFIBROUS 25% HOMOGENEOUS Y

Textures fibrous Location Description _____

ESTIMATED FIBROUS CONSTITUENTS 25% mineral wool, 50% cellulose

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Low
 w blue e yellow _____
 D.St. - || Mag. - ⊥ Blue _____
 Becke Line Used _____
 n || n ⊥ _____

N Pleochroic @ 40X

Amosite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w blue e yellow _____
 D.St. - || Gold- ⊥ Blue _____
 Becke Line Used _____
 n || n ⊥ _____

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers _____
 Sign of Elongation (-) _____
 Parallel Extinction _____
 Perpendicular Extinction _____
 Birefringence Mediu
 w tan e Blue _____
 D.St. - || Yellow ⊥ Yellow _____
 Becke Line Used _____
 n || n ⊥ _____

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Mediu
 w Blue e yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || n ⊥ _____

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || n ⊥ _____

Pleochroic @ 40X

Tremolite 0%

Straight Fibers _____
 Sign of Elongation (+) _____
 Parallel Extinction _____
 Oblique Extinction 0 Angle _____
 Birefringence Low
 w Blue e Yellow _____
 D.St. - || Gold - ⊥ Blue _____
 Becke Line Used _____
 n || n ⊥ _____

N Pleochroic @ 40X

Cellulose 50%

X Flat Twisted Fibers _____
 X Anisotropic _____

Synthetics 0%

Even Edges _____
 High Birefringence _____

Other Fibers

Other nonfibers _____

Comments _____

Mineral Wool 35%

X Irregular Shapes _____
 X Isotropic _____

Glass Fibers 0%

Straight Fibers _____
 Isotropic _____

Perlite _____

Quartz _____

Wollastonite 0%

CaCO _____

CaSO X

Mica _____

Binder X

K S

Analyst Ken Scheske

NVLAP #1926

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ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 181 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-119

Lab Sample ID# 41812-119

Sample Description carpet mastic

Colors blue

Materials carpet mastic

FIBROUS MATERIAL 0%

NONFIBROUS 100%

HOMOGENEOUS Y

Textures resinous

Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 1%

X Flat Twisted Fibers

X Anisotropic

Synthetics 1%

X Even Edges

X High Birefringence

Other Fibers

Other nonfibers

Comments

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Mineral Wool 0%

Irregular Shapes

Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Perlite

Quartz

Wollastonite 0%

CaCO x

CaSO

Mica

Binder x

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Pg 182 of 183

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND

Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-120

Lab Sample ID# 41812-120

Sample Description debris

Colors white

Materials debris

FIBROUS MATERIAL 95%

NONFIBROUS 5%

HOMOGENEOUS Y

Textures fibrous

Location Description

ESTIMATED FIBROUS CONSTITUENTS 95% fiberglass

PLM ANALYSIS

Chrysotile 0%

Wavy Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Low

w blue e yellow

D.St. - || Mag. - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Amosite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Crocidolite 0%

Straight Fibers

Sign of Elongation (-)

Parallel Extinction

Perpendicular Extinction

Birefringence Mediu

w tan e Blue

D.St. - || Yellow ⊥ Yellow

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Anthophyllite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Mediu

w Blue e yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Actinolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

Pleochroic @ 40X

Tremolite 0%

Straight Fibers

Sign of Elongation (+)

Parallel Extinction

Oblique Extinction 0 Angle

Birefringence Low

w Blue e Yellow

D.St. - || Gold - ⊥ Blue

Becke Line Used

n || n ⊥

N Pleochroic @ 40X

Cellulose 0%

Flat Twisted Fibers

Anisotropic

Synthetics 0%

Even Edges

High Birefringence

Mineral Wool 95%

X Irregular Shapes

X Isotropic

Glass Fibers 0%

Straight Fibers

Isotropic

Perlite

Quartz

Wollastonite 0%

CaCO

CaSO

Mica

Binder X

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

ENVIRONMENTAL MANAGEMENT CONSULTANTS

Lab # 41812

LABORATORY ANALYSIS OF BULK ASBESTOS

Method Interim EPA 600/M4-82-020

Client ROY F. WESTON, INC.

Purchase Order #

Reported To LAVELL SCOTT

Date Received 09/17/97

Sampled From USPS-PORT TOWNSEND Sampled By Client

Shipped Via FEDERAL EXPR

Client Sample ID# POR-121 Lab Sample ID# 41812-121 Sample Description carpet mastic

Colors dk. brown Materials carpet mastic

FIBROUS MATERIAL 0% NONFIBROUS 100% HOMOGENEOUS Y

Textures resinous Location Description

ESTIMATED FIBROUS CONSTITUENTS

PLM ANALYSIS

Chrysotile 0%
Wavy Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Low
w blue e yellow
D.St. - || Mag. - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Amosite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w blue e yellow
D.St. - || Gold- ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Crocidolite 0%
Straight Fibers
Sign of Elongation (-)
Parallel Extinction
Perpendicular Extinction
Birefringence Mediu
w tan e Blue
D.St. - || Yellow ⊥ Yellow
Becke Line Used
n || n' ⊥
Pleochroic @ 40X

Anthophyllite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Mediu
w Blue e yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Actinolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
Pleochroic @ 40X

Tremolite 0%
Straight Fibers
Sign of Elongation (+)
Parallel Extinction
Oblique Extinction 0 Angle
Birefringence Low
w Blue e Yellow
D.St. - || Gold - ⊥ Blue
Becke Line Used
n || n ⊥
N Pleochroic @ 40X

Cellulose TR%
X Flat Twisted Fibers
X Anisotropic
Synthetics 0%
Even Edges
High Birefringence

Mineral Wool 0%
Irregular Shapes
Isotropic
Glass Fibers 0%
Straight Fibers
Isotropic

Perlite
Quartz
Wollastonite 0%
CaCO x
CaSO x
Mica
Binder x

Other Fibers

Other nonfibers

Comments

Analyst Ken Scheske

NVLAP #1926

7342 EAST THOMAS ROAD SCOTTSDALE, ARIZONA 85251-7216 (602) 990-2069 FAX: (602) 990-8468

D.4. Bulk Sample Chain of Custody

CHAIN OF CUSTODY
 EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#: 41812
 TAT: 2 days
 Rec'd: SEP 17 PM

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842
 CONTACT: Mark E. Selman
 Phone / Fax: (303) 980-6800 / (303) 980-1622

BILL TO: _____ (If different Location)

FAXED 9/19

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

****Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.**
******Additional charges for rush analysis (please call marketing department for pricing details).**
******For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.**

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010-00

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
1	POR-001	9-13-97	Debris on brick ledges	Y N			
2	002		↓ ↓ ↓ ↓	Y N			
3	003		↓ ↓ ↓ ↓	Y N			
4	004		Hard cloth covered duct insulation	Y N			
5	005		↓ ↓ ↓ ↓ ↓	Y N			
6	006		↓ ↓ ↓ ↓ ↓	Y N			
7	007		Pipe insulation ends	Y N			
8	008		↓ ↓ ↓	Y N			
9	009		↓ ↓ ↓	Y N			
10	010		Pipe insulation sealant	Y N			
11	011		↓ ↓ ↓	Y N			
12	012		↓ ↓ ↓	Y N			
13	013		Trench insulation and debris	Y N			
14	014		↓ ↓ ↓ ↓	Y N			
15	015		↓ ↓ ↓ ↓	Y N			

SPECIAL INSTRUCTIONS: _____

Relinquished by: P. Scott Date: 9-16-97 Received by: Fed Ex Date: 9-16-97
 Relinquished by: Fed Ex Date: _____ Received by: Diana Federow Date: 9/17/97
 Relinquished by: Diana Federow Date: 9/17/97 Received by: [Signature] Date: 9/19/97

CHAIN OF CUSTODY

EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:	
TAT:	4/8/2
Rec'd:	

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax: (303) 980-6800 / (303) 980-1622

BILL TO: _____
 (If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

****Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.**
******Additional charges for rush analysis (please call marketing department for pricing details).**
******For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.**

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010-00

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
<u>16</u>	<u>PCR - 016</u>	<u>9-13-97</u>	<u>Heat Exchanger Debris</u>	<u>(Y) N</u>			
<u>17</u>	<u>017</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>18</u>	<u>018</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>19</u>	<u>019</u>		<u>Heat Exchanger Troweled Lining</u>	<u>Y N</u>			
<u>20</u>	<u>020</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>21</u>	<u>021</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>22</u>	<u>022</u>		<u>Old Fiberglass Insulation (Tar)</u>	<u>Y N</u>			
<u>23</u>	<u>023</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>24</u>	<u>024</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>25</u>	<u>025</u>		<u>Old Pipe Insulation (cloth)</u>	<u>Y N</u>			
<u>26</u>	<u>026</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>27</u>	<u>027</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>28</u>	<u>028</u>		<u>12"x12" Black Floor Tile (boxed)</u>	<u>Y N</u>			
<u>29</u>	<u>029</u>		↓ ↓ ↓ ↓	<u>Y N</u>			
<u>30</u>	<u>030</u>		↓ ↓ ↓ ↓	<u>(Y) N</u>			

SPECIAL INSTRUCTIONS: _____

Relinquished by: L. Scott Date: 9/16/97 Received by: Fed Ex Date: 9/16/97
 Relinquished by: Fed Ex Date: _____ Received by: Dianna Federico Date: 9/17/97
 Relinquished by: Dianna Federico Date: 9/17/97 Received by: [Signature] Date: 9/19/97

CHAIN OF CUSTODY

EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:	
TAT:	41812
Rec'd:	

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax: (303) 980-6800 / (303) 980-1622

BILL TO: _____ (If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

**Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.
 ****Additional charges for rush analysis (please call marketing department for pricing details).
 ****For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS-Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010-00

IC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
31	PCR - 031	9-13-97	Plaster	Y N			
32	032			Y N			
33	033			Y N			
34	034			Y N			
35	035			Y N			
36	036			Y N			
37	037			Y N			
38	038		Brown Linoleum	Y N			
39	039			Y N			
40	040			Y N			
41	041		Chimney Debris	Y N			
42	042			Y N			
43	043			Y N			
44	044		Electric Wire Insulation	Y N			
45	045			Y N			

SPECIAL INSTRUCTIONS: _____

Relinquished by: P. Scott Date: 9/16/97 Received by: Fed Ex Date: 9/16/97
 Relinquished by: Fed Ex Date: _____ Received by: Deana Federow Date: 9/17/97
 Relinquished by: Deana Federow Date: 9/17/97 Received by: HJ Date: 9/19/97

CHAIN OF CUSTODY

EMC Laboratories
7342 E. Thomas Road
Scottsdale, AZ 85251-7216
(800) 362-3373 / (602) 990-8468 Fax

LAB#:	
TAT:	41812
Rec'd:	

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax (303) 980-6800 / (303) 980-1622

BILL TO: _____
 (If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] (2-Day) [3-Day] [5-Day] [6-10 Day]

****Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.**
******Additional charges for rush analysis (please call marketing department for pricing details).**
******For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.**

2. TYPE OF ANALYSIS: (Bulk-PLM) [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS-Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
46	POR-046	9-13-97	Electric Wire Insulation	Y N			
47	047		12"x12" Black Painted Floor Tile + Mastic	Y N			
48	048		↓ ↓ ↓ ↓	Y N			
49	049		↓ ↓ ↓ ↓	Y N			
50	050		Orange carpet Mastic on Brown linoleum + Mastic	Y N			
51	051		↓ ↓ ↓ ↓	Y N			
52	052		↓ ↓ ↓ ↓	Y N			
53	053		inside caulk	Y N			
54	054		↓ ↓	Y N			
55	055		↓ ↓	Y N			
56	056		Gray Carpet Mastic on tan linoleum + Mastic	Y N			
57	057		↓ ↓ ↓ ↓	Y N			
58	058		↓ ↓ ↓ ↓	Y N			
59	059		12"x12" Ceiling Tile + Mastic	Y N			
60	060		↓ ↓ ↓ ↓	Y N			

SPECIAL INSTRUCTIONS: multiple layers

Relinquished by: L. Scott Date: 9-16-97 Received by: Fed Ex Date: 9-16-97
 Relinquished by: Fed Ex Date: _____ Received by: Deana Federew Date: 9/17/97
 Relinquished by: Deana Federew Date: 9/17/97 Received by: [Signature] Date: _____

CHAIN OF CUSTODY

EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:
TAT: <u>41812</u>
Rec'd:

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax: (303) 980-6800 / (303) 980-1622

BILL TO: _____

(If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

****Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.**

******Additional charges for rush analysis (please call marketing department for pricing details).**

******For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.**

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010

MC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
61	POR - 061	9-13-97	12"x12" Ceiling Tile + Mastic	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
62	062		Tan Carpet Mastic Tan Floor Tile + Mastic	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
63	063		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
64	064		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
65	065		Wallboard + Joint Compound(1)	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
66	066		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
67	067		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
68	068		Ceiling Boards	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
69	069		↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
70	070		↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
71	071		4" Tan Baseboard Mastic	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
72	072		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
73	073		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
74	074		Gold Octigon Linoleum + Mastic	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
75	075		↓ ↓ ↓ ↓	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N			

SPECIAL INSTRUCTIONS: multiple layers

Relinquished by: L. Scott Date: 9-13-97 Received by: Fed Ex Date: 9-13-97
 Relinquished by: Fed Ex Date: _____ Received by: Diana Federew Date: 9/17/97
 Relinquished by: Diana Federew Date: 9/17/97 Received by: LS Date: _____

CHAIN OF CUSTODY

EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:	
TAT:	41912
Rec'd:	

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax (303) 980-6800 / (303) 980-1622

BILL TO: _____ (If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

**Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.
 ****Additional charges for rush analysis (please call marketing department for pricing details).
 ****For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.

2. TYPE OF ANALYSIS: [Bulk-PCM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]
 3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
76	PCR - 076	9-13-97	Gold Octagon Linoleum + Mastic	Y N			
77	077		Lite Brown Carpet Mastic ^{blown linoleum + mastic}	Y N			
78	078		↓ ↓ ↓ ↓ ↓	Y N			
79	079		↓ ↓ ↓ ↓ ↓	Y N			
80	080		Red Orange Carpet Mastic	Y N			
81	081		↓ ↓ ↓ ↓ ↓	Y N			
82	082		↓ ↓ ↓ ↓ ↓	Y N			
83	083		Tan linoleum + Mastic	Y N			
84	084		↓ ↓ ↓ ↓ ↓	Y N			
85	085		↓ ↓ ↓ ↓ ↓	Y N			
86	086		Wallboard + Joint Compound (2)	Y N			
87	087		↓ ↓ ↓ ↓ ↓	Y N			
88	088		↓ ↓ ↓ ↓ ↓	Y N			
89	089		3" Gray Baseboard Mastic	Y N			
90	090		↓ ↓ ↓ ↓ ↓	Y N			

SPECIAL INSTRUCTIONS: multiple layers

Relinquished by: L. Scott Date: 9-16-97 Received by: Fed Ex Date: 9-16-97
 Relinquished by: Fed Ex Date: _____ Received by: Diana Federer Date: 9/17/97
 Relinquished by: Diana Federer Date: 9/17/97 Received by: [Signature] Date: 9/19/97

CHAIN OF CUSTODY
 EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:
TAT: <u>4/8/2</u>
Rec'd:

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax (303) 980-6800 / (303) 980-1622

BILL TO: _____

(If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

**Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.
 ****Additional charges for rush analysis (please call marketing department for pricing details).
 ****For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
91	POR-091	9-13-97	3" Gray Baseboard Mastic	<input checked="" type="checkbox"/> N			
92	092		Gray Linoleum + Mastic	Y N			
93	093		↓ ↓ ↓	Y N			
94	094		↓ ↓ ↓	Y N			
95	095		White Insulation	Y N			
96	096		↓ ↓	Y N			
97	097		↓ ↓	Y N			
98	098		Wallboard + Joint Compound (3)	Y N			
99	099		↓ ↓ ↓ ↓	Y N			
100	100		↓ ↓ ↓ ↓	Y N			
101	101		Exterior Caulk	Y N			
102	102		↓ ↓	Y N			
103	103		↓ ↓	Y N			
104	104		Window Glaze	Y N			
105	105	✓	↓ ↓	<input checked="" type="checkbox"/> N			

SPECIAL INSTRUCTIONS: _____

Relinquished by: P. Scott Date: 9-16-97 Received by: Fed Ex Date: 9-16-97
 Relinquished by: Fed Ex Date: _____ Received by: Diana Federew Date: 9/17/97
 Relinquished by: Diana Federew Date: 9/17/97 Received by: [Signature] Date: 9/19/97

CHAIN OF CUSTODY

EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:
TAT: <u>41812</u>
Rec'd:

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax (303) 980-6800 / (303) 980-1622

BILL TO: _____

(If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

**Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.
 ****Additional charges for rush analysis (please call marketing department for pricing details).
 ****For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]
 3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010

EMC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
106	POR - 106	9-13-97	Window Glaze	Y N			
107	107		3" Black Baseboard Mastic	Y N			
108	108		↓ ↓ ↓ ↓	Y N			
109	109		↓ ↓ ↓ ↓	Y N			
110	110		Orange Green Carpet Mastic	Y N			
111	111		↓ ↓ ↓ ↓	Y N			
112	112		↓ ↓ ↓ ↓	Y N			
113	113		Red Orange Carpet (2) Mastic	Y N			
114	114		↓ ↓ ↓ ↓ ↓	Y N			
115	115		↓ ↓ ↓ ↓ ↓	Y N			
116	116		Old insulation repair	Y N			
117	117		Red Brown linoleum	Y N			
118	118		12"x12" Ceiling Tile (Dots)	Y N			
119	119		Blue Carpet Mastic	Y N			
120	120		Debris on Floor	Y N			

SPECIAL INSTRUCTIONS: _____

Relinquished by: L. Scott Date: 9-16-97 Received by: Fed Ex Date: 9-16-97
 Relinquished by: Fed Ex Date: _____ Received by: Deana Federud Date: 9/17/97
 Relinquished by: Deana Federud Date: 9/17/97 Received by: [Signature] Date: 9/19/97

CHAIN OF CUSTODY
 EMC Laboratories
 7342 E. Thomas Road
 Scottsdale, AZ 85251-7216
 (800) 362-3373 / (602) 990-8468 Fax

LAB#:	
TAT:	<u>4/8/2</u>
Rec'd:	

COMPANY NAME: Roy F. Weston, Inc.
215 Union Blvd., Suite 600
Lakewood, CO 90228-1842

CONTACT: Mark E. Selman
 Phone / Fax (303) 980-6800 / (303) 980-1622

BILL TO: _____
 (If different Location)

Now Accepting: VISA - MASTERCARD - (Indicate Payment Method) Price Quoted: \$ _____ / Sample
 \$ _____ / Layers

_____ EXP DATE _____ SIGNATURE _____

COMPLETE ITEMS 1-4: (Failure to complete any items may cause a delay in processing or analyzing your samples)

1. TURNAROUND TIME: [4hr rush] [8hr rush] [1-Day] [2-Day] [3-Day] [5-Day] [6-10 Day]

**Prior confirmation of turnaround time is required for one day analysis or analysis of more than 50 samples per shipment.
 ****Additional charges for rush analysis (please call marketing department for pricing details).
 ****For no Federal Express charges, a minimum of 20 asbestos or 6 lead samples must be enclosed.

2. TYPE OF ANALYSIS: [Bulk-PLM] [Air-PCM] [Lead] [Point Count] [TEM-Air] [TEM-Bulk]

3. DISPOSAL INSTRUCTIONS: [Dispose of samples at EMC] / [Return samples to me at my expense]
 (If you do not indicate preference, EMC will dispose of samples 60 days from analysis.)

4. Project Name: USPS - Port Townsend
 P.O. Number: _____ Project Number: 01779-079-576-0010

IC SAMPLE #	CLIENT SAMPLE #	DATE SAMPLED	LOCATION/MATERIAL TYPE	Samples Accepted Yes / No	AIR SAMPLE INFO / COMMENTS		
					ON	OFF	FLOW RATE
<u>21</u>	<u>PCR-121</u>	<u>9-13-97</u>	<u>Green Carpet Mastic</u>	<u>(Y) N</u>			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			
				Y N			

SPECIAL INSTRUCTIONS: _____

Relinquished by: L. Scott Date: 9-16-97 Received by: Fed Ex Date: 9-16-97
 Relinquished by: Fed Ex Date: _____ Received by: Diana Fedruu Date: 9/17/97
 Relinquished by: Diana Fedruu Date: 9/17/97 Received by: [Signature] Date: 9/19/97

EXPLANATION

- TRENCH
- HEAT EXCHANGER
- 001 SAMPLE LOCATION
- 📷 PHOTOGRAPH LOCATIONS

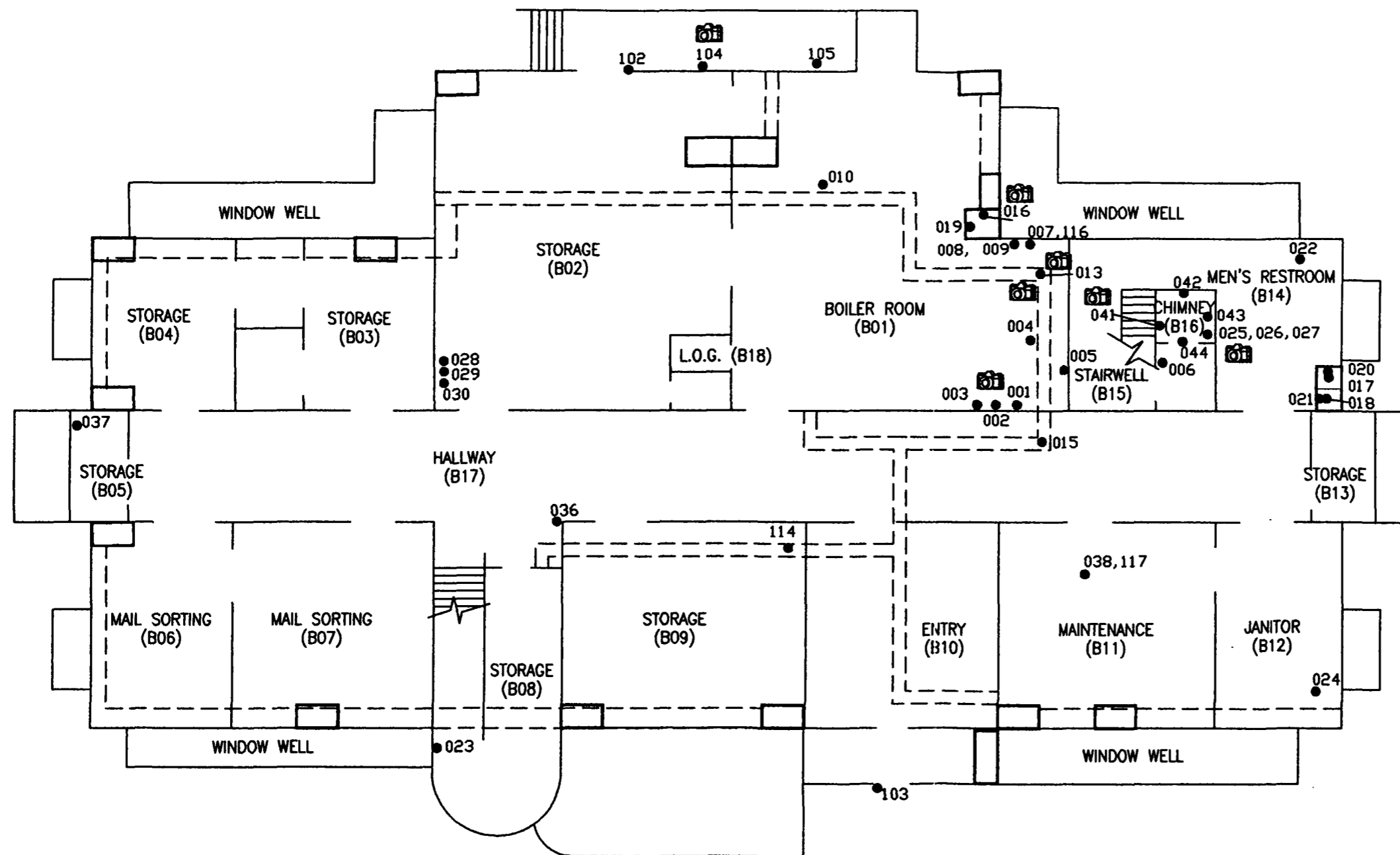


NOT TO SCALE

WESTON
MANAGERS DESIGNERS/CONSULTANTS
215 Union Boulevard
Suite 600
Lakewood, CO 80228
(303) 980-6800

USPS Contract No.: 072976-95-B-0016
 USPS Project No.: E89196
 USPS Work Order No.: 165.00
 Port Townsend Main Post Office
 1322 Washington Street
 Port Townsend, Washington 98368-9998
 Finance/Sub. No.: 546776-G01
 Date: October 1997

**BULK SAMPLE & PHOTOGRAPH LOCATIONS
 BASEMENT FLOOR PLAN
 FIGURE D.2**



ROOF OVERHANG

DOCK

VESTIBULE (102)

WORK ROOM (103)

RESTROOM (111)

OFFICE (110)

LUNCH ROOM (106)

WORK ROOM (104)

VAULT (105)

L.O.G. VAULT (112)

L.O.G. (NO ACCESS)

WORK ROOM (101)

HALLWAY (109)

STORAGE (107)

BOX LOBBY (108)

NOT TO SCALE

WESTON
MANAGERS DESIGNERS/CONSULTANTS

215 Union Boulevard
Suite 600
Lakewood, CO 80228
(303) 980-6800

USPS Contract No.: 072976-95-B-0016
USPS Project No.: E89196
USPS Work Order No.: 165.00
Port Townsend Main Post Office
1322 Washington Street
Port Townsend, Washington 98368-9998
Finance/Sub. No.: 546776-G01
Date: October 1997

BULK SAMPLE AND PHOTOGRAPH LOCATIONS
FIRST FLOOR PLAN

FIGURE D.2

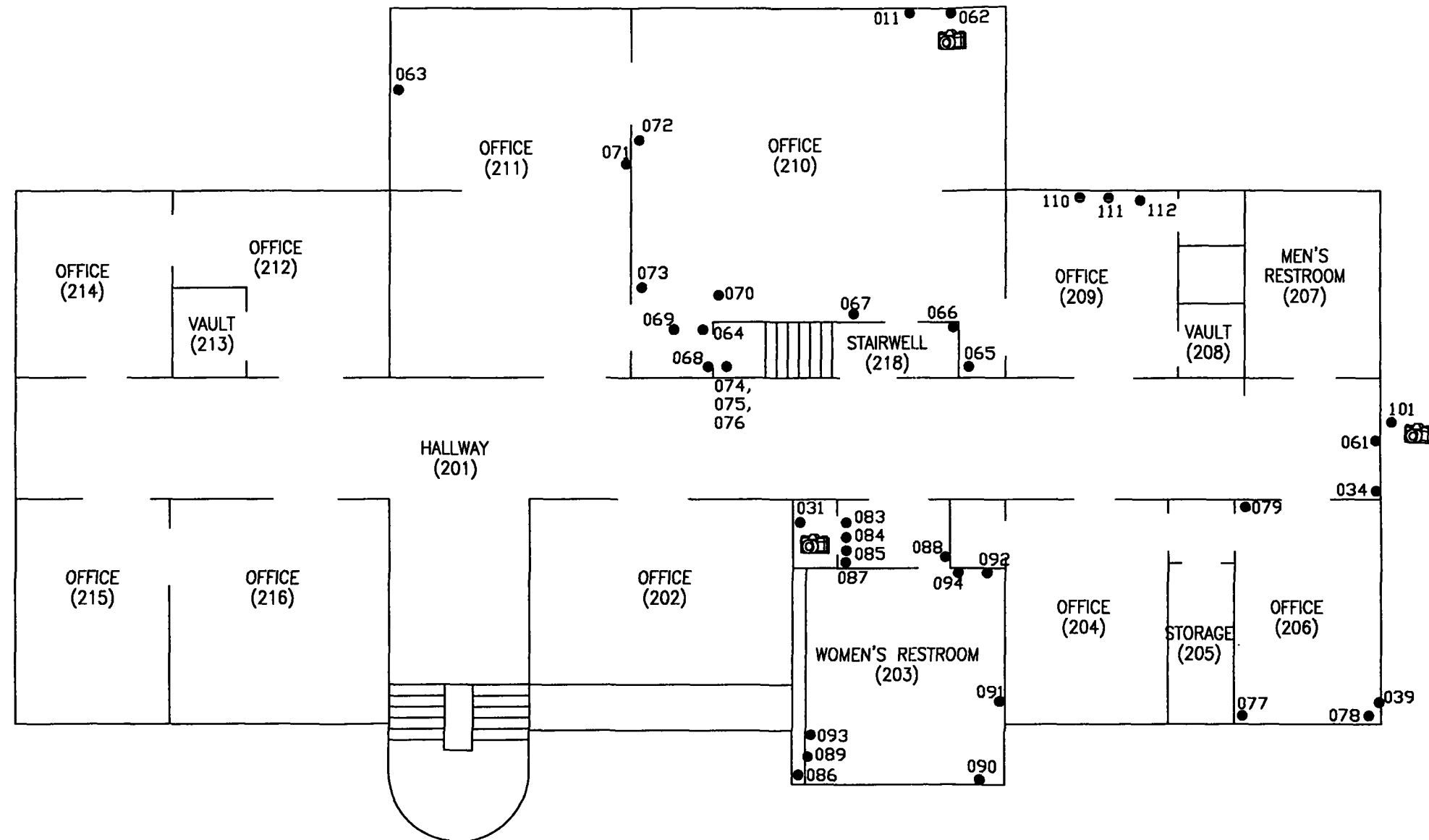
001 ● SAMPLE LOCATION

📷 PHOTOGRAPH LOCATIONS



EXPLANATION

- 001 ● SAMPLE LOCATION
- ☒ PHOTOGRAPH LOCATIONS



NOT TO SCALE



215 Union Boulevard
Suite 600
Lakewood, CO 80228
(303) 980-6800

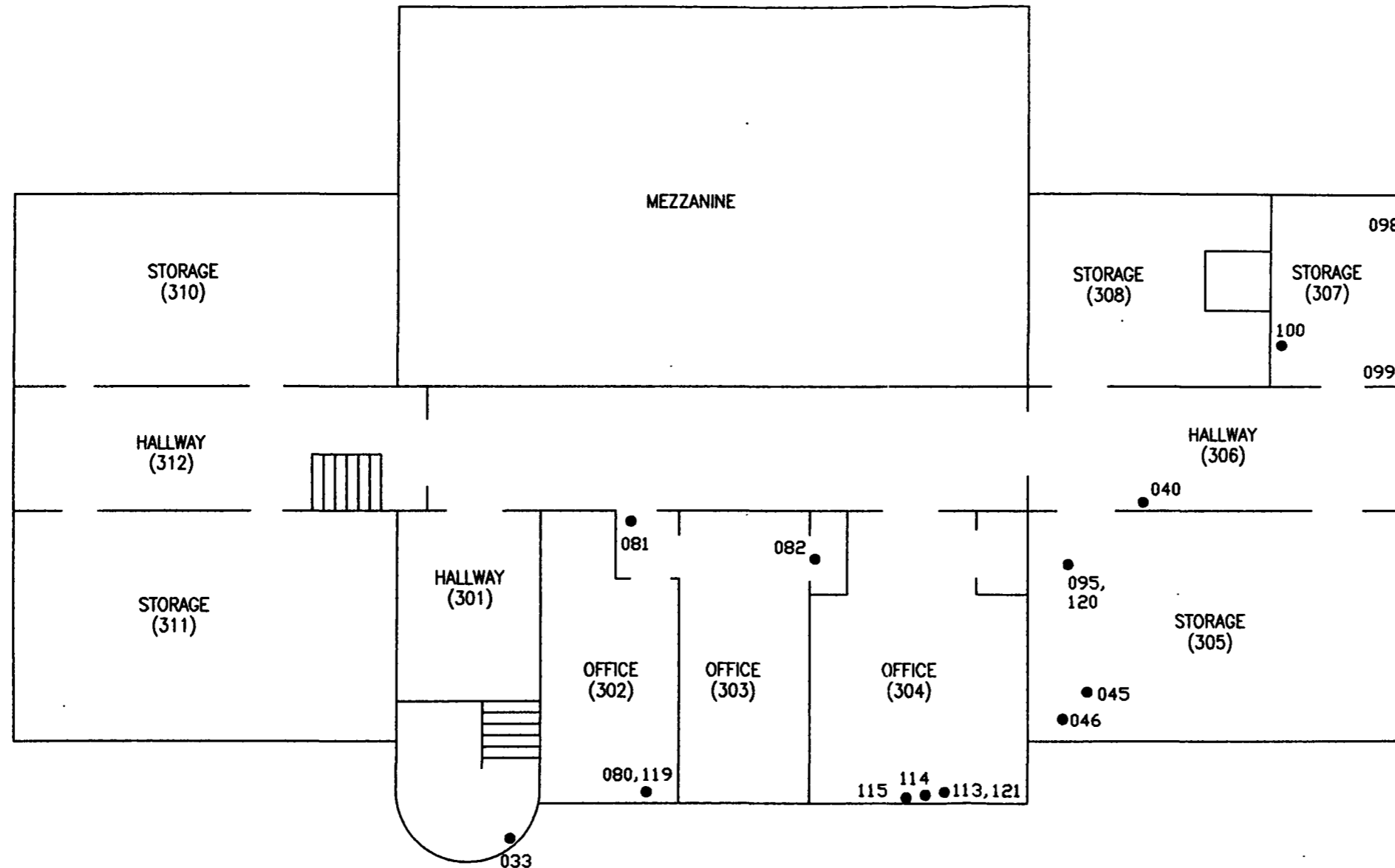
USPS Contract No.: 072976-95-B-0016
USPS Project No.: E89196
USPS Work Order No.: 165.00
Port Townsend Main Post Office
1322 Washington Street
Port Townsend, Washington 98368-9998
Finance/Sub. No.: 546776-G01
Date: October 1997

BULK SAMPLE AND PHOTOGRAPH LOCATIONS
SECOND FLOOR PLAN

FIGURE D.2

EXPLANATION

- 001 ● SAMPLE LOCATION
- ☒ NO PHOTOGRAPHS TAKEN



NOT TO SCALE

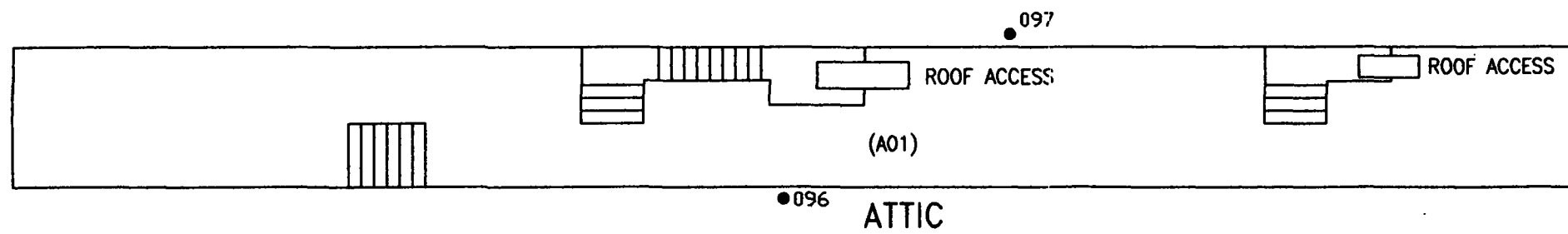
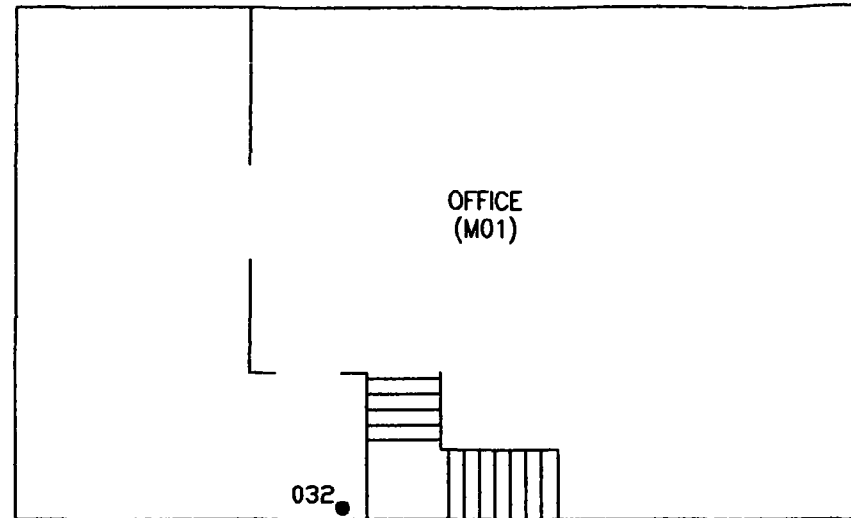


215 Union Boulevard
Suite 600
Lakewood, CO 80228
(303) 980-6800

USPS Contract No.: 072976-95-B-0016
USPS Project No.: E89196
USPS Work Order No.: 165.00
Port Townsend Main Post Office
1322 Washington Street
Port Townsend, Washington 98368-9998
Finance/Sub. No.: 546776-G01
Date: October 1997

BULK SAMPLE AND PHOTOGRAPH LOCATIONS
THIRD FLOOR PLAN
FIGURE D.2

MEZZANINE



EXPLANATION

- 001 ● SAMPLE LOCATION
-  NO PHOTOGRAPHS TAKEN



NOT TO SCALE



215 Union Boulevard
 Suite 600
 Lakewood, CO 80228
 (303) 980-6800

USPS Contract No.: 072976-95-B-0016
 USPS Project No.: E89196
 USPS Work Order No.: 165.00
 Port Townsend Main Post Office
 1322 Washington Street
 Port Townsend, Washington 98368-9998
 Finance/Sub. No.: 546776-G01
 Date: October 1997

BULK SAMPLE AND PHOTOGRAPH LOCATIONS
 ATTIC AND MEZZANINE FLOOR PLANS

FIGURE D.2

D.3. Bulk Sample Analysis Results

SECTION E

E.1. SECTION SUMMARY

Photographs of Homogeneous ACBM areas identified in the floor plans in Sections C.2 and D.2.

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS



Debris on Brick Ledges
Sample Numbers: 001, 002, 003
Homogeneous Material Photograph

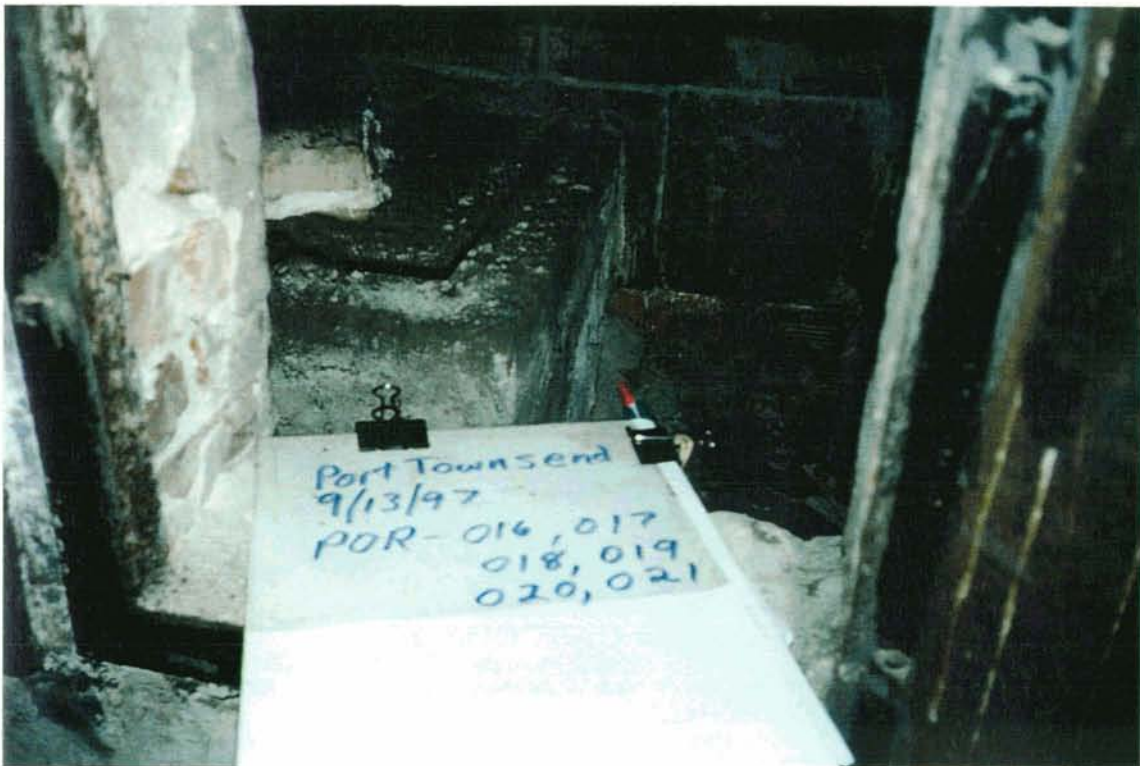


Pipe Insulation Ends
Sample Numbers: 007,008,009,116
Homogeneous Material Photograph

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS

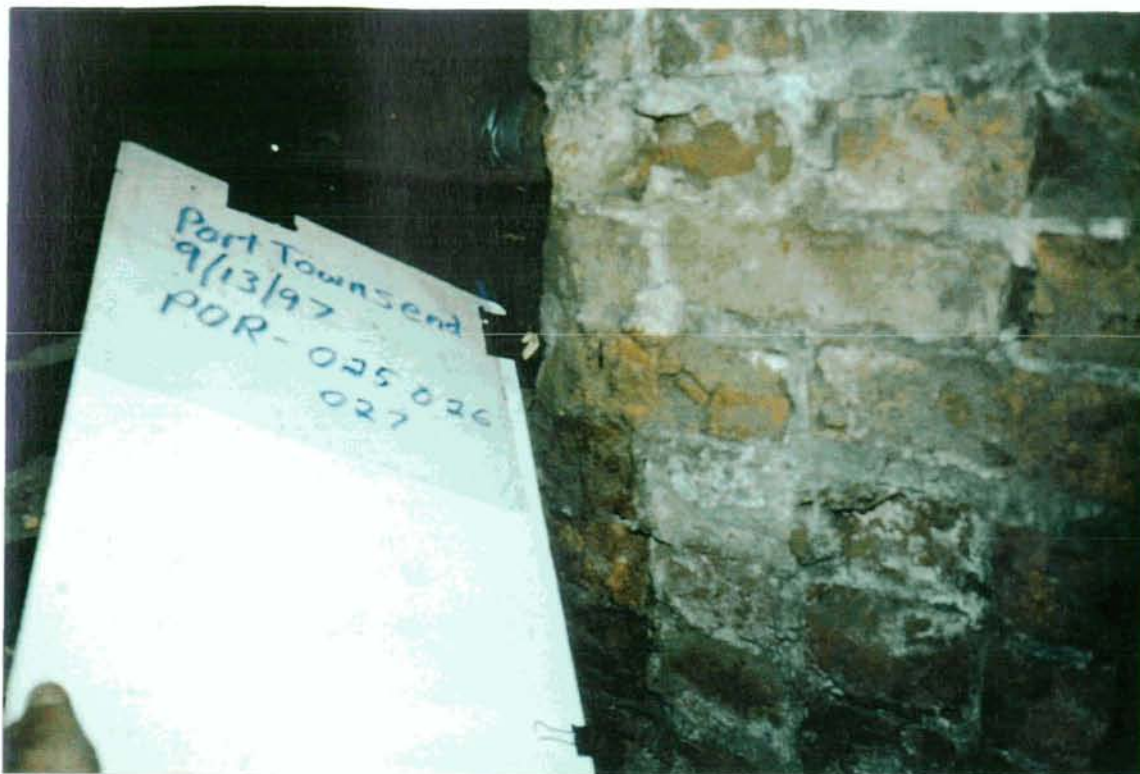


Trench Insulation and Debris
Sample Number: 013, 014, 015
Homogeneous Material Photograph



Heat Exchanger Debris
Sample Numbers: 016, 017, 018
Homogeneous Material Photograph

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS



Old Pipe Insulation (cloth)
Sample Numbers: 025,026,027
Homogeneous Material Photograph



Plaster
Sample Numbers: 031,032,033,034,035,036,037
Homogeneous Material Photograph

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS

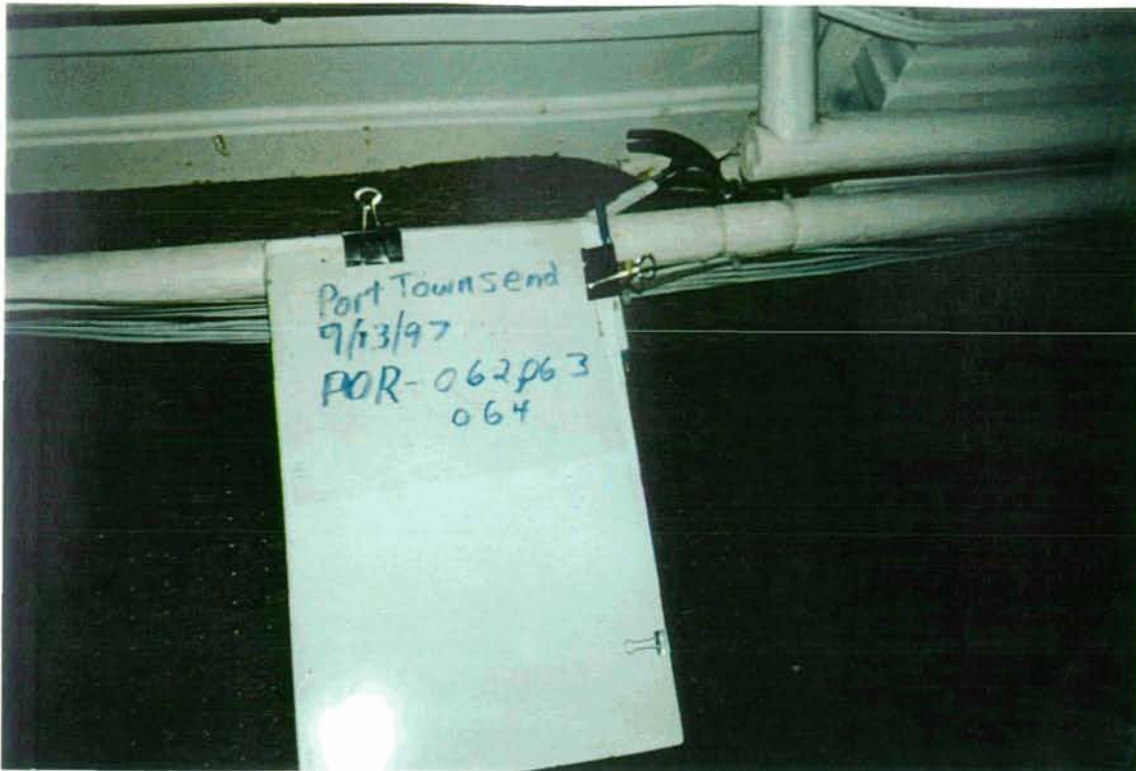


Chimney Debris
Sample Numbers: 041,042,043
Homogeneous Material Photograph



12"x12" Brown Floor Tile and Mastic under 12"x12" Black Floor Tile
Sample Number: 047,048,049
Homogeneous Material Photograph

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS



12"x12" Tan Floor Tile under Tan Carpet
Sample Numbers: 062,063,064
Homogeneous Material Photograph



Exterior Caulk
Sample Numbers: 101,102,103
Homogeneous Material Photograph

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS



Window Glaze
Sample No.:104,105,106
Homogeneous Material Photograph



Metal Roof Vapor Barrier and Rolled Roof
Not Sampled
Assumed ACBM

SEATTLE DISTRICT - PORT TOWNSEND MAIN POST OFFICE

E.2 PHOTOGRAPHS OF ACBM HOMOGENEOUS AREAS

Boiler Gaskets (three sets)
Assumed ACBM
No photograph available
due to poor picture quality.

SECTION F

SECTION F.1. SECTION SUMMARY

Section F, the reader will find the removal data organized by cost, category and quantity. Other abatement options are to be considered within the O & M Plan. Section F.2. is to guide the decision between removal or O & M Plan implementation.

UNIT

This identifies how the removal action will be charged.

ea:	each
day:	day
est:	per estimate
sf:	square foot
lf:	linear foot
/w:	per week
/d:	per day
/m:	per month
cu:	cubic yard

QUANTITY

This describes the amount of material to be removed.

TOTAL

Identifies the individual cost for each removal action.

LIMITATIONS: All costs are estimates only and should be confirmed by a certified asbestos abatement contractor. The costs do not include any costs for reinstallation of any surfacing, insulation, or miscellaneous materials. Project design, project management, and construction inspection fees are included in the estimate. The budgetary estimate presented assumes there will be no relocation costs. The estimate assumes that all identified ACBM's are removed concurrently.

F.2. REMOVAL COST ESTIMATE

Room:	Description:	Unit:	Quantity:	Total Cost:
103	12" x 12" Floor Tile	square Feet	1034	\$2,585.00
104	12" x 12" Floor Tile	square Feet	466	\$1,165.00
106	12" x 12" Floor Tile	square Feet	280	\$700.00
110	Plaster	square Feet	1200	\$7,200.00
101	Plaster	square Feet	5770	\$34,620.00
102	Plaster	square Feet	1683	\$10,098.00
103	Plaster	square Feet	3200	\$19,200.00
104	Plaster	square Feet	1922	\$11,532.00
105	Plaster	square Feet	524	\$3,144.00
106	Plaster	square Feet	1108	\$6,648.00
107	Plaster	square Feet	1694	\$10,164.00
108	Plaster	square Feet	2052	\$12,312.00
109	Plaster	square Feet	4552	\$27,312.00
111	Plaster	square Feet	320	\$1,920.00
112	Plaster	square Feet	200	\$1,200.00
113	Plaster	square Feet	250	\$1,500.00
114	Plaster	square Feet	250	\$1,500.00
201	Plaster	square Feet	5082	\$30,492.00
202	Plaster	square Feet	2124	\$12,744.00
203	Plaster	square Feet	1664	\$9,984.00
204	Plaster	square Feet	1478	\$8,868.00
205	Plaster	square Feet	546	\$3,276.00
206	Plaster	square Feet	1224	\$7,344.00
207	Plaster	square Feet	1080	\$6,480.00
208	Plaster	square Feet	368	\$2,208.00
209	Plaster	square Feet	1132	\$6,792.00
210	12" x 12" Floor Tile	square Feet	1568	\$3,920.00
210	Plaster	square Feet	1275	\$7,650.00
211	12" x 12" Floor Tile	square Feet	990	\$2,475.00
211	Plaster	square Feet	1104	\$6,624.00
212	12" x 12" Floor Tile	square Feet	470	\$1,175.00
212	Plaster	square Feet	1518	\$9,108.00
213	Plaster	square Feet	418	\$2,508.00
214	12" x 12" Floor Tile	square Feet	300	\$750.00
214	Plaster	square Feet	954	\$5,724.00
215	12" x 12" Floor Tile	square Feet	414	\$1,035.00

F.2. REMOVAL COST ESTIMATE

Room:	Description:	Unit:	Quantity:	Total Cost:
215	Plaster	square Feet	1350	\$8,100.00
216	12" x 12" Floor Tile	square Feet	516	\$1,290.00
216	Plaster	square Feet	1650	\$9,900.00
218	12" x 12" Floor Tile	square Feet	66	\$165.00
218	Plaster	square Feet	50	\$300.00
301	Plaster	square Feet	3608	\$21,648.00
302	Plaster	square Feet	1010	\$6,060.00
303	Plaster	square Feet	964	\$5,784.00
304	Plaster	square Feet	1422	\$8,532.00
B01	Boiler Insulation	square Feet	10	\$300.00
B01	Gasket Materials	each	3	\$750.00
B01	Other	each	4	\$800.00
B01	Pipe Joint Insulation	square Feet	2	\$100.00
B01	Straight Pipe Insulation	square Feet	116	\$1,160.00
B01	Transite	square Feet	96	\$240.00
B02	Other	each	2	\$400.00
B02	Straight Pipe Insulation	Square Feet	30	\$300.00
B02	Transite	square Feet	48	\$120.00
B03	Other	each	1	\$200.00
B03	Straight Pipe Insulation	square Feet	30	\$300.00
B03	Transite	square Feet	24	\$60.00
B04	Other	each	2	\$400.00
B04	Straight Pipe Insulation	square Feet	22	\$220.00
B04	Transite	square Feet	48	\$120.00
B05	Plaster	square Feet	360	\$2,160.00
B06	Other	each	3	\$600.00
B06	Plaster	square Feet	950	\$5,700.00
B06	Straight Pipe Insulation	square Feet	28	\$280.00
B06	Transite	square Feet	72	\$180.00
B07	Other	each	1	\$200.00
B07	Plaster	Square Feet	1640	\$9,840.00
B07	Straight Pipe Insulation	square Feet	28	\$280.00
B07	Transite	square Feet	24	\$60.00
B08	Plaster	square Feet	920	\$5,520.00
B08	Straight Pipe Insulation	square Feet	28	\$280.00
B09	Other	each	2	\$400.00

F.2. REMOVAL COST ESTIMATE

Room:	Description:	Unit:	Quantity:	Total Cost:
B09	Straight Pipe Insulation	Square Feet	80	\$800.00
B09	Transite	square Feet	48	\$120.00
B10	Other	each	1	\$200.00
B10	Plaster	square Feet	1572	\$9,432.00
B10	Straight Pipe Insulation	square Feet	33	\$330.00
B10	Transite	square Feet	24	\$60.00
B11	Other	each	2	\$400.00
B11	Plaster	square Feet	1510	\$9,060.00
B11	Straight Pipe Insulation	square Feet	25	\$250.00
B11	Transite	square Feet	48	\$120.00
B12	Plaster	square Feet	804	\$4,824.00
B12	Straight Pipe Insulation	square Feet	16	\$160.00
B13	Plaster	square Feet	380	\$2,280.00
B14	Other	each	2	\$400.00
B14	Plaster	square Feet	830	\$4,980.00
B14	Straight Pipe Insulation	square Feet	14	\$140.00
B14	Transite	square Feet	48	\$120.00
B15	Plaster	square Feet	990	\$5,940.00
B16	Other	square Feet	50	\$250.00
B16	Straight Pipe Insulation	square Feet	50	\$1,000.00
B17	Plaster	square Feet	4700	\$28,200.00
B17	Straight Pipe Insulation	Square Feet	44	\$440.00
M01	Plaster	square Feet	4800	\$28,800.00
E01	Caulking	linear Feet	3300	\$6,600.00
E01	Other	linear Feet	4100	\$12,300.00
R01	Roofing Materials	square Feet	1100	\$3,300.00
R02	Roofing Materials	square Feet	14090	\$42,270.00

F.2. REMOVAL COST ESTIMATE

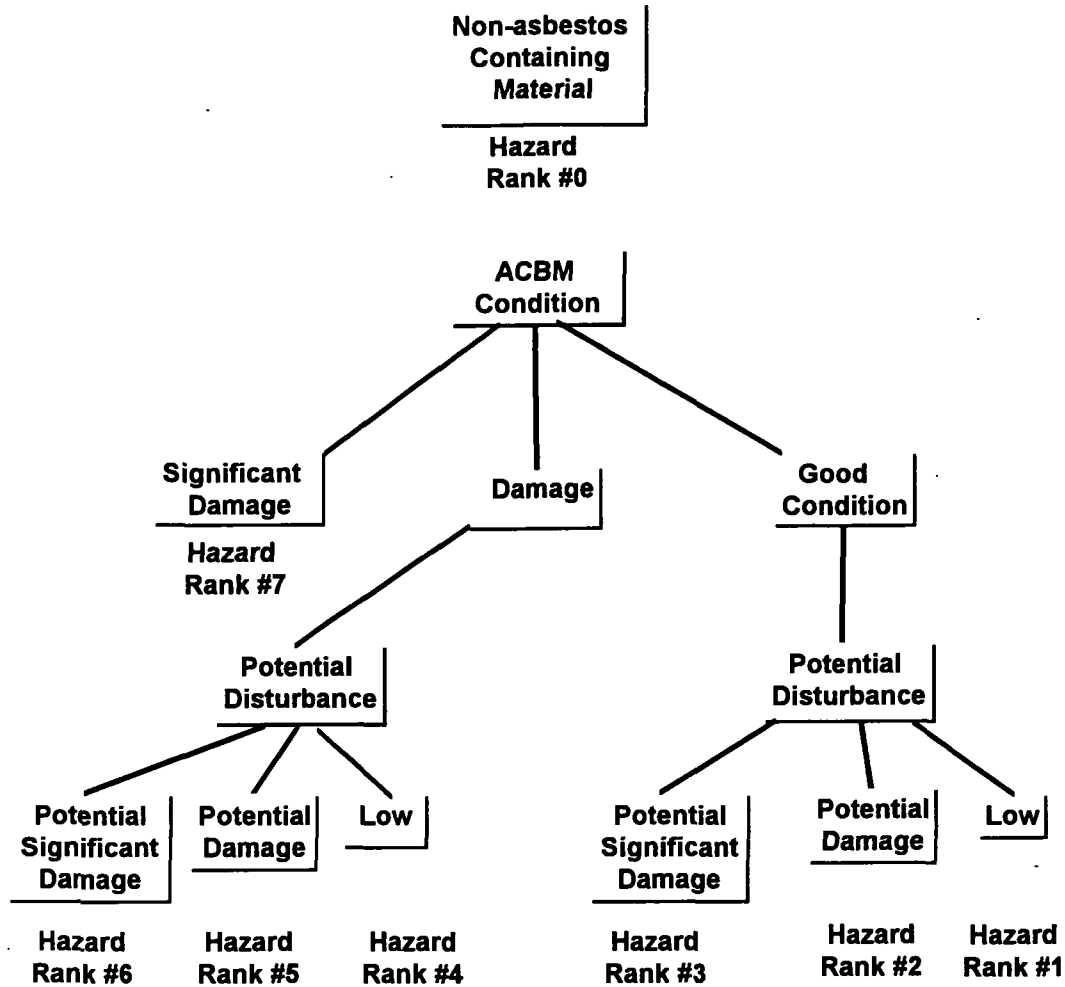
Room:	Description:	Unit:	Quantity:	Total Cost:
-------	--------------	-------	-----------	-------------

Grand Total: \$538,482.00

The cost estimates prepared assume that if a sampling location is comprised of multiple layers of varying material (i.e., floor tile/mastic) of which only one layer is confirmed positive ACBM, all of the associated material will be removed at the same time. For example, with the floor tile and mastic, if only the mastic is confirmed positive ACBM, then the estimate listed above will reflect the removal costs for both the floor tile and mastic. (Realistically, the mastic and floor tile cannot be removed separately). This costing assumption also pertains to baseboard/mastic and wallboard/joint

SECTION G

**CLASSIFICATION FOR HAZARD POTENTIAL
(DECISION TREE DISPLAY)**



Note: A Hazard Ranking of Zero (0) within this Survey Report means the associated material is not asbestos (i.e. less than or equal to one percent - not regulated asbestos).

**CLASSIFICATIONS FOR HAZARD POTENTIAL
(TABULAR DISPLAY)**

<u>Hazard Rank</u>	<u>ACBM Condition</u>	<u>ACBM Disturbance Potential</u>
7	Significantly damaged	Any
6	Damaged with potential for significant damage	Potential for Significant Damage
5	Damaged with potential for damage	Potential for Damage
4	Damaged	Low
3	Good condition with potential for damage	Potential for Significant Damage
2	Good condition with potential for damage	Potential for Damage
1a	Good condition	Low
1b	Non-friable asbestos	Low
1c	Non-regulated Asbestos Containing	Low
0	Non-asbestos Containing Material	

Note: A Hazard Ranking of Zero (0) within this Survey Report means the associated material is not asbestos (i.e. less than or equal to one percent - not regulated asbestos).

RESPONSE ACTIONS BASED ON HAZARD RANKING

Hazard Rank	Removal Priority	AHERA Categories	Response Actions Required by AHERA
7	1	Significantly Damaged	Evacuate or isolate the area if needed. Remove the ACBM (or enclose or encapsulate if sufficient to contain fibers.) Repair of thermal system insulation is allowed if feasible and safe, O&M required for all friable ACBM.
6	2	Damaged + Potential for Significant Damage	Evacuate or isolate the area if needed. Remove, enclose, encapsulate, or repair to correct damage. Take steps to reduce potential for disturbance. O&M required for all friable ACBM.*
5	3	Damaged+ Potential for Damage	Remove, enclose, encapsulate, or repair to correct damage. O&M required for all friable ACBM and TSI.*
4	4	Damaged	Same as hazard rank 5.
3	5	Potential for Significant Damage	Evacuate or isolate the area if needed. Take steps to reduce potential for disturbance. O&M required for all friable ACBM and TSI.
2	6	Potential for Damage	O&M required for all friable ACBM and TSI.
1	7	All Remaining ACBM	O&M required for all friable ACBM, but measures need not be as extensive as above.

*** Note: AHERA does not account for combinations of current and potential damage (i.e., hazard ranks #5 & 6). The response actions shown are combinations of those required for each condition.**

Note: A Hazard Ranking of Zero (0) within this Survey Report means the associated material is not asbestos (i.e. less than or equal to one percent - not regulated asbestos).

SUSPECTED MATERIALS LIST

TSI

- T1 Gasket Materials
- T2 Pipe Joint Insulation
- T3 Straight Pipe Insulation
- T4 HVAC Connector Material (adjoining air ducts)
- T5 Tank Insulation
- T6 Boiler Insulation
- T7 Boiler Breaching / Ductwork / Firebrick
- T8 Duct Insulation
- T9 Patching Material

Surfacing Materials (Spray-On)

- S1 Surface-Sprayed, Applied or Troweled-on Materials, Ceilings and Beams
- S2 Spray-on Fireproofing

Miscellaneous Materials

- M1 Roofing Materials (only sample without damage to the roofing material)
- M2 Exterior Siding Material
- M3 Wallboard / Taping Material
- M4 Transite (cooling tower on roof, soffits, pipes, etc.)

Miscellaneous Materials

- M5 Ceiling Panels (Special attention to dock areas)
- M6 Ceiling Tiles
- M7 Plaster
- M8 Caulking
- M9 Fire Door Insulation (assumed to be ACM if fire doors are present)
- M10 Undercoating / Stainless Steel Sinks / etc.
- M11 Electrical Insulation
- M12 Baseboard
- M13 Tile Debris
- M14 Metalbestos Chimney
- M15 Stucco
- M16 Other

Floor Covering

- F1 Linoleum (seamless floor covering)
- F2 12" x 12" Floor Tile
- F3 9" x 9" Floor Tile
- F4 12" x 24" Floor Plank
- F5 Mastic under Floor Tile / Seamless / Ceiling Tiles / Carpet / Plank-Tile

GENERAL CATEGORIES OF FUNCTIONAL AREAS

1. MECHANICAL AREAS

- A1 Basement / Sublevel Service Areas
- A2 Boiler / Chiller Rooms
- A3 Generator Rooms
- A4 Elevator Equipment Room / Hoistways
- A5 Telephone / Electrical Rooms
- A6 Mechanical Rooms
- A7 Fan Rooms
- A8 Janitor Closets
- A9 Furnace Rooms
- A10 Tunnels and Crawl-Spaces
- A11 Mechanical Floors including Penthouses
- A12 Attics
- A13 Air Duct Shafts
- A14 Pipe Chases
- A15 Air Plenums

2. COMMON AREA

- B1 Entrances and Exit Areas
- B2 Lobbies
- B3 Hallways
- B4 Stairwells
- B5 Meeting Rooms (e.g. auditoriums, conference rooms)
- B6 Garages / Parking Areas
- B7 Restrooms
- B8 Locker Rooms
- B9 Kitchen Area

3. WORKING AREA

- C1 Work-Room / Mail Processing Floors
- C2 Loading Dock / Storage Areas
- C3 Offices / Computer Rooms

4. SPECIAL USE ROOMS/AREA

- D1 Vaults / Accountable Papers
- D2 Inspector Galleries (L.O.G.)

5. EXTERIOR MATERIALS

- E1 Roofs, Siding and Paneling
- E2 Metalbestos Sheeting

GLOSSARY

ASBESTOS

A generic name given to a number of naturally occurring silicates that poses a unique crystalline structure. Incombustible in air, and separable into fibers. Asbestos includes the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, actinolite and tremolite.

ACBM

Asbestos Containing Building Material. A term that encompasses surfacing, thermal system, and miscellaneous asbestos-containing material in or on interior/exterior parts of a building. This definition also includes exterior hallways, connecting buildings, porticos, and mechanical system insulation.

ACM

Asbestos-Containing Material. Any material with more than one percent (1%) asbestos content.

BULK SAMPLE

A piece of suspected asbestos-containing building material.

FIBER RELEASE

Process by which dust is given off from asbestos materials and becomes airborne.

FRIABLE

Material which can be crumbled, pulverized, or reduced to powder when dry, by moderate hand pressure.

FUNCTIONAL SPACE/AREA

Specially distinct units within a building such as a room, a group of rooms, or a homogeneous area - this includes crawl spaces and areas above a drop ceiling.

HVAC

Heating, Ventilating, and Air Conditioning Systems. The system of pipes, ducts, and equipment (air conditioners, chillers, heaters, boilers, pumps, fans) used to heat, cool, move, and filter air in a building.

HOMOGENEOUS AREA

An area which appears similar throughout in terms of color, texture, and date of material application.

INACCESSIBLE AREA

Inaccessible areas are those which cannot be inspected due to physical barriers. Buildings may contain areas that are intrinsically inaccessible. These include gaps and spaces in walls, areas above fixed ceilings and below floors, enclosed boiler breechings, and ducts. Some buildings contain other inaccessible areas, such as very small pipe tunnels, sealed crawlspaces, unsafe attics, encased boilers, etc.

NON-FRIABLE

Material which cannot be crumbled or pulverized by hand pressure.

PACBM

Presumed Asbestos Containing Building Material

PIPE JOINT

The elbow, valve, connector, reduction or pipe hanger.

PLENUM

A space designed to transport air in a building. Commonly found below ground level and in the space between a dropped ceiling and the floor above it.

PLM

Polarized Light Microscopy. An accepted method for analyzing bulk ACM samples.

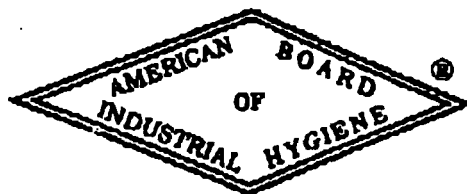
SACBM

Suspected Asbestos-Containing Building Materials (SACBM) are materials identified for sampling which may or may not be regulated ACM.

USEPA

United States Environmental Protection Agency. The Federal agency governing general population and environmental problems. In the case of ACM in buildings, the USEPA deals with regulations and their guidelines for application, renovation, removal and disposal of ACM in building structures.

The
American Board of Industrial Hygiene®
ABIH®



organized to improve the practice of Industrial Hygiene
proclaims that

Brian L. Benson

having met all requirements through
education, experience and examination,
is hereby certified in the

**CHEMICAL PRACTICE
of
INDUSTRIAL HYGIENE**

and has the right to use the designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH

June 26, 1996

date

Terry D. Thadell

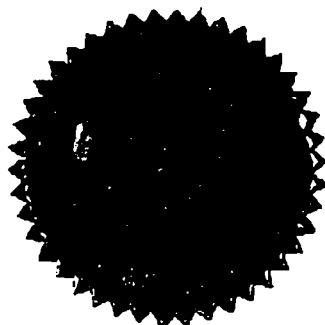
Chair ABIH

C 7021

certificate
number

Greg T. Conant

Secretary ABIH



**ASBESTOS
CERTIFICATION**

STATE OF COLORADO

**Colorado Department of Public Health
and Environment
Air Pollution Control Division**

This certifies that

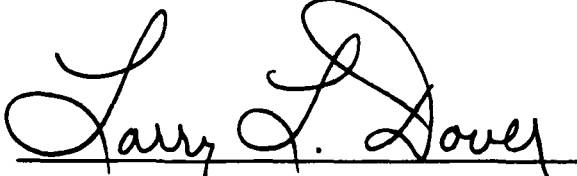
**Lavell Scott
524-58-6127**

**has met the requirements of 25-7-507, C.R.S. and Air Quality Control
Commission Regulation No. 8, Part B, and is hereby certified by the state
of Colorado in the following discipline:**

BUILDING INSPECTOR

Issued: 05/13/1997

Expires: 05/13/1998


Authorized APCI Representative

Record Number: 6805

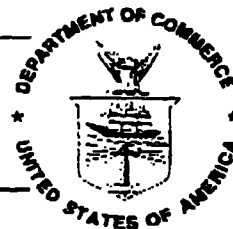
National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101926-0

ENVIRONMENTAL MANAGEMENT CONSULTANTS, INC.

7342 East Thomas Road

Scottsdale, AZ 85251-7216

Mr. Kurt A. Kettler

Phone: 602-840-8012 Fax: 602-990-8468

NVLAP Code

18/A01

Designation

U.S. EPA's "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" as found in 40 CFR, Part 763, Subpart F, App. A, or the current U.S. EPA method for the analysis of asbestos in building material.

June 30, 1998

Effective through

A handwritten signature in black ink, appearing to read 'Jan L. G...'. The signature is written over a horizontal line.

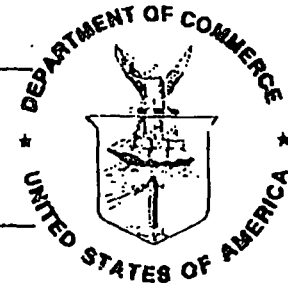
For the National Institute of Standards and Technology

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation



ENVIRONMENTAL MANAGEMENT CONSULTANTS, INC.
SCOTTSDALE, AZ

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

June 30, 1998

Effective through


For the National Institute of Standards and Technology

NVLAP Lab Code: 101926-0

McCRONE RESEARCH INSTITUTE

RESEARCH
certifies that

Kurt Kettler

has successfully completed an intensive course of instruction in

Advanced Asbestos Identification

given by the McCrone Research Institute

Presented this 10th day of March, 1995

Course Date: March 6-10, 1995

3.5 CEU's

Peter W. Cook

Walter C McCrone

SPENGEIGER ASSO@ATES

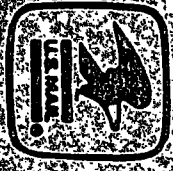


Burr Lawrence Rising Architects PS

MAIN POST OFFICE
PORT TOWNSEND, WASHINGTON 98368

PRE-CONSTRUCTION SURVEY
SCOPE REPORT

UNITED STATES POSTAL SERVICE
SEATTLE FIELD OFFICE
TRIABLE ASBESTOS CONTROL PROGRAM



PRE-CONSTRUCTION SURVEY
SCOPE REPORT

PROJECT NO. 5DB568
MAIN POST OFFICE
PORT TOWNSEND, WASHINGTON 98368

POSTMASTER: RICHARD GASFIELD
PHONE: (206)385-1600

UNITED STATES POSTAL SERVICE
SEATTLE FIELD OFFICE
FRIABLE ASBESTOS CONTROL PROGRAM

Prepared by:

SPENCE-GEIGER ASSOCIATES
Post Office Box 8434
Fort Collins, CO 80525-0400

BURR LAWRENCE RISING ARCHITECTS, P.S.
3600 - 108th Street S.W.
Tacoma, WA 98499-4698

SEP 1 0 1984

PRE-CONSTRUCTION SURVEY
SCOPE REPORT

PROJECT NO. 5DB568
MAIN POST OFFICE
PORT TOWNSEND, WASHINGTON 98368

UNITED STATES POSTAL SERVICE
SEATTLE FIELD OFFICE
FRIABLE ASBESTOS CONTROL PROGRAM

TABLE OF CONTENTS

Abstract

- I. Introduction
- II. Survey Methods
- III. Discussion of Abatement Alternatives
- IV. Problem Summary and Cost Estimate

Appendices

- A. Laboratory Results
- B. Drawings
- C. Construction Cost Estimates
- D. Photographs

ABSTRACT OF REPORT

This Pre-Construction Survey Report documents results of a site investigation performed on August 8, 1984 by Spence-Geiger Associates, IH, and Burr Lawrence Rising Architects, A/E in response to Work Order #2, Contract 549952-84-J-0226. This report was done on a "rush" basis so as to precede an emergency boiler replacement.

Asbestos materials were confirmed on the Port Townsend, WA MPO boiler (2) and stack. Additional asbestos materials were noted on steam lines, old domestic water lines and fittings, new domestic water fittings, and original ductwork.

REMOVAL

In accordance with District BME0 policy, the cost to remove and replace all identified exposed asbestos is estimated at \$61,718.00. However, due to the boiler project, insulation will not be replaced on items scheduled for demolition.

PORT TOWNSEND, WA

I. INTRODUCTION

In order to provide a healthful working environment for building occupants and to protect maintenance personnel, the United States Postal Service Field Real Estate and Buildings Office in Kent, WA has requested a Friable Asbestos Control Program for portions of this USPS facility. They have contracted with Burr Lawrence Rising Architects, P.S.; who have in turn contracted with Spence-Geiger Associates, Inc.; Asbestos Abatement Consultants, to prepare this "Pre-Construction Survey Scope Report."

This study incorporates site survey and testing results, coupled with an evaluation of asbestos control alternatives. In accordance with District BME0 policy and scope directions, exposed asbestos is generally recommended to be removed and replaced with non-asbestos containing insulation. Scope construction cost estimates are presented for this alternative. In special cases, upon direction by USPS, other alternatives are examined regarding their feasibility and concept construction cost estimates are presented. A description of methods used during the course of the site survey is also included.

There is often no single obvious solution to an asbestos control problem. It is the intent of Burr Lawrence Rising Architects, P.S.; and Spence-Geiger Associates, Inc.; to provide the USPS with an objective, concise presentation of the scope of the problem and corrective options when directed by USPS.

II. SURVEY METHODS

To gather the greatest quantity of reliable information in the time available, several investigative techniques were utilized. These techniques consisted of gathering and reviewing available building construction documents, brief informal interviews with selected supervisory and maintenance personnel, a walk-through tour of the areas identified in the work order and the taking of bulk samples of suspect materials identified in the work order.

Facility occupants, especially those of long duration, were solicited for comments because of their unique knowledge of the construction history and the location of the suspect materials. They also had insight as to the past, present, and future maintenance needs that might impact upon these materials. Any available construction and maintenance documents were also obtained at this time.

The suspect materials identified in the work order were inspected, sampled and measured for cost estimate purposes. Drawings of the affected areas were made with sample locations identified for later reference. Reference photographs were also taken.

Samples were taken in accordance with EPA guidelines. A complete core of each material was taken, placed in a clean vial, sealed, and labeled with a unique code. Analysis was then performed by Hager Laboratories, an AIHA accredited laboratory that participates regularly in the NIOSH PAT and EPA QA programs to assure quality control. Duplicate portions of each bulk material were immersed in liquid media of known index of refraction on a microscope slide and observed at 100 power using a McCrone Dispersion

Staining Objective with polarizing light. Characteristics of the fibers under polarized light and under dispersion staining characteristics were compared to similarly prepared samples of known asbestos type. Estimates of asbestos fiber content were made by comparing the quantity of non-asbestos material to asbestos fibers. These results were then given in percent and type(s) of asbestos; most commonly chrysotile, amosite and crocidolite.

In addition to determining asbestos content, attention was also given to the following factors: material condition, water damage, exposed surface area, accessibility, activity and movement in the area, presence of an air plenum or direct air stream, and friability.

Friable material is defined as material that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friability is an important factor in estimating how readily the asbestos fibers may be liberated from the material into the air.

III. DISCUSSION OF ABATEMENT ALTERNATIVES

There are four general asbestos abatement alternatives available:

- 1) Removal - asbestos material is stripped and disposed of in an approved burial site.
- 2) Encapsulation - asbestos material is either surface coated by a bridging encapsulant or bonded by a penetrating encapsulant to prevent fiber release.
- 3) Enclosure - asbestos material is separated from the general environment by confinement systems such as jacketing, drywall, panel ceiling, etc.
- 4) Management - action is deferred to a future date. Warnings are posted and periodic inspections made. This is not a USPS approved alternative.

While each of these alternatives has its advantages and disadvantages, the biggest distinction lies between removal and the remaining three. Removal is the only alternative that permanently disposes of the asbestos, and thereby the possibility of contamination, from the facility. Removal is the USPS preferred alternative and per District BME0 policy is the alternative used for the Scope Construction Cost Estimate for identified exposed asbestos unless otherwise directed. Encapsulation, enclosure, and management attempt to control fiber release, but they do not remove the fiber source. Therefore the potential for future asbestos contamination due to maintenance, remodeling or demolition remain. The USPS should keep this important point in mind when selecting the alternatives presented. In addition, encapsulation and enclosure require identification of locations on A/E plans and inspections every six months by BME0.

Additional indications favoring removal are:

PORT TOWNSEND, WA

- 1) Impending disturbance of the material via scheduled maintenance, remodeling or demolition. Extensive delay and cost problems can result to maintenance and remodeling projects and fiber release may still result from emergency repair projects.
- 2) Old age/poor condition of the associated mechanical system which increases the chances of unscheduled maintenance, remodeling, or demolition.
- 3) Deterioration of the material.
- 4) Water damage, present or potential.
- 5) Mechanical damage via impact and/or vandalism, present or potential.

The major disadvantages of removal are its relatively high initial cost and potential for disruption of facility operations during abatement activities. Removal is also more time-consuming.

Encapsulation and enclosure are generally quicker, less disruptive of operations, and cheaper initially although required BMEQ inspections may represent a significant on-going operational expense. They can be a viable alternative when the asbestos material is in good condition and several criteria are met. In the case of encapsulation key prerequisites include:

- 1) Material not easily accessible.
- 2) No water damage, present or potential.
- 3) Material of low friability and possessing good cohesive strength.

Encapsulation is most often done on sprayed ceilings that satisfy the above criteria. If encapsulation is done, it is important that an encapsulant found "satisfactory" by the EPA be used. Material thickness and composition will determine the choice between a bridging or penetrating encapsulant.

Enclosure is most effective when relatively small volumes of material

are involved. The enclosure must be sturdy enough to prevent penetration via impact, and must not allow any outward air movement or fiber migration. Enclosure may also be combined with encapsulation, as in the case of slightly damaged pipe lagging. An encapsulant could first be applied, followed by a protective PVC jacket for additional durability.

As both encapsulation and enclosure do not remove the asbestos source, a worker education and training program is an essential part of either of these alternatives. USPS custodial and maintenance personnel and outside contractors must be educated as to the location of the asbestos material and its hazards. Warnings should be posted on the materials and workers trained in proper work practices. Reference drawings giving approximate locations of non-removed materials should be kept on site and at the appropriate safety, maintenance and real estate offices. They should also note that concealed materials may exist within spaces such as walls and permanent ceilings, and that these materials have not received benefit of any form of abatement, regardless of the option(s) selected for exposed identified materials.

PORT TOWNSEND, WA

IV. PROBLEM SUMMARY AND SCOPE CONSTRUCTION COST ESTIMATE

The Port Townsend, WA MPO was visited on August 8, 1984. This report was completed on a "rush" basis at the request of the USPS in order to allow an emergency boiler replacement project to proceed.

In accordance with the work order, the entire building was inspected. As suspected, the boilers (2) and stack are insulated with asbestos (Sample NW0802). Steam lines also tested positive for asbestos (Sample NW0804).

Additional asbestos materials were found on the old domestic water lines (Samples NW0805, 0806, 0809), fittings (NW0807, 0808, 0810), and new domestic water fittings (Sample NW 0812). The new domestic water straight runs are figerglass. Several duct runs are also insulated with asbestos (Samples NW0803, 0811).

The age and unique design of this facility will necessitate special care during abatement. Insulation materials are very friable and high in asbestos content. In addition, there are numerous gravity air risers leading up from the basement. Grates, doors, pipe sleeves, etc., on these risers must be carefully sealed and negative pressure maintained in the work area to prevent fiber migration.

SCOPE CONSTRUCTION COST ESTIMATE

The estimated construction cost for removal and reinsulation of identified materials throughout the facility (in accordance with USPS policy) is \$61,718.00. This cost does not include reinsulation for the boilers and related components which are scheduled for demolition.

PORT TOWNSEND, WA

APPENDIX A

LABORATORY RESULTS

SN12397
8/23/84

TABLE 5

ASBESTOS ID
Sample Number

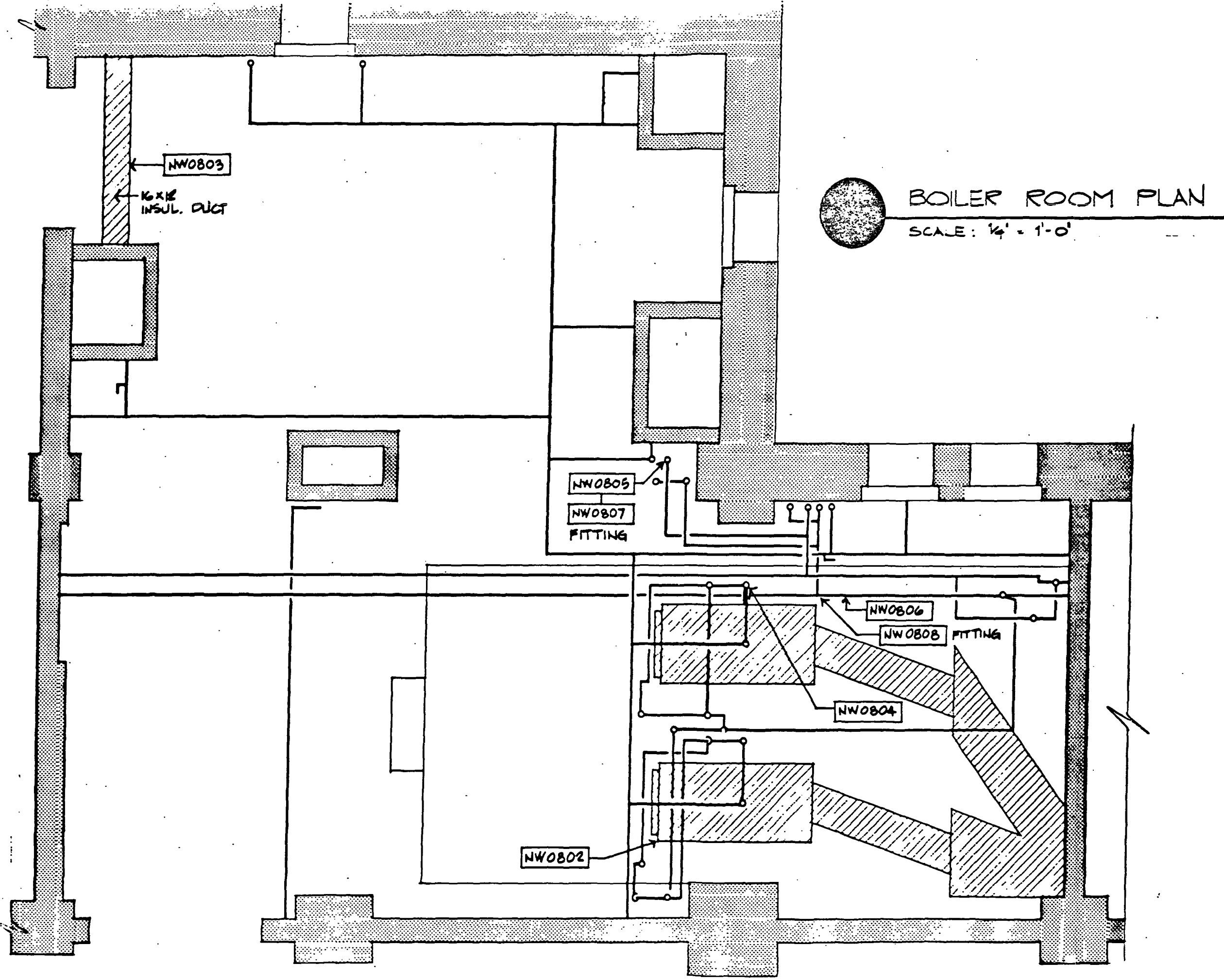
Sample contains:

NW 0802	30-50% chrysotile asbestos 30-50% amosite asbestos
NW 0803	5-15% chrysotile asbestos
NW 0804	50-75% chrysotile asbestos 1-5% amosite asbestos
NW 0805	75-90% chrysotile asbestos 1-5% non-asbestos fibers
NW 0806	30-50% chrysotile asbestos 50-75% non-asbestos fibers
NW 0807	5-15% chrysotile asbestos 5-15% amosite asbestos 5-15% glass-like fibers
NW 0808	5-15% chrysotile asbestos 30-50% amosite asbestos
NW 0809	30-50% chrysotile asbestos 1-5% amosite asbestos 1-5% non-asbestos fibers
NW 0810	15-30% chrysotile asbestos 15-30% non-asbestos fibers
NW 0811	30-50% chrysotile asbestos 30-50% amosite asbestos
NW 0812	5-15% chrysotile asbestos 15-30% amosite asbestos 5-15% glass-like fibers 5-15% non-asbestos fibers

PORT TOWNSEND, WA

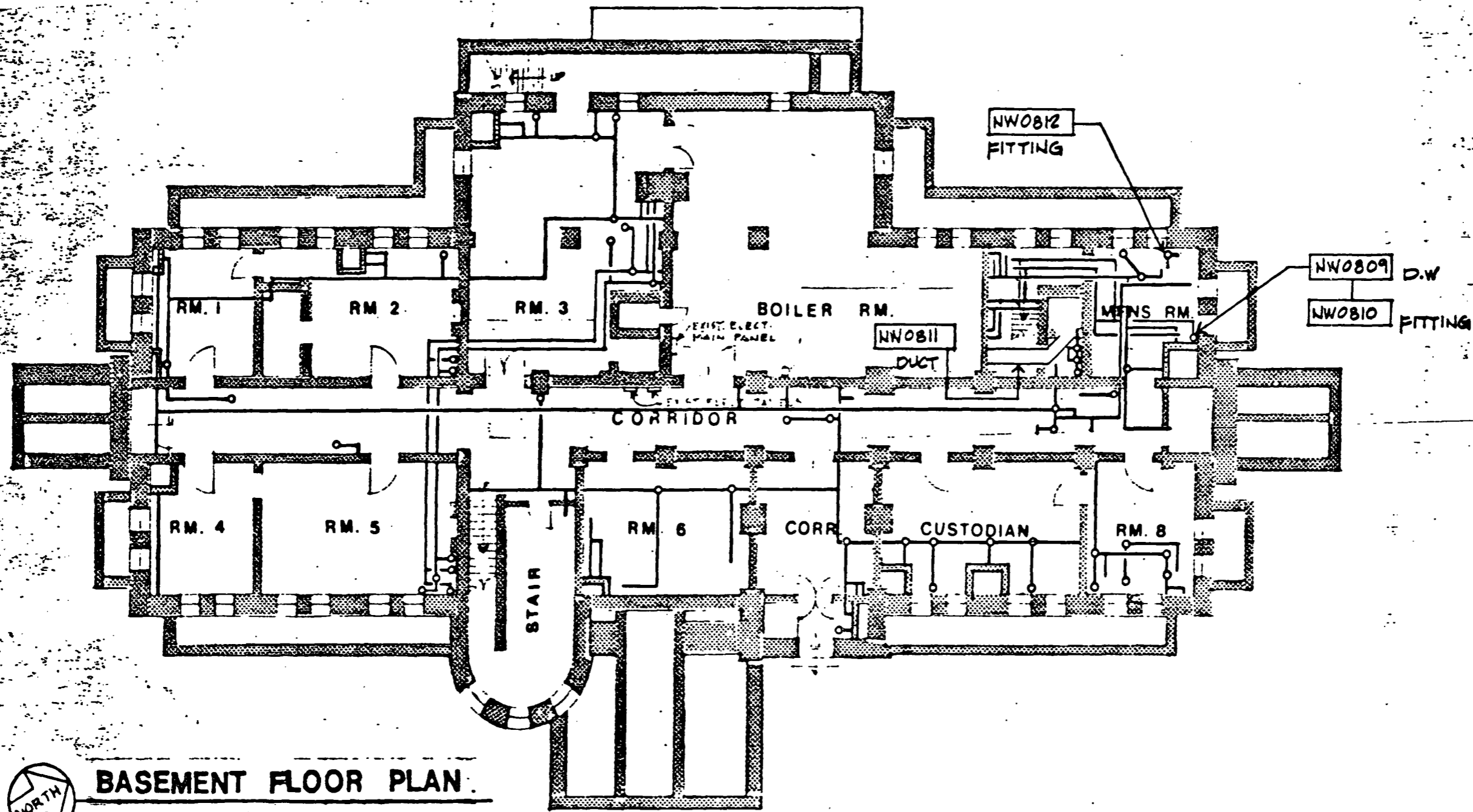
APPENDIX B

DRAWINGS



BOILER ROOM PLAN
 SCALE: 1/4" = 1'-0"

BOILER ROOM PLAN	
ASBESTOS ABATEMENT PROGRAM PORT TOWNSEND M.P.O.	
BURR LAWRENCE RISING ARCHITECTS, P.S. ARCHITECTURE INTERIORS	
Date	
Revised	
Drawn By	F. EARNE
Sheet No.	1
	of 4



BASEMENT FLOOR PLAN

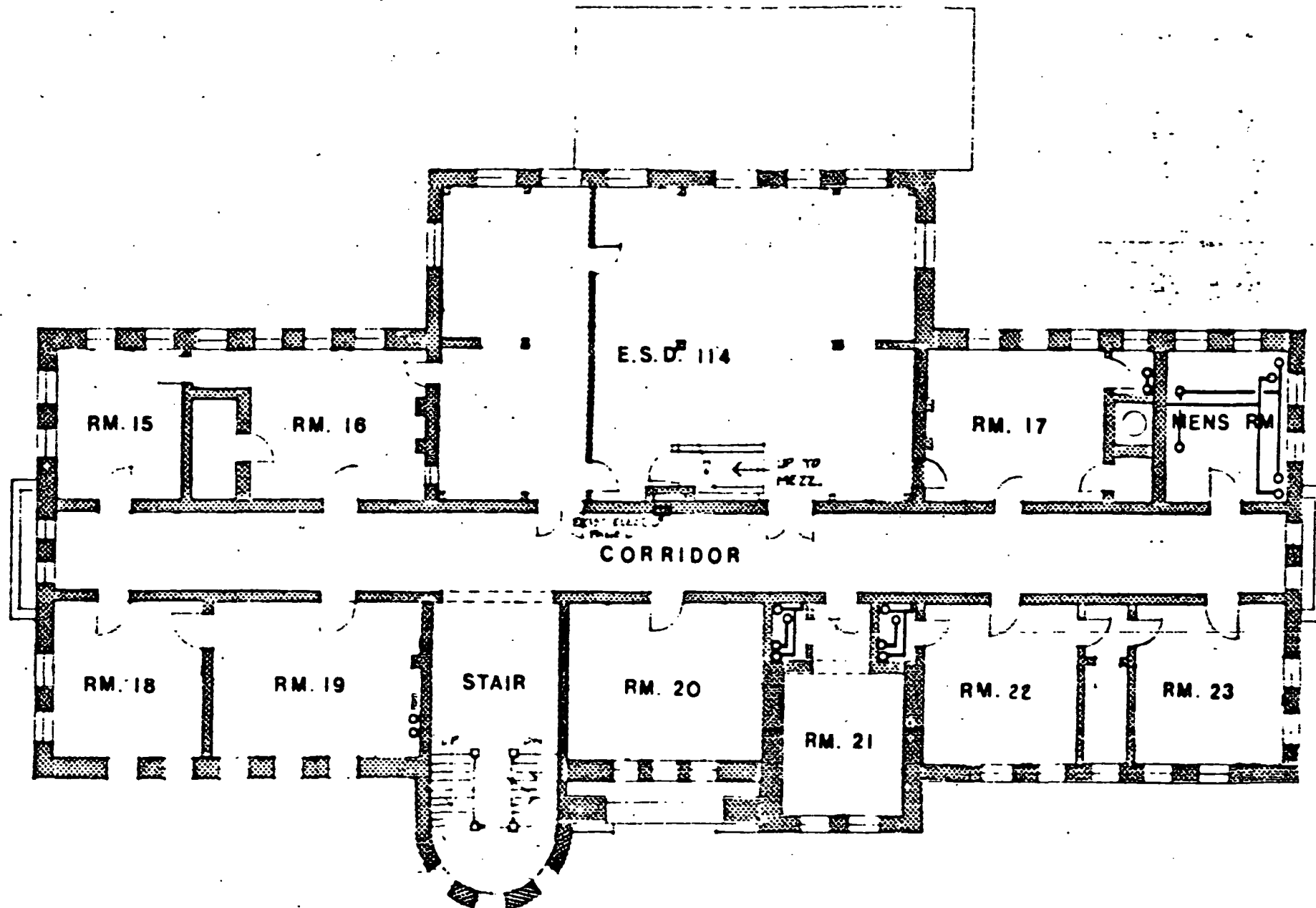
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BURR LAWRENCE RISING ARCHITECTS, P.C. ARCHITECTURE & INTERIORS
 FACOMA, N.Y.

ASBESTOS ABATEMENT PROGRAM
 PORT TOWNSEND M.P.O.

BASEMENT FLOOR PLAN

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SECOND FLOOR PLAN

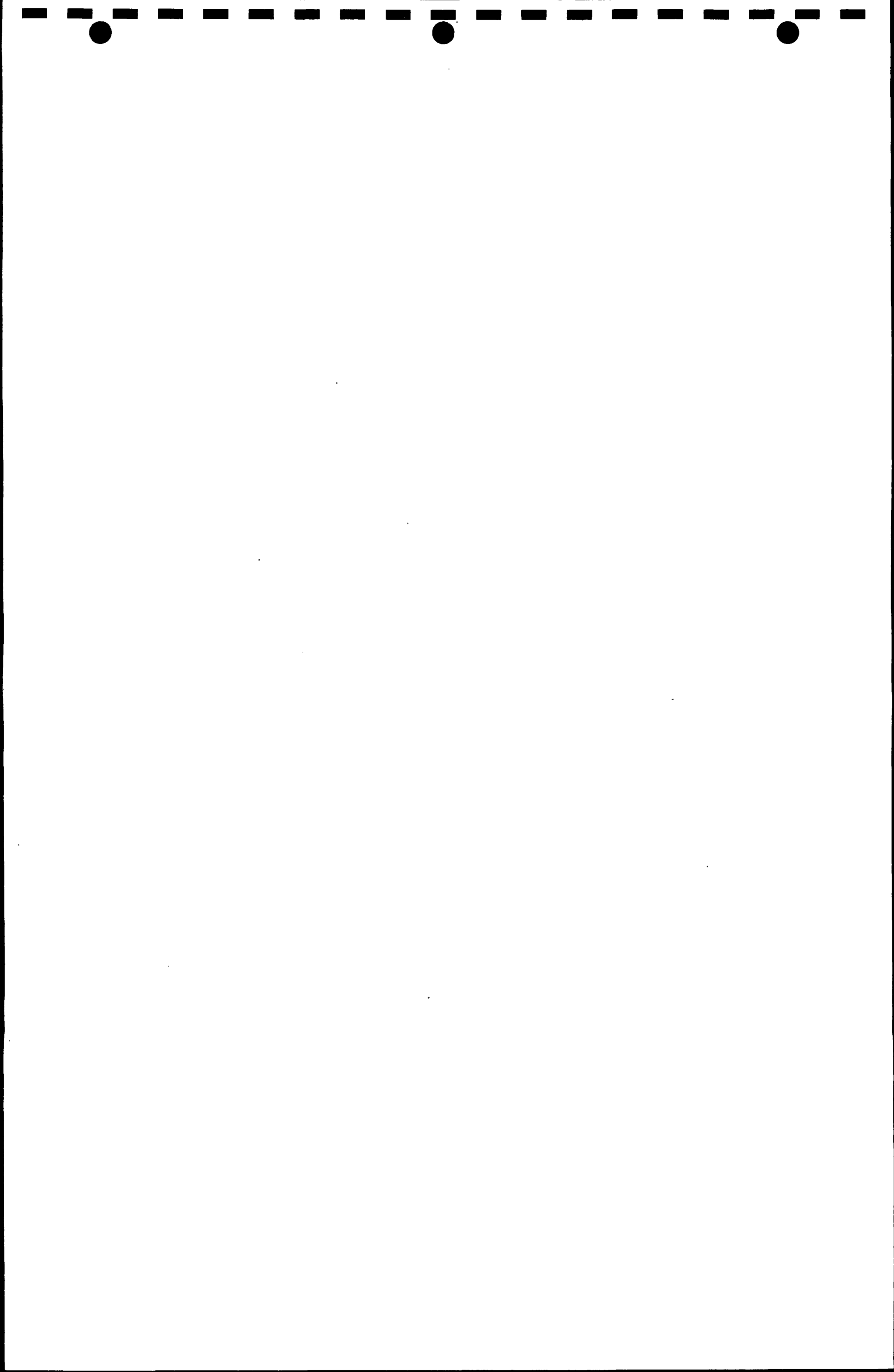
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ASBESTOS ABATEMENT PROGRAM
PORT TOWNSEND M.P.O.

SECOND FLOOR PLAN

BURR LAWRENCE RISING ARCHITECTS, P.S. ARCHITECTURE & INTERIORS
INCORPORATED
 1100 100th St. Port Townsend, WA 98364
 Phone: (360) 335-1100
 Fax: (360) 335-1101
 Email: burr@burr-lawrence.com

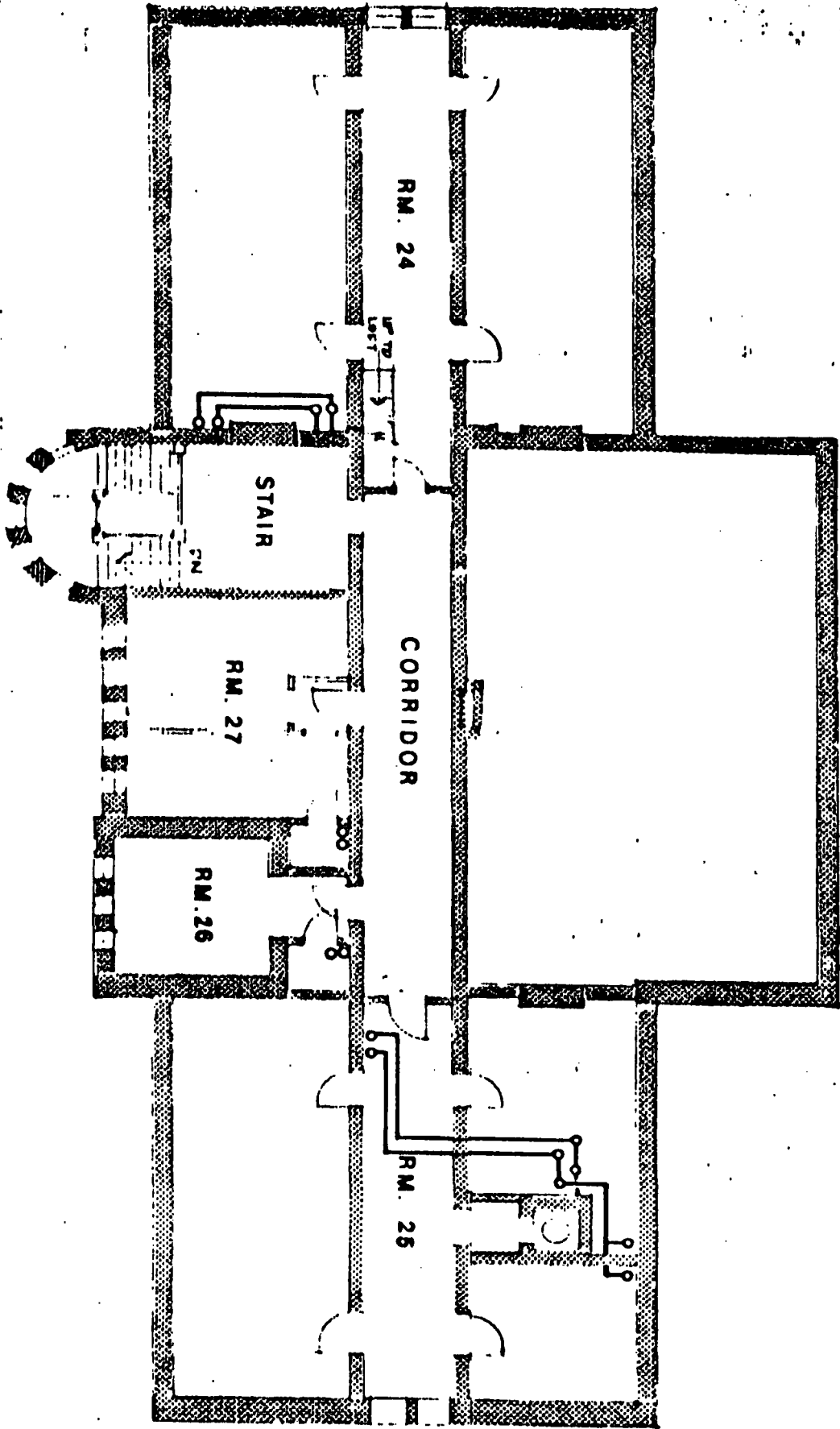
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Check By	
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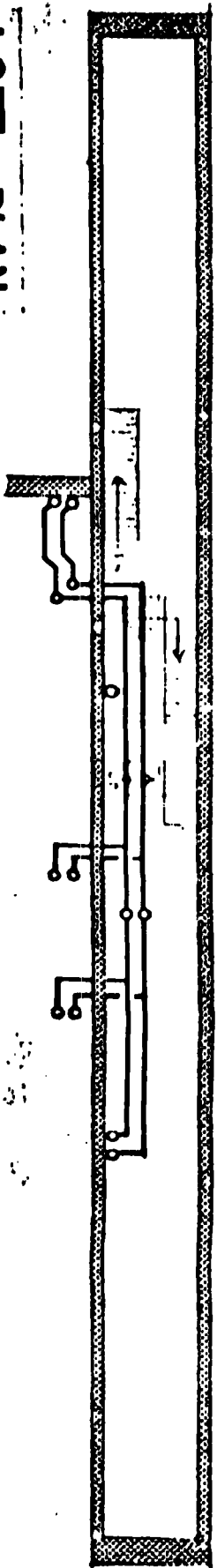
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SCALE 0 10 20 30



LOFT PLAN

SCALE 0 10 20 30



ASBESTOS ABATEMENT PROGRAM
PORT TOWNSEND M.P.O.

ATTIC FLOOR PLAN &
LOFT PLAN

BURR LAWRENCE RISING ARCHITECTS, P.S.

ARCHITECTURE & INTERIORS
TACOMA, WA 98402

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Checked	gpr
Project No.	4



APPENDIX C

CONSTRUCTION COST ESTIMATE

ASBESTOS ABATEMENT PROGRAM

PRELIMINARY COST ESTIMATE

PROJECT: PORT TOWNSEND, WA - MPO 98368

PROJECT NO. 5DB568

ITEM	DESCRIPTION	QTY.	UNIT	REG. RATE	AMOUNT
2.01	Mobilization on Projects Requiring Work Area Isolation	1	Each site	\$2,450.00	\$2,450
2.03	Work Plan	3	Per Flr	200.00	600
2.04	Masking and Sealing (Isolated Work Area)	32,250	SF	0.25	8,051
2.07	Rolling Scaffold	2	Per Wk	80.00	160
2.08	Remove Insulation from Boilers, Stacks, and Ducts, and Tack Coat (Isolated Work Area)	602	SF	4.00	2,408
2.09	Remove Insulation from Straight-Run of Pipe and Tack Coat (Isolated Work Area).	2,107	SF	6.00	12,642
2.10	Remove Insulation from Fittings and Tack Coat (Isolated Work Area)	598	Each Ftng	6.00	3,588
2.12	Remove Insulation from Straight-Run of Ppe and Tack Coat (Glove Bag Method)	111	SF	25.00	2,775
2.13	Remove Insulation from Fittings and Tack Coat (Glove Bag Method)	30	Each Ftng	35.00	1,050
2.15	Install Insulation on Boilers and Stacks	486	SF	14.00	6,804
2.16	Install Insulation on Straight Run of Pipe	2,218	SF	3.25	7,209
2.17	Install Insulation and PVC Covers on Fittings	628	Each Ftng	12.00	7,536
2.19	Install Insulation on Ductwork Exposed Locations	116	SF	4.35	505
2.33	Install and Remove Temporary Partition of Wood Studs & Plastic Sheeting	540	SF	1.50	810
2.36	Air Sampling	69	Per Smpl	20.00	1,380
2.37	Industrial Hygienist	15	Per Day	250.00	<u>3,750</u>
TOTAL					\$61,718

PORT TOWNSEND, WA



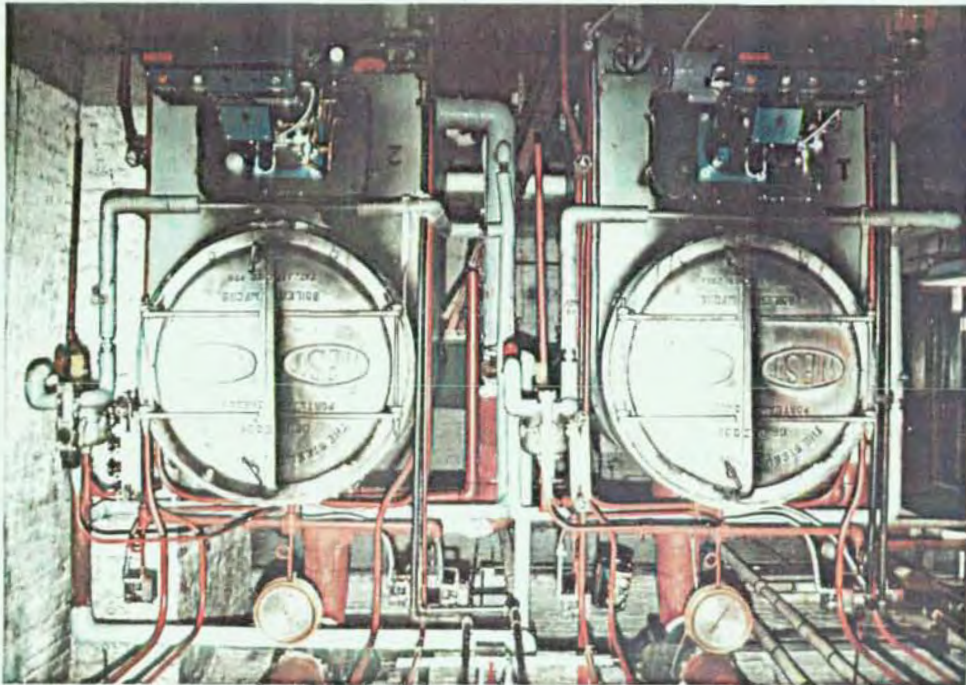
APPENDIX D

PHOTOGRAPHS

View of Damaged Asbestos Insulation on an Exposed Duct in the Mechanical Room.



View of Boilers and Associated Piping in the Mechanical Room





Original Steam Line Insulation and Fittings - Typical of
Basement Level.