

LIMITED NESHAP ASBESTOS
DEMOLITION/RENOVATION SURVEY
UTILITY OPERATIOS DEPARTMENT
(LABORATORY AREA)
5101 65TH STREET WEST
BRADENTON, MANATEE COUNTY, FLORIDA
PSI PROJECT NO. 552-3A036



April 9, 2003

Mr. Charles Bishop Project Manager Manatee County Government 1026 26th Avenue East Bradenton, Florida 34208

RE: Limited NESHAP Asbestos

Demolition Renovation Survey Utility Operations Department

(Laboratory Area) 5101 65th Street West

Bradenton, Manatee County, Florida

PSI Project No. 552-3A036

Dear Mr. Bishop:

Enclosed herewith please find three (3) copies of the above-referenced NESHAP Asbestos Demolition/Renovation Sampling Survey. After your review, if you have any questions or concerns, please do not hesitate to contact Mr. Keith R. Kartovicky at (813) 886-1075, ext. 216.

Professional Service Industries, Inc. appreciates the opportunity to work with the Manatee County Government on this project. We look forward to working with you again in the future.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Bruce Reed

Asbestos AHERA Inspector

Timothy F. Caughey, C.I.H.

Florida Licensed Asbestos Consultant

License No. IA-0000016

KRK/ljs

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Senior Project Manager

LIMITED NESHAP ASBESTOS DEMOLITION/RENOVATION SURVEY

Of

UTILITY OPERATIONS DEPARTMENT
(LABORATORY AREA)
5101 65TH STREET WEST
BRADENTON, MANATEE COUNTY, FLORIDA

Prepared for

MANATEE COUNTY GOVERNMENT 1026 26TH AVENUE EAST BRADENTON, FLORIDA 34208

Conducted by

Professional Service Industries, Inc. 5801 Benjamin Center Drive Suite 112 Tampa, Florida 33634 (813) 886-1075

PSI Project Number 552-3A036

April 9, 2003



NESHAP ASBESTO	OS DEMOLITION/RENOVATION SURVEY
5101 65 [™] STREET	WEST
PSI PROJECT No.	552-3A036

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П	•		
U		SECTION I EXECUTIVE SUMMARY	
U		General	
	nervoryniai i radom Luebonia.	Professional Service Industries, Inc. (PSI) was retained by the Manatee C	•
		Government to conduct an National Emissions Standard for Hazardous Air Poll (NESHAP) asbestos demolition/renovation sampling survey limited to the Operations Department's Laboratory area located at 5101 65 th Street We Bradenton, Manatee County, Florida. At the client's request roofing is not a part	Utility est in
		survey.	OI tills
Canada		PSI conducted this sampling survey in general accordance with the NESHAP are scope of work as requested by the client to facilitate demolition/renovation estructure.	
П		Mr. Bruce Reed of PSI conducted the survey on April 2, 2003.	
Constitution Const		The purpose of the survey was to identify, locate and quantify friable and non-suspect asbestos-containing materials located at the subject site. During the sur total of twenty-four (24) samples of suspect Asbestos-Containing Materials (ACM) collected from eight (8) homogeneous areas and analyzed by Polarized Microscopy (PLM). The EPA considers a homogeneous material to be ast containing if at least one sample of this material is greater than one percent asbestos. Results of laboratory analysis confirmed that none of the same	vey, a) were Light bestos (>1%)
\bigcup		materials contain greater than one percent (>1%) asbestos.	
		Purpose	4.
		The purpose of this study was to provide information regarding the present asbestos on the site, which may have cost considerations associated with demolition/renovation of the laboratory area located within the Utility Open Department at 5101 65 th Street West in Bradenton, Florida.	h the
		PSI warrants that the findings contained herein have been promulgated in graccordance with accepted professional practices at the time of its preparation applied by professionals in the community.	



	8	NESHAP ASSESTOS DEMOLITION/RENOVA 5101 65 TH STREET WEST PSI PROJECT NO. 552-3A036	TION SURVEY		APRIL 9, 2003 PAGE iii
	•	The report is limited to the prepared and the conditions	existing at the structure	re at the time of the	limited survey.
U		There is a possibility that cor scope of the survey or which was			ified within the
		The NESHAP asbestos dem final report prepared by PS	 The report has be 	een included in its e	entirety in this
		document for review by Mana exclusive use of Manatee Cou		ent and has been pr	epared for the
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NESHAP Assestos Demolition/Renovation Survey 5101 65TH Street West PSI Project No. 552-3A036

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I. INTRODUCTION

Asbestos, once commonly referred to as the miracle mineral, has been used as a reinforcement fiber for more than 3,000 years. Due to the abundant availability of the fiber, its acoustical and tensile qualities, and its resistance to fire and chemicals, asbestos was used extensively in building materials.

However, inhalation of asbestos fibers has been found to be a health hazard to humans, and building owners may be held liable for the presence of the fibers and subsequent inhalation by occupants. Due to these factors, a move is presently underway among building owners in both the public and private sectors to identify any asbestos-containing materials (ACM) in their buildings. This identification is accomplished by building inspections, which are the first step in a plan to effectively control and/or remove any known asbestos-containing materials found.

Current EPA statutes address presently friable (easily crumbled) and non-friable materials. Non-friable building materials do not create an environmental exposure unless they are sawn, broken, ripped, or pulverized. However, even materials that are well wrapped and technically non-friable at the time of inspection have the potential to become friable very readily by accidental tearing or other disturbance. It is for this reason, as well as to simply inform the owner of all asbestos-containing materials, that Professional Service Industries, Inc.'s policy is to address all materials which are Potentially friable as well as those presently friable. This report has been organized in a manner that presents the data in several forms to best suit the needs of the building owner. The Quality Control and Method of Quantification section explains our testing and quality control methods. The Petrographic Results section is a listing of samples taken and their asbestos content. The spreadsheets contain detailed information on the locations, types, and quantities of all documented asbestos materials sampled.



5101 65 [™] \$	ASBESTOS DEM STREET WEST CT No. 552-3	OVATION SURVEY

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II. METHODOLOGY

GENERAL REFERENCES

- I

The Manatee County Government authorized PSI to conduct a NESHAP asbestos demolition/renovation sampling survey and to analyze samples taken during the survey, by forwarding IFAS No. W3000155 dated March 27, 2003. The survey was performed per Work Assignment No. 61PE PSI Proposal No. 552-A3036 dated March 14, 2003.

Asbestos survey and sampling procedures were performed in general accordance with National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulation and the guidelines published by the EPA in 40 CFR Part 763 Subpart E, October 30, 1987, last amended July 3, 1993.

ASBESTOS SAMPLING SURVEY GENERAL ORGANIZATION

The study itself consisted of three major activities: visual observation, sampling, and quantification. Although these activities are listed separately, they are integrated tasks.

VISUAL OBSERVATION

The visual observation was performed by EPA accredited inspector Mr. Bruce Reed, Certification 7ME08087402IR007. An initial building walk-through was conducted to determine the presence and condition of suspect materials, which were accessible and/or exposed. Materials which were similar in general appearance, were grouped into homogeneous sampling areas. Functional spaces were also identified. Such materials are termed "homogeneous materials" by the EPA. During this walk-through, the approximate quantities of these homogeneous materials were also noted. Only materials, which were accessible and/or exposed and suspected to contain asbestos, were identified.

Homogeneous Material Classifications

Following the EPA inspection protocol, each identified suspect homogeneous material was placed in one of the following EPA classifications:

Surfacing Materials (sprayed or trowel applied to building members)

Thermal System Insulation (materials generally applied to various mechanical system[s])

Miscellaneous Materials (any materials which do not fit either of the above categories)



	NESHAP Asbestos Demolition/Renovation Survey 5101 65 TH Street West PSI Project No. 552-3A036	APRIL 9, 2003 PAGE 3
D	SAMPLING PROCEDURES	
U	Following the walk-through of the laboratory located within the Utility Department at 5101–65 th Street West, the inspector collected selected sel	Operations
	exposed and/or accessible materials identified as suspect ACM.	
	EPA and NESHAP guidelines were used to determine the sampling protocol. locations were chosen to be representative of the homogeneous material.	Sampling
	Samples of miscellaneous materials were taken as randomly as possible vattempting to sample already damaged areas so as to minimize disturbated material. Sampling was scheduled to minimize interference with building	nce of the occupants.
	After each sample was extracted, a spray encapsulate was applied to the sai to prevent potential fiber release.	mpled area
П	QUANTIFICATION	
U	Quantities of accessible and/or exposed building materials, which were su	
	containing asbestos, were estimated. This estimation was performed approximate measurements in the field.	by taking
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П		79
U		
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III. THE LABORATORY

All samples collected during this survey were analyzed at PSI's Polarized Light Microscopy Laboratory in Pittsburgh, Pennsylvania. Our PLM/DS laboratory is staffed with microscopists who are graduates of the McCrone Research Institute, which certifies individuals for the analysis of asbestos-containing materials. Lab results are computerized for greater efficiency.

A. POLARIZED LIGHT MICROSCOPY LABORATORY ACCREDITATION

Professional Service Industries, Inc. is accredited under the National Institute of Standards and Technology's (NIST) certification program. The National Voluntary Laboratory Accreditation Program (NVLAP) replaces the EPA's interim program for Bulk Sample Quality Assurance. PSI has participated in the EPA's quality assurance program since the program was established in 1983. PSI has also received American Industrial Hygiene Association (AIHA) accreditation. Our NVLAP Laboratory Number is 1350.

B. PSI LABORATORY QUALITY CONTROL PROGRAM

PSI maintains an in-house quality control program in addition to participating in the U.S. Environmental Protection Agency Bulk Sample Quality Assurance Program. Our in-house program consists of blind reanalysis of five percent of all samples. This reanalysis is done by a designated Quality Control Microscopist. In addition, the Quality Control Microscopist reanalyzes the samples that were originally reported between trace and five percent asbestos. There is also voluntary quality control reanalysis and mandatory source material dependent quality control reanalysis for sample types that are particularly difficult to analyze.

C. METHOD OF ANALYSIS

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (Chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and non-fibrous constituents. Asbestos was identified by refractive indices,



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morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample, using a stereoscope.

The Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) define asbestos containing material as any material which contains greater than one percent asbestos. When friable samples analyzed by Polarized Light Microscopy contain asbestos in amounts less than ten (< 10%) percent, a more exact method of analysis called point counting may be performed at the client's request. When the results of this method are less than or equal to one percent (≤ 1%) asbestos, then the material is not regulated by the EPA or OSHA.

The test results are based on a visual determination of relative volume of the bulk sample components. The results are valid only for the item tested. This report may not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: EPA Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116 July 1993).



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IV. FINDINGS AND OBSERVATIONS

The Utility operations Department located at 5101 65th Street West in Bradenton Florida is a concrete block structure built slab on grade. Interior finishes of the structure include but are not limited to, 2' x 2' ceiling panels, drywall, and ceramic floor tile. The area surveyed was limited to the laboratory area.

Bulk Material Samples

A total of twenty-four (24) samples were collected from eight (8) homogeneous areas during the survey and were analyzed by Polarized Light Microscopy (PLM). The following chart lists each material sampled, sample locations, approximate quantity of material located throughout the surveyed area and percentage of asbestos fibers found in the material sampled.

Homo. No.	Sample No.	Material Description	Sampled Location	Approx. Quantity ⁽¹⁾	% Asbestos Type	NESHAP Category
01	01	2' x 2' deep pock mark ceiling panels	Lab area, west side outside of Room 301	1,742 sq. ft.	NAD ⁽²⁾	N/A ⁽³⁾
01	02	2' x 2' deep pock mark ceiling panels	Lab area, center		NAD	N/A
01	03	2' x 2' deep pock mark ceiling panels	Lab area, east side		NAD	N/A
02	04	2' x 2' smooth texture replacement ceiling panels	Lab area, north side of lab	266 sq. ft.	NAD	N/A
02	05	2' x 2' smooth texture replacement ceiling panels	Lab area, outside balance room		NAD	N/A
02	06	2' x 2' smooth texture replacement ceiling panels	Lab area, wet chem. Ph area, northeast side		NAD	N/A
03	07	White mastic on metal exhaust pipe	Lab area above #1 fume hood on metal exhaust pipe	16 sq. ft.	NAD	N/A
03	80	White mastic on metal exhaust pipe	Lab area above fume hood #2 on metal exhaust pipe		NAD	N/A



Homo. No.	Sample No.	Material Description	Sampled Location	Approx. Quantity ⁽¹⁾	% Asbestos Type	NESHAP Category
03	09	White mastic on metal	Lab area above		NAD	N/A
		exhaust pipe	fume hood #5 on metal exhaust pipe			1
04	10	Beige mastic on paper-foil over fiberglass on small pipe lines	Lab area above fume hood #3, small pipe lines	25 sq. ft.	NAD	N/A
04	11	Beige mastic on paper-foil over fiberglass on small pipe lines	Lab area above fume hood #3, small pipe lines	30	NAD	N/A
04	12	Beige mastic on paper-foil over fiberglass on small pipe lines	Lab area above large fume hood, small pipe lines		NAD	N/A
05	13	Drywall and joint compound	Laboratory supervisor office 301 behind door	4,500 sq. ft.	NAD	N/A
05	14	Drywall and joint compound	Lab area, balance room behind door		NAD	N/A
05	15	Drywall and joint compound	Lab area, solvent storage room behind door		NAD	N/A
06	16	2' x 2' pinhole texture over fiberglass ceiling panels	Lab area, acid storage room, east side	66 sq. ft.	NAD	N/A
06	17	2' x 2' pinhole texture over fiberglass ceiling panels	Lab area, acid storage room, west side		NAD	N/A
06	18	2' x 2' pinhole texture over fiberglass ceiling panels	Lab area, solvent storage room over door		NAD -	N/A
07	19	Yellow baseboard mastic	Lab area, northwest side	333 lin. ft.	NAD	N/A
07	20	Yellow baseboard mastic	Lab area, Bod room, northeast side		NAD	N/A
07	21	Yellow baseboard mastic	Lab area, extraction room, west side		NAD	N/A
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Homo. No.	Sample No.	Material Description	Sampled Location	Approx. Quantity ⁽¹⁾	% Asbestos Type	NESHAP Category
08	22	Gray fiber panels	Lab area located in fume hood #5	19 sq. ft.	NAD	N/A
08	23	Gray fiber panels	Lab area located in fume hood #5		NAD	N/A
08	24	Gray fiber panels	Lab area located in fume hood #5		NAD	N/A

(1) Approximate quantity located throughout the surveyed area; sq. ft. = square feet; lin. ft. = linear feet
 (2) NAD = No Asbestos Detected
 (3) N/A = Not Applicable



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	NESHAP ASBESTOS DEMOLITION/RENOVATION SURVEY 5101 65 TH STREET WEST PSI PROJECT No. 552-3A036	APRIL 9, 2003 Page 9
	V. CONCLUSIONS	p v 100
	ASBESTOS CONTAINING MATERIALS	
	Results of laboratory analysis confirmed that none of the twen materials collected from eight (8) homogeneous areas containe fibers.	
	There is no further action necessary at this time	
- Control of the Cont	NON-ASBESTOS CONTAINING MATERIALS	
Commission	Asbestos was not detected in the following PSI sampled and analy 2' x 2' deep pock mark ceiling panels 2' x 2' smooth texture replacement ceiling panels White mastic on metal exhaust pipe Beige mastic on paper-foil over fiberglass on small pipe lines Drywall and joint compound 2' x 2' pinhole texture over fiberglass ceiling panels Yellow baseboard mastic Gray fiber panels	
	If demolition/renovation activities expand into other areas not refer or if during demolition/renovation activities, materials are uncover been tested, or were not visible at the time of the survey, they show asbestos containing until laboratory testing proves otherwise.	ered which have not



APPENDICES

[psi]

APPENDIX A GLOSSARY OF TERMS



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	GLOSSARY OF TERMS
	ABATEMENT Procedures to control fiber release from asbestos-containing building materials. Includes encapsulation, enclosure, and removal.
0	AIR MONITORING The process of measuring fiber content of a specific volume of air in a stated period of time.
U	AMBIENT EXPOSURE Exposure to environmental fiber concentrations (i.e., the
	normal concentration of fibers in an area prior to the disturbance of asbestos-containing materials).
	AMENDED WATER Water to which a surfactant has been added to increase its penetrating capabilities.
	ASBESTOS A defined group of naturally occurring minerals that separate into fibers. There are six asbestos minerals used commercially: Chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite.
	ASBESTOS-CONTAINING MATERIAL Product containing a percentage of asbestos equal to or greater than the limits established by the appropriate federal, state, or local governing authority.
	CONTAINMENT Isolation of the work area from the rest of the building to prevent escape of asbestos fibers.
	DECONTAMINATION ENCLOSURE SYSTEM - A series of connected rooms, with curtained doorways between any two adjacent rooms, for the decontamination of workers or material and equipment. A decontamination enclosure system always contains at least
	one air lock.
	DELAMINATION The separation of individual layers of a multi-layered building material, such as the delamination of the layers in a sheet of plywood.
	ENCAPSULATE To surround or penetrate with an adhesive matrix to prevent release of fibers.
]	ENCLOSURE An airtight barrier constructed around ACM to prevent fiber release.



	GLOSSARY OF TERMS (continued)
	EXPOSURE (HUMAN) The presence of people in an area where levels of an airborne contaminant are elevated. A more technical definition sometimes found in specific
	literature is: The total amount of airborne contaminant inhaled by a person, typically approximated by the product of concentration and duration.
and the second s	FIBROUS Contains or is composed of fibers.
	FRIABLE Descriptive term referring to material which, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
	HEPA FILTER — A High Efficiency Particulate Air filter capable of trapping and retaining 99.97% of mono-dispersed particles greater than 0.3 microns in size.
	HEPA VACUUM A specialized vacuum which uses HEPA filters; the process of using a HEPA vacuum.
phi-springuos.	HOMOGENEOUS MATERIAL Material similar in appearance, color, texture, and date of application.
processing the second	PEAK EXPOSURE Exposure at the time of disturbance to asbestos-containing material which creates relatively high fiber concentrations.
Tradition policy	PREVALENT LEVELS Levels of airborne contaminant occurring under normal conditions.
	PETROGRAPHIC Pertaining to the description of systematic classification of minerals.
on and and and a	REMOVAL All herein specified procedures necessary to strip all asbestos materials from the designated areas to dispose of these materials at an acceptable site.
	SUBSTRATE The substance beneath a finish surface, such as the scratch coat and brown coat under finish plaster.



APPENDIX B PETROGRAPHIC BULK SAMPLE RESULTS





REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS

TESTED FOR: PSI, Inc

5801 Benjamin Center Drive Suite 112

Tampa, FL 33634 Attn: Keith Kartovicky Project ID: 552-3A036

Manatee County

Administration Renovation SW Regional Wastewater

Treatment Plant

Date Received: 4/3/03

Date Completed: 4/4/03

Date Reported: 4/4/03

Analyst:	D	DA Work Or	der: 0304075	Page: 1 c	of 3
Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) Analyst's Comment	Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type)	
01-01	001A	(1) Gray, Ceiling Tile, Homogeneous	NO ASBESTOS DETECTED	30% Cellulose fib	
01-02	002A	(1) Gray, Ceiling Tile, Homogeneous	NO ASBESTOS DETECTED	30% Cellulose fib 30% Fibrous Glas	
01-03	003A	(1) Gray, Ceiling Tile, Homogeneous	NO ASBESTOS DETECTED	30% Cellulose fib 30% Fibrous Glas	0.00
02-04	004A	(1) Gray, Ceiling Tile, Homogeneous	NO ASBESTOS DETECTED	5% Fibrous Glas 45% Cellulose fibe	
02-05	005A	(1) Gray, Ceiling Tile, Homogeneous	NO ASBESTOS DETECTED	5% Fibrous Glas 45% Cellulose fibe	
02-06	006A	(1) Gray, Ceiling Tile, Homogeneous	NO ASBESTOS DETECTED	5% Fibrous Glass 45% Cellulose fibe	
03-07	007A	(1) White, Mastic, Homogeneous	NO ASBESTOS DETECTED	None Reported	
3-08	008A	(1) White, Mastic, Homogeneous	NO ASBESTOS DETECTED	None Reported	
3-09	009A	(1) White, Mastic, Homogeneous	NO ASBESTOS DETECTED	None Reported	

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Method for the Determination of Asbestos in Bulk Building Materials (EPA / 600/R-93/116 July 1993). Polarized Light Microscopy 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 the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight.

Respectfully submitted,

Approved Signatory

Glynnis Bowman

Professional Service Industries, Inc. 850 Poplar Street, Pittsburgh, PA 15220 Phone 412/922-4010 Fax 412/922-7289

Analyst:	D	PA .	Work Order:	0304075		Page: 2 of 3
Client ID	Lab ID (Layer)	Sample Descrip (Color, Texture, Analyst's Comn	Etc.)	Asbestos Content (Percent and Type)	3	Non-asbestos Fibers cent and Type)
04-10	010A	(1) Beige, Mastic, Home (2) Silver, Other, Home PaperlFoil	(NO ASBESTOS DETECTED NO ASBESTOS DETECTED	No 45%	ne Reported Cellulose fiber
		(3) Yellow, Insulation,	Homogeneous	NO ASBESTOS DETECTED	100%	Fibrous Glass
04-11	011A	(1) Beige, Mastic, Hom (2) Silver, Other, Homo PapedFoil		NO ASBESTOS DETECTED NO ASBESTOS DETECTED	45%	ne Reported Cellulose fiber
		(3) Yellow, Insulation, I	Homogeneous	NO ASBESTOS DETECTED	100%	Fibrous Glass
04-12	012A	(1) Beige, Mastic, Homo (2) Silver, Other, Homo PaperlFoil		NO ASBESTOS DETECTED NO ASBESTOS DETECTED		ne Reported Cellulose fiber
		(3) Yellow, Insulation, I	Homogeneous	NO ASBESTOS DETECTED	100%	Fibrous Glass
05-13	013A	(1) Gray, Drywall, Hom(2) White, Joint Compo- Homogeneous		NO ASBESTOS DETECTED NO ASBESTOS DETECTED	10% No	Cellulose fiber ne Reported
05-14	014A	(1) Gray, Drywall, Hom(2) White, Joint CompositionHomogeneous	360 - 15400 - 15	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	10% No	Cellulose fiber ne Reported
05-15	015A	(1) Gray, Drywall, Hom(2) White, Joint CompositionHomogeneous	75	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	10% No	Cellulose fiber ne Reported
06-16	016A	(1) White, Texture, Hor (2) Yellow, Ceiling Tile,		NO ASBESTOS DETECTED NO ASBESTOS DETECTED		ne Reported Fibrous Glass
06-17	017A	(1) White, Texture, Hor (2) Yellow, Ceiling Tile,	•	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	No 100%	ne Reported Fibrous Glass
06-18	018A	(1) White, Texture, Hor (2) Yellow, Ceiling Tile,		NO ASBESTOS DETECTED NO ASBESTOS DETECTED		ne Reported Fibrous Glass
07-19	019A	(1) Yellow, Mastic, Hon	nogeneous	NO ASBESTOS DETECTED	No	ne Reported
07-20	020A	(1) Yellow, Mastic, Hon	nogeneous	NO ASBESTOS DETECTED	No	ne Reported
07-21	021A	(1) Yellow, Mastic, Hon	nogeneous	NO ASBESTOS DETECTED	No	ne Reported

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Method for the Determination of Asbestos in Bulk Building Materials (EPA / 600/R-93/116 July 1993). Polarized Light Microscopy 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 the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight.

Respectfully submitted,

Approved Signatory Glynnis Bowman

Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) Analyst's Comment	Asbestos Content (Percent and Type)	Page: 3 of 3 Non-asbestos Fibers (Percent and Type)	
08-22	022A	(1) Gray, Other, Homogeneous	NO ASBESTOS DETECTED	100% Cellulose fiber	
08-23	023A	(1) Gray, Other, Homogeneous Fiber Panel	NO ASBESTOS DETECTED	100% Cellulose fiber	
08-24	024A	(1) Gray, Other, Homogeneous	NO ASBESTOS DETECTED	100% Cellulose fiber	

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Method for the Determination of Asbestos in Bulk Building Materials (EPA / 600/R-93/116 July 1993). Polarized Light Microscopy 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 the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight.

Respectfully submitted,

SI. Inc.

Approved Signatory

Glynnis Bowman

APPENDIX C STAFF CERTIFICATES





Certificate # 7ME08087402IR007

This is to certify that

A. Bruce Reed

completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 U.S.C. 2646 has on 08/08/02, in TAMPA, FL

AHERA Asbestos Inspector Recertification Course

as approved by the State of Florida and the U.S.E.P.A. under 40 C.F.R. 763 (AHERA) on 08/08/02 - 08/08/02 and passed the associated examination on 08/08/02

with a score of 70% or better CM = 0.5 pro

MAYHEW

Aleborah a Stertura

Instructor

DrociHout

Soc. Sec #: 264-68-5316 Accreditation Expires: 08/08/03 P.O. Box 786 - Lawrence KS 66044

META

NGODN

- 800-444-6382

United States Department of Commerce National Institute of Standards and Technology

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SE STATEST OF COMPANY

ISO/IEC GUIDE 25:1990 ISO 9002:1987

Certificate of Accreditation

PSI PITTSBURGH, PA

STATES OF

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 is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

June 30, 2003

Pavid F. Olderman

For the National Institute of Standards and Technology NVLAP Lab Code: 101350-0

Effective through

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 101350-0

PSI

850 Poplar Street Pittsburgh, PA 15220 Mr. Wayne Dickerson

Phone: 412-922-4010 x260 Fax: 412-922-4014 E-Mail: wayne.dickerson@psiusa.com

URL: http://www.psiusa.com

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk

Insulation Samples

June 30, 2003

Effective through

Pavid F. alderman

For the National Institute of Standards and Technology

NVLAP-01S (11-95)

Certifications and/or licenses to provide service in the State of Florida.

Timothy F. Caughey

KIM BINKLEY-SEYER SECRETARY

AC#0700053

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION SEQ#L02111401847

Region of

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The ASBESTOS CONSULTANT
Named below IS LICENSED
Under the provisions of Chapter 459 FS.
Expiration date: NOV 30, 2004

CAUGHEY, TIMOTHY F
200 10TH AVENUE

CAUGHEY, TIMOTHY F 200 10TH AVENUE INDIAN ROCKS BEACH FL 33785

JEB BUSH GOVERNOR DISPLAY AS REQUIRED BY LAW

PSI PERSONNEL - LICENSE / CERTIFICATES