

# Limited Asbestos Survey Report



**HEALTH & SAFETY • ENGINEERING • ENVIRONMENTAL**

1553 West Todd Drive, Suite 201 - Tempe, AZ 85283  
tel 480-460-8334 fax 480-460-8335 csceng.com

Presented To:

Barbara Wethington  
Project Manager  
Weston Solutions, Inc.  
960 West Elliot Road, Suite 201  
Tempe, Arizona 85284

Project:

Sun Chief Mill Site - Office  
Southeast Corner of Arizona Highway 77 & US 70  
Globe, AZ

CSC Project # 5002357

Inspection Dates: January 26-27, 2010

Report Date: February 16, 2010

## TABLE OF CONTENTS

<b>1. PROJECT SUMMARY .....</b>	<b>3</b>
<b>2. EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>3. ASBESTOS BULK SAMPLING METHODOLOGY .....</b>	<b>4</b>
<b>4. PLM ASBESTOS BULK ANALYSIS LABORATORY .....</b>	<b>5</b>
<b>5. PLM ASBESTOS BULK SAMPLE RESULTS .....</b>	<b>5</b>
<b>6. CONCLUSIONS.....</b>	<b>5</b>
<b>7. RECOMMENDATIONS .....</b>	<b>6</b>
<b>8. LIMITATIONS .....</b>	<b>6</b>
8.1 USE BY THIRD PARTIES.....	6
8.2 UNIDENTIFIABLE CONDITIONS .....	7
<b>9. SITE DIAGRAM.....</b>	<b>8</b>
<b>10. SITE PHOTOS .....</b>	<b>9</b>

### ATTACHMENTS:

ASBESTOS LAB PLM BULK RESULTS & CHAIN OF CUSTODY  
AHERA BUILDING INSPECTOR CERTIFICATE



## 1. Project Summary

Project Name & Address: Limited Asbestos Survey  
Sun Chief Mill Site - Office  
Southeast Corner of Highways 70 & 77  
Globe, AZ

CSC Project Number: 5002357

Client: Barbara Wethington, Project Manager  
Weston Solutions, Inc.  
960 West Elliot Road, Suite 201  
Tempe, Arizona 85284  
Phone: 480-477-4900  
Email: b.wethington@WestonSolutions.com

On Site Contact: Steve Kleinheider, Site Manager  
Weston Solutions, Inc.  
960 West Elliot Road, Suite 201  
Tempe, Arizona 85284

Consultant: Clark Seif Clark, Inc. (CSC)  
1553 West Todd Drive - Suite 201  
Tempe, Arizona 85283  
Phone: 480-460-8334  
Fax: 480-460-8335

Project Manager: Derrick A. Denis, CIAQP, CAC, CIEC

AHERA Building Inspector: Robert E. Crawley  
AHERA Building Inspector # E2412, Expires April, 2010

Inspection and sampling date: January 26-27, 2010

Report date: February 16, 2010



## 2. Executive Summary

Barbara Wethington of Weston Solutions, Inc. retained Clark Seif Clark, Inc. (CSC) to perform a limited asbestos survey at the Sun Chief Mill Site located at the southeast corner of Arizona Highway 77 and US 70 near Globe, Arizona (referred to hereunder as the subject property). The survey was specific to the Office.

On January 26 and 27, 2010 CSC industrial hygiene consultant and AHERA Building Inspector, Robert Crawley (#E2412 expires April, 2010) performed a visual inspection and collected asbestos bulk samples of suspect asbestos containing building materials throughout the subject property that were readily accessible. A total of thirty (30) bulk asbestos samples of what appeared to be ten (10) homogeneous materials were collected at the subject property for PLM analysis.

The analytical results indicate that the following building materials **DO contain asbestos**:

- **White Transite-like Ceiling Panels**; 25-30% chrysotile
- **Black Roofing Mastic**; 8-11% chrysotile

The analytical results indicate that the following building materials do **NOT** contain asbestos:

- Drywall and Joint Compound Wall System
- White Spray Applied Acoustic Ceiling Material
- Beige Carpet Mastic
- Off-white Window Putty with Brown Paint
- Concrete Foundation
- Brick and Mortar
- Beige Stucco
- Roofing Layers (excluding black roofing mastic)

## 3. Asbestos Bulk Sampling Methodology

Asbestos bulk samples were collected and placed in zip-lock bags for laboratory analysis. This sampling was performed to identify asbestos in specific suspect asbestos containing materials (ACM). The samples were submitted for standard turn around time analysis via polarized light microscopy (PLM).

The PLM method is the most commonly used method to analyze building materials for the presence of asbestos. The PLM method is in accordance with the EPA Interim Method of the Determination of Asbestos in Bulk Samples (EPA, July 1993). This method utilizes the optical properties of minerals to identify the selected constituent. The use of this method enables identification of the type and the percentage of asbestos in a sample.

The detection limit of the PLM method for asbestos identification is approximately one percent (1%) asbestos. CSC recommends Transmission Electron Microscopy (TEM) or Point Counting analysis for asbestos samples with trace, or less than one percent (<1%) when analyzed via PLM.



In some cases, samples collected from an apparently homogeneous material and yielding mixed results may, in fact, have been taken from different homogeneous materials displaying similar visual characteristics but composed of different constituents. Although materials may appear to be homogeneous, different manufacturers may have produced them in different batches. Materials, which appear to be homogeneous but yield mixed results, are typically assumed, in accordance with AHERA procedures, to be asbestos containing in all areas where the materials are located.

#### 4. PLM Asbestos Bulk Analysis Laboratory

Collected asbestos bulk samples were submitted under chain of custody for standard turn around PLM analysis to CSC laboratory in Chatsworth, California. CSC laboratory is NVLAP (#200324) accredited for bulk (PLM) asbestos analysis.

#### 5. PLM Asbestos Bulk Sample Results

Positive samples identify building components as ACM. Asbestos containing materials are regulated materials. ACM scheduled for disturbance or in poor condition are subject to handling and disposal according to all local, state, and federal regulations.

On January 26-27, 2010, a total of thirty (30) bulk asbestos samples of what appeared to be ten (10) homogeneous materials were collected at the subject property for PLM analysis. Quantities of the asbestos containing material are estimations only.

The analytical results indicate that the following building materials **DO contain asbestos**:

- **White Transite-like Ceiling Panels**; 25-30% chrysotile
  - ~ 80 square feet
- **Black Roofing Mastic**; 8-11% chrysotile
  - ~ 30 square feet

The analytical results indicate that the following building materials do **NOT** contain asbestos:

- Drywall and Joint Compound Wall System
- White Spray Applied Acoustic Ceiling Material
- Beige Carpet Mastic
- Off-white Window Putty with Brown Paint
- Concrete Foundation
- Brick and Mortar
- Beige Stucco
- Roofing Layers (excluding black roofing mastic)

#### 6. Conclusions

1. Exterior Black Roofing Mastic (~ 30 square feet) contained 8-11% chrysotile asbestos. The material is considered category II non-friable ACM.
  - a. The north side of the roof remained covered in snow at the time of the investigation. It is possible that roofing patches exist under the snow, thereby increasing the quantity of black roofing mastic.



2. White transite-like ceiling panels in the powder room and restroom contained 25-30% chrysotile asbestos. The material is considered category II non-friable ACM.
3. Category of asbestos may change due to the means employed by the contractor to remove ACM.

## 7. Recommendations

1. If suspect asbestos containing materials other than those tested are encountered, they must be assumed to contain asbestos or tested and proven otherwise.
2. Removal of category II non-friable ACM throughout the subject property should only be performed by certified asbestos abatement workers.
  - a. Removal by hand means shall be considered class 2 work.
  - b. Removal by mechanical means shall render the asbestos RACM.
  - c. Workers performing said work should comply with all state, local and federal regulations.
3. CSC should be contracted to write specifications prior to abatement and renovation activities at the subject property.
4. The contractor should be responsible for verifying locations and quantities of ACM.
5. A complete copy of this survey must be kept on site during asbestos abatement activities.

## 8. Limitations

The field observations, measurements, and research reported herein are considered sufficient in detail and scope to determine the asbestos content of the tested materials at the subject property. The assessment, conclusions, and recommendations presented herein are based upon specifically limited data. They do not represent all conditions at the subject property as they reflect the information gathered for specific building systems. CSC warrants the findings and conclusions contained herein have been promulgated in accordance with generally accepted industrial hygiene methodology and only for the site described in this report.

### 8.1 Use by Third Parties

This report was prepared pursuant to the contract CSC has with the client. That contractual relationship included an exchange of information about the subject property that was unique and between CSC and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between CSC and its client, reliance or any use of this report by anyone other than the client, for whom it was prepared, is prohibited and therefore not foreseeable to CSC.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third party beneficiary to CSC's contract with the client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.



## 8.2 Unidentifiable Conditions

This asbestos related environmental consulting report has been developed to provide the client with information regarding apparent conditions related to limited accessible building materials in the subject property. Although CSC believes that the findings and conclusions provided in this report are reasonable, the assessment is necessarily limited to the conditions observed and to the information available at the time of the work. Due to the nature of the work, there is a possibility conditions exist that could not be identified within the scope of the assessment or which were not apparent at the time of our site work. The assessment is also limited to information available from the client at the time it was conducted. It is also possible that the testing methods employed at the time of the report may later be superseded by other methods. CSC does not accept responsibility for changes in the state of the art.

Clark Seif Clark, Inc. does not guarantee that all contaminated areas in the subject property were recognized during our evaluation. This report is limited only to the samples taken and locations sampled. Additional sampling may be needed to further identify other pollutants, or other affected areas inside the property.

We have employed state-of-the-art practices to perform this analysis of risk and identification, but this evaluation is limited in scope to the areas listed above. Our services consist of professional opinions and recommendations made in accordance with generally accepted engineering principles and practices, and are designed to provide an analytical tool to assist the client.

Clark Seif Clark or those representing Clark Seif Clark bear no responsibility for the actual condition of the structure or safety of a site pertaining to IAQ contamination regardless of the actions taken by the client.

Thank you for choosing Clark Seif Clark, Inc. to provide professional consulting services. If for some reason you have any questions regarding this report, please do not hesitate to contact us.

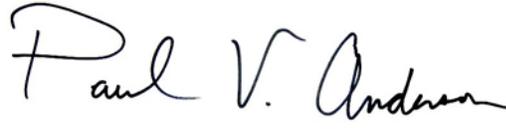
Thank you,  
Clark Seif Clark, Inc.

Written by,



Robert E. Crawley, CIEC  
AHERA Building Inspector E2412,  
Expires April, 2010

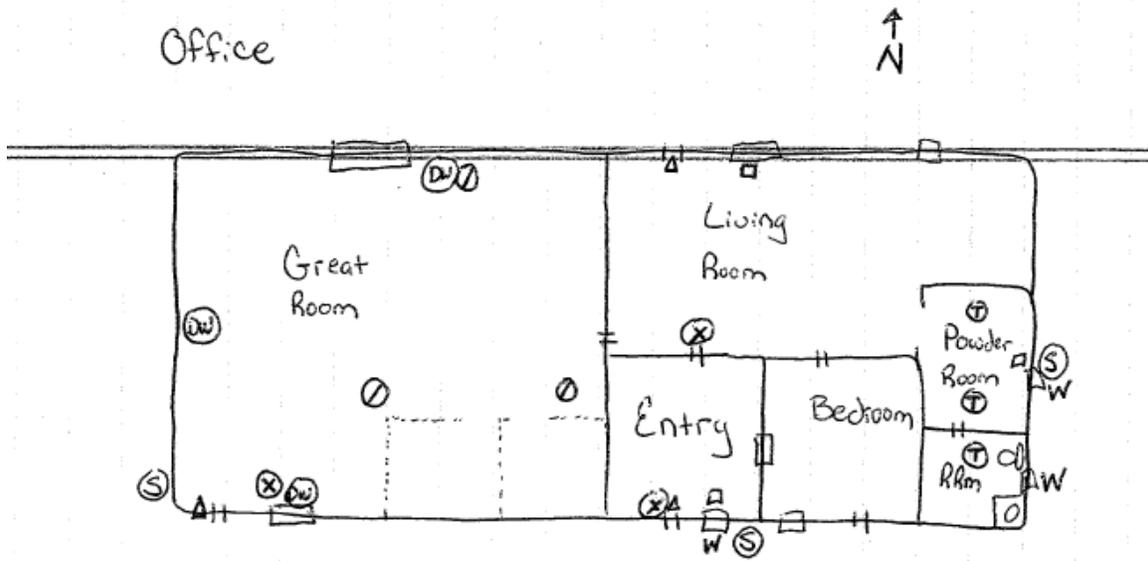
Reviewed and Approved by,



Paul V. Anderson, MS, CIEC  
AHERA Building Inspector E2951  
Expires June, 2010



9. Site Diagram



- Ⓢ = Bg Stucco
- W = White Window Putty (w/Brown Paint)
- ⓪ = Spray Applied Acoustic Ceiling Material
- ⓧ = Carpet Mastic
- Ⓣ = Drywall and Joint Compound
- Δ = Concrete
- = Brick and Mortar
- Ⓣ = Transite Ceiling Panels

\* Not drawn to scale



**10. Site Photos**



Photo 1: Office – subject property south elevation



Photo 2: Office – subject property north elevation



Photo 3: Example of window putty – negative for asbestos content



Photo 4: Example of beige carpet mastic – negative for ACM



Photo 5: Example of white drywall/joint compound and spray applied acoustic ceiling material – negative for ACM



Photo 6: Example of transite-like ceiling panels – positive for ACM



E 2412

# THE ASBESTOS INSTITUTE

Certifies that

**Robert E Crawley**

has attended the EPA approved course  
**AHERA Refresher**  
**Building Inspector**  
**April 3, 2009**  
and successfully passed the competency exam.

Date of Examination: **April 3, 2009**

Date of Expiration: **April 3, 2010**



Director



Approved Instructor

**THE ASBESTOS INSTITUTE**

8102 North 23rd Avenue

Suite A

Phoenix, AZ 85021-4962

602-864-6564

*This training meets all requirements for asbestos accreditation under TSCA Title II.*



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# Asbestos Bulk Sampling Chain of Custody

Requested Turn around time

**STANDARD RUSH**

99005288

CSC Project #	Sampling By	Dates Taken	# Samples	Page #	Of	Total Pages	
5002357	Robert Crawley	1/26 - 1/27 2010	30	1		3	
Project Name & Location			Client Info:				
Sun Chief Mill Globe AZ			Weston Solutions Tempe AZ c/o B. Wethington				
Building #: Office			Lab Submitted to:				
ID #	Material Description	HM	Sample Location	Condition	Friability	Quantity	
1	DW/JC wall system	1	Great Room S	P	Y	TBD	
2	↓	1	Great Room N	↓	↓	↓	
3	↓	1	Great Room W	↓	↓	↓	
4	SAACM	2	Great Room N	P	Y	TBD	
5	↓	2	Great Room E	↓	↓	↓	
6	↓	2	Great Room Center	↓	↓	↓	
7	Carpet Mastic	3	Great Room	F	N	TBD	
8	↓	3	Living Room	↓	↓	↓	
9	↓	3	Entry	↓	↓	↓	
10	Transite-like ceiling panels	4	Powder Room	F	N	~800	
11	↓	4	Powder Room	↓	↓	↓	
12	↓	4	Rest Room	↓	↓	↓	
CONDITION CODE		FRIABLE CODE		HOMOGENEOUS CODE		QUANTITY CODE	
G= GOOD	F= FAIR	P= POOR	Y= YES	N= NO	HA= HOMOGENEOUS MATERIAL	SF= Square Ft.	LF= LINEAR Ft.
Notes:							
Relinquished By:		Received by:		Date & Time			
		Cory Egan		1/29/10 @ ~3pm to FedEx			
Relinquished By:		Received by:		Date & Time			
		Cory Egan		2-2-10 1200			





Requested Turn around time

# Asbestos Bulk Sampling Chain of Custody

**STANDARD RUSH**

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99005288

CSC Project #	Sampling By	Date	# Samples	Page #	Of	Total Pages
5002357	Robert Crawley	1/26 - 1/27 2010	30	2		3
Project Name & Location			Client Info:			
Sun Chief Mill Globe AZ			Weston Solutions Tempe AZ % B. Wethington			
Building #:	Office		Lab Submitted to:			
ID #	Material Description	HM	Sample Location	Condition	Friability	Quantity
13	Off-white Window Putty w/ Brown Paint	5	Entry	P	Y	~45#
14	↓	5	Restroom	↓	↓	↓
15	↓	5	Powder Room	↓	↓	↓
16	Concrete	6	Great Room	G	N	TBD
17	↓	6	Living Room	↓	↓	↓
18	↓	6	Entry	↓	↓	↓
19	Brick and Mortar	7	Entry	G	N	TBD
20	↓	7	Living Room	↓	↓	↓
21	↓	7	Powder Room	↓	↓	↓
22	Beige Stucco	8	S	F	N	TBD
23	↓	8	E	↓	↓	↓
24	↓	8	W	↓	↓	↓
CONDITION CODE		FRIABLE CODE		HOMOGENEOUS CODE		QUANTITY CODE
G= GOOD	F= FAIR	P= POOR	Y= YES	N= NO	HA= HOMOGENEOUS MATERIAL	SF= Square Ft.   LF= LINEAR Ft.
Notes:						
Relinquished By:			Received by:		Date & Time	
			Way Egner		1/29/10 @ ~3pm to FedEx	
Relinquished By:			Received by:		Date & Time	
					2-2-10 1200	







## Asbestos Bulk Sample Analysis Summary

[Performed by EPA 600/R-93/116 Method]

Project Site: Sun Chief Mill  
Globe, AZ

CSC Project / Lab # : 99005288

# Samples : 42

Sampling By : Robert Crawley

Date Sampled : 1/26/2010 - 1/27/2010

Date Received : 2/2/2010

Date Reported : 2/10/2010

CSC Job Ref. ID : 5002357

Client Name: Weston Solutions, Inc. (5000786)  
Barbara Wethington  
Department: Project Manager  
Suite 201  
960 West Elliot Road  
Tempe, AZ 85284

Client ID #	Lab Sample #	Material Description	Location	Asbestos Type & %	Fibrous Non-Asbestos	Nonfibrous Non-Asbestos
2357 B-1	5288-1	Drywall White	Office - Great Room, S	ND	14% Cellulose	86% Matrix Material
2357 B-1A	5288-2	Joint Compound White	Office - Great Room, S	ND	ND	100% Matrix Material
2357 B-2	5288-3	Drywall White	Office - Great Room, N	ND	16% Cellulose	84% Matrix Material
2357 B-2A	5288-4	Joint Compound White	Office - Great Room, N	ND	ND	100% Matrix Material
2357 B-3	5288-5	Drywall White	Office - Great Room, W	ND	15% Cellulose	85% Matrix Material
2357 B-3A	5288-6	Joint Compound White	Office - Great Room, W	ND	ND	100% Matrix Material
2357 B-4	5288-7	SAACM White	Office - Great Room, N	ND	ND	100% Matrix Material
2357 B-5	5288-8	SAACM White	Office - Great Room, E	ND	ND	100% Matrix Material
2357 B-6	5288-9	SAACM White	Office - Great Room, Center	ND	ND	100% Matrix Material
2357 B-7	5288-10	Carpet Mastic Yellow	Office - Great Room	ND	ND	100% Matrix Material

CSC Project / Lab # : 99005288

Address: Globe, AZ

Client ID #	Lab Sample #	Material Description	Location	Asbestos Type & %	Fibrous Non-Asbestos	Nonfibrous Non-Asbestos
2357 B-8	5288-11	Carpet Mastic Yellow	Office - Living Room	ND	ND	100% Matrix Material
2357 B-9	5288-12	Carpet Mastic Yellow	Office - Entry	ND	ND	100% Matrix Material
2357 B-10	5288-13	Transite-Like Ceiling Panel Gray	Office - Powder Room	25% Chrysotile	ND	75% Matrix Material
2357 B-11	5288-14	Transite-Like Ceiling Panel Gray	Office - Powder Room	28% Chrysotile	ND	72% Matrix Material
2357 B-12	5288-15	Transite-Like Ceiling Panel Gray	Office - Restroom	30% Chrysotile	ND	70% Matrix Material
2357 B-13	5288-16	Window Putty Off White	Office - Entry	ND	ND	100% Matrix Material
2357 B-13A	5288-17	Paint Brown	Office - Entry	ND	ND	100% Matrix Material
2357 B-14	5288-18	Window Putty Off White	Office - Restroom	ND	ND	100% Matrix Material
2357 B-14A	5288-19	Paint Brown	Office - Restroom	ND	ND	100% Matrix Material
2357 B-15	5288-20	Window Putty Off White	Office - Powder Room	ND	ND	100% Matrix Material
2357 B-15A	5288-21	Paint Brown	Office - Powder Room	ND	ND	100% Matrix Material
2357 B-16	5288-22	Concrete Gray	Office - Great Room	ND	ND	100% Matrix Material
2357 B-17	5288-23	Concrete Gray	Office - Living Room	ND	ND	100% Matrix Material
2357 B-18	5288-24	Concrete Gray	Office - Entry	ND	ND	100% Matrix Material

CSC Project / Lab # : 99005288

Address: Globe, AZ

Client ID #	Lab Sample #	Material Description	Location	Asbestos Type & %	Fibrous Non-Asbestos	Nonfibrous Non-Asbestos
2357 B-19	5288-25	Brick/Mortar Gray	Office - Entry	ND	2% Cellulose	98% Matrix Material
2357 B-20	5288-26	Brick/Mortar Gray	Office - Living Room	ND	3% Cellulose	97% Matrix Material
2357 B-21	5288-27	Brick/Mortar Gray	Office - Powder Room	ND	3% Cellulose	97% Matrix Material
2357 B-22	5288-28	Stucco Beige	Office - S	ND	ND	100% Matrix Material
2357 B-23	5288-29	Stucco Beige	Office - E	ND	ND	100% Matrix Material
2357 B-24	5288-30	Stucco Beige	Office - W	ND	ND	100% Matrix Material
2357 B-25	5288-31	Roof Penetration Mastic Black	Office - SE Vent	8% Chrysotile	3% Cellulose	89% Matrix Material
2357 B-26	5288-32	Roof Penetration Mastic Black	Office - SE Roof Patch	ND	35% Glass Fibers, Cellulose, Synthetic	65% Matrix Material
2357 B-27	5288-33	Roof Penetration Mastic Black	Office - W HVAC Penetration	11% Chrysotile	4% Cellulose	85% Matrix Material
2357 B-28	5288-34	Pebbled Roofing Layer Brown	Office - SE	ND	60% Glass Fibers	40% Matrix Material
2357 B-28A	5288-35	Roofing Layer Black	Office - SE	ND	80% Cellulose, Synthetic	20% Matrix Material
2357 B-28B	5288-36	Roofing Layer Black	Office - SE	ND	80% Cellulose, Synthetic	20% Matrix Material
2357 B-29	5288-37	Pebbled Roofing Layer Brown	Office - S Center	ND	60% Glass Fibers	40% Matrix Material
2357 B-29A	5288-38	Roofing Layer Black	Office - S Center	ND	80% Cellulose, Synthetic	20% Matrix Material

CSC Project / Lab # : 99005288

Address: Globe, AZ

2357 B-29B	5288-39	Roofing Layer Black	Office - S Center	ND	80% Cellulose, Synthetic	20% Matrix Material
2357 B-30	5288-40	Pebbled Roofing Layer Brown	Office - SW	ND	60% Glass Fibers	40% Matrix Material
2357 B-30A	5288-41	Roofing Layer Black	Office - SW	ND	80% Cellulose, Synthetic	20% Matrix Material
2357 B-30B	5288-42	Roofing Layer Black	Office - SW	ND	80% Cellulose, Synthetic	20% Matrix Material

**Bulk Material Analysis:**

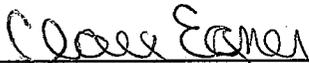
Bulk samples are examined by Polarized Light Microscopy (PLM) with Dispersion Staining as recommended by the U.S. Environmental Protection Agency (EPA).

**Results:**

Results are reported as a percent(%) of total asbestos present for each asbestos type identified within each distinguishable layer, or sub-sample, of a sample. Other non-asbestos materials may also be identified.

**Explanation:**

Reported results are a visual estimate by area of asbestos concentration. Results for heterogeneous samples examined by component are reported as a composite. The lower limit of reliable detection for the PLM methods is 1%. Samples which contain asbestos in a concentration lower than the limit of reliable detection (<1%) commonly referred to as "trace" are reported as "<1%". Trace is defined as reproducible detection levels of asbestos with at least five fibers spread over three slides, per NIST Proficiency Test instructions. Samples in which no asbestos is observed are reported as ND (None Detected). Note: When ND appears on a report, it means that asbestos was not observed and that, if present, it exists in concentrations of <1% and/or fiber dimensions are too small for accurate microscopic resolution. CSCSL is accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of accreditation under NVLAP Lab Code 200324. Results reported relate only to sample(s) submitted and tested and do not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without prior written authorization is prohibited. In addition, this report is not to be used to claim product endorsement by NVLAP or any agency of the U.S. Government.



Clay Egner  
Laboratory Analyst

Christian Goerrissen  
Laboratory Analyst/Manager

Note: Our policy is to dispose of samples unless written notification is received in our office within 30 days of this report.