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PROJECT # **ASBESTOS SURVEY**



PROJECT NAME

**REVISED LIMITED ASBESTOS BULK SURVEY  
BRIDGER BUILDING  
225 BRIDGER AVE-LAS VEGAS, NV  
JUNE 10, 1998**

DOC TYPE **RPTS**





# Converse Consultants

Over 50 Years of Dedication in  
Geotechnical Engineering and Environmental Sciences

**REVISED LIMITED ASBESTOS BULK  
SAMPLE SURVEY**

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**BRIDGER BUILDING  
225 BRIDGER AVENUE  
LAS VEGAS, NEVADA**



# Converse Consultants

Over 50 Years of Dedication in Geotechnical Engineering and Environmental Sciences

## REVISED LIMITED ASBESTOS BULK SAMPLE SURVEY

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BRIDGER BUILDING  
225 BRIDGER AVENUE  
LAS VEGAS, NEVADA

Prepared for:

Clark County General Services  
500 South Grand Central Parkway, 4<sup>th</sup> Floor  
Las Vegas, NV 89106

Converse Project No. 98-43552-10

June 10, 1998

3/36BS





# Converse Consultants

Over 50 Years of Dedication in Geotechnical Engineering and Environmental Sciences

June 10, 1998

98-43552-10

Mr. Brian Connolly  
Clark County General Services  
500 South Grand Central Parkway, 4<sup>th</sup> floor  
Las Vegas, NV 89106

Subject: Revised Limited Asbestos Survey - Bridger Building  
225 Bridger Avenue  
Las Vegas, Nevada

Dear Mr. Connolly:

We are pleased to submit the results of additional bulk samples taken from the 9<sup>th</sup> and 10<sup>th</sup> floor of the Bridger Building. Additional building materials samples included interior wall plaster and fire door insulation. The initial survey was performed in December 1996 and January 1997. Our current sample collection was performed on May 15, 1998 and May 18, 1998.

Samples collected were interior wall plaster taken from the 9<sup>th</sup> and 10<sup>th</sup> floor plenums and the fire door insulation taken from a 10<sup>th</sup> floor hallway fire door.

We have incorporated the current results of the additional bulk samples into the initial survey report. The initial asbestos survey consisted of a visual survey, bulk sample collection, laboratory analysis, and the preparation of this report. In our initial report, friable and non-friable building materials were found to contain asbestos during our survey. Our current sampling indicated no asbestos in the interior wall plaster and fire door insulation. Recommendations regarding these asbestos-containing materials are identified in our report.

Clark County General Services  
Project No. 98-43552-10  
June 10, 1998  
Page 2.

If you have any questions concerning information contained in this report,  
please contact us at your convenience.

Respectfully submitted,

CONVERSE CONSULTANTSC.



Jeffrey S. Palmer  
Environmental Division Manager

JSP:sc  
43/36BS

# ASBESTOS SURVEY

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# **REVISED LIMITED ASBESTOS SURVEY**

## **INTRODUCTION**

On December 31, 1996 and January 2, 1997 Converse Consultants (Converse) conducted an asbestos bulk sample survey at the Bridger Building located at 225 Bridger Avenue in Las Vegas, Nevada.

On May 15, 1998 and May 18, 1998, additional bulk samples were taken from the 9<sup>th</sup> and 10<sup>th</sup> floor of the Bridger Building. Two (2) of the samples were interior wall plaster taken from the 9<sup>th</sup> and 10<sup>th</sup> floor plenums and one (1) was fire door insulation taken from a 10<sup>th</sup> floor hallway fire door. All three (3) samples reported non-detect for asbestos.

### **CREDENTIALS**

John M. Watkins and Kevin J. Bottum (both accredited and licensed inspectors in the State of Nevada) performed the survey. Copies of these inspector's certification/accreditation are enclosed in Appendix A.

### **SURVEY**

The purpose of the bulk sample survey was to identify asbestos-containing materials (ACMs) building materials utilized during construction of the buildings at the site. Friable asbestos is considered hazardous and refers to materials which can be crushed, pulverized, or reduced to powder by hand pressure when dry. Non-friable asbestos can be rendered friable by such actions as sanding, sawing, drilling, or breaking into pieces. The survey generally followed current recommended OSHA (1994), and EPA guidelines for surveying of ACM (EPA, 1985).

### **BULK SAMPLE SURVEY**

The purpose of the bulk sample survey was to identify friable and non-friable ACMs building materials utilized during construction of the building.

### **METHODOLOGY**

### **INTERVIEWS**

According to Mr. Brian Connolly, Clark County General Services Representative, there are original blueprints for the building at the subject site but he has no in-

formation on the current configuration of partition walls and recent renovations. The Blueprints available for review included only limited mechanical, plumbing and electrical drawings. These drawings were a limited source of information on current building conditions. Existing floor plans were available. This building was reportedly built before 1980.

Previous survey information for the building includes three reports that were generated by two firms: Ab-Haz Environmental and University Associates.

- The November 10, 1987 University Associates report indicated that Structural Fireproofing, Pipe Insulation, Tank Insulation, Specialty Caulking, and Floortile tested positive for asbestos.
- The December 2, 1991, Ab-Haz report indicated that Structural Fireproofing tested positive for asbestos. In the February 4, 1994 Ab-Haz report, Structural Fireproofing, Sheet Floor Covering, and Pipe insulation was found to contain asbestos.

Upon review of the conditions at the site, we found that many materials remained untested and were, therefore, the focus of our study. There were many samples taken in these three previous surveys of primarily two materials. Of the fifty-six pipe insulation samples analyzed, fifty-one tested positive for asbestos and of the seventy-two structural fireproofing samples analyzed, all tested positive for asbestos. Exterior Wall Plaster samples were taken on three floors, all of which contained a trace level of asbestos. The information generated by these previous surveys is assumed correct and complete for the materials tested. This information is included into the survey data generated by our study.

### **BULK SAMPLE SURVEY**

Our visual survey was performed to classify each suspected building material by location and condition in order to establish homogenous areas for bulk sample collection. Homogeneous areas refer to areas in which similar application, age and appearance of building materials exist.

Following the visual portion of the survey, bulk samples were collected from areas representing the homogenous use of suspect building materials. A summary of these samples is presented in Appendix B.

In general, bulk samples were obtained by (1) adequately wetting the sample area with a water and surfactant mixture, and (2) placing bulk pieces of the building construction materials into labeled plastic bags. Where possible, bulk samples were obtained to the depth of the affected area. Bulk samples were transferred to an analytical laboratory with applicable chain-of-custody documentation.

**LABORATORY TESTING**

**BULK SAMPLING**

Seventy-three (73) bulk samples were analyzed by Converse Consultants Mountain Region (CCMR) of Reno, Nevada. Four of the seventy-three samples were sent to Forensic Analytical Specialties, Inc. (FASI) of Hayward, California for quality control purposes. CCMR used the "point counting" method of analysis on two bulk samples to confirm asbestos content. CCMR and FASI are accredited by the EPA for asbestos analysis. All samples submitted for primary testing were analyzed by Polarized Light Microscopy (PLM). Laboratory analysis reports for these samples are enclosed in Appendix C.

**ASBESTOS BULK SURVEY FINDINGS**

Current State and Federal standards define an "asbestos-containing material as any material containing asbestos in excess of one percent by weight." Based on laboratory results and our survey, the materials that were tested and found to contain in excess of one-percent asbestos are presented below:

<u>Location</u>	<u>Material</u>	<u>Friable?</u>	<u>Approximate Quantity</u>
Roof (Penthouse)	Roof Mastic	No	5 Gal.
	<i>Tank Insulation</i>	<i>Yes</i>	<i>250 s.f.</i>
	<i>Structural Fireproofing</i>	<i>Yes</i>	<i>2,400 s.f.</i>
	<i>Pipe Fitting Insulation</i>	<i>Yes</i>	<i>50 each</i>
	Caulking	Yes	1 Gal.
10 <sup>th</sup> floor	<i>Structural Fireproofing</i>	<i>Yes</i>	<i>8,600 s.f.</i>
	<i>Pipe Insulation</i>	<i>Yes</i>	<i>200 l.f.</i>
	9"x9" Floor tile, tan	No	2,500 s.f.

Location	Material	Friable?	Approximate Quantity
9 <sup>th</sup> floor	<i>Structural Fireproofing</i>	Yes	11,500 s.f.
	<i>Pipe Insulation</i>	Yes	200 l.f.
	<i>12"x12" Floor tile, white</i>	No	150 s.f.
	9"x9" Floor tile, tan	No	2,500 s.f.
	Drywall Compound	No	N/A
8 <sup>th</sup> floor	<i>Structural Fireproofing</i>	Yes	11,500 s.f.
	<i>Pipe Insulation</i>	Yes	200 l.f.
	<i>Sheet floor covering</i>	Yes	200 s.f.
	9"x9" Floortile, tan	No	9,000 s.f.
7 <sup>th</sup> floor	<i>Structural Fireproofing</i>	Yes	11,500 s.f.
	<i>Pipe Insulation</i>	Yes	200 l.f.
	<i>12"x12" Floor tile, white</i>	No	75 s.f.
	9"x9" Floortile, tan	No	2,400 s.f.
6 <sup>th</sup> floor	<i>Structural Fireproofing</i>	Yes	11,500 s.f.
	<i>Pipe Insulation</i>	Yes	200 l.f.
	12"x12" Floortile, tan	No	85 s.f.
	<i>12"x12" Floortile, white</i>	No	45 s.f.
	Floortile adhesive	No	Include above
5 <sup>th</sup> floor	<i>Structural Fireproofing</i>	Yes	11,500 s.f.
	<i>Pipe Insulation</i>	Yes	200 l.f.
	9"x9" Floor tile, tan	No	2400 s.f.
	Floortile adhesive	No	Included above
4 <sup>th</sup> floor	<i>Structural Fireproofing</i>	Yes	11,500 s.f.
	<i>Pipe Insulation</i>	Yes	400 l.f.
3 <sup>rd</sup> floor	<i>Pipe Insulation</i>	Yes	400 l.f.
2 <sup>nd</sup> floor	<i>Pipe Insulation</i>	Yes	400 l.f.
1 <sup>st</sup> floor	<i>Structural Fireproofing</i>	Yes	8,600 s.f.
	<i>Pipe Insulation</i>	Yes	400 l.f.
	9"x9" Floor tile, tan	No	230 s.f.
	Floortile adhesive	No	Included above

\* - Quantities for this item is based on square footage of floor space.

University Associates or Ab-Haz tested materials listed in Italics

- The materials listed above were observed to be in a condition that ranged from good to poor with small amounts of localized damage, presumably due to water damage, physical contact and other influences.
- On floors five through nine, 9"x9" tan floortile and adhesive was found under carpet and in exposed areas. Random areas throughout these floors were viewed to determine extent of the floortile. The quantities listed above are estimates.
- The estimated quantities above for the pipe insulation includes pipe straight runs and pipe fittings.
- Quality control sample results were consistent with primary sample results.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the laboratory analysis and our survey, friable and non-friable ACMs were identified in our study at this site. In general, these material were found to range from fair to good condition with small amounts of localized damage, presumably due to physical contact, water damage, and other influences.

The following recommendations apply if demolition occurs where these ACMs are found. Regulations require removal of materials that are friable or will become friable during renovation prior to building renovation. Per EPA regulations and guidance documents regarding demolition, this material should be considered regulated ACM and be removed prior to demolition.

Regarding the removal of ACMs found at the subject site, we recommend the following coordinated response actions, that at a minimum, should be undertaken prior to demolition:

1. A qualified asbestos abatement contractor licensed in the State of Nevada should perform any actions involving the removal of ACMs. Removal activities should conform to local, State, and Federal laws, ordinances, and regulations.

2. A qualified asbestos consultant licensed in the State of Nevada should be retained to assist in the design of the abatement project and to perform air quality sampling during and after the removal activities.
3. Notification of the authorities (OSHA and EPA) regulating the abatement of asbestos will be necessary before commencing any response action.

Until the building is demolished or all ACMs are abated, steps should be taken to notify building occupants of the presence of ACMs in occupied buildings so that exposure to airborne asbestos fibers can be reduced. If these ACMs remain in place and are not disturbed, the probability for significant exposure to airborne asbestos fibers by building occupants is low. Asbestos specific training is recommended for personnel working on ACMs or materials that are presumed ACMs, and for personnel performing cleaning activities where ACMs are located.

In our opinion, a management plan should be implemented to manage ACMs at this site until the building is demolished or all ACMs have been abated at some time in the future. One element of the management plan, an Operations and Maintenance program would allow ACMs that are in good condition to remain in place if they remain undisturbed. The asbestos management plan will reduce both building occupant exposure to asbestos and the liability associated with ownership and/or operation of a building containing ACMs.

#### LIMITATIONS

This report is for the use of Clark County General Services Department as it applies to the Clark County Court House building, located at 200 South 3rd Street, Las Vegas, Nevada.

This assessment should not be regarded as a guarantee that no further asbestos, beyond that which was suspected to be present (and sampled) during our investigation, is present at the property. In addition, asbestos is usually not distributed uniformly throughout a material and Converse cannot guarantee that all areas sampled are exactly as represented throughout the entire facility.

The conclusions presented in this report are professional opinions based on the data described in this report. They are intended only for the purpose, site location and project indicated. The conclusions presented in this report are based on the assumption that conditions do not deviate from those observed during our study, as described in this report. No other warranty is either expressed or implied.

This report is based upon data and information obtained during Converse's current reconnaissance, laboratory data and information by others, and information provided by those individuals identified to Converse by the Client as being knowledgeable of the facility, its operation and processes. Therefore, the information and data presented regarding the property identified herein is based solely upon the condition of the property as of the dates of our site visits, supplemented by information and data obtained by Converse as described herein.

Converse has performed this work, made the findings, and proposed the recommendations described in this report in accordance with generally accepted and current environmental science and engineering common to our local area of practice at the time the work was performed. This report should be considered accurate only to the degree implied by the methods used in its preparation. It must also be understood that changing circumstances in the environment, applicable legislation and in the use of the property can alter the validity of conclusions and information contained in this report.

The opinions, conclusions, and recommendations presented herein apply to site conditions existing at the time of our study. They cannot necessarily apply to site changes made of which this office is not aware and has not had opportunity to evaluate. Changes in the conditions of the subject property can occur with time, because of the natural processes or the works of man, on the subject site or on adjacent properties. Changes in applicable engineering or regulatory standards can also occur as the result of legislation or from the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond Converse's control.

Converse is not responsible for any claims or damages associated with interpretation of available information. This assessment should not be regarded as a guar-

antee that no further asbestos, beyond that which was suspected to be present (and sampled) during our investigation, is present at the property. In addition, asbestos is usually not distributed uniformly throughout a material and Converse cannot guarantee that all areas sampled are exactly as represented throughout the entire facility. In the event that changes in the nature of the property occur, or additional relevant information about the property is brought to our attention, the recommendations contained in this assessment may not be valid unless these changes and additional relevant information are reviewed and the recommendations of this assessment are modified or verified in writing.

Thank you for the opportunity to be of service. Should you have any questions or comments regarding this report, please do not hesitate to call.

Respectfully submitted,

CONVERSE CONSULTANTS



Kevin J. Bottum  
Nevada License IM0420  
Senior Environmental Technician

Reviewed by,



Jeffrey S. Palmer  
Environmental Division Manager

KJB:JSP:sc  
43/36BS

Encl.: Appendices A, B, and C

Dist: 2/Addressee

*APPENDIX A*

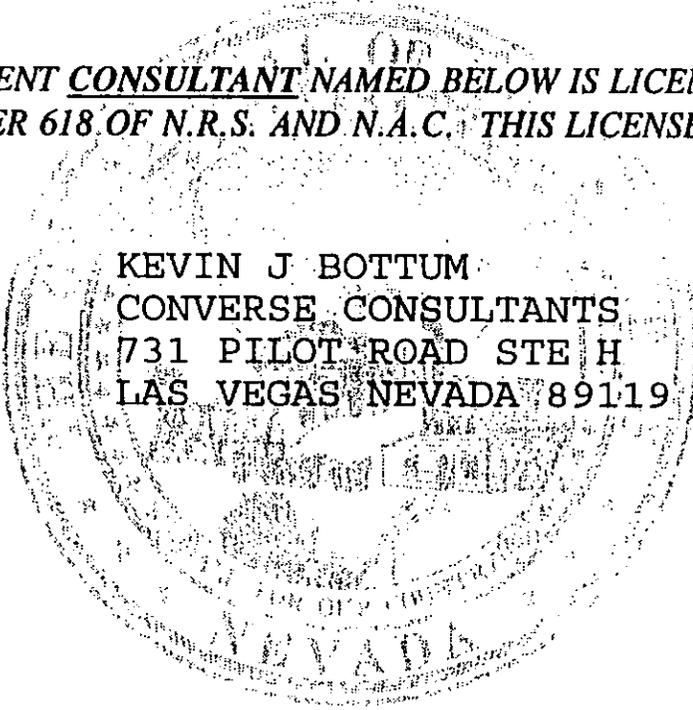
**INSPECTOR CREDENTIALS**

STATE OF NEVADA  
DEPARTMENT OF BUSINESS AND INDUSTRY  
DIVISION OF INDUSTRIAL RELATIONS  
OCCUPATIONAL SAFETY AND HEALTH ENFORCEMENT SECTION  
ASBESTOS CONTROL PROGRAM

DATE 12/5/97

LICENSE NO. IM0420

*THE ASBESTOS ABATEMENT CONSULTANT NAMED BELOW IS LICENSED UNDER THE PROVISIONS OF CHAPTER 618 OF N.R.S. AND N.A.C. THIS LICENSE EXPIRES ON 11/4/98.*



KEVIN J BOTTUM  
CONVERSE CONSULTANTS  
731 PILOT ROAD STE H  
LAS VEGAS NEVADA 89119

STATE OF NEVADA  
DEPARTMENT OF BUSINESS AND INDUSTRY  
DIVISION OF INDUSTRIAL RELATIONS  
OCCUPATIONAL SAFETY AND HEALTH ENFORCEMENT SECTION

ASBESTOS CONTROL PROGRAM

DATE 1/29/98

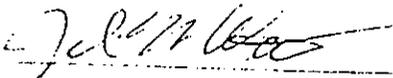
LICENSE NO. IPM0199

THE ASBESTOS ABATEMENT CONSULTANT NAMED BELOW IS LICENSED UNDER THE  
PROVISIONS OF CHAPTER 618 OF N.R.S. AND N.A.C. THIS LICENSE EXPIRES ON 1/28/99.

JOHN M WATKINS  
CONVERSE CONSULTANTS  
731 PILOT ROAD SUITE H  
LAS VEGAS NEVADA 89119

DATE 1/29/98  
LICENSE NO. IPM0199

INSPECTOR  
PROJECT DESIGNER  
PROJECT MONITOR

  
Signature

[Wallet Card - Fold Here]

STATE OF NEVADA  
DEPARTMENT OF BUSINESS AND INDUSTRY  
DIVISION OF INDUSTRIAL RELATIONS  
OCCUPATIONAL SAFETY AND HEALTH  
ENFORCEMENT SECTION

ASBESTOS ABATEMENT CONSULTANT  
JOHN M WATKINS  
CONVERSE CONSULTANTS

HAS PAID THE FEE REQUIRED BY  
CHAPTER 618 OF N.A.C.  
THIS LICENSE EXPIRES ON 1/28/99.

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**LABORATORY REPORTS**



A Wholly Owned Subsidiary of The Converse Professional Group

# Converse Consultants Southwest, Inc.

50th Anniversary

Celebrating 50 Years of Dedication in Engineering and Environmental Sciences

## POLARIZED LIGHT MICROSCOPY ANALYSIS REPORT

Client: CECSW  
 731 PILOT ROAD, SUITE H  
 LAS VEGAS, NEVADA 89119-4429

Account: NA

Contact: JOHN WATKINS

Project No: 9643995-01  
 CLARK COUNTY GENERAL SERVICES

Date Received: 01/06/97  
 Data Analyzed: 01/06&07/97  
 Date Reported: 01/08/97  
 Reported To: JOHN WATKINS  
 Submitted By: FEDERAL EXPRESS  
 Report No.: 71-34682  
 P.O. #: NONE PROVIDED

I certify that these results are accurate for the samples obtained and comply with accepted methods of analysis.

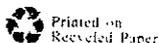
Lab Manager, Dan R. Dolk

Analyst, Dan R. Dolk

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34682 Grey Ceiling Tile 1st Floor North, East Court Room West Side	BB-CT-01	None Detected	30% Cellulose 60% Mineral Wool 5% Mineral Cleavages 5% Paint	I F
34683 Grey Ceiling Tile 1st Floor North East Court Room East Side	BB-CT-102	None Detected	20% Cellulose 65% Mineral Wool 10% Mineral Cleavages 5% Paint	I F
34684 Grey Ceiling Tile 1st Floor North East Court Room North Central	BB-CT-103	None Detected	20% Cellulose 65% Mineral Wool 10% Mineral Cleavages 5% Paint	I F
34685 Grey Ceiling Tile Treasurer (controller) Office Area	BB-CT-104	None Detected	25% Cellulose 60% Mineral Wool 10% Mineral Cleavages 5% Paint	I F
34686 Grey Ceiling Tile Treasurer (Controller) Office Area	BB-CT-105	None Detected	25% Cellulose 60% Mineral Wool 10% Mineral Cleavages 5% Paint	I F
34687 Grey Ceiling Tile Treasurer (controller) Office Area	BB-CT-106	None Detected	15% Cellulose 55% Mineral Wool 10% Mineral Cleavages 5% Paint 15% Perlite	I F

Converse Consultants Southwest, Inc.  
 4840 Mill Street, Suite 5  
 Reno, Nevada 89502

Telephone: (702) 856-3833  
 Facsimile: (702) 856-3513



RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* FH APPEARANCE* F-NF
34688a White Plaster 1st Floor North East Courtroom	BB-IWP-107a	None Detected	<1% Cellulose 25% Carbonate Binders 30% Aggregate 45% Mineral Cleavages	I F
34688b Tan Plaster 1st Floor North East Courtroom	BB-IWP-107b	None Detected	25% Binders 50% Aggregate 25% Mineral Cleavages	I NF
34688c Grey Plaster 1st Floor North East Courtroom	BB-IWP-107c	None Detected	30% Binders 40% Aggregate 30% Mineral Cleavages	I NF
34689a White Plaster 1st Floor North Entrance Area	BB-IWP-108a	None Detected	5% Cellulose 65% Carbonate Binders 30% Mineral Cleavages	I F
34689b Tan Plaster 1st Floor North Entrance Area	BB-IWP-108b	None Detected	5% Cellulose 30% Binders 40% Aggregate 25% Mineral Cleavages	I F
34689c Grey Plaster 1st Floor North Entrance Area	BB-IWP-108c	None Detected	50% Binders 50% Mineral Cleavages	I F
34690 Grey Plaster 1st Floor Central Area	BB-IWP-109	None Detected	<1% Cellulose 30% Binders 40% Aggregate 30% Mineral Cleavages	I F
34691a Grey Floor Tile 1st Floor Hallway to West Exit	BB-FT-110a	None Detected	<1% Cellulose 40% Carbonate Binders 30% Organic Binders 30% Mineral Cleavages	I F
34691b Light Mastic 1st Floor Hallway to West Exit	BB-FT-110b	None Detected	5% Cellulose 20% Carbonate Binders 55% Organic Binders 20% Mineral Cleavages	I F
34692a Grey Floor Tile North Storage Shower Area	BB-FT-111a	None Detected	55% Carbonate Binders 40% Organic Binders 5% Mineral Cleavages	I NF
34692b Light Brown Mastic North Storage Shower Area	BB-FT-111b	None Detected	5% Cellulose <1% Glass Fibers 20% Carbonate Binders 60% Organic Binders 15% Mineral Cleavages	I F
34693 Tan Adhesive 1st Floor North East Court Room	BB-WFA-112	None Detected	80% Organic Binders 20% Mineral Cleavages	I NF

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34694a Yellow Floor Tile 9"x9" 1st Floor Vault	BB-FT-113a	3-5% Chrysotile	45% Carbonate Binders 30% Organic Binders 20% Mineral Cleavages	I F
34694b Black Mastic 1st Floor Vault	BB-FT-113b	10-20% Chrysotile	60% Organic Binders 20% Mineral Cleavages	I F
34695 Yellow Ceiling Tile 1st Floor Vault	BB-CT-114	None Detected	90% Wood Fibers 5% Binders 5% Paint	I F
34696 Yellow Ceiling Tile 1st Floor Vault	BB-CT-115	None Detected	90% Wood Fibers 5% Binders 5% Paint	I F
34697 Yellow Ceiling Tile 1st Floor Vault	BB-CT-16	None Detected	90% Wood Fibers 5% Binders 5% Paint	I F
34698 White Duct Tape 4th Garage Level	BB-DI-117	None Detected	60% Cellulose 20% Organic Binders 20% Mineral Cleavages	I F
34699 Grey Plaster 4th Garage Level	BB-EWP-118	None Detected	<1% Cellulose 50% Binders 50% Aggregate	I F
34700 Grey Plaster 4th Garage Level	BB-CP-119	None Detected	30% Binders 40% Aggregate 30% Mineral Cleavages	I NF
34701 Grey Plaster 4th Garage Level	BB-CP-120	None Detected	<1% Cellulose 30% Binders 50% Aggregate 20% Mineral Cleavages	I F
34702 Grey Plaster 4th Garage Level	BB-CP-121	None Detected	30% Binders 50% Aggregate 20% Mineral Cleavages	I NF
34703 Grey Plaster 4th Garage Level	BB-CP-122	None Detected	<1% Cellulose 30% Binders 40% Aggregate 30% Mineral Cleavages	I F
34704 Grey Plaster 4th Garage Level	BB-CP-123	None Detected	30% Binders 50% Aggregate 20% Mineral Cleavages	I NF
34705 Light Grey Weaving 4th Garage Level	BB-DI-124	None Detected	60% Cellulose 25% Organic Binders 15% Mineral Cleavages	I F
34706 Cream Weaving 4th Garage Level	BB-DI-125	None Detected	60% Cellulose 25% Organic Binders 15% Mineral Cleavages	I F

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* LH APPEARANCE* F-NF
34707 Grey Ceiling Tile 5th Floor Near Elevators	BB-CT-126	None Detected	28% Cellulose 70% Mineral Wool 2% Paint	I F
34708 Yellow Mastic 5th Floor North side Office Hallway	BB-CA-127	None Detected	2% Cellulose 3% Glass Fibers 75% Organic Binders 20% Mineral Cleavages	I F
34709a Cream Floor Tile 9"x9" 5th Floor Men's Rest Room	BB-FT-128a	>1-3% Chrysotile	47% Carbonate Binders 40% Organic Binders 10% Mineral Cleavages	I F
34709b Black Mastic 5th Floor Men's Rest Room	BB-FT-128b	5-10% Chrysotile	50% Organic Binders 40% Mineral Cleavages	I F
34710 Black Adhesive Electrical Room Across Mens Room on 5th Floor	BB-FTA-129	None Detected	5% Cellulose 5% Synthetic 70% Organic Binders 20% Mineral Cleavages	I F
34711a Yellow Floor Tile 9"x9" 5th Floor Break Room	BB-FT-130a	>1-3% Chrysotile	60% Carbonate Binders 30% Organic Binders 7% Mineral Cleavages	I F
34711b Black Mastic 5th Floor Break Room	BB-FT-130b	3-5% Chrysotile	70% Organic Binders 25% Mineral Cleavages	I F
34712a Light Floor Tile 6th Floor Closet Area Side of Floor	BB-FT-131a	3-5% Chrysotile	55% Carbonate Binders 30% Organic Binders 10% Mineral Cleavages	I F
34712b Grey Floor Tile 12"x12" 6th Floor Closet Area Side of Floor	BB-FT-131b	>1-3% Chrysotile	57% Carbonate Binders 30% Organic Binders 10% Mineral Cleavages	I F
34713a Cream Floor Tile 9"x9" 6th Floor Closet Area West Side Below Sample #BB- FT-131	BB-FT-132a	>1-3% Chrysotile	60% Carbonate Binders 30% Organic Binders 7% Mineral Cleavages	I F
34713b Black Mastic 6th Floor Closet Area West Side Below Sample #BB- FT-131	BB-FT-132b	None Detected	5% Cellulose 20% Carbonate Binders 70% Organic Binders 5% Mineral Cleavages	I F
34713c Black Mastic 6th Floor Closet Area West Side Below Sample #BB- FT-131	BB-FT-132c	5-10% Chrysotile	70% Organic Binders 20% Mineral Cleavages	I F

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34714 Grey Floor Tile 6th floor closet Area East Side of Floor	BB-FT-133	None Detected	<1% Cellulose 55% Carbonate Binders 30% Organic Binders 15% Mineral Cleavages	I F
34715a Grey Floor Tile 12"x12" 6th Floor Closet Area East Side of Floor	BB-FT-134a	<1% Chrysotile	55% Carbonate Binders 30% Organic Binders 15% Mineral Cleavages	I F
34715b Yellow Mastic 6th Floor Closet Area East Side of Floor	BB-FT-134b	None Detected	5% Cellulose <1% Glass Fibers 5% Synthetic 60% Organic Binders 30% Mineral Cleavages	I F
34716a Grey Floor Tile Below Sample BB-FT-134a	BB-FT-135a	None Detected	60% Carbonate Binders 30% Organic Binders 10% Mineral Cleavages	I F
34716b Tan Mastic Below Sample BB-FT-134b	BB-FT-135b	None Detected	<1% Cellulose <1% Synthetic 15% Carbonate Binders 80% Organic Binders 5% Mineral Cleavages	I F
34717a Beige Floor Tile 6th Floor East Closet Area	BB-FT-136a	None Detected	<1% Cellulose 60% Carbonate Binders 30% Organic Binders 10% Mineral Cleavages	I F
34717b Brown Mastic 6th Floor East Closet Area	BB-FT-136b	None Detected	5% Cellulose 75% Organic Binders 20% Mineral Cleavages	I F
34717c Grey Floor Tile 6th Floor East Closet Area	BB-FT-136c	None Detected	<1% Cellulose 50% Carbonate Binders 30% Organic Binders 20% Mineral Cleavages	I F
34718 Grey Ceiling Tile North Side office, 7th Floor	BB-CT-137	None Detected	10% Cellulose 75% Mineral Wool 10% Mineral Cleavages 5% Paint	I F
34719 Tan Ceiling Tile North Side Offices, 7th Floor	BB-CT-138	None Detected	5% Cellulose 75% Mineral Wool 15% Mineral Cleavages 5% Paint	I F
34720 Grey Ceiling Tile North Side Offices, 7th Floor	BB-CT-139	<1% Chrysotile	10% Cellulose 65% Mineral Wool 20% Mineral Cleavages 5% Paint	I F
34721 Yellow Ceiling Tile Womens Rest Room	BB-CT-140	None Detected	<1% Cellulose 70% Glass Fibers 25% Binders 5% Paint	I F

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34722 Yellow Ceiling Tile North Office Area 7th Floor	BB-CT-141	None Detected	<1% Cellulose 70% Glass Fibers 20% Binders 10% Mineral Cleavages	I F
34723 Yellow Ceiling Tile Womens Rest Room 7th Floor	BB-CT-142	None Detected	<1% Cellulose 70% Glass Fibers 20% Binders 10% Paint	I F
34724a Cream Floor Tile 9th Floor North Side, Small Room with Sink	BB-FT-143a	<1% Chrysotile	60% Carbonate Binders 30% Organic Binders 10% Mineral Cleavages	I F
34724b Brown Mastic 9th Floor North Side, Small Room with Sink	BB-FT-143b	None Detected	<1% Cellulose 80% Organic Binders 20% Mineral Cleavages	I F
34725 Cream Floor Tile 9"x9" 9th Floor Womens Rest Room	BB-FT-144	3-5% Chrysotile	30% Carbonate Binders 45% Organic Binders 20% Mineral Cleavages	I F

Attached are the results of analysis of bulk samples submitted for asbestos identification. Converse Consultants MR, Inc. follows EPA Method EPA/600/R-93/116; July, 1993.

Each sample was initially examined under a stereoscopic microscope at a magnification of 10x to 60x. Fibrous material was examined for morphology and content. Portions of each sample were immersed in a fluid with a known refractive index. The sample was examined under polarized light using a Nikon Labophot microscope with a McCrone Dispersion Staining objective under 100X magnification. Optical characteristics of the fibrous material were examined to determine the mineralogy of the fiber. The observed optical characteristics include angles of extinction, signs of elongation and dispersion staining colors. Asbestos fiber content is estimated by optically comparing the quantity of asbestos material and non-asbestos material to establish estimated percentages.

Bulk sampling may not have been performed by Converse Consultants personnel. No warranty is made as to the acceptability of sampling strategies.

Converse Consultants MR, Inc., is National Voluntary Laboratory Accreditation Program accredited. Our NVLAP Laboratory I.D. Number is 102091. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report must not be reproduced except in full with the approval of the laboratory. This report relates only to the items tested.

I in the layer column above indicates an inhomogeneous sample; H indicates an homogenous sample.  
F in the appearance column indicates a fibrous sample; NF indicates a nonfibrous sample.



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# Converse Consultants Southwest, Inc.

50th Anniversary

Celebrating 50 Years of Dedication in Engineering and Environmental Sciences

## POLARIZED LIGHT MICROSCOPY ANALYSIS REPORT

Client: CECSW  
 731 PILOT ROAD, SUITE H  
 RENO, NEVADA 89119-4429

Account: NA

Contact: JOHN WATKINS

Project No: 9643995-01  
 CLARK COUNTY GENERAL SERVICES

Date Received: 01/06/97  
 Data Analyzed: 01/07/97  
 Date Reported: 01/09/97  
 Reported To: JOHN WATKINS  
 Submitted By: FEDERAL EXPRESS  
 Report No.: 71-34726  
 P.O. #: NONE PROVIDED

I certify that these results are accurate for the samples obtained and comply with accepted methods of analysis.

Lab Manager, Dan R. Dolk

Analyst, Dan R. Dolk

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34726 Yellow Mastic 5th Floor Ladies Rest Room	BB-CTA-145	None Detected	<1% Cellulose 90% Binders 10% Mineral Cleavages	I F
34727 Beige Drywall 5th Floor Office/Above Ceiling	BB-DWM-146	None Detected	10% Processed Paper 50% Binders 40% Mineral Cleavages	I F
34728 Grey Plaster 5th Floor Men's Rest Room Above Ceiling	BB-IWP-147	None Detected	<1% Cellulose 40% Binders 20% Aggregate 40% Mineral Cleavages	I F
34729 Beige Drywall 5th Floor Office/Above Ceiling	BB-DWM-148	None Detected	<1% Glass Fibers 10% Processed Paper 60% Binders 30% Mineral Cleavages	I F
34730a White Skimcoat 6th Floor	BB-IWP-149a	None Detected	15% Talc 35% Binders 20% Gypsum 30% Mineral Cleavages	I F
34730b Tan Plaster 6th Floor	BB-IWP-149b	None Detected	30% Binders 30% Aggregate 40% Mineral Cleavages	I NF

Converse Consultants Southwest, Inc.  
 4840 Mill Street, Suite 5  
 Reno, Nevada 89502

Telephone: (702) 856-3833  
 Facsimile: (702) 856-3513

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34731 Grey Ceiling Tile 6th Floor	BB-CT-150	None Detected	30% Cellulose 50% Mineral Wool 5% Mineral Cleavages 5% Paint 10% Perlite	I F
34732 Grey Ceiling Tile 6th Floor	BB-CT-151	None Detected	30% Cellulose 45% Mineral Wool 5% Mineral Cleavages 5% Paint 15% Perlite	I F
34733 Grey Ceiling Tile 6th Floor	BB-CT-152	None Detected	35% Cellulose 50% Mineral Wool 5% Paint 10% Perlite	I F
34734 Grey Ceiling Tile 7th Floor	BB-CT-153	None Detected	30% Cellulose 65% Mineral Wool 5% Paint	I F
34735 Grey Ceiling Tile 7th Floor	BB-CT-154	None Detected	30% Cellulose 50% Mineral Wool 5% Paint 15% Perlite	I F
34736 White Drywall 7th Floor Room #732	BB-DWM-155	None Detected	<1% Glass Fibers 10% Processed Paper 70% Binders 20% Mineral Cleavages	I F
34737 Grey Ceiling Tile 7th Floor	BB-CT-156	None Detected	30% Cellulose 45% Mineral Wool 5% Mineral Cleavages 5% Paint 15% Perlite	I F
34738 Grey Plaster 7th Floor	BB-IWP-157	None Detected	30% Binders 50% Aggregate 20% Mineral Cleavages	I NF
34739 White Drywall 8th Floor Entrance Room	BB-DWM-158	None Detected	<1% Glass Fibers 10% Processed Paper 5% Talc 55% Binders 30% Mineral Cleavages	I F
34740 Grey Plaster 8th Floor Ladies Rest Room	BB-IWP-159	>1-3% Chrysotile	7% Cellulose 30% Binders 60% Mineral Cleavages	I F
34741 Grey Plaster 8th Floor Ladies Rest Room	BB-IWP-160	None Detected	30% Binders 40% Aggregate 30% Mineral Cleavages	I NF
34742a Cream Joint Compound 9th Floor Hallway Near Elevator	BB-DWM-161a	3-5% Chrysotile	5% Cellulose 60% Carbonate Binders 40% Mineral Cleavages	I F

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* FH APPEARANCE* F-NF
34742b White Drywall 10th Floor Hallway Near Elevator	BB-DWM-161b	None Detected	10% Processed Paper 50% Binders 40% Mineral Cleavages	I F
34743 Grey Plaster 10th Floor Ladies Room	BB-IWP-162	None Detected	30% Binders 40% Aggregate 30% Mineral Cleavages	I NF
34744 White Drywall 10th Floor Hallway Near Elevator	BB-DWM-163	None Detected	10% Processed Paper 60% Binders 30% Mineral Cleavages	I F
34745a Black Roofing Roof Northwest Side	BB-RM-164a	None Detected	5% Cellulose <1% Synthetic 65% Organic Binders 30% Mineral Cleavages	I F
34745b Black Roofing Roof Northwest Side	BB-RM-164b	None Detected	<1% Cellulose <1% Glass Fibers <1% Synthetic 50% Organic Binders 50% Mineral Cleavages	I F
34745c Black Roofing Roof Northwest Side	BB-RM-164c	None Detected	30% Synthetic 30% Organic Binders 40% Mineral Cleavages	I F
34745d Black Roofing Roof Northwest Side	BB-RM-164d	None Detected	10% Cellulose <1% Glass Fibers 30% Synthetic 30% Organic Binders 30% Mineral Cleavages	I F
34745e Black Roofing Roof Northwest Side	BB-RM-164e	None Detected	10% Cellulose 40% Organic Binders 50% Mineral Cleavages	I F
34746a Black Roofing Roof Northwest Side	BB-RM-165a	None Detected	20% Synthetic 50% Organic Binders 30% Mineral Cleavages	I F
34746b Black Roofing Roof Northwest Side	BB-RM-165b	None Detected	20% Synthetic 50% Organic Binders 30% Mineral Cleavages	I F
34747 Black Roofing Roof Northwest Side	BB-RM-166	None Detected	25% Synthetic 25% Organic Binders 30% Aggregate 20% Mineral Cleavages	I F
34748 Black Roofing Roof Northwest Side	BB-RM-167	None Detected	10% Cellulose 30% Synthetic 30% Organic Binders 30% Mineral Cleavages	I F
34749 Grey Plaster 6th Floor	BB-IWP-168	None Detected	40% Binders 30% Aggregate 30% Mineral Cleavages	I NF



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# Converse Consultants Southwest, Inc.

Celebrating 50 Years of Dedication in  
Engineering and Environmental Sciences

## POLARIZED LIGHT MICROSCOPY ANALYSIS REPORT

Client: CECSW  
731 PILOT ROAD, SUITE H  
LAS VEGAS, NEVADA 89119-4429

Account: NA

Contact: E. BLACKMAN

Project No: 9643995-01  
CLARK COUNTY GENERAL SERVICES

Date Received: 01/07/97  
Data Analyzed: 01/08/97  
Date Reported: 01/09/97  
Reported To: E. BLACKMAN  
Submitted By: FEDERAL EXPRESS  
Report No.: 71-34776  
P.O. #: NONE PROVIDED

Certify that these results are accurate for the samples obtained and comply with accepted methods of analysis.

Lab Manager, Dan R. Dolk

Analyst, Dan R. Dolk

RESULTS LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34776a Black Roofing Southwest Corner - Upper Secondary Roof	BB-RM-169a	None Detected	<1% Cellulose <1% Glass Fibers 5% Synthetic 40% Organic Binders 55% Mineral Cleavages	I F
34776b Black Roofing Southwest Corner - Upper Secondary Roof	BB-RM-169b	None Detected	30% Synthetic 40% Organic Binders 30% Mineral Cleavages	I F
34776c Black Roofing Southwest Corner - Upper Secondary Roof	BB-RM-169c	None Detected	<1% Cellulose 5% Glass Fibers 5% Synthetic 50% Organic Binders 40% Mineral Cleavages	I F
34776d Black Roofing Southwest Corner - Upper Secondary Roof	BB-RM-169d	None Detected	5% Cellulose <1% Glass Fibers <1% Synthetic 55% Organic Binders 40% Mineral Cleavages	I F
34776e Black Roofing Southwest Corner - Upper Secondary Roof	BB-RM-169e	None Detected	5% Cellulose <1% Glass Fibers <1% Synthetic 45% Organic Binders 50% Mineral Cleavages	I F

Converse Consultants Southwest, Inc.  
4840 Mill Street, Suite 5  
Reno, Nevada 89502

Telephone: (702) 856-3833  
Facsimile: (702) 856-3513

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT. & TYPE OF ASBESTOS	PERCENT. & TYPE OF NON-ASBESTOS	LAYER* I-H APPEARANCE* F-NF
34776f Black Roofing Southwest Corner - Upper Secondary Roof	BB-RM-169f	None Detected	35% Cellulose 5% Glass Fibers 45% Organic Binders 15% Mineral Cleavages	I F
34777a Black Roofing Northeast Corner of Main Roof - near Metal Dome	BB-RM-170a	None Detected	<1% Cellulose 30% Synthetic 40% Organic Binders 30% Mineral Cleavages	I F
34777b Black Roofing Northeast Corner of Main Roof - near Metal Dome	BB-RM-170b	None Detected	<1% Cellulose <1% Glass Fibers 70% Organic Binders 30% Mineral Cleavages	I F
34777c Black Roofing Northeast Corner of Main Roof - near Metal Dome	BB-RM-170c	None Detected	30% Synthetic 40% Organic Binders 30% Mineral Cleavages	I F
34777d Black Roofing Northeast Corner of Main Roof - near Metal Dome	BB-RM-170d	None Detected	<1% Cellulose <1% Glass Fibers 60% Organic Binders 40% Mineral Cleavages	I F
34777e Black Roofing Northeast Corner of Main Roof - near Metal Dome	BB-RM-170e	None Detected	30% Glass Fibers 40% Organic Binders 30% Mineral Cleavages	I F
34777f Black Roofing Northeast Corner of Main Roof - near Metal Dome	BB-RM-170f	None Detected	30% Cellulose 20% Glass Fibers 40% Organic Binders 10% Mineral Cleavages	I F

Attached are the results of analysis of bulk samples submitted for asbestos identification. Converse Consultants MR, Inc. follows EPA Method EPA/600/R-93/116; July, 1993.

Each sample was initially examined under a stereoscopic microscope at a magnification of 10x to 60x. Fibrous material was examined for morphology and content. Portions of each sample were immersed in a fluid with a known refractive index. The sample was examined under polarized light using a Nikon Labophot microscope with a McCrone Dispersion Staining objective under 100X magnification. Optical characteristics of the fibrous material were examined to determine the mineralogy of the fiber. The observed optical characteristics include angles of extinction, signs of elongation and dispersion staining colors. Asbestos fiber content is estimated by optically comparing the quantity of asbestos material and non-asbestos material to establish estimated percentages.

Bulk sampling may not have been performed by Converse Consultants personnel. No warranty is made as to the acceptability of sampling strategies.

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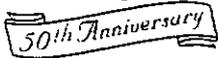
I in the layer column above indicates an inhomogeneous sample; H indicates an homogenous sample.  
\*F in the appearance column indicates a fibrous sample; NF indicates a nonfibrous sample.



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# Converse Consultants Southwest, Inc.

Celebrating 50 Years of Dedication in Engineering and Environmental Sciences



## POLARIZED LIGHT MICROSCOPY ANALYSIS POINT COUNT REPORT

Client: CECSW  
 731 PILOT ROAD, SUITE H  
 LAS VEGAS, NEVADA 89119-4429

Account: NA  
 Contact: JOHN WATKINS  
 Project No: 9643996-01  
 CLARK COUNTY GENERAL SERVICES

Date Received: 01/13/97  
 Data Analyzed: 01/13/97  
 Date Reported: 01/14/97  
 Reported To: JOHN WATKINS  
 Submitted By: FEDERAL EXPRESS  
 Report No.: 71-35357  
 P.O. #: NONE PROVIDED

Warranty that these results are accurate for the samples obtained and comply with accepted methods of analysis.

Lab Manager, Dan R. Dolk

Analyst, Dan R. Dolk

RESULTS: LAB SAMPLE # LOCATION DESCRIPTION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* I-H	APPEAR* F-NF
36257 Old Sample #34720	BB-CT-139	0.5% Chrysotile			
36258 Old Sample #34740	BB-WP-159	4.5% Chrysotile			

As these Results represent a point count, this report supercedes the previous analysis results.

Attached are the results of analysis of bulk samples submitted for asbestos identification. Converse Consultants MR, Inc. follows EPA Method EPA/600/R-93/116; July, 1993.

Each sample was initially examined under a stereoscopic microscope at a magnification of 10x to 60x. Fibrous material was examined for morphology and content. Portions of each sample were immersed in a fluid with a known refractive index. The sample was examined under polarized light using a Nikon Labophot microscope with a McCrone Dispersion Staining objective under 100X magnification. Optical characteristics of the fibrous material were examined to determine the mineralogy of the fiber. The observed optical characteristics include angles of extinction, signs of elongation and dispersion staining colors. Asbestos fiber content is established by point counting.

Bulk sampling may not have been performed by Converse Consultants personnel. No warranty is made as to the acceptability of sampling strategies.

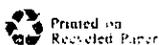
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\*If the layer column above indicates an inhomogeneous sample; H indicates an homogenous sample.

\*If the appearance column indicates a fibrous sample; NF indicates a nonfibrous sample.

Converse Consultants Southwest, Inc.  
 4840 Mill Street, Suite 5  
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 Facsimile: (702) 856-3513





# Forensic Analytical

## Analytical Report

San Francisco • 3777 Depot Road, Suite 409, Hayward, CA 94545 • Phone 510 887-8328 • Fax 510 887-4213  
Los Angeles • 2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 • Phone 310 763-2374 • Fax 310 763-3554

### Bulk Material Analysis

Method: 40 CFR 763, Subpart F, Appendix A (AHERA)

Client:

Converse Environmental Consultants, SW

731 Pilot Road, Suite H  
Las Vegas, NV 89119

Client ID: 1647  
Report Number: 262638  
Date Received: 01/03/97  
Date Analyzed: 01/03/97

P.O. Num:

Job ID: Clark County General Services

Site:

Sample Number	Lab Number	Total Asbestos	Total Fibrous Non-Asbestos	(Breakdown by type)
QC-1 Off-white fibrous tile with paint.	19700317	Non-Det. %	85-90%	Cellulose (45-50%) Fibrous Glass (35-40%)
QC-2 Grey cementitious material.	19700318	Non-Det. %	Trace %	Cellulose (Trace %)

  
David Kahane, C.I.E., Laboratory Director, Hayward Laboratory

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FORENSIC ANALYTICAL

FAX TRANSMISSION  
Summary of Results  
Polarized Light Microscopy

Date/Time: 1/3/97 10:57

To: Converse Environmental Consultants, SW

Project : 96-4399501

Report #: 262587

Attn: John Watkins

Sender: Colleen

If you do not receive all pages, please contact Sender at (510) 887-8828

C: Chrysotile  
A: Amosite

Cr: Crocidolite  
ND: No Asbestos detected  
P: Preliminary; subject to review

Sample Number	Asbestos	Asb. Type(s)	Notes
BB-IWP-108QC	N/D		
BB-CP-121QC	N/D		

FAXED TO: 702-269-8353

A hard copy report will follow in the mail. Thank you.

Supervisor Approval: \_\_\_\_\_



# Converse Consultants Southwest, Inc.

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## POLARIZED LIGHT MICROSCOPY ANALYSIS REPORT

Client: CONVERSE CONSULTANTS SOUTHWEST  
731 PILOT ROAD, SUITE H  
LAS VEGAS, NEVADA 89119

Date Received: 5/19/98

Date Analyzed: 5/19/98

Date Prepared: 6/1/98

Account: N/A  
Contact: KEVIN BOTTUM

Reported To: KEVIN BOTTUM

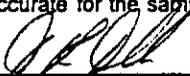
Submitted By: CA/O.N.

Project No: 98-43552-06 CCGS - BRIDGER BUILDING

Report No.: 71-52629

P.O. #: N/A

I certify that these results are accurate for the samples obtained and comply with accepted methods of analysis.

  
Lab Manager, Dan R. Dolk

  
Analyst, Dan R. Dolk

RESULTS: LAB SAMPLE # LAB DESCRIPTION LOCATION	CLIENT SAMPLE #	PERCENT & TYPE OF ASBESTOS	PERCENT & TYPE OF NON-ASBESTOS	LAYER* (H) APPEARANCE* (F-NF)
52629A White Plaster 10th Floor, Above Ceiling In Hallway At #1017	1501WP-A	None Detected	30% Binders 20% Aggregate 50% Gypsum	I NF
52629B Cream Plaster 10th Floor, Above Ceiling In Hallway At #1017	1501WP-B	None Detected	<1% Cellulose 30% Binders 40% Aggregate 30% Gypsum	I F
52630 White Insulation 10th Floor, West Fire Door From Elevator Lobby	1801FDI	None Detected	<1% Cellulose 5% Glass Fibers 10% Binders 20% Mineral Cleavages 70% Perlite	I F
52631 Tan Plaster 9th Floor, Ladies Restroom Above Ceiling	1802WP	None Detected	<1% Cellulose 30% Aggregate 35% Gypsum 20% Mineral Cleavages 15% Vermiculite	I F

Converse Consultants Southwest, Inc.  
4840 Mill Street, #5  
Reno, Nevada 89502  
Telephone (702) 856-3833  
Facsimile (702) 856-3513

Attached are the results of analysis of bulk samples submitted for asbestos identification. Converse Consultants MR, Inc. follows EPA Method EPA/600/R-93/116; July, 1993.

Each sample was initially examined under a stereoscopic microscope at a magnification of 10x to 60x. Fibrous material was examined for morphology and content. Portions of each sample were immersed in a fluid with a known refractive index. The sample was examined under polarized light using a Nikon Labophot microscope with a McCrone Dispersion Staining objective under 100X magnification. Optical characteristics of the fibrous material were examined to determine the mineralogy of the fiber. The observed optical characteristics include angles of extinction, signs of elongation and dispersion staining colors. Asbestos fiber content is estimated by optically comparing the quantity of asbestos material and non-asbestos material to establish estimated percentages.

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\*I in the layer column above indicates an inhomogeneous sample; H indicates an homogenous sample.

\*F in the appearance column indicates a fibrous sample; NF indicates a nonfibrous sample.

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FIELD SAMPLE DATA SHEETS



Converse Environmental  
 Consultants Southwest, Inc.  
 731 Pilot Road, Suite H  
 Las Vegas, Nevada 89119-4429  
 Telephone (702) 263-7600 Fax (702) 269-8353

# BULK SAMPLE SHEET

Client Name: CLARK County General Services  
 Project Name: Bridger Building  
 Job Number: 96-43 Date: 12-31-96

Sample Number	MATERIAL	AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
BB-CT-101	6'x4' ceiling tile heavy fissure pattern		1st floor north East court Room west side	A: ND
BB-CT-102	"		" East side	A: ND
BB-CT-103	"		" North central	A: ND
BB-CT-104	2'x4' Ceiling tile small random slash Pattern		Treasurer/Comptroller office area	A: ND
BB-CT-105	"		"	A: ND
BB-CT-106	"		"	A: ND
BB-IWP-107	Interior wall Plaster, gray Rough texture		1st floor north East court room	A: ND B: ND C: ND
BB-IWP-108	"		1st floor north Entrance area	A: ND B: ND C: ND
BB-IWP-109	"		1st floor central area	A: ND
BB-FT-110	12" x 12" Gray w/ white streak, TAN adhesive		1st floor hallway to west exit	A: ND B: ND

Signature



Converse Environmental  
 Consultants Southwest, Inc.  
 731 Pilot Road, Suite H  
 Las Vegas, Nevada 89119-4429  
 Telephone (702) 263-7600 Fax (702) 269-8353

# BULK SAMPLE SHEET

Client Name: CLARK County General Services

Project Name: Bridger Building

Job Number: 96-43

Date: 12-31-96

Sample Number	MATERIAL AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
<del>12" x 12" f</del> BB-FT-111	12" x 12" Floor tile white w/BLACK speck TAN/BLACK ADH.	North Storage/ Shower area	A: NO B: ND
BB-WFA-112	Wall Fabric adhesive, white	1st Floor North East Court room	A: ND
BB-FT-113	9' x 9' Floor tile, white	<del>1st</del> 4th Floor VAULT	A: 3-5 Tile B: MISC
BB-CT-114	1' x 1' Ceiling tile small dot large dash Pattern	4th Floor VAULT	A: NO
BB-CT-115	"	"	A: ND
BB-CT-116	"	"	A: ND
BB-DI-117	INSULATION w/ DUCT TAPE, white over fiberglass	4th Garage level	A: ND
BB-EWP-118	Exterior wall Plaster	4th Garage Level	A: ND
BB-CP-119	Ceiling Plaster	4th level Garage level	A: ND
BB-CP-120	"	"	A: ND

Signature



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# BULK SAMPLE SHEET

Client Name: CLARK County General Services

Project Name: Bridger Building

Job Number: 96-43 Date: 12-31-96

Sample Number	MATERIAL	AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
BB-CP-121	Ceiling Plaster		4th level garage	A: NO
BB-CP-122	"		"	A: NO
BB-CP-123	"		"	A: NO
BB-DI-124	Duct Insulation w/ TAPE over fiberglass Insulation		4th level garage	A: NO
BB-DI-125	Duct Insulation NO TAPE		"	A: NO
BB-CT-126	1'x1' Ceiling tile gray w/ Parallel slash Pattern		5th floor near Elevators	A: NO
BB-CA-127	Carpet adhesive TAN		5th floor north side office HALLWAY	A: NO
BB-FT-128	9" x 9" Floor tile Cream w/ gray highlight BLACK adhesive		5th floor men's <del>restroom</del> Restroom	A: 21-3 tile B: 5-10 mastic
BB-FTA-129	Floor tile adhesive BLACK		Electrical Room around men's room on 5th floor	A: NO
BB-FT-130	9" x 9" Floor tile Cream w/ gray highlight BLACK adhesive		5th floor Breakroom	A: 21-3 tile B: 3-5 mastic

Signature



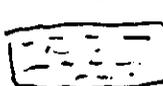
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# BULK SAMPLE SHEET

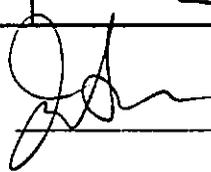
Client Name: CLARK County General Services

Project Name: Bridger Building

Job Number: \_\_\_\_\_ Date: 12-31-96

Sample Number	MATERIAL	AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
BB-FT-131	12" x 12" Floor tile TAN w/ Brown + white highlights TAN ADHESIVE		6th Floor closet area <del>East</del> side of west Floor	A: 3-5 tile B: 71-3 <del>tile</del>
BB-FT-132	unknown size Floor tile white, Black ADHESIVE		6th Floor closet area west side Below sample → BB-FT-131	A: 21-3 tile B: NO C: 5-10 mastic
BB-FT-133	12" x 12" Floor tile gray w/ white chips, TAN adhesive		6th Floor closet area East side of Floor.	A: NO
BB-FT-134	12" x 12" Floor tile gray w/ white chips TAN adhesive		"	A: 61 (trace) tile B: NO
BB-FT-135	Unknown size Floor tile gray, TAN adhesive		Below sample BB-FT-134	A: NO B: NO
BB-FT-136	12" x 12" Floor tile TAN w/ Brown + white highlights, TAN adhesive Two layers of Floor tile over GRAY		6th Floor East Closet area	A: NO B: NO C: NO
BB-CT-137	2' x 4' Ceiling tile Small dot/long-streak Pattern, red Backing		East side offices North, 7th Floor	A: NO
BB-CT-138	"		"	A: NO
BB-CT-139	"		"	A: 41
BB-CT-140	2' x 4' Ceiling tile ms/mo Pattern		women's restroom 	A: NO

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# BULK SAMPLE SHEET

Client Name: CLARK COUNTY GENERAL SERVICES

Project Name: BRIDGER BUILDING

Job Number: 9643995-01 Date: 1-2-97

Sample Number	MATERIAL	AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
BB-CTA-145	CERAMIC TILE ADHESIVE (YELLOW)		5TH FLOOR/LADIES REST ROOM SE CORNER @ CEILING LEVEL	A: ND
BB-dwm-146	drywall Compound		5TH FLOOR/INTERIOR office @ HALLWAY above ceiling opposite Rm 513)	A: ND
BB-IWP-147	INTERIOR WALL PLASTER - grey - ROUGH TEXTURE		5TH FLOOR/MENS REST ROOM #513 SW CORNER ABOVE CEILING @ LAV	A: ND
BB-dwm-148	drywall Compound		6TH FLOOR/INTERIOR OFFICE CLOSET OPPOSITE ROOM 629 SW ABOVE CEILING	A: ND
BB-IWP 149	INTERIOR WALL PLASTER - grey ROUGH TEXTURE		6TH FLOOR/LADIES ROOM # 601/SOUTH EAST	A: ND B: ND
BB-CT-150	CEILING TILE 2' x 4' <sup>white</sup> SMALL DOT/MED SLASH		6TH FLOOR-ABOVE RECEPTION DESK CENTER of MAIN HALL WAY-OPPOSITE ELEVATOR	A: ND
BB-CT-151	2' x 4' CEILING <sup>white</sup> TILE/SMALL DOT MEDIUM SLASH		6TH FLOOR-NEXT TO ROOM #634 @ ELECTRICAL UTILITY CABINET/SOUTH EAST	A: ND
BB-CT-152	2' x 4' CEILING <sup>white</sup> TILE/SMALL DOT MEDIUM SLASH		SOUTH CENTER CEILING " " " " SAME FLOOR/SAME INTERIOR OFFICE	A: ND
BB-CT-153	2' x 4' CEILING <sup>white</sup> TILE/SMALL DOT MEDIUM SLASH		7TH FLOOR CONFERENCE ROOM # 732 NORTHWEST WALL INTERIOR OFFICE	A: ND
BB-CT-154	2' x 4' CEILING <sup>white</sup> TILE/SMALL DOT MEDIUM SLASH		7TH FLOOR/LADIES REST ROOM # 723 SOUTHWEST CEILING	A: ND

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# BULK SAMPLE SHEET

Client Name: CLARK COUNTY GENERAL SERVICES  
Project Name: BRIDGER BUILDING  
Job Number: 9643995-01 Date: 1-2-97

Sample Number	MATERIAL	AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
BB-dwm-155	drywall compound		7TH FLOOR / ROOM # CONFERENCE - 732 NORTH WEST WALL ABOVE CEILING	A: NO
BB-CT-156	2' X 4' CEILING TILE / SMALL dot - MEDIUM SLASH		7TH FLOOR / CENTER HALLWAY - OPPOSITE LADIES RESTROOM # 723	QC # 1 A: NO
BB-IWP-157	INTERIOR WALL PLASTER - grey - ROUGH TEXTURE		7TH FLOOR / LADIES RESTROOM # 732 ABOVE CEILING SOUTHWEST CORNER	QC # 2 A: NO
BB-dwm-158	drywall compound		8TH FLOOR INTERIOR OFFICE MARKED ENTRANCE CENTER of SW WALL	A: NO
BB-IWP-159	INTERIOR WALL PLASTER - grey - ROUGH TEXTURE		8TH FLOOR / LADIES RESTROOM / SOUTH EAST CORNER - ABOVE CEILING ABOVE LAV	A: > 1 - 3 Point count 4.5 %
BB-IWP-160	INTERIOR WALL PLASTER - grey - ROUGH TEXTURE		9TH FLOOR, LADIES RESTROOM # 921 SE CORNER ABOVE CEILING @ LAV	A: NO
BB-dwm-161	drywall compound		9TH FLOOR / ABOVE CEILING IN MAIN HALLWAY NORTH of ELEVATOR'S / E. of RM 904	A: 3-5 compound B: NO
BB-IWP-162	INTERIOR WALL PLASTER grey - ROUGH TEXTURE		10TH FLOOR LADIES RESTROOM SOUTH EAST CORNER ABOVE CEILING @ LAV	A: NO
BB-dwm-163	drywall compound		10TH FLOOR - ABOVE CEILING IN HALLWAY NORTH of ELEVATOR BANK - EAST of RM 1001	A: NO
BB-RM-164	Roof MATERIAL (FLASHING)		NORTH WEST CORNER of MAIN Roof @ SLOPE	A: NO B: NO C: NO D: NO

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# BULK SAMPLE SHEET

Client Name: CLARK COUNTY GENERAL SERVICES  
 Project Name: BRIDGER BUILDING  
 Job Number: 9643995-01 Date: 1-2-97

Sample Number	MATERIAL	AMOUNT, COLOR, SIZE	SAMPLE LOCATION	REPORTED % ASBESTOS BY LAYER
BB-RM-165	Roof MATERIAL BLACK/MASTIC		NORTH WEST side of MAIN Roof-	A: ND B: ND
BB-RM-166	Roof MATERIAL LAYERED ASPHALT		NW AREA of MAIN Roof & METAL dome	A: ND
BB-RM-167	Roof MATERIAL BLACK/MASTIC		NORTHWEST side of MAIN Roof	A: ND
BB-1WP-168	INTERIOR WALL PLASTER - grey - ROUGH TEXTURE		6TH FLOOR / ladies REST ROOM - west WALL ABOVE CEILING	A: ND
BB-RM-169	Roof MATERIAL LAYERED / FOAM INSULATION + ASPHALT		SOUTHWEST corner UPPER SECONDARY Roof	A: ND B: ND C: ND F: ND D: ND
BB-RM-170	Roof MATERIAL LAYERED / FOAM INSULATION + ASPHALT		NORTH EAST AREA of MAIN ROOF NEAR METAL dome	A: ND B: ND C: ND F: ND D: ND

1-6-97

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