

Reno Office

815 Maestro Drive Reno, Nevada 89511 Ph: 775.829.2245 Fax: 775.829.2213

Las Vegas Office

6280 South Valley View Boulevard Suite 604 Las Vegas, Nevada 89118

Ph: 702.260.4961 Fax: 702.260.4968

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#### REPORT OF FINDINGS

# ASBESTOS, LEAD BASED PAINT, AND MOLD ASSESSMENT

McGill Library
4 North Fourth Street
McGill
White Pine County
Nevada

Prepared for:

Nye County 2101 East Calvada Boulevard, Suite 100 Pahrump, Nevada 89048

On behalf of: Rural Desert Southwest Brownfields Coalition

July 7, 2014 Project No. 804.11.001 – Task T2W-HAZ Phase II

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#### LIST OF ACRONYMS

ACAC American Council for Accredited Certification

ACM Asbestos Containing Material
AST Aboveground Storage Tank
C.E.M. Certified Environmental Manager
EPA Environmental Protection Agency

HASP Health and Safety Plan

HEPA High-Efficiency Particulate Air
HUD Housing and Urban Development

LBP Lead-based Paint

MDB&M Mount Diablo Base and Meridian

MGA McGinley and Associates
NAD No Asbestos Detected

National Emission Standard for Hazardous Air

NESHAP Pollutants

OSHA Occupational Health and Safety Administration
PACM Presumed Asbestos Containing Material

P.E. Professional Engineer
PLM Polarized Light Microscopy

RACM Regulated Asbestos-Containing Material
RDSBC Rural Desert Southwest Brownfields Coalition

SAP Sampling and Analysis Plan
TSI Thermal System Insulation
VCT Vinyl Composition Tile
XRF X-Ray Fluorescence

#### 1. INTRODUCTION

McGinley and Associates, Inc. (MGA) is pleased to submit this report that summarizes the results of hazardous substances assessment activities that were conducted at the McGill Library located in McGill, Nevada. These assessment activities are being funded through the Rural Desert Southwest Brownfields Coalition (RDSBC) Grant for Nye County, Nevada.

In April of 2013, MGA conducted a Phase I Environmental Site Assessment (ESA) on the subject property via funding through the RDSBC (MGA, 2013). The Phase I ESA provided recommendations as follows:

• Due to the age of the building, further studies should be conducted to investigate possible asbestos and/or lead-based paint contamination within building materials utilized previously for the construction/renovation of the building.

Therefore, the purpose of this project was to assess for the presence of asbestos and lead-based paint within building materials that are proposed to be renovated. Further, it was requested that an indoor air assessment be conducted to assess for possible mold contamination due to past roof leaks. Mr. Jason McAllister, a Nevada Asbestos Abatement Consultant, License No. IM0901, and a Nevada EPA Lead Inspector, certification # NV-I-125427-1, conducted these services at the subject site.

#### 1.1 Site Location

The site is located at 4 North Fourth Street, McGill, White Pine County, Nevada. The subject property lies within the Steptoe Valley of east-central Nevada at an elevation of approximately 6,212 feet above mean sea level. The subject property consists of one parcel of land that is listed as White Pine County Assessor's Parcel number 004-071-02. Geographically, the site is located within Section 29, Township 17 North, Range 63 East of the Mount Diablo Base and Meridian (MDB&M). The location of the site is presented in Figure 1.

Access to the property is gained via North Fourth Street to the north. The subject property is bordered on the north by a vacant recreational building. To the south lies a fire and ambulance vehicle garage with Avenue K beyond. East of the subject property is a storage yard with the McGill Park beyond. Lastly, to the west lies North Fourth Street, a property containing storage trailers, and a gas station beyond. The site map for the subject property is presented in Figure 2.

#### 1.2 Background

The McGill Library ("Library"), also known as the Kinnear Library, is currently owned by the White Pine County Board of Commissioners. The subject property consists of one parcel of land and totals 0.670 acres in size. The site is currently developed with a vacated building that was formerly utilized as a library. The building was originally constructed in 1940. The vacant building is comprised of a 2,200 square feet, one-story, brick building with an attached basement that contains the unit's plumbing and heating systems. The interior of the building consists of a utility room, restrooms, a kitchen, and a large empty room. The interior of the building appears to have been formerly divided by an accordion wall when it was in use. However, it appears the wall was taken down and the room is now a large open space.

The exterior of the subject property consists of landscaped planters, an asphalt driveway, and a concrete walkway. A 350 gallon aboveground storage tank (AST) was observed in the attached side yard. The AST is labeled as supplied by Suburban Gas and holds propane that likely heated the interior of the building.

The building has been proposed for new renovations that would update the structure so that it could be efficient for daily use as a library, for cultural activities, and for use as a Town Hall

meeting place. However, due to the age of the structure, there is potential for asbestos containing building materials and lead-based paint to have been utilized as part of construction of the structure. In addition, there is potential for microbial growth due to water damage.

#### 2. SCOPE OF WORK

The below scope of work was followed for this assessment:

- Development of a Sampling and Analysis Plan (SAP);
- Development of a Health and Safety Plan (HASP);
- Assessment of the subject property for asbestos containing material;
- Assessment of the subject property for lead-based paint;
- Assessment of the subject property for mold contamination; and
- Preparation of this technical report.

The field activities described below were conducted utilizing the project specific SAP which was developed by MGA in January of 2014 and subsequently approved by the United States Environmental Protection Agency (EPA) Region IX (MGA, 2014). The SAP described sampling and analysis activities that were required to be performed in order to determine the extent of abatement necessary prior to planned renovations. The HASP was developed in conjunction with the SAP and is an appendix within the SAP document.

#### 3. ASBESTOS CONTAINING MATERIAL (ACM) INSPECTION

#### 3.1 ACM Inspection Activities

On May 20, 2014, an EPA accredited, and State of Nevada licensed asbestos consultant from Macrotec conducted an asbestos assessment at the above referenced facility. Oversight for all field activities and sampling assistance were provided by MGA. The assessment was conducted to identify the presence of any materials containing asbestos pursuant to the requirements of:

- Nevada Occupational Health and Safety Administration (OSHA) NAC 618.960;
- OSHA's "Criteria to rebut the designation of installed material as PACM (Presumed Asbestos Containing Material)", 1926.1101(k)(5); and
- United States Environmental Protection Agency (EPA): 40 CFR Part 61, National Emission Standard for Hazardous Air Pollutants (NESHAP).

These regulations outline inspection and abatement requirements for materials containing asbestos.

Prior to sample collection, homogenous suspect materials were identified during an initial walk through of the library. Once identified, samples of suspect materials were collected per the EPA-approved sampling and analysis plan (SAP) (MGA, 2014), sealed in their own zipper locked plastic containers, and labeled with a unique identification number. Proper decontamination techniques described within the SAP were utilized after each sample was collected. Each sample was recorded on Macrotec's chain of custody form which accompanied all samples to the analytical laboratory.

The suspect ACM samples were analyzed for asbestos fibers utilizing Polarized Light Microscopy (PLM). Bulk sample analysis was conducted in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA, 1982) and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA, 1993). The laboratory analytical

reports and the chain of custody record are attached in Appendix A with the full assessment report.

#### 3.2 ACM Analytical Results

In accordance with OSHA 29 CFR 1926.1101 and NESHAPS 40 CFR 61.141, the definition of an asbestos containing material is "any material which contains more than one percent asbestos by weight".

Analytical results indicated that eleven of the 29 bulk samples that were collected during this inspection were positive for containing asbestos in excess of one percent. Table 1 below summarizes asbestos containing materials, sample locations, and asbestos content. The remaining samples that were collected during this investigation were reported as No Asbestos Detected (NAD). According to Triangle Laboratories, NAD is defined as not detected at/or below the detection limit for the method, which is one percent (1%) asbestos.

**Table 1: Asbestos Containing Material Results (Asbestos Containing Only)** 

McGill Library 4 North Fourth Street McGill, Nevada					
Sample No.	Material	Sample Location	Asbestos % Type	Condition	NESHAP Category
AB2	Base Cove – Black	Kitchen – Adj. door	3% Chrysotile	Non-friable	$II^3$
AB6	9x9 VCT <sup>1</sup> Floor Tile – White	Men's room – E side	3% Chrysotile	Non-friable	I <sup>4</sup>
AB7	9x9 VCT <sup>1</sup> Floor Tile – Brown	Main room – Adj. kitchen	3% Chrysotile	Non-friable	I
AB13	Window putty – white	Exterior – E side	5% Chrysotile	Non-friable	II
AB17	Roof mastic – gray	Exterior – Main roof; S end (vent)	10% Chrysotile	Non-friable	I
AB18	Roof mastic – gray	Exterior – Main roof; E side (gutter)	10% Chrysotile	Non-friable	I
AB19	Roof mastic – gray	Exterior – Main roof; N side (pony wall)	10% Chrysotile	Non-friable	I
AB23	TSI <sup>2</sup> - straight runs	NW Basement – SE corner	98% Chrysotile	Friable	RACM <sup>5</sup>
AB24	TSI <sup>2</sup> - straight runs	NW Basement – NE corner	98% Chrysotile	Friable	RACM <sup>5</sup>
AB25	TSI <sup>2</sup> - straight runs	NW Basement – N end, among debris	98% Chrysotile	Friable	RACM <sup>5</sup>
AB28	Mastic – black	NW Basement – E side	10% Chrysotile	Non-friable	II

<sup>&</sup>lt;sup>1</sup> VCT = Vinyl Composition Tile

These sample results are limited to the materials that were identified and sampled during this inspection.

<sup>&</sup>lt;sup>2</sup> TSI = Thermal System Insulation

<sup>&</sup>lt;sup>3</sup> Category II non-friable asbestos-containing material – any material, excluding those materials described as Category I, containing more than 1% asbestos

<sup>&</sup>lt;sup>4</sup> Category I non-friable asbestos-containing material – asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos

<sup>&</sup>lt;sup>5</sup> RACM – Regulated Asbestos-Containing Material; a material which is friable asbestos and is subject to NAC 618.850 to 618.986, which sets forth provisions for the abatement of asbestos

#### 4. LEAD-BASED PAINT (LBP) SAMPLING ASSESSMENT

#### 4.1 LBP Inspection Activities

On May 20, 2014, an EPA-certified inspector from Macrotec conducted a LBP assessment of suspect painted surface coatings at the library. Oversight for all field activities and sampling assistance were provided by MGA. In accordance with the SAP, X-Ray Fluoroescence (XRF) readings were collected to identify the presence and content level of lead above the action level in compliance with the United States Department of Housing and Urban Development (HUD) and the EPA. In addition, Macrotec personnel collected bulk paint samples to confirm the XRF analyzer readings. These were also collected to identify the presence and content level of lead for compliance with the OSHA and EPA regulatory requirements pertaining to worker protection and waste disposal.

Prior to sample collection, an initial walk through of the building was conducted to identify homogenous suspect materials that may contain lead-based paint. Once identified, painted surfaces were tested utilizing a Niton XLp300A paint analyzer. Per the project specific SAP, the instrument was calibrated prior to and after sample collection. Confirmatory paint chip samples were collected, sealed in their own zipper locked plastic containers and labeled with a unique identification number. Proper decontamination techniques described within the SAP were utilized after each sample was collected. Each sample was recorded on Macrotec's chain of custody form which accompanied all samples to the analytical laboratory. The confirmatory samples were analyzed for lead in accordance with the EPA's Method SW846-7420. The laboratory analytical reports and the chain of custody record are attached in Appendix A with the full assessment report.

#### 4.2 Lead-Based Paint Analytical Results

#### 4.2.1 XRF Analyzer Results

For this assessment, 122 XRF paint readings were collected within the building. Table 2 below lists all materials found to be above the HUD action level of 1.0 milligrams per centimeter squared (mg/cm²). Since the XRF analyzer's inconclusive range is from 0.8 to 1.2 mg/cm², any results of 0.8 and above are considered to be above the 1.0 mg/cm² action level. The XRF data related to the 122 paint readings are provided in Appendix A with the full assessment report.

Table 2: XRF Results (Above HUD Action Level)

McGill Lib

McGill Library 4 North Fourth Street McGill, Nevada				
Material	Location	Result mg/cm <sup>2</sup>		
Roof and gutter solder	Seams of front entrance roof Seams of perimeter pony walls, gutters, and downspouts on the main roof	21.8-40.8		
Wood exterior window casing - Gray	Outer window casing on two windows – west side of the building	1.2		
Metal radiator - Blue	Two large metal radiators on the north and south sides of the main room	1.0-1.3		
Wood trim - Blue	Wood trim in the entrance foyer (window casings, frames, sills, door frames, and crown molding)	0.6-0.9		
Wallboard, walls, and ceiling - Blue	Kitchen walls and ceilings	0.5-0.8		

#### 4.2.2 Confirmatory Sample Results

For this assessment, five bulk paint chip samples were collected to confirm XRF results obtained during the assessment. Table 3 below summarizes the results found for confirmatory samples. Results in bold font represent those exceeding the EPA action level of 5,000 mg/kg (0.5%). Analytical results for the confirmatory samples are provided in Appendix A with the full assessment report.

McGill Library **4 North Fourth Street** McGill, Nevada Corresponding Lab Result Material Location **XRF** Result (mg/kg) (mg/cm<sup>2</sup>) Wood window sill - Blue Main room - SE corner 1.820 Negative Metal radiator - Blue Main room - S side 14,600 1.0-1.3 Wood window sill - Blue Entrance foyer - NW corner 16,400 0.6 - 0.9Wallboard wall - Blue Kitchen door 7,390 0.5 - 0.8Wood crown molding - white Men's room - N wall 4.180 Negative

**Table 3: Results of Confirmatory Bulk Paint Samples** 

Results for the bulk paint samples indicate a confirmation of results found during collection of field XRF data.

#### 5. MICROBIAL INVESTIGATION REPORT

#### 5.1 Microbial Inspection Activities

On May 20, 2014, an American Council for Accredited Certification (ACAC) certified Microbial Consultant from Macrotec conducted an investigation to determine the presence of mold contamination within the subject property. Prior to sample collection, a visual inspection of the interior, exterior, roof, and basement of the building was conducted. During the inspection, visible water damage was observed in several locations within the building. In addition, moisture readings utilizing a "2-prong" moisture meter were collected throughout the building. At the time of the assessment, no elevated levels of moisture were found.

Macrotec determined that spore trap air sampling within the building would be effective in supporting the hypothesis that there may be hidden fungal growth on building materials in the areas that had water damage. This growth could be detected by the presence of elevated airborne mold spores within the building. Fungal spore trap air sampling is used to compare the types and concentrations of mold spores within the subject area compared to an outside control samples. A total of six air samples (one exterior and five interior) were collected for the assessment. The samples were collected utilizing Zefon Air-O-Cell air sampling cassettes and analyzed by non-viable methods. Non-viable methods utilize direct microscopic examination at 400x magnification to determine the presence of non-viable fungal spores at the genera level. High

volume pumps were used to collect the samples and the flow rates were calibrated before and after each use. Table 3 below summarizes the results for each sample collected. The full microbial investigation report with analytical data is provided in Appendix B.

**Table 3: Summary of Microbial Sample Results** 

	McGill Library 4 North Fourth Street McGill, Nevada						
Sample	Sample	Most P		Genera of Spores/m³)	Spores Found	d	Total
Number	Location	Aspergillus/ Penicillium	Asco- spores	Clado- sporium	Smut/ Myxomycete/ Periconia	Alter- naria	(Spores/m <sup>3</sup> )
MA1	Interior – Main room, SE corner	ND	99	543	4,938	148	5,876
MA2	Interior – Main room, NW corner	148	99	444	1,185	ND	2,024
MA3	Interior – Kitchen, center	198	49	593	1,086	49	2,074
MA4	Interior – Women's room, center	ND	99	741	691	ND	1,630
MA5	Interior – Men's room, center	99	ND	1,235	1,284	ND	2,667
MA6	Exterior – Sidewalk, W of building	ND	25	543	1,086	ND	1,655

These results show that the total number of spores were higher within the building than outside the building. It appears that the majority of spores found within the building were of the Smut/Myxomycete/Periconia genera, which generally do not grow in indoor environments. In addition, the elevated spores of the other genera found within the samples indicate that there is a potential for indoor fungal growth and contamination within the building.

#### 6. CONCLUSIONS/RECOMMENDATIONS

#### 6.1 Asbestos Assessment

Based on information obtained from the asbestos inspection, several samples collected from the building were identified to contain greater than 1% chrysotile asbestos.

EPA and Nevada Department of Industrial Relations regulations require the removal of all regulated asbestos-containing materials (RACM) prior to any renovation or demolition that could impact or disturb RACM. Therefore, prior to the disturbance of these materials, it is recommended that the following procedures are acknowledged in order to maintain EPA, State of Nevada OSHA and federal OSHA regulatory compliance, and reduce liability and health concerns:

- All RACM should be removed from the building prior to any renovation projects commencing which would disturb these materials.
- A certified asbestos abatement consultant licensed in the State of Nevada should be contracted to develop abatement specifications based on this investigation and any other additional findings.

- A certified asbestos abatement contractor licensed in the State of Nevada should be contracted to perform all activities involving the removal or disturbance of materials which contain greater than one percent asbestos. All abatement work should be done in strict accordance with applicable Federal, State and local regulations.
- Notification to the EPA and State of Nevada OSHA, which regulate the removal of asbestos, should be performed by an asbestos abatement contractor (if required).
- A certified asbestos consultant licensed in the State of Nevada should be contracted to conduct perimeter air monitoring and project oversight during the removal of all ACM, and final clearance air sampling assessments after the asbestos abatement is complete.

Although the floor tile, base cove, roof mastic, and wall mastic found to contain asbestos greater than 1% is non-friable and in good condition, it will require abatement as RACM if the probability exists that the material will become pulverized or reduced to a friable state by forces expected to act on the material in the course of renovation. Therefore, it is recommended that removal of all ACM occurs in the manner described above whenever feasible.

#### 6.2 Lead Based Paint Assessment

Based on information obtained from conducting this lead-based paint assessment, results indicated that multiple building materials contained lead in paint at levels above the HUD action level of 1 mg/cm<sup>2</sup> or the EPA action level of 5,000 mg/Kg by weight. These locations are found within the interior portions of the building and on the exterior portions of the building.

US EPA and OSHA regulations require the implementation of worker protection if there is a potential that paint containing lead will be disturbed during renovation activities. In accordance with these regulations, the following is recommended:

- A certified lead consultant should be contracted to develop a project specification based on this investigation and any other additional findings.
- A licensed Lead Abatement contractor licensed in the State of Nevada should be contracted to stabilize and or remove all regulated lead-painted materials.
- A certified lead consultant should be contracted to monitor the removal activities and to provide final clearance inspection reports.

#### 6.3 Microbial Investigation

Based on information obtained from conducting this microbial investigation, results indicated that mold growth, possibly due to observed water damage, is present within the building. In addition, it appears that the building's roof and gutter system may be damaged and in need of repair or replacement. The following recommendations were made in the report:

- Remove and discard the panel walls from floor to ceiling (and adjacent flooring and base cove) in the men's and women's bathroom (See Appendix B)
- Remove and discard the panel walls and ceiling, acoustic ceiling tiles, fiberglass insulation, carpet (and flooring beneath carpet), and blown-in insulation above the hard ceiling in the southeast portion of the main room (See Appendix B)
- Remove the carpet throughout the rest of the building
- Remove and clean the toilets in the restrooms
- Utilizing a HEPA vacuum, wet wiping, and roughing techniques, clean the wood framing, brick outer walls, and concrete sub-floor in the areas mentioned above.

Note: Some of the materials recommended above to be removed were found to contain asbestos and/or lead as per Macrotec's Asbestos and Lead Based Paint Investigation dated May 30, 2014.

Those materials should be abated and disposed in accordance with local, state, and federal regulations prior to removal and disposal.

#### 7. LIMITATIONS

MGA is not responsible for any claims or damages associated with the interpretation of information provided during this inspection. This report should not be regarded as a guarantee that no further asbestos containing materials or lead-based paint exists beyond that which was suspected, visually inspected, and/or sampled during this non-destructive survey. In addition, asbestos and lead may not be distributed evenly throughout a particular material and MGA cannot guarantee that all materials sampled are exactly as represented throughout the entire facility. In the event renovation or demolition activities uncover materials that were previously hidden or inaccessible during the time of this survey, then additional sample collection and analysis may be required. In the event materials that were previously hidden or inaccessible during the time of this inspection are disturbed and an exposure occurs, MGA shall be held harmless and will not be responsible for any claims made, financial or otherwise.

The conclusions and recommendations presented above are based upon the agreed scope of work outlined in the above report. MGA makes no warranties or guarantees as to the accuracy or completeness of information obtained from others. It is possible that information exists beyond the scope of this investigation. Additional information, which is not available to MGA at the time of writing the Report, may result in a modification of the conclusions and recommendations presented. The services performed by MGA have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. This report is not a legal opinion, but may, under certain circumstances, be prepared at the direction of counsel, may be in anticipation of litigation, and may be classified as an attorney-client communication or as an attorney work product.

This report has been prepared for the sole use of the addressee of this report, and cannot be released without consent from MGA. If a third party relies on the information provided in this report, MGA accepts no responsibility for damages suffered by the third party as a result of reliance of information contained in this report, and that nothing contained in this report shall create a contractual relationship or cause the third party to bring suit against MGA.

#### 8. CLOSURE

We appreciate the opportunity to provide these services to you. Should you have any questions regarding the contents of this report, or need additional information, please contact us at your convenience.

#### Respectfully submitted,

McGinley and Associates, Inc.

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances

The use of the word "certify" in this document constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification and does not constitute a warranty or guarantee, either expressed or implied.

Brett C. Bottenberg, C.E.M. #1690, Exp. 10/7/13

Senior Project Manager

Reviewed by:

Joseph M. McGinley, P.E., C.E.M.

Principal

#### 9. REFERENCES

McGinley and Associates, Inc. *Phase I Environmental Site Assessment, McGill Library, APN:* 004-071-02, 4 North Fourth Street, McGill, White Pine, Nevada. Project No. 804.11 – Task T2W, April 15, 2013

McGinley and Associates, Inc. Sampling and Analysis Plan, Asbestos and Lead Based Paint Assessment, McGill Library, 4 North Fourth Street, McGill, White Pine, Nevada. Project No. 804.11.001 – Task T2W:HAZ, January 31, 2014.

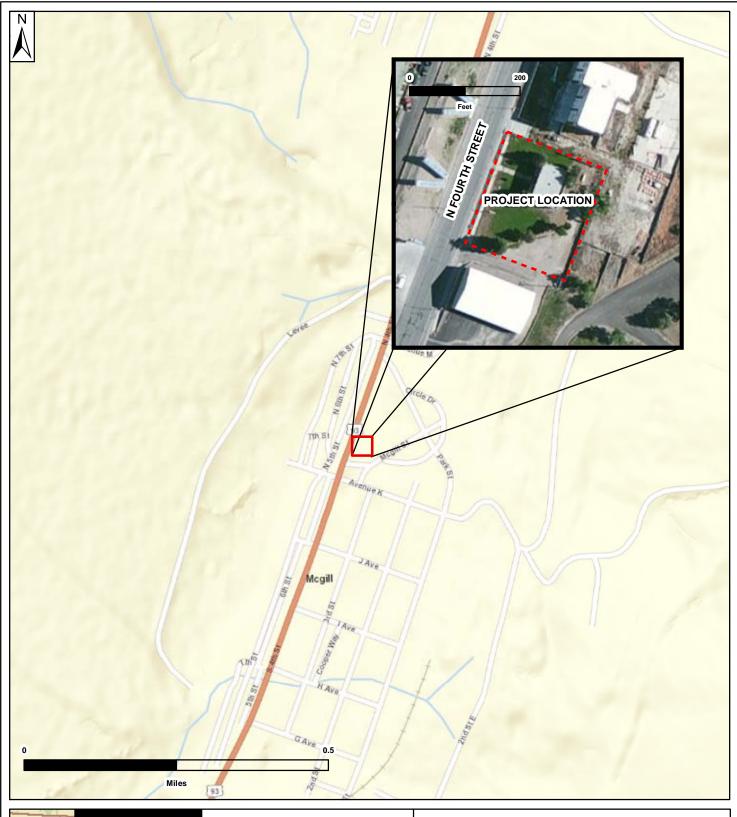
Nevada Occupational Health and Safety Administration (OSHA) – NAC 618.960.

OSHA's "Criteria to rebut the designation of installed material as PACM (Presumed Asbestos Containing Material)", 1926.1101(k)(5).

United States Environmental Protection Agency. 40 CFR Part 61, National Emission Standard for Hazardous Air Pollutants (NESHAP).

United States Environmental Protection Agency. *Interim Method for the Determination of Asbestos in Bulk Insulation Samples*. EPA 600/M4-82-020. December, 1982.

United States Environmental Protection Agency. *Method for the Determination of Asbestos in Bulk Building Materials*. EPA 600/R-93/116. July, 1993.





#### FIGURE 1

**PROJECT LOCATION MAP** -SHOWING-McGILL LIBRARY **4 NORTH FOURTH STREET** MCGILL, NEVADA

2/5/2014

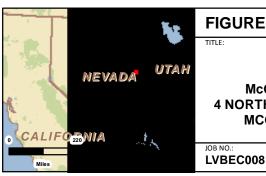
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LVBEC008\_figure1\_msp\_85x11\_portrait

NAD 1983 UTM Zone 11N US Feet

L.	DESIGNED	MSP	CHECKED	MSP	REVISION:
RE	DRAWN	MSP	APPROVED	вв	-





#### FIGURE 2

SITE MAP -SHOWING-McGILL LIBRARY **4 NORTH FOURTH STREET** MCGILL, NEVADA

2/6/2014

LVBEC008\_figure2\_msp\_85x11\_portrait

WGS 1984 Web Mercator Auxiliary Sphere

LL.	DESIGNED	MSP	CHECKED	MSP	REVISION:
RE	DRAWN	MSP	APPROVED	вв	-

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## **APPENDIX A**

**Macrotec Renovation Investigation Report** 



#### Renovation Investigation Report Asbestos and Lead Based Paint Inspection

#### **Project Information:**

McGill Library 4 N. 4<sup>th</sup> St. McGill, NV

#### Report Info:

Macrotec Project # 14068 May 30, 2014

#### Prepared For:

McGinley & Associates 6280 S. Valley View Blvd., Suite 604 Las Vegas, NV 89118

#### Prepared By:

Jason McAllister - Macrotec Consulting, LLC.

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#### INTRODUCTION

Macrotec Consulting performed an inspection for Asbestos-Containing Building Materials and Lead Based Paint on May 20, 2014. The inspection was conducted for the project defined as: Renovation of the one-story building, which had been previously utilized as the town library.

The intent of this inspection was to identify materials containing asbestos and lead based paint, within the subject site, that may be impacted during planned renovation activities. Macrotec's inspection services were conducted at the request of Brett Bottenberg of McGinley & Associates.

Jason McAllister, a Nevada Asbestos Abatement Consultant, License No.IPM0901, and a Nevada EPA Lead Inspector, certification #NV-R-125427-1, conducted these services for Macrotec Consulting at the subject site.

#### SCOPE OF SERVICES

Macrotec's inspection services were conducted utilizing the McGinley & Associates' *Sampling Analysis Plan (SAP)*, which was prepared by Mr. Bottenberg. This SAP was developed to provide an outline for the proper collection and analysis of asbestos and lead based paint at the subject site.

**Asbestos -** Macrotec's asbestos inspection services were conducted to identify the presence of any materials containing asbestos pursuant to the requirements of:

- Nevada OSHA NAC 618.850-618.986
- OSHA's "Criteria to rebut the designation of installed material as PACM (Presumed Asbestos Containing Material)", 1926.1101(k)(5).
- EPA's: 40 CFR Part 61 National Emission Standard for Hazardous Air Pollutants (NESHAP).

These regulations outline inspection and abatement requirements for materials containing asbestos.

**Lead -** Macrotec collected X-Ray Fluorescence (XRF) readings to identify the presence and content level of lead above the action level in compliance with the U.S. Department of Housing and Urban Development (HUD) and the Environmental Protection Agencies (EPA) regulatory requirements.

As per the SAP, Macrotec collected paint chip samples to confirm the readings found by the XRF analyzer. These paint chip samples were collected to identify the presence and content level of lead for compliance with the Occupational Safety and Health Administration's (OSHA) and the Environmental Protection Agencies (EPA) regulatory requirements pertaining to worker protection and waste disposal.

#### SITE DESCRIPTION

The subject site was a one-story brick building, with a flat roof and concrete foundation. There was a basement, which was standing height in the northwest corner and a crawl space height beneath the rest of the building.

Macrotec's inspection was limited to this building.

#### **INSPECTION METHODOLOGY**

An initial walk through of the subject site was conducted to identify homogeneous suspect materials containing asbestos and/or lead based paint, and their respective locations. This information was then used to develop a sample collection strategy.

Asbestos samples were collected by pre-wetting sample areas with water, then cutting or scraping the sample from the substrate with an appropriate sampling tool. Whenever possible, samples were collected from areas previously damaged or deteriorating. To avoid potential contamination due to unknown asbestos and/or lead based paint content; no building systems, components, or structures were demolished to obtain samples of potentially hidden materials containing asbestos.

Each suspect bulk sample was sealed in its own zip lock plastic container and labeled with a unique identification number. Sampling tools were individually cleaned before and after each sample was collected to avoid sample cross contamination. Decontamination was accomplished using single use, premoistened cloths.

Samples were recorded on Macrotec's chain-of-custody form. This form accompanied the samples to Triangle Enivronmental Service Center, Inc. (TESC), located in Moseley, Virginia. The National Voluntary Laboratory Accreditation Program (NVLAP) accredits TESC for analysis of bulk building material samples for asbestos.

Lead testing was conducted in accordance with chapter seven of the <u>Guidelines of</u> the <u>Evaluation and Control of Lead Based Paint Hazards in Housing</u> published by HUD. Interior XRF readings were taken on the painted surfaces which will be impacted during renovation activities. The HUD definition of lead based paint is lead equal to or greater than 1.0 mg/cm<sup>2</sup>. All results above this level are considered positive and all results found below this level are considered negative.

The confirmatory paint chip samples were recorded on Macrotec's chain of custody form and submitted to TESC and analyzed by Schneider Laboratories. The American Industrial Hygiene Association (AIHA) accredits Schneider Laboratories Inc. in Richmond Virginia, for analysis of paint chip samples for lead.

#### SAMPLE ANALYSIS METHODOLOGY

**Asbestos -** Suspect asbestos samples were subjected to analysis by polarized light microscopy (PLM). Bulk sample analysis was conducted in accordance with the EPA's "Test Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116, 1993.

**Lead -** Painted surfaces were tested using an X-Ray Fluorescence (XRF) analyzer. The XRF was a Niton XLp300A paint analyzer serial #26948. The instrument was calibrated to the manufactures specifications before and after the inspection, verified against the National Institute of Standards and Testing (NIST) Standard Reference Material (SRM) P/N 500-934. The analyzer was in control at all times of the NIST SRM lead standard.

To determine lead content, the confirmatory paint chip samples were submitted for analysis in accordance with the EPA's Method SW846-7420.

#### ASBESTOS SAMPLE ASSESSMENT

Macrotec's inspection of the subject site found **Twenty Two (22)** separate <u>suspect</u> asbestos building materials, of which a total of **Twenty Nine (29)** samples were collected and submitted for analysis.

The following table summarizes the materials that were found to be asbestos containing, the locations where the material is located, the material's friability and its NESHAP classification.

Material Number	Material Description	Material Locations	Material Friability	NESHAP
2	Black Base Cove	This material is located on the lower walls throughout the interior of the building. ~117 Sq. Ft. (~350 Linear Ft.)	Non- Friable	Category II <sup>1</sup>
5 & 6	White and Brown 9"x9" VCT	This material is located on the floors throughout the interior of the building. ~2,000 Sq. Ft.	Non- Friable	Category I <sup>2</sup>
11	White Window Putty	This material is located around the perimeter of the block windows (where they touch the exterior brick walls) on the west and east sides of the building. ~20 Sq. Ft. (~250 Linear Ft.)	Non- Friable	Category II <sup>1</sup>
15	Gray Roof Mastic	This material is located on the vents and pipes on the roll roofing portion of the roof and on the seams of the metal gutters and pony walls around the perimeter of the main roof.  ~50 Sq. Ft.	Non- Friable	Category I <sup>2</sup>

\_\_\_\_

<sup>&</sup>lt;sup>1</sup> Category II non-friable asbestos-containing material means any material, excluding Category I, containing more than 1 percent asbestos.

<sup>&</sup>lt;sup>2</sup> Category I nonfriable asbestos-containing material means asbestos containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos as determined by Polarized Light Microscopy (PLM)

19	Thermal System Insulation	This material is on pipes in the northwest basement and the north crawl space, as well as in a debris pile on the north side of the northwest basement. ~60 Linear Ft. (visible) * Note: Due to the poor condition of this material, Macrotec recommends that the basement not be entered without proper respirator protection	Friable	RACM <sup>3</sup>
		and personal protective equipment.		
21	Black Wall Mastic	This material is located on various separating	Non-	Category
		walls in the basement and crawl space.*	Friable	$H^{1}$

<sup>\*</sup>These materials are assumed to be in other portions of the crawl space under the building.

See Appendix A for a listing of the materials, material locations, samples, sample locations and results for this project. Wainscoting

#### LEAD BASED PAINT ASSESSMENT

#### **XRF Analyzer Results**

Macrotec collected **One Hundred Twenty Two (122)** XRF paint readings within the subject site. The following table summarizes the painted surfaces were found to be leaded (painted materials and/or surfaces above the HUD action level of 1.0 mg/cm²), the locations where the painted surface is located, and analyzer result. (Note: The analyzer's inconclusive range is 0.8 to 1.2 mg/cm², so results of 0.8 and above are listed as well.)

Paint/Material Description	Paint/Material Location	Condition	Result mg/cm <sup>2</sup>
Roof and Gutter Solder	This material is on the seams of the front entrance roof, and the seams of the perimeter pony walls, gutters and downspouts on the main roof.	Intact	21.8 - 40.8
Gray Wood Exterior Window Casing	This paint was on the outer window casing on the two windows on the west side of the building.	Intact	1.2
Blue Large Metal Radiator	This paint was on the two large metal radiators on the north and south side of the main room.	Intact	1.0 – 1.3
Blue Wood Trim	This paint is on the wood trim (window casings, frames, sills, door frames and casings, and crown molding) in the entrance foyer.	Intact	0.6 – 0.9
Blue Wallboard Walls and Ceiling	This paint is on the walls and ceiling in the kitchen.	Intact	0.5 – 0.8

**Note:** OSHA regulations require the implementation of worker protection if there is a potential that paint with any amount of lead in it will be disturbed during demolition or renovation activities. Painted materials that were found to contain lead, but not above the HUD action level, are highlighted in yellow in Appendix F.

Asbestos / Lead Based Paint Inspection

4 N. 4th St., McGill, NV

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<sup>&</sup>lt;sup>3</sup> RACM – Regulated Asbestos Containing Material means a material which is friable asbestos and is subject to NAC 618.850 to 618.986, which sets forth provisions for the abatement of asbestos.

#### **Bulk Paint Chip Results**

Macrotec collected **Five (5)** confirmatory bulk paint chip samples of five of the painted surfaces that were tested with the XRF analyzer.

The following table summarizes the painted surfaces that were bulk tested, the sample location, and the laboratory result.

Painted Surface Description	Sample Collection Location	Lab Result (Parts / Million)
Blue Wood Window Sill	Interior – Main Room – SE corner	1,820
Blue Meal Radiator	Interior – Main Room – S side	14,600
Blue Wood Window Sill	Interior – Entrance Foyer – NW corner	16,400
Blue Wallboard Wall	Interior – Kitchen – Adj. door	7,390
White Wood Crown Molding	Interior – Men's Room – N wall	4,180

The results of the bulk paint chip sampling confirms the results found by the XRF analyzer. See Appendix F.1 for a copy of the laboratory report.

#### **RECOMMENDATIONS**

**Asbestos -** US EPA and Nevada Department of Industrial Relations regulations require the removal of all regulated asbestos-containing materials (RACM) prior to any renovation or demolition that could impact or disturb RACM. In accordance with these regulations Macrotec recommends:

Hiring a Certified Asbestos Consultant to develop a project specification based on this investigation and any other additional findings.

Hiring a Nevada licensed Asbestos Abatement Contractor to remove all asbestos materials, which are either regulated or may become regulated during the course of renovation and/or demolition activities.

Hiring a Certified Asbestos Consultant to monitor the removal activities and to provide final clearance inspection reports.

Although the floor tile, base cove, roof mastic and wall mastic found to contain asbestos in this investigation are non-friable in good condition, they need to be dealt with as RACM if they have a high probability of becoming pulverized or reduced to powder by the forces expected to act on the material in the course of

renovation. Macrotec recommends the removal of all ACM (in the manner described above) whenever feasible.

**Lead -** OSHA regulations require the implementation of worker protection if there is a potential that paint with any amount of lead in it will be disturbed during demolition or renovation activities.

Macrotec always recommends hiring an EPA Licensed Lead Abatement contractor to stabilize and/or remove all regulated lead painted materials. EPA now allows lead-safe certified renovation contractors and certified persons under the *Renovate Right* law to perform renovation of leaded areas, but a lead abatement company is necessary if the material is to be fully abated.

Macrotec also recommends that after any renovation or abatement of leaded materials is completed, a certified lead inspector or risk assessor be hired to provide final clearance inspection report. This will ensure the work has been completed successfully, prove the adjacent areas have not been contaminated, and will further limit the facilities liability.

#### **INSPECTION LIMITATIONS**

The information contained in this report is limited to those areas and suspect materials found to be visually accessible through reasonable means.

Macrotec conducted a non-destructive survey. No demolition of building materials was conducted to determine the presence of asbestos or lead in wall cavities, chases or other inaccessible areas. Macrotec cannot warrant that these areas do not contain asbestos or lead in locations other than those noted in this report, however, a good faith effort was made to conduct a comprehensive survey.

Macrotec accepts no liability for additional materials or under reporting of asbestos materials that exist below other floor coverings.

This report is not represented as, nor is it intended to be, an asbestos or lead abatement scope of work or project specification. The quantities of materials listed in the *Asbestos Sample Assessment* section are approximations and should not be utilized for bidding purposes.

If suspect materials are discovered during future demolition operations, cease all general work activities which could impact the discovered suspect materials, until confirmation sampling can be conducted.

Thank you for allowing Macrotec Consulting to assist you with your environmental consulting needs. Please contact me with any questions regarding this report at (702) 949-6225.

Jason R. McAllister

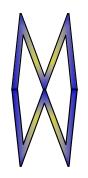
Nevada-OSHA Certified Asbestos Abatement Consultant

Certificate #IPM0901

**US-EPA Certified Lead Inspector** 

Certification #NV-R-125427-1

# Appendix A



# Macrotec Consulting, LLC.

## Appendix A - Asbestos Assessment

Macrotec Job #14068 - McGill Library

The following table lists each of the materials suspected to contain asbestos at the subject site. For each material the sample number, location and laboratory result are listed. If the material was found to contain asbestos, the friablity and NESHAP classification is identified.

#### 1 Wallboard Panel -

**No Asbestos Detected** 

This material is the component of the walls and ceilings throughout the interior of the building.

AB1	Interior - Kitchen - Adj. door	None Detected

#### 2 Base Cove - Black

Non-Friable, Category II

This material is located on the lower portion of the walls throughout the interior of the building. ~117 Sq. Ft. (~350 Linear Ft.)

AB2	Interior - Kitchen - Adj. door	3% Chrysotile

#### 3 Base Cove Mastic - Brown

**No Asbestos Detected** 

This material is located on the lower portion of the walls throughout the interior of the building.

AB3	Interior - Kitchen - Adj. door	None Detected
AB4	Interior - Main Room - SE corner	None Detected

#### 4 2X4 Ceiling Tile -

No Asbestos Detected

This material is located on the ceiling in the main room.

AB5	Interior - Main Room - SE corner	None Detected

#### 5 9X9 VCT - White

Non-Friable, Category I

This material is located on the floors throughout the interior of the building. ~2,000 Sq. Ft. (Combined amount of 9x9 VCT)

AB6 Interior - Men's Room - E side 3% Chrysotile
--

#### 6 9X9 VCT - Brown

Non-Friable, Category I

This material is located on the floors throughout the interior of the building. ~2,000 Sq. Ft. (Combined amount of 9x9 VCT)

AB7 Interior - Main Room - Adj. kitchen	3% Chrysotile
---	---------------

#### 7 Floor Tile Mastic - Black

**No Asbestos Detected** 

This material is located on the floors throughout the interior of the building.

AB8	Interior - Men's Room - E side	None Detected
AB9	Interior - Main Room - Adj. kitchen	None Detected

Asbestos Survey Macrotec Job #14068

4 N. 4th St., McGill, NV Appendix A

## Appendix A

#### Macrotec Job #14068 - McGill Library

	sulation - White aterial is located above the hard ceiling throughout the building's attic.	No Asbestos Detected
AB10	Interior - Kitchen - Above ceiling	None Detected
	rap - Silver/Black aterial is located on the metal ducts above the hard ceiling throughout th	No Asbestos Detected e building's attic.
AB11	Interior - Kitchen - Above ceiling	None Detected
-	: <b>Mastic - Yellow</b> aterial is located beneath the carpet throughout the main room.	No Asbestos Detected
AB12	Interior - Main Room - S side	None Detected
This m	w Putty - White aterial is located around the perimeter of the block windows (where they d west sides of the exterior of the building. ~20 Sq. Ft. (~250 Linear Ft.	•
AB13	Exterior - E Side - Adj. E door	5% Chrysotile
<b>12 Morta</b> This m	- <b>Gray</b> aterial is located on the building's exterior walls.	No Asbestos Detected
AB14	Exterior - E Side - Adj. E door	None Detected
13 Stucco - No Asbe This material is located around the perimeter of the door on the east side of the building.		No Asbestos Detected building.
AB15	Exterior - E Side - Adj. E door	None Detected
	It Roll Roofing - Gray	No Asbestos Detected
_	aterial is the primary component of the main roof.	
_		None Detected
AB16	Exterior - Main Roof - Center	None Detected Non-Friable, Category
AB16  This m  AB16  This m	Exterior - Main Roof - Center  astic - Gray	None Detected Non-Friable, Category

Asbestos Survey Macrotec Job #14068
4 N. 4th St., McGill, NV Appendix A

10% Chrysotile

Exterior - Main Roof - N Side (Pony Wall)

AB19

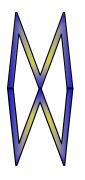
## Appendix A

## Macrotec Job #14068 - McGill Library

16	6 Caulk - White This material was found around the sign above the building's main entrance.		No Asbestos Detected	
	AB20	Exterior - W Side - Adj. sign	None Detected	
17		ulation - Black rial was found on the building's main entrance roof.	No Asbestos Detected	
	AB21	Exterior - Entry Roof - Center	None Detected	
18	Wall Substrate (Drywall & Mud) - Smooth  This material is located around the perimeter of the east exterior door, and the two west windows in the main room.			
	AB22	Interior - Main Room - Adj. E ext door	None Detected	
19	TSI - Straight Runs This material is located in the NW basement and north crawl space. ~60 Linea more of this material in the crawl space on the east side of the building.)		·	
	AB23	Interior - NW Basement - SE corner	98% Chrysotile	
	AB24	Interior - NW Basement - NE corner	98% Chrysotile	
20	AB25 Interior - NW Basement - N end, among debris 98% Chrysc  20 Debris on Floor - No Asbestos De			
	This mate	rial is located in the NW basement.		
	AB26	Interior - NW Basement - N end	None Detected	
	AB27	Interior - NW Basement - S end	None Detected	
21	Mastic - Black This material is located on dividing walls in the NW basement and crawl spaces. ~80 Square Feet			
	AB28	Interior - NW Basement - E side	10% Chrysotile	
22		ap - Yellow rial is located on the metal rectangular ducts running beneath the build	No Asbestos Detecteding.	
	AB29	Interior - SW Crawl Space - N end	None Detected	

Asbestos Survey Macrotec Job #14068

# Appendix B



# Macrotec Consulting, LLC.

## Appendix B - Lead Assessment Macrotec Job #14068 - McGill Library

The following table lists each of the painted surfaces found to contain lead at the subject site, Materials with a result greater than 1.0 mg/cm<sup>2</sup> are considered leaded by the EPA and HUD. Note: OSHA requires PPE for materials containing any amount of lead. For each painted surface, the description, material location and result are listed.

Painted Surface Description	Painted Surface Location	XRF Result (mg/cm²)
Roof and Gutter Solder	This material is on the seams of the front entrance roof, and the seams of the perimeter pony walls, gutters and downspouts on the main roof.	21.8 - 40.8
Gray Wood Exterior Window Casing	This paint is on the outer window casing on the two windows on the west side of the building.	1.2
Blue Large Metal Radiator	This paint is on the two large metal radiators on the north and south sides of the main room.	1.0 - 1.3
Blue Wood Trim	This paint is on the wood trim (window casings, frames, sills, door frames and casings, and crown molding) in the entrance foyer.	0.6 - 0.9
Blue Wallboard Walls and Ceiling	This paint is on the walls and ceiling in the kitchen.	0.5 - 0.8

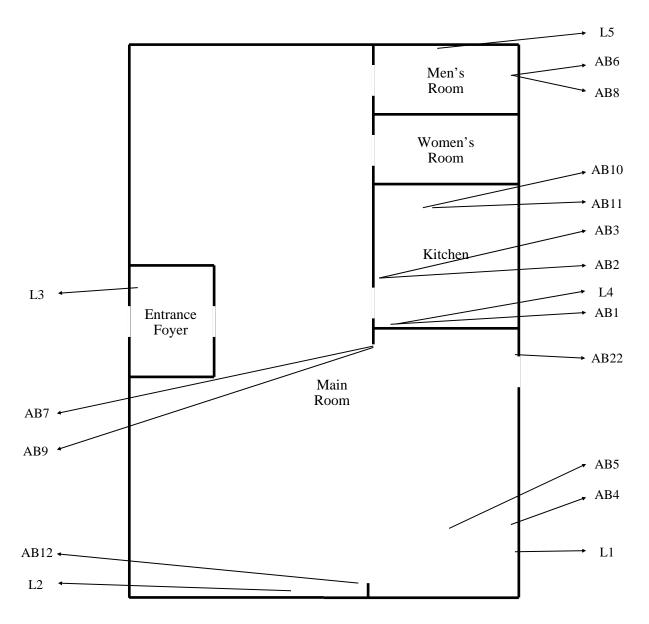
Lead Paint Survey Macrotec Job #14068

4 N. 4th St., McGill, NV

# Appendix C

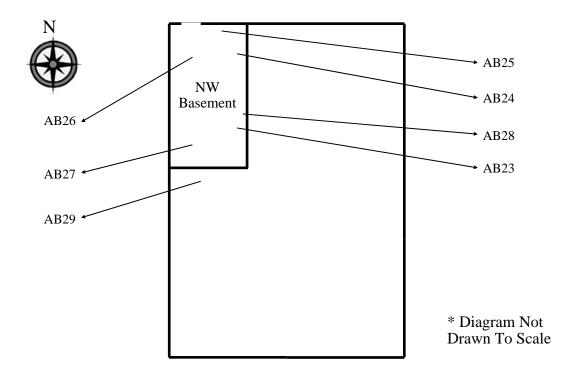
# **Sample Location Diagram**





<sup>\*</sup> Diagram Not Drawn To Scale

# **Sample Location Diagram**





Asbestos and Lead Inspection

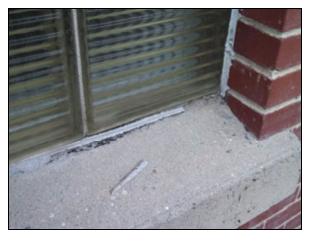
# Appendix D



Picture 1—Asbestos containing 9"x9" VCT (including beneath carpet) on the floor in the main room.



Picture 2—Asbestos containing black vinyl base cove on the wall in the main room.



Picture 3—Asbestos containing white window putty around the perimeter of the block windows on the east side of the building.



Picture 4—Asbestos containing gray roof mastic on the main roof.



Picture 5—Asbestos containing TSI on the pipes in the north crawl space beneath the building.



Picture 6—Asbestos containing TSI debris in the northwest basement.



Picture 7—Asbestos containing black wall mastic in the northwest basement.



Picture 8—Asbestos containing TSI and black wall mastic in the northwest basement.



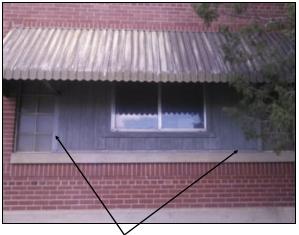
Picture 9—Leaded solder on the seam of the entrance roof.



Picture 10—Lead paint on the blue metal radiator in the main room.



Picture 11—East side of the building showing the gutter downspout with leaded solder and block windows with asbestos containing putty.



Picture 12—The light gray trim around the perimeter of the T1-11 on the front windows is lead based paint.

### Appendix E



13509 East Boundary Road, Suite B, Midlothian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Macrotec Consulting TESC LOGIN #: 140522D

9724 Mild Weather Ct.

Las Vegas, NV 89148 DATE OF RECEIPT: 5/22/2014

DATE OF ANALYSIS: 5/22/2014 DATE OF REPORT: 5/22/2014

CLIENT JOB: 14068

JOB SITE: 4 N.4th St., McGill, NV ANALYST: F. Jiang

TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
1	AB1 / Brown fibers	NAD	98% Cellulose	2%
2	AB2 / Black rubber	3% Chrysotile		97%
3	AB3 / Brown adhesive	NAD		100%
4	AB4 / Brown adhesive	NAD		100%
5	AB5 / Gray fibers	NAD	80% Cellulose 10% Fiberglass	10%
6	AB6 / White vinyl	3% Chrysotile		97%
7	AB7 / Brown vinyl	3% Chrysotile		97%
8	AB8 / Black adhesive	NAD		100%
9	AB9 / Black adhesive	NAD		100%
10	AB10 / White fibers	NAD	98% Fiberglass	2%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA 600/M4-82-020, Dec. 1982 and "Method for the Determination of Asbestos in Bulk Building Materials", EPA 600/R-93/116, July 1993. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report shall not be reproduced, except in full written approval of Triangle Environmental Service Center, Inc. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0 [LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Yuedong Fang, Senior Geologist

Thursday, May 22, 2014 Page 1 of 4



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### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Macrotec Consulting

9724 Mild Weather Ct.

Las Vegas, NV 89148

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DATE OF REPORT: 5/22/2014

TESC LOGIN #: 140522D

**CLIENT JOB: 14068** 

JOB SITE: 4 N.4th St., McGill, NV

ANALYST: F. Jiang

TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
11	AB11 / Black, brown fibers & foil	NAD	95% Cellulose	5%
12	AB12 / Yellow adhesive	NAD		100%
13	AB13 / White powder	5% Chrysotile		95%
14	AB14 / Gray granular	NAD		100%
15	AB15 / Gray granular	NAD		100%
16	AB16 / Black tar-like	NAD	20% Fiberglass	80%
17	AB17 / Gray adhesive	10% Chrysotile		90%
18	AB18 / Gray adhesive	10% Chrysotile		90%
19	AB19 / Gray adhesive	10% Chrysotile		90%
20	AB20 / White powder	NAD		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA 600/M4-82-020, Dec. 1982 and "Method for the Determination of Asbestos in Bulk Building Materials", EPA 600/R-93/116, July 1993. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report shall not be reproduced, except in full written approval of Triangle Environmental Service Center, Inc. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0 [LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

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Feng Jiang, MS Senior Geologist, Laboratory Director Yuedong Fang, Senior Geologist

Thursday, May 22, 2014 Page 2 of 4



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### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Macrotec Consulting

9724 Mild Weather Ct.

Las Vegas, NV 89148

DATE OF RECEIPT: 5/22/2014 DATE OF ANALYSIS: 5/22/2014 DATE OF REPORT: 5/22/2014

TESC LOGIN #: 140522D

CLIENT JOB: **14068** 

JOB SITE: 4 N.4th St., McGill, NV

ANALYST: F. Jiang

TESC SAMPLE #	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
21	AB21 / Black powder	NAD		100%
22A	AB22-Drywall / White powder, brown fibers	NAD	20% Cellulose	80%
22B	AB22-Mud / White powder	NAD		100%
23	AB23 / Gray fibers	98% Chrysotile		2%
24	AB24 / Gray fibers	98% Chrysotile		2%
25	AB25 / Gray fibers	98% Chrysotile		2%
26	AB26 / Gray powder	NAD		100%
27	AB27 / Brown fibers, gray powder	NAD	90% Cellulose	10%
28	AB28 / Black adhesive	10% Chrysotile		90%
29	AB29 / Yellow fibers	NAD	98% Cellulose	2%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA 600/M4-82-020, Dec. 1982 and "Method for the Determination of Asbestos in Bulk Building Materials", EPA 600/R-93/116, July 1993. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report shall not be reproduced, except in full written approval of Triangle Environmental Service Center, Inc. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0 [LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Yuedong Fang, Senior Geologist

Thursday, May 22, 2014 Page 3 of 4



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### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

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DATE OF ANALYSIS: 5/22/2014 DATE OF REPORT: 5/22/2014

CLIENT JOB: 14068

JOB SITE: 4 N.4th St., McGill, NV ANALYST: F. Jiang

TESC	CLIENT SAMPLE ID	ESTIMATED	NON ASBESTOS	NON FIBROUS
\$ SAMPLE #	& GROSS DESCRIPTION	% ASBESTOS	% FIBERS	% MATERIALS

Total Samples/Layers Analyzed: 30

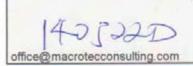
Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA 600/M4-82-020, Dec. 1982 and "Method for the Determination of Asbestos in Bulk Building Materials", EPA 600/R-93/116, July 1993. None Detected: not detected at/or below the detected limit of method (Reporting limit: 1% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report shall not be reproduced, except in full written approval of Triangle Environmental Service Center, Inc. This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. This test report relates only to the item(s) tested.

NVLAP Lab Code: 200794-0 [LEGEND NAD=No Asbestos Detected, Lino.=Linoleum, JC=Joint Compound]

**Reviewed By Authorized Signatory:** 

Feng Jiang, MS Senior Geologist, Laboratory Director Yuedong Fang, Senior Geologist

Thursday, May 22, 2014 Page 4 of 4



### Macrotec Consulting, LLC

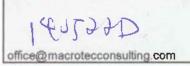
Phone: (702) 949-6225 Fax: (702) 629-5677

### **Bulk Sampling Chain of Custody Form**

Client Name	McGinley	Project Number	14068
	McGill Library	Collection Date	5/20/2014
Project Location	on 4 N. 4th St., McGill, NV.	WO Number	
Technician _	Jason R McAllister	Turn Around Time	Rush
Laboratory _	(V) (-1)	Method of Analysis	PLM
Stop at 1st Po	+131	Matrix Bulk	

10.0710.655	ple #	Sample Description (Material Type : Color / Description)	Sample Location (General : Room : Specific)
7	AB1	Wall Panel -	Interior - Kitchen - Adj. door
2	AB2	Base Cove - Black	Interior - Kitchen - Adj. door
3	AB3	Base Cove Mastic - Brown	Interior - Kitchen - Adj. door
3	AB 4	Base Cove Mastic - Brown	Interior - Main Room - SE corner
4	AB5	2X4 Ceiling Tile -	Interior - Main Room - SE corner
5	AB6	9X9 VCT - White	Interior - Men's Room - E side
6	AB7	9X9 VCT - Brown	Interior - Main Room - Adj. kitchen
7	AB8	Floor Tile Mastic - Black	Interior - Men's Room - E side
7	AB9 '	Floor Tile Mastic - Black	Interior - Main Room - Adj. kitchen
8	AB 10	Attic Insulation - White	Interior - Kitchen - Above ceiling
9	AB 11	Duct Wrap - Silver/Black	Interior - Kitchen - Above ceiling
10	AB 12	Carpet Mastic - Yellow	Interior - Main Room - S side
77	AB13	Window Putty - White	Exterior - E Side - Adj. E door
12	AB 14	Mortar - Gray	Exterior - E Side - Adj. E door
73	AB15	Stucco -	Exterior - E Side - Adj. E door
74	AB16	Asphalt Roll Roofing - Gray	Exterior - Main Roof - Center
75	AB 17	Roof Mastic - Gray	Exterior - Main Roof - 5 End (Vent)
15	AB 18	Roof Mastic - Gray	Exterior - Main Roof - E Side (Gutter)
15	AB 19	Roof Mastic - Gray	Exterior - Main Roof - N Side (Pony Wall);
16	AB 20	Caulk - White	Exterior - W Side - Adj. sign

/ /	111/1	8		1/
Relinquished By:	Date:5/20/19	Received By:	W	Date: Jul 1
. //	, , ,			(0)
Relinquished By:	Date:	Received By:	U	Date:



### Macrotec Consulting, LLC

Phone: (702) 949-6225 Fax: (702) 629-5677

### **Bulk Sampling Chain of Custody Form**

Client Name McGinley	Project Number	14068
Project Name McGill Library	Collection Date	5/20/2014
Project Location 4 N. 4th St., McGill, NV.	WO Number	
Technician Jason R McAllister	Tum Around Time	Rush
Laboratory TESC	Method of Analysis	PLM
Stop at 4st Bacitive2: V/N Composite Wall Substrate2:	2 11	

	ple # Count	Sample Description (Material Type : Color / Description)	Sample Location (General : Room : Specific)
17	AB 21	Wire Insulation - Black	Exterior - Entry Roof - Center
18	AB 22	Wall Substrate (Drywall & Mud) - Smooth	Interior - Main Room - Adj. E ext door
79	AB 23	TSI - Straight Runs	Interior - NW Basement - SE corner
79	AB 24	TSI - Straight Runs	Interior - NW Basement - NE corner
19	AB 25	TSI - Straight Runs	Interior - NW Basement - N end, among debris
20	AB 26	Debris on Floor :	Interior - NW Basement - N end
20	AB 27	Debris on Floor -	Interior - NW Basement - 5 end
27	AB 28	Mastic - Black	Interior - NW Basement - E side
22	AB 29	Duct Wrap - Yellow	Interior - SW Crawl Space - N end

Relinquished By:

Relinquished By:

Date: 5/00/14 Re

Received By:

Date:5 12

Date:

Received By:

Date:

### Appendix F

Time	Duration	Component	Substrate	Color	Side	Room	Results	Depth	PbC	PbC Error	PbL	PbL Error	PbK	<b>PbK Error</b>
5/20/2014 16:03	100.79		Res:374.77 ; Esca	ale1:4.37;	EscleCT:2	2.46			3.53	0	0.49	0	0	0
5/20/2014 16:06	1.05		Cal	Green			Negative	3.26	< LOD	0.9	< LOD	0.9	< LOD	3.64
5/20/2014 16:06	1.05		Cal	Green			Negative	2.98	< LOD	0.75	< LOD	0.75	< LOD	3.9
5/20/2014 16:07	1.04		Cal	Green			Negative	2.5	< LOD	0.61	< LOD	0.61	< LOD	3.96
5/20/2014 16:10	1.04	Wall	Wallboard	Blue	Α	Main Room (SE)	Negative	3.17	< LOD	0.36	< LOD	0.36	< LOD	2.15
5/20/2014 16:10	1.05	Wall	Wallboard	Blue	В	Main Room (SE)	Negative	3.31	< LOD	0.43	< LOD	0.43	< LOD	2.17
5/20/2014 16:11	1.05	Wall	Wallboard	Blue	С	Main Room (SE)	Negative	4.26	< LOD	0.56	< LOD	0.56	< LOD	2.3
5/20/2014 16:11	1.05	Wall	Wallboard	Blue	D	Main Room (SE)	Negative	2.83	< LOD	0.36	< LOD	0.36	< LOD	2.03
5/20/2014 16:12	1.58	Wall	Drywall	Blue	С	Main Room (SE)	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	2.4
5/20/2014 16:12	1.06	Trim	Wood	Blue	С	Main Room (SE)	Negative	1	< LOD	0.04	< LOD	0.04	< LOD	2.11
5/20/2014 16:12	1.05	Door Frame	Metal	Blue	С	Main Room (SE)	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	4.37
5/20/2014 16:13	1.05	Door	Metal	Gray	С	Main Room (SE)	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	4.46
5/20/2014 16:14	1.06	Baseboard	Vinyl	Black	D	Main Room (SE)	Negative	1.01	< LOD	0.04	< LOD	0.04	< LOD	3.08
5/20/2014 16:14	3.39	Floor	Vinyl	Brown		Main Room (SE)	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	1.59
5/20/2014 16:15	1.05	Window Frame	Wood	Blue	С	Main Room (SE)	Negative	2.18	< LOD	0.33	< LOD	0.33	< LOD	2.34
5/20/2014 16:15	1.05	Window Casing	Wood	Blue	С	Main Room (SE)	Negative	2.67	< LOD	0.47	< LOD	0.47	< LOD	2.41
5/20/2014 16:15	1.04	Window Casing	Wood	Blue	С	Main Room (SE)	Negative	3.49	< LOD	0.67	< LOD	0.67	< LOD	3.45
5/20/2014 16:16	1.05	Window Sill	Wood	Blue	С	Main Room (SE)	Negative	3.39	< LOD	0.65	< LOD	0.65	< LOD	2.39
5/20/2014 16:17	3.14	Radiator	Metal	Blue	С	Main Room (SE)	Negative	4.27	< LOD	1.49	< LOD	0.23	< LOD	1.49
5/20/2014 16:19	1.04	Roof	Metal	Brown	Α	<b>Entrance Roof</b>	Negative	1	< LOD	0.11	< LOD	0.11	< LOD	3.18
5/20/2014 16:19	0.53	Roof Solder	Metal	Brown	Α	<b>Entrance Roof</b>	Positive	1.53	< LOD	40.8	3.7	2	< LOD	40.8
5/20/2014 16:20	0.52	<b>Roof Solder</b>	Metal	Brown	Α	<b>Entrance Roof</b>	Positive	1.64	< LOD	34.2	4.3	2.3	< LOD	34.2
5/20/2014 16:22	1.05	Stair Rail	Metal	Brown	Α	Exterior	Negative	1	< LOD	0.08	< LOD	0.08	< LOD	4.55
5/20/2014 16:22	1.05	Stair Rail	Metal	Brown	Α	Exterior	Negative	1	< LOD	0.1	< LOD	0.1	< LOD	2.25
5/20/2014 16:23	1.06	Stair Rail	Metal	Brown	Α	Exterior	Negative	1.05	< LOD	0.14	< LOD	0.14	< LOD	3.15
5/20/2014 16:23	1.05	Window Trim	Metal	Gray	Α	Exterior	Negative	1	< LOD	0.04	< LOD	0.04	< LOD	3.3
5/20/2014 16:23	1.05	Window Trim	Metal	Gray	Α	Exterior	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	2.85
5/20/2014 16:24	3.67	Window Trim Outer	Metal	Gray	Α	Exterior	Positive	1.89	1.2	0.2	1.2	0.2	< LOD	1.05
5/20/2014 16:26	1.83	Wall	Brick	Red	Α	Exterior	Negative	3.84	< LOD	0.13	< LOD	0.13	< LOD	3.47
5/20/2014 16:26	3.15	Awning	Metal	Brown	Α	Exterior	Negative	1	0.3	0.1	0.3	0.1	< LOD	1.14
5/20/2014 16:27	7.36	Awning	Metal	Brown	Α	Exterior	Negative	1.1	0.6	0.1	0.6	0.1	< LOD	1.2
5/20/2014 16:27	3.94	Awning	Metal	Brown	Α	Exterior	Negative	1.06	0.24	0.05	0.24	0.05	< LOD	0.98
5/20/2014 16:29	1.05	Door Header	Metal	Red	Α	Exterior	Negative	1	< LOD	0.09	< LOD	0.09	< LOD	4.25
5/20/2014 16:29	1.05	Door Header	Metal	Red	Α	Exterior	Negative	1.03	< LOD	0.17	< LOD	0.17	< LOD	4.57
5/20/2014 16:30	1.06	Light	Metal	Gray	Α	Exterior	Negative	2.44	< LOD	0.11	< LOD	0.11	< LOD	4.4
5/20/2014 16:31	1.05	Door	Metal	Red	В	Exterior	Negative	1	< LOD	0.09	< LOD	0.09	< LOD	4.89
5/20/2014 16:31	1.05	Door	Metal	Red	В	Exterior	Negative	1	< LOD	0.08	< LOD	0.08	< LOD	4.59
5/20/2014 16:35	1.58	Electric Panel	Metal	Green	В	Basement	Negative	1.08	0.7	0.3	0.7	0.3	< LOD	3.15
5/20/2014 16:35	1.05	Electric Panel	Metal	Green	D	Basement	Negative	1	0.5	0.3	0.5	0.3	< LOD	4.65
5/20/2014 16:36	1.31	Furnace	Metal	Yellow	В	Basement	Negative	1.14	0.7	0.3	0.7	0.3	< LOD	3.66

Time	Duration	Component	Substrate	Color	Side	Room	Results	Depth	PbC	PbC Error	PbL	PbL Error	PbK	<b>PbK Error</b>
5/20/2014 16:36	3.66	Furnace	Metal	Yellow	В	Basement	Negative	1.15	0.7	0.1	0.7	0.1	< LOD	1.35
5/20/2014 16:38	1.04	Propane Tank	Metal	White	С	Exterior	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	4.78
5/20/2014 16:38	1.06	Electric Panel	Metal	Gray	С	Exterior	Negative	1	< LOD	0.05	< LOD	0.05	< LOD	4.44
5/20/2014 16:39	1.05	Gutter	Metal	Gray	С	Exterior	Negative	1	< LOD	0.06	< LOD	0.06	< LOD	3.53
5/20/2014 16:39	0.52	<b>Gutter Solder</b>	Metal	Gray	С	Exterior	<b>Positive</b>	1.71	< LOD	21.75	< LOD	2.4	< LOD	21.75
5/20/2014 16:40	1.05	Window Header	Metal	Red	С	Exterior	Negative	1.5	< LOD	0.21	< LOD	0.21	< LOD	4.65
5/20/2014 16:41	1.04	bench	Wood	Blue	С	Exterior	Negative	1.73	< LOD	0.06	< LOD	0.06	< LOD	1.86
5/20/2014 16:41	2.88	Wall	Plaster	Beige	С	Exterior	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	2.46
5/20/2014 16:42	1.05	Door	Metal	Beige	С	Exterior	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	4.78
5/20/2014 16:42	1.04	Door Frame	Metal	Beige	С	Exterior	Negative	1	< LOD	0.03	< LOD	0.03	< LOD	4.34
5/20/2014 16:43	3.14	Wall	Wallboard	Blue	Α	Main Room	Negative	1.33	0.6	0.2	0.6	0.2	< LOD	1.05
5/20/2014 16:44	2.36	Wall	Wallboard	Blue	В	Main Room	Negative	1.86	0.5	0.2	0.5	0.2	< LOD	1.65
5/20/2014 16:44	2.38	Wall	Wallboard	Blue	С	Main Room	Negative	2.62	0.6	0.3	0.6	0.3	< LOD	1.65
5/20/2014 16:44	2.89	Wall	Wallboard	Blue	D	Main Room	Negative	1.98	0.7	0.2	0.7	0.2	< LOD	1.5
5/20/2014 16:45	1.04	Door	Wood	Blue	Α	Main Room	Negative	1.56	< LOD	0.44	< LOD	0.44	< LOD	2.72
5/20/2014 16:46	1.31	Door Frame	Wood	Blue	Α	Main Room	Negative	2.53	0.6	0.4	0.6	0.4	< LOD	2.4
5/20/2014 16:46	1.3	Door Casing	Wood	Blue	Α	Main Room	Negative	2.59	0.4	0.45	0.4	0.45	< LOD	2.7
5/20/2014 16:46	1.05	Window Frame	Wood	Blue	Α	Main Room	Negative	3.16	0.4	0.9	0.4	0.9	< LOD	2.7
5/20/2014 16:47	1.05	Window Casing	Wood	Blue	Α	Main Room	Negative	2.86	0.4	0.75	0.4	0.75	< LOD	3
5/20/2014 16:47	1.05	Window Frame	Wood	Blue	Α	Main Room	Negative	3.04	0.4	0.75	0.4	0.75	< LOD	2.79
5/20/2014 16:47	1.05	Window Casing	Wood	Blue	Α	Main Room	Negative	1	< LOD	0.04	< LOD	0.04	< LOD	3.15
5/20/2014 16:52	1.05	Window Sill	Wood	Blue	Α	Main Room	Negative	2.47	0.3	0.62	0.3	0.62	< LOD	3.09
5/20/2014 16:54	19.94	Radiator	Metal	Blue	D	Main Room	<b>Positive</b>	3.02	1	0.1	1	0.1	0.9	0.4
5/20/2014 16:54	3.93	Radiator	Metal	Blue	D	Main Room	<b>Positive</b>	3.18	1.3	0.3	1.3	0.3	< LOD	1.65
5/20/2014 16:56	1.31	Wall	Wallboard	Blue	Α	Entrance	Negative	2.3	< LOD	0.28	< LOD	0.28	< LOD	2.15
5/20/2014 16:56	1.05	Wall	Wallboard	Blue	В	Entrance	Negative	2.59	< LOD	0.57	< LOD	0.57	< LOD	2.19
5/20/2014 16:56	1.05	Wall	Wallboard	Blue	С	Entrance	Negative	2.33	< LOD	0.38	< LOD	0.38	< LOD	2.01
5/20/2014 16:57	1.05	Wall	Wallboard	Blue	D	Entrance	Negative	3.25	< LOD	0.6	< LOD	0.6	< LOD	2.21
5/20/2014 16:57	1.83	Door Frame	Wood	Blue	Α	Entrance	Negative	1.64	0.6	0.2	0.6	0.2	< LOD	2.25
5/20/2014 16:58	5.74	Window Frame	Wood	Blue	Α	Entrance	Negative	2.25	0.8	0.1	0.8	0.1	8.0	0.5
5/20/2014 16:58	10.23	Window Sill	Wood	Blue	Α	Entrance	Null	2.4	0.9	0.1	0.9	0.1	1.1	0.4
5/20/2014 16:59	12.85	Window Sill	Wood	Blue	Α	Entrance	Negative	2.3	0.9	0.1	0.9	0.1	0.9	0.4
5/20/2014 16:59	1.05	Ceiling	Wallboard	Blue		Entrance	Negative	2.69	< LOD	0.41	< LOD	0.41	< LOD	2.24
5/20/2014 17:00	1.32	Crown Molding	Wood	Blue	В	Entrance	Negative	2.48	0.6	0.4	0.6	0.4	< LOD	2.55
5/20/2014 17:01	5.2	Radiator	Metal	Blue	В	Entrance	Negative	2.87	< LOD	1.2	0.12	0.06	< LOD	1.2
5/20/2014 17:02	1.58	Wall	Wallboard	Blue	Α	Kitchen	Negative	2.77	0.6	0.4	0.6	0.4	< LOD	2.11
5/20/2014 17:02	1.04	Wall	Wallboard	Blue	В	Kitchen	Negative	1.66	0.5	0.6	0.5	0.6	< LOD	2.32
5/20/2014 17:02	4.96	Wall	Wallboard	Blue	С	Kitchen	Negative	3.15	0.8	0.2	0.8	0.2	< LOD	0.9
5/20/2014 17:03	2.35	Wall	Wallboard	Blue	D	Kitchen	Negative	2.81	0.6	0.3	0.6	0.3	< LOD	1.65
5/20/2014 17:03	3.4	Ceiling	Wallboard	Blue		Kitchen	Negative	3.58	0.7	0.2	0.7	0.2	< LOD	0.88

Time	Duration	Component	Substrate	Color	Side	Room	Results	Depth	PbC	PbC Error	PbL	PbL Error	PbK	<b>PbK Error</b>
5/20/2014 17:04	1.32	Door	Wood	Blue	Α	Kitchen	Negative	3.14	0.4	0.6	0.4	0.6	< LOD	2.5
5/20/2014 17:04	1.05	Door	Wood	Blue	Α	Kitchen	Negative	3.02	0.4	0.75	0.4	0.75	< LOD	2.51
5/20/2014 17:04	1.05	Door Frame	Wood	Blue	Α	Kitchen	Negative	1.88	< LOD	0.42	< LOD	0.42	< LOD	2.55
5/20/2014 17:05	1.04	Door Casing	Wood	Blue	Α	Kitchen	Negative	1.91	< LOD	0.42	< LOD	0.42	< LOD	2.59
5/20/2014 17:05	1.05	Cabinet	Wood	Blue	С	Kitchen	Negative	2.77	0.4	0.75	0.4	0.75	< LOD	3.22
5/20/2014 17:06	1.05	Counter	Ceramic Tile	White	С	Kitchen	Negative	1	< LOD	0.05	< LOD	0.05	< LOD	6.29
5/20/2014 17:06	1.05	Window Frame	Wood	Blue	С	Kitchen	Negative	1.21	< LOD	0.26	< LOD	0.26	< LOD	3.68
5/20/2014 17:06	1.05	Window Casing	Wood	Blue	С	Kitchen	Negative	3.36	0.4	0.9	0.4	0.9	< LOD	2.45
5/20/2014 17:07	9.43	Radiator	Metal	Blue	В	Kitchen	Negative	3.88	0.4	0.9	0.8	0.1	< LOD	0.9
5/20/2014 17:08	1.04	Crown Molding	Wood	Blue	В	Kitchen	Negative	2.55	< LOD	0.6	< LOD	0.6	< LOD	2.55
5/20/2014 17:08	1.05	Wall	Wallboard	Pink	Α	Women's Room	Negative	1.28	< LOD	0.24	< LOD	0.24	< LOD	2.24
5/20/2014 17:09	2.1	Wall	Wallboard	Pink	В	Women's Room	Negative	1.72	< LOD	0.16	< LOD	0.16	< LOD	1.37
5/20/2014 17:09	1.05	Wall	Wallboard	Pink	С	Women's Room	Negative	1.19	< LOD	0.2	< LOD	0.2	< LOD	3.71
5/20/2014 17:09	1.05	Wall	Wallboard	Pink	D	Women's Room	Negative	1.21	< LOD	0.2	< LOD	0.2	< LOD	2.19
5/20/2014 17:10	1.05	Wall Panel	RFP	Pink	D	Women's Room	Negative	1.68	< LOD	0.29	< LOD	0.29	< LOD	3.93
5/20/2014 17:10	1.04	Ceiling	Wallboard	Brown		Women's Room	Negative	1	< LOD	0.13	< LOD	0.13	< LOD	1.95
5/20/2014 17:11	1.31	Crown Molding	Wood	Brown		Women's Room	Negative	2.82	< LOD	0.32	< LOD	0.32	< LOD	1.95
5/20/2014 17:11	1.06	Door	Wood	Pink	Α	Women's Room	Negative	2.29	< LOD	0.47	< LOD	0.47	< LOD	2.55
5/20/2014 17:11	1.05	Door	Wood	Pink	Α	Women's Room	Negative	1.16	< LOD	0.21	< LOD	0.21	< LOD	2.25
5/20/2014 17:12	1.05	Door Frame	Wood	Pink	Α	Women's Room	Negative	2.21	< LOD	0.37	< LOD	0.37	< LOD	2.16
5/20/2014 17:12	1.04	Door Casing	Wood	Pink	Α	Women's Room	Negative	1.31	< LOD	0.25	< LOD	0.25	< LOD	3.12
5/20/2014 17:12	3.93	Radiator	Metal	Pink	D	Women's Room	Negative	1.51	< LOD	1.33	0.12	0.05	< LOD	1.33
5/20/2014 17:13	1.05	Stall Divider	Wood	Pink	С	Women's Room	Negative	1	< LOD	0.14	< LOD	0.14	< LOD	4.18
5/20/2014 17:13	1.04	Stall Door	Wood	Pink	С	Women's Room	Negative	1.24	< LOD	0.19	< LOD	0.19	< LOD	2.06
5/20/2014 17:13	1.05	Window Frame	Wood	Pink	С	Women's Room	Negative	1.26	< LOD	0.21	< LOD	0.21	< LOD	2.4
5/20/2014 17:14	1.05	Window Casing	Wood	Pink	С	Women's Room	Negative	1.67	< LOD	0.3	< LOD	0.3	< LOD	3.26
5/20/2014 17:14	1.05	Window Sill	Wood	Pink	С	Women's Room	Negative	1.62	< LOD	0.32	< LOD	0.32	< LOD	2.66
5/20/2014 17:14	1.05	Toilet	Porcelain	White	В	Women's Room	Negative	1.45	< LOD	0.1	< LOD	0.1	< LOD	6.63
5/20/2014 17:15	2.09	Sink	Porcelain	White	В	Women's Room	Negative	3.22	< LOD	0.12	< LOD	0.12	< LOD	3.06
5/20/2014 17:16	1.85	Wall	Wallboard	Green	Α	Men's Room	Negative	1.55	< LOD	0.21	< LOD	0.21	< LOD	1.8
5/20/2014 17:17	1.31	Wall	Wallboard	Green	В	Men's Room	Negative	1.4	< LOD	0.21	< LOD	0.21	< LOD	2.17
5/20/2014 17:17	3.15	Wall	Wallboard	Green	С	Men's Room	Negative	2.25	< LOD	0.84	0.3	0.17	< LOD	0.84
5/20/2014 17:17	1.83	Wall	Wallboard	Green	D	Men's Room	Negative	1.79	< LOD	0.24	< LOD	0.24	< LOD	1.52
5/20/2014 17:18	1.05	Wall Panel	RFP	Green	D	Men's Room	Negative	1.29	< LOD	0.29	< LOD	0.29	< LOD	4.1
5/20/2014 17:18	1.04	Wall Panel	RFP	Green	В	Men's Room	Negative	2.01	< LOD	0.5	< LOD	0.5	< LOD	4.26
5/20/2014 17:19	1.05	Door	Wood	Green	Α	Men's Room	Negative	1.6	< LOD	0.34	< LOD	0.34	< LOD	2.25
5/20/2014 17:19	1.05	Door Frame	Wood	Green	Α	Men's Room	Negative	1.85	< LOD	0.41	< LOD	0.41	< LOD	2.66
5/20/2014 17:19	1.05	Door Casing	Wood	Green	Α	Men's Room	Negative	1.9	< LOD	0.45	< LOD	0.45	< LOD	2.19
5/20/2014 17:20	1.05	Stall Divider	Wood	Green	D	Men's Room	Negative	1.03	< LOD	0.18	< LOD	0.18	< LOD	2.47
5/20/2014 17:20	1.05	Stall Door	Wood	Green	С	Men's Room	Negative	1.23	< LOD	0.23	< LOD	0.23	< LOD	2.55

Time	Duration	Component	Substrate	Color	Side	Room	Results	Depth	PbC	<b>PbC Error</b>	PbL	PbL Error	PbK	<b>PbK Error</b>
5/20/2014 17:21	1.04	Radiator	Metal	Green	В	Men's Room	Negative	1.15	< LOD	0.25	< LOD	0.25	< LOD	4.33
5/20/2014 17:21	1.05	Window Frame	Wood	Green	С	Men's Room	Negative	2.08	< LOD	0.48	< LOD	0.48	< LOD	2.68
5/20/2014 17:21	1.05	Window Casing	Wood	Green	С	Men's Room	Negative	1.52	< LOD	0.36	< LOD	0.36	< LOD	2.55
5/20/2014 17:22	1.04	Window Sill	Wood	Green	С	Men's Room	Negative	2.05	< LOD	0.55	< LOD	0.55	< LOD	3.15
5/20/2014 17:22	1.05	Ceiling	Wallboard	White		Men's Room	Negative	1.4	< LOD	0.19	< LOD	0.19	< LOD	1.87
5/20/2014 17:23	1.05	Crown Molding	Wood	White	В	Men's Room	Negative	2.02	0.4	0.28	0.4	0.28	< LOD	4.94
5/20/2014 17:24	1.3		Cal	Gold			Negative	2.2	< LOD	0.4	< LOD	0.4	< LOD	2.85
5/20/2014 17:24	1.57		Cal	Gold			Negative	2.24	0.6	0.3	0.6	0.3	< LOD	2.36
5/20/2014 17:24	3.15		Cal	Gold			Negative	2.68	0.7	0.3	0.7	0.3	< LOD	1.8

### Appendix F.1



13509 East Boundary Road, Suite B, Midlothian, VA 23112 • 804-739-1751 • fax: 804-739-1753

### LEAD IN PAINT SAMPLE ANALYSIS SUMMARY

**(EPA METHOD 7420)** 

CLIENT: Macrotec Consulting

9724 Mild Weather Ct.

Las Vegas, NV 89148

TESC LOGIN #: 140522E

DATE OF RECEIPT: 5/22/2014

DATE OF ANALYSIS: 5/22/2014

DATE OF REPORT: 5/22/2014

**CLIENT JOB #: 14068** 

JOBSITE: 4 N 4th St., NV

ANALYST: MHB

TESC SAMPLE #	CLIENT SAMPLE #	SAMPLE WEIGHT (mg)	TOTAL LEAD (ug)	LEAD CONCENTRATION (% by Weight)	LEAD CONCENTRATION PPM
1	L1	327	595	0.182	1820
2	L2	231	3370	1.46	14600
3	L3 Sample weight below method guideling	122 nes.	2000	1.64	16400
4	L4	335	2480	0.739	7390
5	L5 Sample weight below method guideling	85.0 nes.	356	0.418	4180

**Total Sample(s) Analyzed:** 5

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Yuedong Fang, Senior Geologist

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the customer. Sample information was provided by the customer. This report must not be reproduced, except in full, without the written consent of Triangle Environmental Service Center, Inc. The test report related only to the item(s) tested. This analysis was performed by an AHIA accredited laboratory. AIHA/ELLAP ID: 100527, NYELAP/NELAC ID: 11413.

Minimum Reporting Limit: 20 ug. Lead Based Paint contains 0.5% lead by weight per Federal statute. The OSHA Lead in Construction Standard, 29 CFR 1926.62, is invoked if any lead is present in the sample. Lead-free paint is defined as <0.06% by weight (CPSC).

[LEGEND: mg= milligram, ug= microgram, ppm= parts per million]

Thursday, May 22, 2014 Page 1 of 1

140522E
Office@MacrotecConsulting.com

### Macrotec Consulting, LLC

Phone: (702)949-6225 Fax: (702) 629-5677

**Bulk Sampling Chain of Custody Form** 

Client	Name 🛓	MOINLEY	Project Number
Projec	t Name	M'GILL LIBERCY "-	Collection Date 5/30/14
Projec	t Location	4 N. 4TH ST. MGIL, NV.	PO Number
	ician 🗾		Turn Around Time Lus 4
Labora	itory <u></u>	TESE	Method of Analysis AA/RAME
		itive?: Y/N Composite Sheet Rock?: Y/	N Matrix PANT COTIP
	ple # Count	Sample Description (Material Type: Description: Color)	Sample Location (General: Room: Specific)
	21	Bux Wood Whoon Sin	Workeyer- Man Loon - Elsever
	42	BLUE METAL ROIATOR	1 - 11 - 5 SIDE
	43	BLUE WOOD WINDOW SILL	- EVNERUE - NW CORNER
	L4	Buc Wousenes Ware	- KIRHEW - ADT DOOK
-	L5	WHITE WOOD Com Moreing	y - MEN'S for - N ware
			4
		-F	
4			
	2.4		
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Relinqu	ished By:	Date: 5 pg/y Receive	d By: Date:
Relinqu	ished By:	: Date: Receive	d By: Date:

### Appendix G

# Anited States Environmental Protection Agency

This is to certify that

Jason Robert McAllister

has fulfilled the requirements of the Toxics Substance Control Act (TSCA) Section 402(a)(1) and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as a:

Z. Risk Assessor

In the Jurisdiction of:

Nevada

This certification is valid from the date of issuance and expires March 27, 2017

NV-R-125427-1

Certification #

Adrienne Priselac, Manager, Toxics Office

Communities and Ecosystems Division

# Anited States Environmental Protection Agency

This is to certify that

### Macrotec Consulting, LLC

has fulfilled the requirements of the Toxics Substance Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745,226

The Jurisdiction of:

Nevada

This certification is valid from the date of issuance and expires July 29, 2014

NV-17067-2

JULY 30 Issued On

Adrienne Priselac, Manager, Toxics Office

Communities and Ecosystems Division

STATE OF NEVADA

DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

ASBESTOS CONTROL PROGRAM

DATE 02/13/14

LICENSE NO. IPM-0901

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 02/13/15

Jason R McAllister Macrotec Consulting LLC 9724 Mild Weather Ct Las Vegas, NV 89148

DATE: 02/13/14
LICENSE NO: IPM-0901
INSPECTOR
MANAGEMENT PLANNER
PROJECT MONITOR

Signature

[Wallet Card - Fold Here]

STATE OF NEVADA

DEPARTMENT OF BUSINESS AND INDUSTRY
DIVISION OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

ASBESTOS ABATEMENT CONSULTANT
Jason R McAllister
Macrotec Consulting LLC

HAS PAID THE FEE REQUIRD BY CHAPTER 618 OF N.AC 02/13/15

(NSPO Rev. 2-06)

(O) 3656 et

United States Department of Commerce National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200794-0

## Triangle Environmental Service Center, Inc.

Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

## **BULK ASBESTOS FIBER ANALYSIS**

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009). This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.



M-D.M.C

For the National Institute of Standards and Technology

2014-04-01 through 2015-03-31 Effective dates



### AIHA Laboratory Accreditation Programs, LLC

acknowledges that

### Schneider Laboratories Global, Inc.

2512 West Cary Street, Richmond, VA 23220-5117

Laboratory ID: 100527

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025 2005 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

### LABORATORY ACCREDITATION PROGRAMS

- ✓ INDUSTRIAL HYGIENE
- ✓ ENVIRONMENTAL LEAD
- ✓ ENVIRONMENTAL MICROBIOLOGY
- ☐ FOOD
- UNIQUE SCOPES

Accreditation Expires: 05/01/2015

Accreditation Expires: 05/01/2015

Accreditation Expires: 05/01/2015

Cheryl O. Charten

Accreditation Expires:

Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025-2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Larry S. Pierce

Chairperson, Analytical Accreditation Board

Cheryl O. Morton

Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 13: 03/12/2013

Date Issued: 08/30/2013

### **APPENDIX B**

Macrotec Microbial Investigation Report



### Microbial Investigation Report Fungal Inspection

### **Project Information:**

McGill Library 4 N. 4<sup>th</sup> St. McGill, NV

### Report Info:

Macrotec Project # 14068 June 2, 2014

### Prepared For:

Brett Bottenberg McGinley & Associates 6280 S. Valley View Blvd. Suite 604 Las Vegas, NV 89118

### Prepared By:

Jason McAllister - Macrotec Consulting, LLC.

### Table of Contents:

Introduction
Site Description
Site Inspection
Sample Collection
Sample Results
Conclusions
Recommendations
Inspection Limitations

Appendix A Photo Log

Appendix B Laboratory Report Appendix C Certifications

### INTRODUCTION

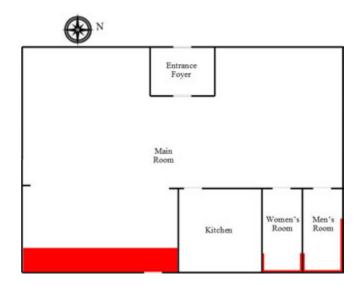
On May 20, 2014, Macrotec Consulting, LLC., conducted an investigation to determine the presence of a mold contamination in the one-story building located at 4 N. 4<sup>th</sup> St., McGill, NV. This project was conducted at the request of Brett Bottenberg of McGinley & Associates.

### SITE DESCRIPTION

The subject site was a one-story brick building, with a flat roof and concrete foundation. There is a basement, which is standing height in the northwest corner and a crawl space height beneath the rest of the building.

### SITE INSPECTION

Macrotec Consulting visited the subject site and conducted a visual inspection of the interior, exterior, roof, and basement of the building. Macrotec found visible water damage in several locations within the building. The locations of the water damage are highlighted in red in the following diagram.



In the men's room and women's room, the water damage was on the walls, and adjacent floor. In the southeast portion of the main room, the water damage was on the walls, drop ceiling, hard ceiling (above drop ceiling) and the carpeted floor. The source of the water intrusion appeared to be from roofing leaks. An inspection of the roof found that the asphalt roll roofing was damaged in the areas above the restrooms and the southeast portion of the main room. Furthermore, the roof sloped from west to east, where a metal gutter ran along the east edge of the roof, inside of the building's outer brick wall. This gutter had a number of patches, where roofing mastic was used to evidently repair past leaks. Please see Appendix A for photographs of the areas described above.

Macrotec also collected moisture readings using a "2-prong" moisture meter throughout the building, but found no elevated levels of moisture in any of the building materials checked, at the time of this investigation. Note: Macrotec suspects that this result may have been different if conducted following a period of rain or snow melt.

The building has not been occupied for approximately ten years, so there were no personnel available to describe any history of water intrusions or air quality complaints within the building. There were ducts running through the basement that were part of the original (and now unused) heating system. The current heating system has a furnace in the basement and ducts running up through the attic space. Note: There is no central air conditioning in the building.

### SAMPLE COLLECTION

Macrotec determined that spore trap air sampling within the building would be effective in supporting the hypothesis that there may be hidden fungal growth on building materials in the areas that had water damage. This growth could be detected by the presence of elevated airborne mold spores within the building. Fungal spore trap air sampling is used to compare the types and concentrations of mold spores within the subject area compared to an outside control sample.

For this project, Macrotec collected a total of six air samples including five within the subject site and one outside the building. The samples within the subject site were collected in each of the interior rooms, including two in the main room.

The spore trap air samples for this project were collected using Zefon Air-O-Cell air sampling cassettes, and analyzed by non-viable methods. High volume pumps were used to collect the samples and the flow rates were calibrated before and after each use.

### SAMPLE RESULTS

Microbiological samples for this project were submitted for analysis to Amerisci Los Angeles, which is an AIHA accredited laboratory for the analysis of non-viable mold samples. Non-viable samples are analyzed by light microscopy at 400x magnification and determine the presence of non-viable fungal spores at the genera level.

The following table lists the results of the air samples collected for this project.

Sample	Sample	Most Pre	Total				
Number	Location	Aspergillus / Penicillium	Asco- spores	Clado- sporium	Smut/Myxomy- cete/Periconia	Alter- naria	(Spores/m³)
MA1	Inside – Main Room – SE corner	ND	99	543	4,938	148	5,876
MA2	Inside – Main Room – NW corner	148	99	444	1,185	ND	2,024
MA3	Inside – Kitchen - Center	198	49	593	1,086	49	2,074
MA4	Inside – Women's Room - Center	ND	99	741	691	ND	1,630
MA5	Inside – Men's Room - Center	99	ND	1,235	1,284	ND	2,667
MA6	Outside – Sidewalk West of Building	ND	25	543	1,086	ND	1,655

These results show that the total number of spores were higher inside the building than on the outside control in all but one of the areas sampled. The majority of spores on both the interior and exterior samples were of the Smut/Myxomycete/Periconia genera, which generally do not grow in indoor environments. However, the elevated spores of other genera within the building, including Aspergillus/Penicillium, as compared to the outside control do indicate the potential for indoor fungal growth and contamination.

### **CONSLUSIONS**

The site inspection and sampling in this project has indicated the presence of water damage and mold growth within the building. The building's roof and gutter system are in need of repair or replacement.

### RECOMMENDATIONS

The causal conditions from the roof and gutter should be repaired prior to any remediations or renovations.

Based on the conclusions of the investigation, Macrotec Consulting recommends the following remediations within the building:

- Remove and discard the panel walls from floor to ceiling, and the adjacent flooring and base cove, in the areas indicted in red in the men's and women's restrooms in the above diagram. (Additional removal may be necessary if mold is growing on the back side of the adjacent walls inside the wall cavities.)
- Remove and discard the panel walls and ceiling, acoustic ceiling tiles, fiberglass insulation, carpet (and flooring beneath carpet), and blown-in insulation above hard ceiling in the highlighted area in the southeast portion of the main room.
- Remove the carpet throughout the rest of the building.

- Remove or clean the toilets in the restrooms.
- Clean; utilizing HEPA vacuum, wet wiping, and roughing techniques the wood framing, brick outer walls, and concrete sub-floor in the areas mentioned above.

Note: Some of the materials that are recommended to be removed were found to contain asbestos and/or lead as per Macrotec's Asbestos and Lead Based Paint Report for this project, dated May 30, 2014.

Macrotec Consulting recommends conducting the above remediations utilizing the following reference materials:

- IICRC S520 Standard and Reference Guide for Professional Mold Remediation
- ACGIH Bioaerosols: Assessment and Control
- New York Department of Health Guidelines on Assessment and Remediation of Fungi in Indoor Environments
- EPA Mold Remediation Guidelines

If additional mold growth is found in wall cavities, etc., beyond what is described above, continue with mold removal to a minimum of two feet beyond the growth.

Upon completion of the remediation, a post remediation inspection should be conducted by a third party to insure that mold contaminated materials have been properly removed and cleaned.

### **INSPECTION LIMITATIONS**

This microbial investigation is limited by time, financial considerations, and practical (non-destructive and reasonable) inspection methods and pertains only to the area described in the site description. There is always the potential for discovering additional hidden mold in buildings in areas where water damage or other conditions leading to fungal growth was not expected, could not reasonably be inspected, or were outside the scope of services agreed to with the client.

Accepted industry guidelines do not allow for a complete determination between "safe" and "unsafe" levels of molds in buildings due to background levels of mold being everywhere in indoor and outdoor environments. Ever changing environmental conditions (time and season) and activities in the building must be taken into consideration when assessing this information. Considering the above information, testing is useful only as a means to observe large variations in microbial levels.

If the subject site is remediated without correction of the causal condition, the microbial problem will return.

Thank you for allowing Macrotec Consulting to assist you with your environmental consulting needs. Please contact me with any questions regarding this report at (702) 949-6225.

Jason R. McAllister

Council-Certified Microbial Consultant (CMC)

Certificate #1309015

### Appendix A



Picture 1—Heavily worn and bucking asphalt roll roofing above the southeast section of the main room.



Picture 2—Water damaged wall, ceiling, and crown molding above the drop ceiling in the southeast section of the main room.



Picture 3—Old roof mastic used to seal seams on and adjacent the metal gutter. Note that the gutter is on the interior of the building's outer brick wall.



Picture 4—Water damaged plywood behind the paneling on the north wall in the men's room.



Picture 5—Water damage on the wallboard walls in the women's room.



Picture 6—Water damaged wall, base cove and floor tile in the women's room. Note: There is also visible mold growth in the toilet.

### Appendix B



### AmeriSci Los Angeles

24416 SOUTH MAIN STREET • SUITE 308 CARSON, CA 90745

TEL: (310) 834-4868 • FAX: (310) 834-4772

May 22, 2014

Macrotec Consulting, LLC Attn: Jason McAllister 9724 Mild Weather Ct. Las Vegas, NV 89148

RE: Macrotec Consulting, LLC Job Number 714051139 P.O. # LV123

14068; McGinley Library; 4N. 4th St, McGill NV

Dear Jason McAllister:

Enclosed are the microbiological analysis results for the following Macrotec Consulting, LLC Microbiological samples received at AmeriSci in Good condition, on Thursday, May 22, 2014, for a rush turnaround:

MA1, MA2, MA3, MA4, MA5, MA6

The 6 sample(s) were sent to AmeriSci via Fed Ex 7700 5401 9633. These samples were prepared and analyzed as indicated on the attached analysis sheets.

This report relates ONLY to the sample analysis as reported on the analysis sheets. AmeriSci assumes no responsibility for data interpretation or customer supplied data such as "sample location" or "area sampled". Complete analytical documentation is archived and available upon written request.

AmeriSci appreciates this opportunity to serve your organization. Please contact us for any further assistance or questions.

Sincerely,

Edward M. Khalil Micro. Tech. Mgr.

Edward Khalil



### AmeriSci Los Angeles 24416 S. Main Street, Ste 308

Carson, California 90745 TEL: (310) 834-4868 • FAX: (310) 834-4772

### Analyzed By:

Olga K. Katsuk

AmeriSci Job #: 714051139 FINAL REPORT

**Client: Macrotec Consulting, LLC** 

Address: 9724 Mild Weather Ct.

**Client Job#:** 14068

Client Job Name: McGinley Library; 4N. 4th St, McGill

Date Received: 05/22/14 Date Reported: 05/22/14

Las Vegas, NV 89148

Air Cassette Analytical Report (SOP# 4001)

AmeriSci Number	714051139-01			714051139-02			71	<mark>405</mark> 113	9-03	714051139-04			
Sample Number	MA1				MA2			MA3		MA4			
Sample Name	Inside - Mai	n Room	n - SE Corner	Inside -	Main Ro Corne	oom - NW r	Inside -	Kitcher	n - Center	Inside - Women's Rm - Center			
Analysis Date	!	5/22/20	14		5/22/20	14	Ę	5/22/20	14		5/22/20	14	
Volume (L)		75			75			75			75		
Limit of Detection (LOD) (Count/M <sup>3</sup> )		49			49			49			49		
Background Density		4			3			3			3		
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	
Pollen	ND			ND			ND			ND			
Fibers	247	n/a	5	198	n/a	4	247	n/a	5	247	n/a	5	
Mycelial Fragments	296	n/a	6	ND			198	n/a	4	99	n/a	2	
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	
Alternaria sp.	148	3	3	ND			49	2	1	ND			
Ascospores	99	2	2	99	5	2	49	2	1	99	6	2	
Aspergillus/Penicillium	ND			148	7	3	198	10	4	ND			
Basidiospores	99	2	2	49	2	1	99	5	2	99	6	2	
Chaetomium sp.	49	1	1	ND			ND			ND			
Cladosporium sp.	543	9	11	444	22	9	593	29	12	741	45	15	
Smut/Myxomycete/Periconia	4938	84	100	1185	59	24	1086	52	22	691	42	14	
Ulocladium sp.	ND			99	5	2	ND			ND			
Total Fungal Spores	5876	100	119	2024	100	41	2074	100	42	1630	100	33	



### AmeriSci Los Angeles

24416 S. Main Street, Ste 308 Carson, California 90745 TEL: (310) 834-4868 • FAX: (310) 834-4772 Analyzed By: Olga K. Katsuk

AmeriSci Job #: 714051139

FINAL REPORT

**Client: Macrotec Consulting, LLC** 

Address: 9724 Mild Weather Ct. Las Vegas, NV 89148

**Client Job#:** 14068

Client Job Name: McGinley Library; 4N. 4th St, McGill

Date Received: 05/22/14 Date Reported: 05/22/14

Air Cassette Analytical Report (SOP# 4001)

All Casselle Allalytical Ne		# +UC	, ı <i>,</i>									
AmeriSci Number 714051139-05			71	405113	9-06							
Sample Number	MA5			MA6								
Sample Name	Inside - N	/len's R	m - Center	Outside - Sidewalk W. Of Building								
Analysis Date		5/22/20	14		5/22/20	14						
Volume (L)		75			150							
Limit of Detection (LOD) (Count/M 3)		49			25							
Background Density		3			3							
Other	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Pollen	ND			49	n/a	2						
Fibers	296	n/a	6	173	n/a	7						
Mycelial Fragments	49	n/a	1	74	n/a	3						
Fungal Identification	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count	Count/M <sup>3</sup>	%	Raw Count
Alternaria sp.	ND			ND								
Ascospores	ND			25	1	1						
Aspergillus/Penicillium	99	4	2	ND								
Basidiospores	49	2	1	25	1	1						
Chaetomium sp.	ND			ND								
Cladosporium sp.	1235	46	25	543	33	22						
Smut/Myxomycete/Periconia	1284	48	26	1062	64	43						
Ulocladium sp.	ND			ND								
Total Fungal Spores	2667	100	54	1655	100	67						

ND = None Detected

Results relate only to the items tested and are reported mathematically to significant figures.

Name/Title: Olga K. Katsuk / Analyst

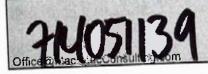
Name/Title: Edward M. Khalil / Micro. Tech. Dir.

Reviewed By: Edward Khalil\_\_\_

Date: 05/22/14

Date: 05/22/14

Page 2 of 2



### Macrotec Consulting, LLC

Phone: (702) 949-6225 Fax: (702) 629-5677

Air Sampling Chain of Custody Form

	Air Sampling Chai	in of Cu	istoay	POILIN		11.15	~	
t Nam	NEGINLRY		_ Proje	ct Numbe	ar _/9	1060		
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issette:	0.8µm.25mm - 0.45µm 25mm - 0.8µm 3  AIR-O-CELL TEM AHERA - PCM NIOSH 7400 - AA NIOS	SH 7082 -	Other	Sporce	TRAP	(kw	one)	
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1A4	- Honer's frm - "	5:45	5:50	5	$\vdash$			75
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### Appendix C



### American Council for Accredited Certification

hereby certifies that

### Jason R. McAllister

has met all the specific standards and qualifications of the certification process and is hereby certified as a



### Council-certified Microbial Consultant

This certificate expires on September 30, 2015.

Charles Flibles	1309015
Charles F. Wiles, Executive Director	Certificate Number

This certificate remains the property of the American Council for Accredited Certification.



### AIHA Laboratory Accreditation Programs, LLC

acknowledges that

### **AmeriSci Los Angeles**

24416 South Main Street, Suite 308, Carson, CA 90745 Laboratory ID: 100530

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories in the following:* 

### LABORATORY ACCREDITATION PROGRAMS

- ✓ INDUSTRIAL HYGIENE
- ✓ ENVIRONMENTAL LEAD
- ✓ ENVIRONMENTAL MICROBIOLOGY
- **□** FOOD

Accreditation Expires: 08/01/2014

Accreditation Expires: 08/01/2014

Accreditation Expires: 08/01/2014

Cheryl of Marton

Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (<a href="www.aihaaccreditedlabs.org">www.aihaaccreditedlabs.org</a>) for the most current Scope.

S. D. Allen Iske, PhD, CIH, CSP

Chairperson, Analytical Accreditation Board

Chervl O. Morton

Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 12: 03/29/2012

Date Issued: 10/31/2012