

December 23, 2020

University of North Texas Health Science Center 3416 Darcy Street Fort Worth, Texas

Attention: Mr. Robert E. Short, Jr. P.E.

Re: Asbestos Survey

University of North Texas Health Science Center

Gibson D. Lewis Library (LIB) 955 Montgomery Street Fort Worth, Texas

Apex project No.725010720021

Apex TITAN, Inc., a subsidiary of Apex Companies, LLC (Apex) was retained by University of North Texas Health Science Center to conduct an asbestos survey of the second, third, and fourth floors of the Gibson D. Lewis Library (LIB) located at 955 Montgomery Street in Fort Worth, Texas. At the request of the client results from the previous sampling of the first floor, Apex Project Number 725010720014, dated March 16, 2020 have been included in this report. The survey was performed from July 29 - 31, 2020 by Mr. Zurisaday Diego, a Texas Department of State Health Service (TDSHS) licensed asbestos inspector (TDSHS License No. 60-3759). This survey has been performed in accordance with Apex Proposal No. P725010720021rev dated July 1, 2020. The following is a summary of the suspect asbestos containing materials (ACM) collected from the building. ACM previously identified by Apex was incorporated into this report.

The following materials were observed on the day of the survey; however, they were not sampled due to the destructive nature of the sampling:

- First Floor
  - Mastic associated with Raised Wooden Floor Pedestals
  - Mirror Mastic Restrooms
- Second Floor
  - 12" x 12" Ceramic Floor Tile (Grey) Restrooms
  - Mirror Mastic Restrooms
  - o 12" x 16" Ceramic Wall Tile (White) Restrooms
- Third Floor
  - Resilient Vinyl Flooring (Red, Wood Pattern)
  - o 12" x 12" Ceramic Floor Tile (Grey) Restrooms
  - Mirror Mastic Restrooms
  - o 12" x 16" Ceramic Wall Tile (White) Restrooms
- Fourth Floor
  - Mastic associated with Corner Guards
  - o 12" x 12" Ceramic Floor Tile (Grey) Restrooms
  - Mirror Mastic Restrooms
  - o 12" x 16" Ceramic Wall Tile (White) Restrooms

### These materials must be sampled prior to disturbance or assumed to be asbestos containing and handled according to local, state, and federal regulations.

This survey applies only to the materials sampled on the interior of the Gibson D. Lewis Library located at the above referenced address. Any materials located on the roof and building envelope were not evaluated as part of this survey should be assumed to contain asbestos until testing is performed.

This survey applies only to the materials sampled in the above referenced locations. Any materials located in the building not evaluated as part of this survey should be assumed to contain asbestos until testing is performed.

The survey activities began with a preliminary visual observation of readily accessible portions of the survey area by Apex personnel to identify homogeneous areas of suspect ACM. A homogeneous area consists of building materials, which appear similar throughout in terms of color, texture and date of application. A visual assessment was conducted throughout the areas surveyed. The identification of homogeneous materials was made by visual observations. Based on results of the visual observation, bulk samples of suspect ACM were collected in general accordance with AHERA sampling protocols.

Each homogeneous area of suspect ACM was physically touched to assess the friability and condition of the materials. A friable material is defined by the EPA as a material which can be crumbled, pulverized or reduced to powder by hand pressure when dry.

The suspect ACM samples collected were obtained by physically removing a small portion of the suspect material using a sharp instrument. Disturbance of adjacent material was kept to a minimum during the sampling program. Appropriately attired inspectors collected bulk samples using wet methods as applicable to reduce the potential for fiber release. Each sample was placed into a separate labeled container, which was then sealed. The sampling instrument was cleaned after each sample was collected. Each sample was placed into a sealable container and labeled with a sample number with an indelible marker.

A total of one hundred ninety (190) samples of suspect ACM were obtained from fifty-nine (59) homogeneous materials. Analyses was conducted utilizing Polarized-Light Microscopy (PLM), following the Environmental Protection Agency (EPA) PLM Method EPA-600/R-93/116. The bulk samples were analyzed by Cates Laboratories located in Dallas, Texas. Cates is accredited by the National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program (NVLAP No. 200569-0) and the TDSHS (License No. 30-0287).

A list of the homogeneous areas/materials sampled as part of this asbestos survey is included in **Appendix B**.

Apex identified friable and non-friable asbestos containing materials (ACM) within the areas surveyed. The materials identified to contain asbestos are presented in the Asbestos Containing Materials Summary table within **Appendix A**. It is Apex's understanding that the areas surveyed are scheduled for renovation/demolition. If any renovation/demolition activities will impact the identified ACMs, the ACMs must be abated prior to the renovation/demolition. The asbestos abatement must be performed by a State of Texas licensed asbestos abatement contractor in accordance with a project design prepared by a State of Texas licensed asbestos consultant. In addition, third party air monitoring must be performed during the abatement. Some category I



non-friable materials may be demolished in place with the structure; however, for the purpose of this report, Apex recommends that all ACM be abated prior to demolition.

If the identified ACM is not abated, the materials should be incorporated into the existing management plan.

Apex performed its services in a manner consistent with the level of care and expertise exercised by asbestos professionals performing the same or similar services at the same time and in the same geographic area. No express or implied warranties apply to these services or this report. Due to the limited extent of the assessment and sampling activities at the Site, Apex cannot and does not imply, warranty or guarantee that materials *not sampled* contain no asbestos. This Asbestos Survey was intended to identify reasonably accessible materials most likely to contain asbestos in quantities subject to regulation. Please note that due to the non-destructive nature of the survey, the potential exists for additional materials to be present in hidden or concealed areas.

All conclusions and recommendations in this report represent the professional opinions of the Apex personnel involved with the project. The results, findings, conclusions and recommendations expressed in this report are based on access provided and conditions observed, and samples taken during Apex survey of the building. The information contained in this report is relevant as of the date on which the field work was performed and should not be relied upon to represent Site's conditions at a later date. This study and report were prepared on behalf of and for the exclusive use of University of North Texas solely for their use and reliance in determining the presence of asbestos in identified areas of the site. The results of this report are not intended or to be construed as legal interpretation of existing federal, state or local environmental, health and safety laws or regulations. Apex assumes no responsibility or liability for errors in information or data provided to Apex by the Client or any third party or developments resulting from activities or situations outside the scope of this project. This report is not to be used as a bidding document.

Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Apex does not warrant the work of regulatory agencies, laboratories or other third parties supplying information, which may have been used in the preparation of this report. No warranty, express or implied is made.



Apex appreciates the opportunity to be of service on this project. If we can be of further assistance, please contact our office at 469-365-1100.

Sincerely yours, **Apex TITAN, Inc.** 

Zurisaday Diego Asbestos Inspector

TDSHS Lic. No. 60-3759

Phillip G. Fronczek, CHMM

Program Manager

Industrial Hygiene Services TDSHS Lic. No. 10-5737

#### Attachments:

Appendix A: Asbestos Containing Materials Summary Appendix B: Analytical Results/Chain(s) of Custody

Appendix C: Figures

Appendix D: Previous Report

Appendix E: Licenses





## Asbestos Containing Materials University of North Texas Health Science Center Gibson D. Lewis Library (LIB) 955 Montgomery Street Fort Worth, Texas

Apex Project No. 725010720021

Sample No.	ACM Sample Description	Location	Friable/ Non- Friable	% Asbestos	Assessment	Condition	Estimated Quantity
2-143 2-144 2-145	Duct Mastic (white)	2 <sup>nd</sup> Floor	NF	5%	5	Good	Through out
2-182 2-183 2-184	Mastic (black) associated w/Perimeter Walls	2 <sup>nd</sup> Floor	NF	5%	5	Good	Through out
3-204 3-205 3-206	Mastic (black) associated w/Perimeter Walls	3 <sup>rd</sup> Floor	NF	5%	5	Good	Through out
3-207 3-208 3-209	Duct Mastic (white)	3 <sup>rd</sup> Floor	NF	5%	5	Good	Through out
4-276 4-277 4-278	Mastic (black) associated w/Perimeter Walls	4 <sup>th</sup> Floor	NF	3%	5	Good	Through out
			Assume	ed Materials	3		
N/A	Mastic associated with Raised Wooden Floor Pedestals	1 <sup>st</sup> Floor	NF	Assumed	5	Good	250SF
N/A	Mirror Mastic	1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Floors	NF	Assumed	5	Good	400SF
N/A	12" x 12" Ceramic Floor Tile (Grey)	2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Floors	NF	Assumed	5	Good	1,800SF
N/A	12" x 16" Ceramic Wall Tile (White)	2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Floors	NF	Assumed	5	Good	800SF
N/A	Mastic associated with Corner Guards	4 <sup>th</sup> Floor	NF	Assumed	5	Good	Through out

#### Assessment:

- 1) Damaged or significantly damaged thermal system insulation ACM;
- 2) Damaged friable surfacing ACM;
- 3) Significantly damaged friable surfacing ACM;
- 4) Damaged or significantly damaged friable miscellaneous ACM;
- 5) ACBM with potential for damage;
- 6) ACBM with potential for significant damage;
- 7) Any remaining friable ACBM or friable suspected ACBM



# Identified Homogeneous Materials University of North Texas Health Science Center Gibson D. Lewis Library (LIB) 955 Montgomery Street Fort Worth, Texas Apex Project No. 725010720021

Material	Category	Condition	АСМ	Sample Number		
First Floor Survey (Apex Project Number 725010720014)						
12"x 12" Floor Tile (Pink with Grey Streaks) and Mastic (Yellow)	Category I Non-friable	G	Non-Detected	1-1 1-2 1-3		
Mastic (Yellow) associated with Carpet (Dark Green with Red, and White Stripe Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-4 1-5 1-6		
Mastic (Tan) associated with Carpet (Brown with Dark Brown Stripe Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-7 1-8 1-9		
Mastic (Yellow) associated with Carpet (Yellow, with Multicolor Dot Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-10 1-11 1-12		
Mastic (Yellow) associated with Carpet (Dark Yellow with Multicolor Dot Pattern)	Category II Non-friable	G	Non-Detected	1-13 1-14 1-15		
Mastic (Yellow) associated with Carpet (Blue with Multicolor Dot Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-16 1-17 1-18		
Mastic (Yellow) associated with Carpet (Light Brown)	Category II Non-friable	G	Non-Detected	1-19 1-20 1-21		
Mastic (Clear) associated with Carpet (Red) Multilayer	Category II Non-friable	G	Non-Detected	1-22 1-23 1-24		
Mastic (Yellow) associated with Carpet (Dark Blue with Light Grey Streak Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-25 1-26 1-27		
Mastic (Yellow) associated with Carpet (Brown with Dark Brown and Grey Stripe Pattern)	Category II Non-friable	G	Non-Detected	1-28 1-29 1-30		

Material	Category	Condition	АСМ	Sample Number
12" x 12" Ceramic Floor Tile (Light Grey) with Grout (Grey) and Mortar (Grey)	Category I Non-friable	G	Non-Detected	1-31 1-32 1-33
Epoxy Floor Coating (Grey, Sandy)	Category II Non-friable	G	Non-Detected	1-34 1-35 1-36
Resilient Vinyl Flooring (Grey with Multicolor Stripes) with Mastic (Yellow) and Leveling Compound (Grey)	Category I Non-friable	G	Non-Detected	1-37 1-38 1-39
Resilient Vinyl Flooring (Brown, Wood Pattern) with Mastic (Yellow)	Category I Non-friable	G	Non-Detected	1-40 1-41 1-42
2"x 6" Ceramic Floor Tile (Brown) with Grout (Grey) and Mortar (Grey)	Category II Non-friable	G	Non-Detected	1-43 1-44 1-45
Mastic (Yellow) associated with 4" Cove Base (Black)	Category II Non-friable	G	Non-Detected	1-46 1-47 1-48
Mastic (Yellow) associated with Fiberglass Reinforced Panel (FRP) (White)	Category II Non-friable	G	Non-Detected	1-49 1-50 1-51
Concrete Wall Texture (Grey, Sandy)	Category II Non-friable	G	Non-Detected	1-52 1-53 1-54 1-55 1-56
CMU Wall Texture (White) with Grout (Grey)	Category II Non-friable	G	Non-Detected	1-57 1-58 1-59
Unfinished Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	1-60 1-61 1-62
Ceiling/Wall Texture (White, Blue, Tan, Sandy) Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	1-63 1-64 1-65 1-66 1-67 1-68 1-69
12"x 24" Ceramic Wall Tile (White) with Grout (White) and Thinset (White)	Category II Non-friable	G	Non-Detected	1-70 1-71 1-72
Sink Under Coating (Black)	Category I Non-friable	G	Non-Detected	1-73 1-74 1-75
Interior Building Expansion Joint Caulking (Tan)	Category II Non-friable	G	Non-Detected	1-76 1-77 1-78

Material	Category	Condition	ACM	Sample Number
2'x4' Acoustical Ceiling Tile (White, Pinhole and Fissured)			Non-Detected	1-79 1-80 1-81
2'x2' Acoustical Ceiling Tile (White, Rough Finish)	Category II Non-friable	G	Non-Detected	1-82 1-83 1-84
Duct Mastic (White)	Category I Non-friable	G	Non-Detected	1-85 1-86 1-87
Duct Mastic (Grey)	Category I Non-friable	G	Non-Detected	1-88 1-89 1-90
Thermal System Insulation (White)	Category II Non-friable	G	Non-Detected	1-91 1-92 1-93
	Seco	nd Floor Survey	,	
Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) -	Category I Non-friable	G	Non-Detected	2-94 2-95 2-96
Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern)	Category I Non-friable	G	Non-Detected	2-97 2-98 2-99
Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	2-100 2-101 2-102
Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey)	Category I Non-friable	Ð	Non-Detected	2-103 2-104 2-105
Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow)	Category I Non-friable	D	Non-Detected	2-106 2-107 2-108
Resilient Vinyl Flooring (dark brown wood pattern) & Mastic (yellow) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	2-109 2-110 2-111
Resilient Vinyl Flooring (light brown wood pattern) & Mastic (yellow) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	2-112 2-113 2-114
12" X 12" Floor Tile (pink w/black & white streaks) & Mastic (yellow) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	2-115 2-116 2-117



Material	Category	Condition	ACM	Sample Number
4" Cove Base (black) w/Mastic (tan)	Category I Non-friable	G	Non-Detected	2-118 2-119 2-120 2-121 2-122 2-123 2-124
Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	2-125 2-126 2-127
4' X 6' Acoustical Ceiling Tile (light grey, pinhole)	Category II Non-friable	G	Non-Detected	2-128 2-129 2-130
2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish)	Category II Non-friable	G	Non-Detected	2-131 2-132 2-133
2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured)	Category II Non-friable	G	Non-Detected	2-134 2-135 2-136
2' X 4' Acoustical Ceiling Tile (white, fissured)	Category II Non-friable	G	Non-Detected	2-137 2-138 2-139
Duct Mastic (grey)	Category I Non-friable	G	Non-Detected	2-140 2-141 2-142
Duct Mastic (white)	Category I Non-friable	G	5% Chrysotile - White Mastic	2-143 2-144 2-145
Interior Building Caulking (white) above Ceiling	Category II Non-friable	G	Non-Detected	2-146 2-147 2-148
Firestop (red, yellow)	Category II Non-friable	G	Non-Detected	2-149 2-150 2-151
Thermal System Insulation (white)	Category II Non-friable	G	Non-Detected	2-179 2-180 2-181
Mastic (black) associated w/Perimeter Walls	Category I Non-friable	G	10% Chrysotile	2-182 2-183 2-184

Material	Category	Condition	ACM	Sample Number			
	Third Floor Survey						
Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern)	Category I Non-friable	G	Non-Detected	3-152 3-153 3-154			
Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design)	Category I Non-friable	G	Non-Detected	3-145 3-156 3-157			
Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	3-158 3-159 3-160			
Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	3-161 3-162 3-163			
Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown	Category I Non-friable	G	Non-Detected	3-164 3-165 3-166			
4" Cove Base (dark grey) w/Mastic (tan) -	Category I Non-friable	G	Non-Detected	3-167 3-168 3-169			
Sink Undercoating (grey)	Category I Non-friable	G	Non-Detected	3-170 3-171 3-172			
Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	3-173 3-174 3-175 3-176 3-177 3-178 3-179			
Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	3-180 3-181 3-182			
Unfinished Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	3-183 3-184 3-185			
4' X 6' Acoustical Ceiling Tile (light grey, pinhole)	Category II Non-friable	G	Non-Detected	3-186 3-187 3-188			
2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish)	Category II Non-friable	G	Non-Detected	3-189 3-190 3-191			
Firestop (red)	Category II Non-friable	G	Non-Detected	3-192 3-193 3-194			



Material	Category	Condition	ACM	Samp3e Number
Thermal System Insulation (white)	Category II Non-friable	G	Non-Detected	3-195 3-196 3-197
2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured)	Category II Non-friable	G	Non-Detected	3-198 3-199 3-200
Firestop (grey)	Category II Non-friable	G	Non-Detected	3-201 3-202 3-203
Mastic (black) associated w/Perimeter Walls	Category I Non-friable	G	5% Chrysotile	3-204 3-205 3-206
Duct Mastic (white)	Category I Non-friable	G	20% Chrysotile	3-207 3-208 3-209
Duct Mastic (grey)	Category I Non-friable	G	Non-Detected	3-210 3-211 3-212
Fireproofing (grey	Category II Non-friable	G	Non-Detected	3-213 3-214 3-215 3-216 3-217
	Four	th Floor Survey		
Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	4-218 4-219 4-220
Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern)	Category I Non-friable	G	Non-Detected	4-221 4-222 4-223
Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels)	Category I Non-friable	G	Non-Detected	4-224 4-225 4-226
12" X 12" Floor Tile (grey w/dark grey & white streaks) & Mastic (yellow) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	4-227 4-228 4-229
12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey)	Category I Non-friable	G	Non-Detected	4-230 4-231 4-232
Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow)	Category I Non-friable	G	Non-Detected	4-233 4-234 4-235



Material	Category	Condition	ACM	Sample Number
4" Cove Base (dark grey) w/Mastic (tan)	Category I Non-friable	G	Non-Detected	4-236 4-237 4-238
Sink Undercoating (grey)	Category I Non-friable	G	Non-Detected	4-239 4-240 4-241
Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	4-242 4-243 4-244 4-245 4-246 4-247 4-248
Unfinished Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	4-249 4-250 4-251
Firestop (red)	Category II Non-friable	G	Non-Detected	4-252 4-253 4-254
Firestop (grey)	Category II Non-friable	G	Non-Detected	4-255 4-256 4-257
4' X 6' Acoustical Ceiling Tile (light grey, pinhole)	Category II Non-friable	G	Non-Detected	4-258 4-259 4-260
2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish)	Category II Non-friable	G	Non-Detected	4-261 4-262 4-263
2' X 4' Acoustical Ceiling Tile (white, fissured)	Category II Non-friable	G	Non-Detected	4-264 4-265 4-266
Duct Mastic (grey)	Category I Non-friable	G	Non-Detected	4-267 4-268 4-269
Duct Mastic (white)	Category I Non-friable	G	Non-Detected	4-270 4-271 4-272
Thermal System Insulation (white)	Category II Non-friable	G	Non-Detected	4-273 4-274 4-275
Mastic (black) associated w/Perimeter Walls	Category II Non-friable	G	5% Chrysotile	4-276 4-277 4-278



Assumed ACM Materials						
	First floor Assumed Materials					
Mastic associated with Raised Wooden Floor Pedestals	Category I Non-friable	G	Assumed	N/A		
Mirror Mastic	Category I Non-friable	G	Assumed	N/A		
Second Floor Assumed Materials						
12"x 12" Ceramic Floor Tile (Grey)	Category II Non-friable	G	Assumed	N/A		
Mirror Mastic	Category I Non-friable	G	Assumed	N/A		
12" x 16" Ceramic Wall Tile (White)	Category II Non-friable	G	Assumed	N/A		
	Third Floor	r Assumed Ma	terials			
Resilient Vinyl Flooring (Red, Wood Pattern)	Category I Non-friable	G	Assumed	N/A		
12"x 12" Ceramic Floor Tile (Grey)	Category II Non-friable	G	Assumed	N/A		
Mirror Mastic	Category I Non-friable	G	Assumed	N/A		
12" x 16" Ceramic Wall Tile (White)	Category II Non-friable	G	Assumed	N/A		
Fourth Floor Assumed Material						
Mastic Associated with Corner Guards	Category I Non-friable	G	Assumed	N/A		
12"x 12" Ceramic Floor Tile (Grey)	Category II Non-friable	G	Assumed	N/A		



Mirror Mastic	Category I Non-friable	G	Assumed	N/A
12" x 16" Ceramic Wall Tile (White)	Category II Non-friable	G	Assumed	N/A



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set No.: 35092

Project (Line 2):

Report Date: 8/14/2020

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 1 of 6

On 8/13/2020, sixty-four (64) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847809	2-94	Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 200	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847810	2-95	Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 230H	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847811	2-96	Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 222G	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847812	2-97	Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern) - Room 234	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847813	2-98	Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern) - Room 230D	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847814	2-99	Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern) - Room 230A	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847815	2-100	Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey) - Room 210	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847816	2-101	Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey) - Room 212	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847817	2-102	Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey) - Room 208	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847818	2-103	Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey) - Room 218E	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847819	2-104	Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey) - Room 218B	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847820	2-105	Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey) - Room 218D	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847821	2-106	Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow) - Room 225	None Detected - Flooring None Detected - Yellow Mastic
CL847822	2-107	Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow) - Room 225	None Detected - Flooring None Detected - Yellow Mastic



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/14/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set No.: 35092

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 2 of 6

On 8/13/2020, sixty-four (64) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847823	2-108	Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow) - Room 225	None Detected - Flooring None Detected - Yellow Mastic
CL847824	2-109	Resilient Vinyl Flooring (dark brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 218	None Detected - Flooring None Detected - Yellow Mastic None Detected - Leveling Compound
CL847825	2-110	Resilient Vinyl Flooring (dark brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 218	None Detected - Flooring None Detected - Yellow Mastic None Detected - Leveling Compound
CL847826	2-111	Resilient Vinyl Flooring (dark brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 218	None Detected - Flooring None Detected - Yellow Mastic None Detected - Leveling Compound
CL847827	2-112	Resilient Vinyl Flooring (light brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 230	None Detected - Flooring None Detected - Yellow Mastic None Detected - Leveling Compound
CL847828	2-113	Resilient Vinyl Flooring (light brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 222	None Detected - Flooring None Detected - Yellow Mastic None Detected - Leveling Compound
CL847829	2-114	Resilient Vinyl Flooring (light brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 202	None Detected - Flooring None Detected - Yellow Mastic None Detected - Leveling Compound
CL847830	2-115	12" X 12" Floor Tile (pink w/black & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 222A	None Detected - Floor Tile None Detected - Yellow Mastic None Detected - Leveling Compound
CL847831	2-116	12" X 12" Floor Tile (pink w/black & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 222A	None Detected - Floor Tile None Detected - Yellow Mastic None Detected - Leveling Compound
CL847832	2-117	12" X 12" Floor Tile (pink w/black & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 222A	None Detected - Floor Tile None Detected - Yellow Mastic None Detected - Leveling Compound



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/14/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set No.: 35092

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 3 of 6

On 8/13/2020, sixty-four (64) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847833	2-118	4" Cove Base (black) w/Mastic (tan) - Room 206	None Detected - Cove Base None Detected - Tan Mastic
CL847834	2-119	4" Cove Base (black) w/Mastic (tan) - Hallway 2L4	None Detected - Cove Base None Detected - Tan Mastic
CL847835	2-120	4" Cove Base (black) w/Mastic (tan) - Room 222C	None Detected - Cove Base None Detected - Tan Mastic
CL847836	2-121	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 2L2	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847837	2-122	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 234	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847838	2-123	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 222F	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847839	2-124	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 220	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847840	2-125	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 218E	None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847841	2-126	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 211	None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/14/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set No.: 35092

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

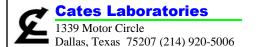
Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 4 of 6

On 8/13/2020, sixty-four (64) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847842	2-127	Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 206	None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847843	2-128	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 200	None Detected
CL847844	2-129	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 129	None Detected
CL847845	2-130	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 200	None Detected
CL847846	2-131	2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 222	None Detected
CL847847	2-132	2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 202	None Detected
CL847848	2-133	2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 2T2	None Detected
CL847849	2-134	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 2L2	None Detected
CL847850	2-135	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 230C	None Detected
CL847851	2-136	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 230	None Detected
CL847852	2-137	2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 2A	None Detected
CL847853	2-138	2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 222F	None Detected
CL847854	2-139	2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 212	None Detected
CL847855	2-140	Duct Mastic (grey) - Room 204	None Detected
CL847856	2-141	Duct Mastic (grey) - Room 2ME2	None Detected
CL847857	2-142	Duct Mastic (grey) - Room 2T1A	None Detected
CL847858	2-143	Duct Mastic (white) - Room 200	5% Chrysotile - White Mastic None Detected - Wrap None Detected - Insulation
CL847859	2-144	Duct Mastic (white) - Room 222	Not Analyzed - Positive Stop
CL847860	2-145	Duct Mastic (white) - Room 204D	Not Analyzed - Positive Stop



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/14/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set No.: 35092

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

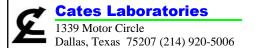
Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 5 of 6

On 8/13/2020, sixty-four (64) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847861	2-146	Interior Building Caulking (white) above Ceiling - Room 2T1A	None Detected
CL847862	2-147	Interior Building Caulking (white) above Ceiling - Room 230	None Detected
CL847863	2-148	Interior Building Caulking (white) above Ceiling - Room 218C	None Detected
CL847864	2-149	Firestop (red, yellow) - Room 2T1A	None Detected
CL847865	2-150	Firestop (red, yellow) - Room 206	None Detected
CL847866	2-151	Firestop (red, yellow) - Room 2ME1	None Detected
CL847867	2-279	Thermal System Insulation (white) - Room 200	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL847868	2-280	Thermal System Insulation (white) - Room 204A	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL847869	2-281	Thermal System Insulation (white) - Room 206	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL847870	2-282	Mastic (black) associated w/Perimeter Walls - Room 207	10% Chrysotile
CL847871	2-283	Mastic (black) associated w/Perimeter Walls - Room 218D	Not Analyzed - Positive Stop
CL847872	2-284	Mastic (black) associated w/Perimeter Walls - Room 220	Not Analyzed - Positive Stop
			<u> </u>



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set No.: 35092

Project (Line 2): Report Date: 8/14/2020

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis
Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 6 of 6

On 8/13/2020, sixty-four (64) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein.

#### STATEMENT OF LABORATORY ACCREDITATION

The samples were analyzed in general accordance with the procedures outlined in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116 or the U.S. Environmental Protection Agency EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, by polarized light microscopy. The results of each bulk sample relate only to the material tested and the results shall not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Specific questions concerning bulk sample results shall be directed to the Laboratory Director.

**Curtis Grigg** 

Analyst:

Laboratory Director: John R. Cates, P.G.

Approved Signatory:

NVLAP

NVLAP LAB CODE 200569-0



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2):

Report Date: 8/14/2020

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 1 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847873	3-152	Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern) - Room 300	None Detected
CL847874	3-153	Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern) - Room 302	None Detected
CL847875	3-154	Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern) - Room 318	None Detected
CL847876	3-155	Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design) - Room 316	None Detected
CL847877	3-156	Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design) - Room 306	None Detected
CL847878	3-157	Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design) - Room 316	None Detected
CL847879	3-158	Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey) - Room 308	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847880	3-159	Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey) - Room 308	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847881	3-160	Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey) - Room 308	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847882	3-161	Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 313	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847883	3-162	Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 313B	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847884	3-163	Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 313A	None Detected - Yellow Mastic None Detected - Leveling Compound
CL847885	3-164	Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown) - Room 310	None Detected - Sheet Flooring None Detected - Yellow Mastic None Detected - Vapor Barrier



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2):

Report Date: 8/14/2020 Project No: 725010720021 Sample Date: Not Provided

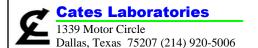
Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 2 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847886	3-165	Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown) - Room 310C	None Detected - Sheet Flooring None Detected - Yellow Mastic None Detected - Vapor Barrier
CL847887	3-166	Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown) - Hallway 3A	None Detected - Sheet Flooring None Detected - Yellow Mastic None Detected - Vapor Barrier
CL847888	3-167	4" Cove Base (dark grey) w/Mastic (tan) - Room 300	None Detected - Cove Base None Detected - Tan Mastic
CL847889	3-168	4" Cove Base (dark grey) w/Mastic (tan) - Room 310G	None Detected - Cove Base None Detected - Tan Mastic
CL847890	3-169	4" Cove Base (dark grey) w/Mastic (tan) - Room 312	None Detected - Cove Base None Detected - Tan Mastic
CL847891	3-170	Sink Undercoating (grey) - Room 313A	None Detected
CL847892	3-171	Sink Undercoating (grey) - Room 313A	None Detected
CL847893	3-172	Sink Undercoating (grey) - Room 313A	None Detected
CL847894	3-173	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 320	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847895	3-174	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 311	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847896	3-175	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 313	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2):

Report Date: 8/14/2020 Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 3 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847897	3-176	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 311A	None Detected - Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847898	3-177	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 310	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847899	3-178	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 310D	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847900	3-179	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 3SC1	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847901	3-180	Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300	None Detected - Wall Covering None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847902	3-181	Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300	None Detected - Wall Covering None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847903	3-182	Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300	None Detected - Wall Covering None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2):

Report Date: 8/14/2020

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 4 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

3-183	Unfinished Drywall/Joint Compound - Room 3ME1	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
3-184	Unfinished Drywall/Joint Compound - Room 3ME2	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
3-185	Unfinished Drywall/Joint Compound - Room 3ME2	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
3-186	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 300	None Detected
3-187	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 300	None Detected
3-188	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 306	None Detected
3-189	2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 319	None Detected
3-190	2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 312	None Detected
3-191	$2^{\prime}$ X $2^{\prime}$ Acoustical Ceiling Tile (white, pinhole, rough finish) - Restroom $3T1$	None Detected
3-192	Firestop (red) - Room 3ME1	None Detected
3-193	Firestop (red) - Room 3ME2	None Detected
3-194	Firestop (red) - Room 3ME2	None Detected
3-195	Thermal System Insulation (white) - Room 3ME2	None Detected - White Mastic None Detected - Wrap
3-196	Thermal System Insulation (white) - Room 300	None Detected - White Mastic None Detected - Wrap
_	3-185  3-186  3-187  3-188  3-190  3-191  3-192  3-193  3-194  3-195	3-185 Unfinished Drywall/Joint Compound - Room 3ME2  3-186 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 300  3-187 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 300  3-188 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 306  3-189 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 319  3-190 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 312  3-191 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Restroom 3T1  3-192 Firestop (red) - Room 3ME1  3-193 Firestop (red) - Room 3ME2  3-194 Firestop (red) - Room 3ME2  3-195 Thermal System Insulation (white) - Room 3ME2



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2):

Report Date: 8/14/2020

Project No: 725010720021 Sample Date: Not Provided

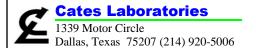
Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 5 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847918	3-197	Thermal System Insulation (white) - Room 300	None Detected - White Mastic None Detected - Wrap
CL847919	3-198	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 313	None Detected
CL847920	3-199	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 313AA	None Detected
CL847921	3-200	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 310	None Detected
CL847922	3-201	Firestop (grey) - Room 3ME1	None Detected
CL847923	3-202	Firestop (grey) - Room 3ME2	None Detected
CL847924	3-203	Firestop (grey) - Room 3ME2	None Detected
CL847925	3-204	Mastic (black) associated w/Perimeter Walls - Room 300	5% Chrysotile
CL847926	3-205	Mastic (black) associated w/Perimeter Walls - Room 312A	Not Analyzed - Positive Stop
CL847927	3-206	Mastic (black) associated w/Perimeter Walls - Room 310B	Not Analyzed - Positive Stop
CL847928	3-207	Duct Mastic (white) - Room 300	20% Chrysotile
CL847929	3-208	Duct Mastic (white) - Room 300	Not Analyzed - Positive Stop
CL847930	3-209	Duct Mastic (white) - Room 320	Not Analyzed - Positive Stop
CL847931	3-210	Duct Mastic (grey) - Room 300	None Detected
CL847932	3-211	Duct Mastic (grey) - Room 300	None Detected
CL847933	3-212	Duct Mastic (grey) - Room 311	None Detected
CL847934	3-213	Fireproofing (grey) - Room 300	None Detected
CL847935	3-214	Fireproofing (grey) - Room 300	None Detected
CL847936	3-215	Fireproofing (grey) - Room 300	None Detected
CL847937	3-216	Fireproofing (grey) - Room 300	None Detected



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2): Report Date: 8/14/2020

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 6 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847938	3-217	Fireproofing (grey) - Room 300	None Detected



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/14/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Set No.: 35093

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 7 of 7

On 8/13/2020, sixty-six (66) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein.

#### STATEMENT OF LABORATORY ACCREDITATION

The samples were analyzed in general accordance with the procedures outlined in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116 or the U.S. Environmental Protection Agency EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, by polarized light microscopy. The results of each bulk sample relate only to the material tested and the results shall not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Specific questions concerning bulk sample results shall be directed to the Laboratory Director.

Analyst: Kathy Schosek

Laboratory Director: John R. Cates, P.G.

Approved Signatory:

NVLAP LAB CODE 200569-0

The Shusk



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/17/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set No.: 35094

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 1 of 6

On 8/13/2020, sixty-one (61) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847939	4-218	Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey) - Room 470	None Detected
CL847940	4-219	Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey) - Room 450	None Detected
CL847941	4-220	Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey) - Hallway 4L1	None Detected
CL847942	4-221	Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) - Room 404	None Detected
CL847943	4-222	Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) - Room 404	None Detected
CL847944	4-223	Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) - Room 405	None Detected
CL847945	4-224	Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels) - Stairway 4S4	None Detected
CL847946	4-225	Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels) - Stairway 3S4	None Detected
CL847947	4-226	Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels) - Stairway 2S4	None Detected
CL847948	4-227	12" X 12" Floor Tile (grey w/dark grey & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 450A	None Detected - Floor Tile None Detected - Yellow Mastic
CL847949	4-228	12" X 12" Floor Tile (grey w/dark grey & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 450A	None Detected - Floor Tile None Detected - Yellow Mastic
CL847950	4-229	12" X 12" Floor Tile (grey w/dark grey & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 450A	None Detected - Floor Tile None Detected - Yellow Mastic
CL847951	4-230	12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 410	None Detected - Floor Tile None Detected - Yellow Mastic
CL847952	4-231	12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 410	None Detected - Floor Tile None Detected - Yellow Mastic



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/17/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set No.: 35094

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 2 of 6

On 8/13/2020, sixty-one (61) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847953	4-232	12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 410	None Detected - Floor Tile None Detected - Yellow Mastic
CL847954	4-233	Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow) - Room 401	None Detected - Flooring None Detected - Yellow Mastic None Detected - Vapor Barrier
CL847955	4-234	Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow) - Room 400	None Detected - Flooring None Detected - Yellow Mastic None Detected - Vapor Barrier
CL847956	4-235	Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow) - Room 454	None Detected - Flooring None Detected - Yellow Mastic None Detected - Vapor Barrier
CL847957	4-236	4" Cove Base (dark grey) w/Mastic (tan) - by Room 470	None Detected - Cove Base None Detected - Tan Mastic
CL847958	4-237	4" Cove Base (dark grey) w/Mastic (tan) - by Room 4T1	None Detected - Cove Base None Detected - Tan Mastic
CL847959	4-238	4" Cove Base (dark grey) w/Mastic (tan) - Room 448	None Detected - Cove Base None Detected - Tan Mastic
CL847960	4-239	Sink Undercoating (grey) - Room 401	None Detected
CL847961	4-240	Sink Undercoating (grey) - Room 401	None Detected
CL847962	4-241	Sink Undercoating (grey) - Room 401	None Detected
CL847963	4-242	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 470	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/17/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set No.: 35094

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 3 of 6

On 8/13/2020, sixty-one (61) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847964	4-243	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 460	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847965	4-244	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 428	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847966	4-245	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 401	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847967	4-246	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 244	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847968	4-247	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 448	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847969	4-248	Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 257	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847970	4-249	Unfinished Drywall/Joint Compound - Room 4ME1	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set No.: 35094

Project (Line 2):

Report Date: 8/17/2020

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Polarized Light Microscopy/Dispersion Staining (PLM/DS) Test Method:

> EPA Method 600/R-93/116 Page 4 of 6

On 8/13/2020, sixty-one (61) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847971	4-250	Unfinished Drywall/Joint Compound - Room 4ME1	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847972	4-251	Unfinished Drywall/Joint Compound - Room 4ME1	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL847973	4-252	Firestop (red) - Room 4ME2	None Detected
CL847974	4-253	Firestop (red) - Room 4ME2	None Detected
CL847975	4-254	Firestop (red) - Room 4ME1	None Detected
CL847976	4-255	Firestop (grey) - Room 4ME1	2% Chrysotile
CL847977	4-256	Firestop (grey) - Room 4ME3	Not Analyzed - Positive Stop
CL847978	4-257	Firestop (grey) - Room 4ME3	Not Analyzed - Positive Stop
CL847979	4-258	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 446	None Detected
CL847980	4-259	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 460	None Detected
CL847981	4-260	4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 430	None Detected
CL847982	4-261	$2^{\rm t}$ X $2^{\rm t}$ Acoustical Ceiling Tile (white, pinhole, rough finish) - Room $450{\rm A}$	None Detected
CL847983	4-262	2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 461	None Detected
CL847984	4-263	$2^{\rm t}$ X $2^{\rm t}$ Acoustical Ceiling Tile (white, pinhole, rough finish) - Restroom $4T1$	None Detected
CL847985	4-264	2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 418	None Detected
CL847986	4-265	2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 432	None Detected
CL847987	4-266	2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 434	None Detected



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/17/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set No.: 35094

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 5 of 6

On 8/13/2020, sixty-one (61) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL847988	4-267	Duct Mastic (grey) - Room 4ME3	None Detected
CL847989	4-268	Duct Mastic (grey) - Room 428	None Detected
CL847990	4-269	Duct Mastic (grey) - Room 400	None Detected
CL847991	4-270	Duct Mastic (white) - Room 446	None Detected
CL847992	4-271	Duct Mastic (white) - Room 470	None Detected
CL847993	4-272	Duct Mastic (white) - Hallway 4C	None Detected
CL847994	4-273	Thermal System Insulation (white) - Room 460	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL847995	4-274	Thermal System Insulation (white) - Room 446	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL847996	4-275	Thermal System Insulation (white) - Room 4ME3	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL847997	4-276	Mastic (black) associated w/Perimeter Walls - Room 470	5% Chrysotile
CL847998	4-277	Mastic (black) associated w/Perimeter Walls - Room 453	Not Analyzed - Positive Stop
CL847999	4-278	Mastic (black) associated w/Perimeter Walls - Room 400	Not Analyzed - Positive Stop



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Report Date: 8/17/2020

Client: Apex TITAN Lab Job No.: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set No.: 35094

Project (Line 2):

Project No: 725010720021 Sample Date: Not Provided

Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 6 of 6

On 8/13/2020, sixty-one (61) bulk samples were submitted by Mr. Edgar Roque of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein.

#### STATEMENT OF LABORATORY ACCREDITATION

The samples were analyzed in general accordance with the procedures outlined in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116 or the U.S. Environmental Protection Agency EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, by polarized light microscopy. The results of each bulk sample relate only to the material tested and the results shall not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Specific questions concerning bulk sample results shall be directed to the Laboratory Director.

Analyst: Kathy Schosek

Laboratory Director: John R. Cates, P.G.

Approved Signatory:

NVLAP LAB CODE 200569-0

The Shusk

#### **Bulk Asbestos Analysis Sheet**



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847809** 

Field ID #: **2-94** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 200

Layer 1 Yellow Masti	C	Stereoscopic l	Examination					
		Color	<u>Texture</u>	Homog	geneous? % I	Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es I	ND	ND	50
LM Examination:			•					
			Color/	Parallel	Perpendicula	r	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Glue Binders	100	Non-fibrous						
				~				
rep/treatment: heat / me	t		Asbesto	os Content:	None Detec	ted		
				os Content:	None Detec	tea — — —		
		Stereoscopic		os Content: - — — -	None Detec	tea — — —		_
		Stereoscopic l					Asbestos %	 of Sample
		•	Examination		geneous? % I		Asbestos %	of Sample 50
		Color	Examination Texture		geneous? % I	 Fibrous %		
ayer 2 Leveling Con		Color	Examination Texture		geneous? % I	Fibrous <u>%</u>		
ayer 2 Leveling Con		Color	Examination Texture Blocky	<u>Homog</u> <b>Y</b>	geneous? % I	Fibrous <u>%</u>	ND	50 Sign of
ayer 2 Leveling Con	 npound	<u>Color</u> <b>Grey</b>	Examination Texture Blocky Color/	Homog <b>Y</b> Parallel	geneous? % I (es I	— — — — — — — — — — — — — — — — — — —	ND Extinction	50
ayer 2 Leveling Con  LM Examination:		Color Grey	Examination Texture Blocky Color/	Homog <b>Y</b> Parallel	geneous? % I (es I	Fibrous <u>%</u> <b>ND</b> r <u>Biref</u>	ND Extinction	50 Sign of

Comments:

Analyst: Curtis Grigg
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847809

#### **Bulk Asbestos Analysis Sheet**



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847810** 

Field ID #: **2-95** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 230H

Sample Description: Mastic (yell	low) associated	w/Carpet (grey w/blu	e & green stripe	pattern) & L	eveling Compoun	d (grey) - Room	1 230H
Layer 1 Yellow Mastic		Stereoscopic 1	Examination				
		Color	<u>Texture</u>	Homog	geneous? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Υ	es ND	ND	50
PLM Examination:			-				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bir	ef Angle	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Leveling Comp	ouna	Stereoscopic l					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % Fibrous	% Asbestos %	of Sample
		Grey	Blocky	Y	es ND	ND	50
PLM Examination:							
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index Bir	<u>ef Angle</u>	<u>Elongation</u>
Cellulose Fibers	3	ribbons			hig	gh	
Aggregate/Binders	97	Non-fibrous					
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detected		

Comments:

Analyst: Curtis Grigg
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847810

#### **Bulk Asbestos Analysis Sheet**



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847811** 

Field ID #: **2-96** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 222G

Layer 1 Yellow Masti	С	Stereoscopic l	Examination					
		Color	<u>Texture</u>	<u>Homog</u>	geneous? % I	Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	'es I	ND	ND	50
PLM Examination:			-					
			Color/	Parallel	Perpendicula	r	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / me	lt		Asbesto	os Content:	None Detec	ted		
 _ayer 2	 npound		Examination					
	 npound	Stereoscopic l	Examination Texture			— — — Fibrous <u>%</u>	Asbestos %	of Sample
	 mpound	•				— — — Fibrous <u>%</u>	Asbestos %	of Sample 50
	 mpound	Color	<u>Texture</u>					
, ,	 mpound	Color	<u>Texture</u>			ND		-
, ,	<u>%</u> +/-	Color	<u>Texture</u> <b>Blocky</b>	Y	es I	ND	ND	50
PLM Examination:		<u>Color</u> <b>Grey</b>	Texture Blocky Color/	Y Parallel	es I	ND r	ND Extinction	50 Sign of
PLM Examination:  Components	<u>%</u> +/-	Color Grey	Texture Blocky Color/	Y Parallel	es I	ND r <u>Biref</u>	ND Extinction	50 Sign of

 Comments:
 Analyst:
 Curtis Grigg

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847811



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847812** 

Field ID #: **2-97** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern) - Room 234

	,		, ,		,		
Layer 1 Yellow Mastic		Stereoscopic I	Examination				
		Color	<u>Texture</u>	Homog	geneous? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Υ	es ND	ND	50
PLM Examination:			-				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	ef Angle	<b>Elongation</b>
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Leveling Compou	ınd	Stereoscopic l	Examination				
		Color	Texture	Homog	geneous? % Fibrous	% Asbestos %	of Sample
		Grev	Blocky	Y	es ND	ND	50
PLM Examination:			,				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bird	ef Angle	Elongation
Cellulose Fibers	3	ribbons			hig	gh	
Aggregate/Binders	97	Non-fibrous			·	-	
Prep/treatment: mechanical se	paration		Asbesto	s Content:	None Detected		

 Comments:
 Analyst:
 Curtis Grigg

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847812



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847813** 

Field ID #: **2-98** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern) - Room 230D

Stereoscopic I	Examination					
Color	<u>Texture</u>	<u>Homog</u>	geneous? % F	ibrous %	Asbestos %	of Sample
Yellow-Tan	Rubbery	Υ	es N	ID	ND	50
	Color/	Parallel	1		Extinction	Sign of
	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	<u>Elongation</u>
Non-fibrous						
	Asbesto	s Content:	None Detect	ed		
Stereoscopic F	 Examination					
•		Homos	reneous? % F	ibroue %	Achestos %	of Sample
<del></del>						-
Grey	вюску	Y	es n	טו	ND	50
	C-1/	D11-1	D		E-dia dia	C: £
M1 - 1						Sign of
	Pieocnroism	Ref. Index	Kel. Index		Angle	Elongation
				nıgn		
Non-TIDFOUS						
	Color Yellow-Tan  Morphology Non-fibrous	Yellow-Tan Rubbery  Color/ Pleochroism  Non-fibrous  Stereoscopic Examination Color Texture Grey Blocky  Color/ Morphology ribbons	Color Yellow-Tan     Texture Rubbery     Homographology Pleochroism       Morphology Non-fibrous     Color/ Pleochroism     Parallel Ref. Index       Asbestos Content:       Stereoscopic Examination       Color Texture     Homographology       Grey Blocky     Y       Morphology ribbons     Pleochroism     Ref. Index	Color     Texture     Homogeneous?     % F       Yellow-Tan     Rubbery     Yes     N       Morphology Non-fibrous     Color/Pleochroism     Parallel Ref. Index     Perpendicular Ref. Index       Asbestos Content:     None Detect       Stereoscopic Examination Color     Texture     Homogeneous?     % F       Grey     Blocky     Yes     N       Morphology ribbons     Pleochroism     Ref. Index     Ref. Index	Color Yellow-Tan     Texture Rubbery     Homogeneous? Yes     % Fibrous % ND       Morphology Non-fibrous     Color/ Pleochroism Ref. Index Ref.	Color Yellow-Tan         Texture Rubbery         Homogeneous? Yes         % Fibrous ND         % Asbestos % or ND           Morphology Non-fibrous         Color/ Pleochroism Ref. Index Ref. In



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847814** 

Field ID #: **2-99** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (green w/yellow, blue & red spot pattern) - Room 230A

Sample Description. Wastic (y	cilow) associated	w/oarpet (green w/y	cilow, blue a rea	spot patter	ii) - 100iii 230			
Layer 1 Yellow Mastic	:	Stereoscopic 1	Examination					
		Color	Texture	Homog	geneous? % Fit	orous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Υ	es NE	)	ND	50
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	Angle	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt	ł		Ashesto	os Content:	None Detecte	ed		
<u> 110pratoaumonu</u>	•		1150050	os comen.	2010010	-		
Layer 2 Leveling Com		Stereoscopic	— — — — — Examination					
,	•	Color	Texture	Homog	geneous? % Fit	rous %	Asbestos %	of Sample
		Grey	Blocky	Y	es NE		ND	50
PLM Examination:		0.0,	Dioony	•				
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Cellulose Fibers	3	ribbons				high		
Aggregate/Binders	97	Non-fibrous				ŭ		
Prep/treatment: mechanica	al separation		Ashesto	os Content:	None Detecte	d		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847815** 

Field ID #: **2-100** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey) - Room 210

**Yellow Mastic** Layer 1 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample 50 Yellow-Tan Rubbery Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Pleochroism Ref. Index Biref Elongation Components Angle Non-fibrous **Glue Binders** 100 heat / melt **None Detected** Prep/treatment: Asbestos Content: **Leveling Compound** Layer 2 Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Grey **Blocky** Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> +/-Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Cellulose Fibers** ribbons high Aggregate/Binders 97 Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847816** 

Field ID #: **2-101** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey) - Room 212

Stereoscopic I	Examination				
Color	<u>Texture</u>	Homog	geneous? % Fibrous 9	6 Asbestos %	of Sample
Yellow-Tan	Rubbery	Υ	es ND	ND	50
	-				
	Color/	Parallel	Perpendicular	Extinction	Sign of
Morphology	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Non-fibrous					
	Ashasta	Contant:	None Detected		
	Asuesic	os Content.	None Detected		
Stereoscopic I	Examination				
Color	<u>Texture</u>	Homog	geneous? % Fibrous 9	6 Asbestos %	of Sample
Grey	Blocky	Υ	es ND	ND	50
•	•				
	Color/	Parallel	Perpendicular	Extinction	Sign of
Morphology	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
ribbons			high	1	
Non-fibrous			•		
	Color Yellow-Tan  Morphology Non-fibrous  Stereoscopic I Color Grey  Morphology ribbons	Yellow-Tan  Rubbery  Color/ Pleochroism  Non-fibrous  Stereoscopic Examination Color Texture Grey Blocky  Color/ Morphology ribbons	Color Yellow-Tan     Texture Rubbery     Homographology Pleochroism       Non-fibrous     Color/Pleochroism     Parallel Ref. Index       Asbestos Content:     Asbestos Content:       Stereoscopic Examination     Color     Texture     Homographology       Grey     Blocky     Y       Morphology ribbons     Pleochroism     Ref. Index	Color Yellow-Tan         Texture Rubbery         Homogeneous? Yes         % Fibrous 9 ND           Morphology Non-fibrous         Color/ Pleochroism Ref. Index Ref. Ind	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847817** 

Field ID #: **2-102** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/green & red dot pattern) & Leveling Compound (grey) - Room 208

**Yellow Mastic** Layer 1 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample 50 Yellow-Tan Rubbery Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Pleochroism Ref. Index Biref Elongation Components Angle Non-fibrous **Glue Binders** 100 heat / melt **None Detected** Prep/treatment: Asbestos Content: **Leveling Compound** Layer 2 Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Grey **Blocky** Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> +/-Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Cellulose Fibers** ribbons high Aggregate/Binders 97 Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847818** 

Field ID #: **2-103** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey) - Room 218E

Sample Description: Wastic (ye	ilow) associated v	wcarper (light grey	w/dark grey strip	e pattern) & Leveni	ng Compound	u (grey) - Roc	OIII Z I OE
Layer 1 Yellow Mastic		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	50
PLM Examination:			•				
			Color/	Parallel Perpend	licular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index Ref. In	ndex Biref	<u>Angle</u>	<b>Elongation</b>
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None I	Detected		
Layer 2 Leveling Comp	oound	Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Grey	Blocky	Yes	ND	ND	50
PLM Examination:		•	•				
			Color/	Parallel Perpend	licular	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index Ref. In	ndex Biref	<u>Angle</u>	<b>Elongation</b>
Cellulose Fibers	3	ribbons			high		
Aggregate/Binders	97	Non-fibrous					

 Prep/treatment:
 mechanical separation
 Asbestos Content:
 None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847819** 

Field ID #: 2-104 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey) - Room 218B

**Yellow Mastic** Layer 1 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample 50 Yellow-Tan Rubbery Yes ND ND PLM Examination: Extinction Color/ Parallel Perpendicular Sign of Morphology Ref. Index Pleochroism Ref. Index Biref Elongation Components Angle Non-fibrous **Glue Binders** 100 heat / melt **None Detected** Prep/treatment: Asbestos Content: **Leveling Compound** Layer 2 Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Grey Blocky Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Morphology Components <u>%</u> +/-Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Cellulose Fibers** ribbons high Non-fibrous Aggregate/Binders 97 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847820** 

Field ID #: **2-105** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (light grey w/dark grey stripe pattern) & Leveling Compound (grey) - Room 218D

Layer 1 Yellow Mastic		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneou	us? % Fibrous 9	6 Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	50
PLM Examination:			_				
			Color/	Parallel Perp	endicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref	f. Index Biref	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: Non	e Detected		
Layer 2 Leveling Compo	ound	Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneou	us? <u>% Fibrous</u> 9	6 Asbestos %	of Sample
		Grey	Blocky	Yes	ND	ND	50
PLM Examination:		·	•				
			Color/	Parallel Perp	endicular	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref	f. Index Biref	<u>Angle</u>	<u>Elongation</u>
Components Cellulose Fibers	<u>%</u> +/- <b>3</b>	Morphology ribbons	Pleochroism	Ref. Index Ref	f <u>. Index</u> <u>Biref</u> <b>high</b>		Elongation
Components Cellulose Fibers Aggregate/Binders			Pleochroism	Ref. Index Ref			<u>Elongation</u>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847821** 

Field ID #: **2-106** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow) - Room 225

Layer 1 Flooring		Stereoscopic I	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos	% of Sample
		Tan	Hard	Yes	ND	ND	99
PLM Examination:							
			Color/	Parallel Perpend	licular	Extinction	n Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. In	ndex Bire	f Angle	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous					
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content: None I	Detected		
Layer 2 Yellow Mastic		Stereoscopic l	— — — — — Examination		- — — -		
		Color	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos	% of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	1
PLM Examination:			,				
			Color/	Parallel Perpend	licular	Extinction	n Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index Ref. In	ndex Bire	f Angle	Elongation
Glue Binders	100	Non-fibrous					
D // / boot/malt			Ashesto	os Content: None I	Detected		
Prep/treatment: heat / melt							



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847822** 

Field ID #: **2-107** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow) - Room 225

Layer 1 Flooring		Stereoscopic F	Examination					
		Color	<u>Texture</u>	<u>Homog</u>	geneous? % F	ibrous %	Asbestos %	of Sample
		Tan	Hard	Υ	es N	ID	ND	99
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detect	ed		
Layer 2 Yellow Mastic		Stereoscopic I	Examination					
		Color	<u>Texture</u>	Homog	geneous? % F	ibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es N	ID	ND	1
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<b>Biref</b>	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	s Content:	None Detect	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847823** 

Field ID #: **2-108** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (tan wood pattern) & Mastic (yellow) - Room 225

Layer 1 Flooring		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homog	geneous? % Fil	orous % A	sbestos % o	of Sample
		Tan	Hard	Y	es NI	)	ND	99
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		
Layer 2 Yellow Mastic		Stereoscopic E	xamination					
		Color	Texture	Homog	geneous? % Fil	orous % A	sbestos % o	of Sample
		Yellow-Tan	Rubbery	Υ	es NI	)	ND	1
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library Floor #2** Set #: 35092 Project (Line 2): Sample #: CI 847824 725010720021

roject #: <b>72501072002</b>	21							Sample #:	CL8478
eld ID #: <b>2-109</b>							. ,		Page 1
nple Description: Resilient Vi	nyl Floo	ring (da	rk brown wood patte	ern) & Mastic (yel	low) & Leve	ling Compou	nd (grey	) - Room 218	3
ayer 1 Flooring			Stereoscopic	Examination					
			Color	<u>Texture</u>		geneous? % Fi			
LM Examination:			Dk. Brown	Hard	Y	es N	D	ND	90
LIVI Examination.				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents	<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100		Non-fibrous						
rep/treatment: heat / melt				Asbesto	s Content:	None Detecte	ed		
ayer 2 Yellow Mastic			Stereoscopic	Examination	· — —				
			Color	Texture	-	geneous? % Fi			of Sample
LM Examination:			Yellow-Tan	Rubbery	Y	es N	D	ND	1
LIVI Examination:				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents	<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Binders	100		Non-fibrous						
rep/treatment: heat / melt				Asbesto	s Content:	None Detecte	ed		
ayer 3 Leveling Compo			Stereoscopic	Examination	. — — -				
			<u>Color</u>	<u>Texture</u>		eneous? % Fi			•
LM Examination:			Grey	Blocky	Y	es N	D	ND	9
LIVI EXAMINIATION:				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents	<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Cellulose Fibers Aggregate/Binders	3 97		ribbons Non-fibrous				high		
		on		Ashesto	s Content:	None Detecte	ed be		

Comments:	Analyst: Date Analyzed:	Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847824</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #:	725010720021								Sample #:	CL847825
Field ID #:	2-110									Page 1 of
Sample Descr	ription: Resilient Viny	l Floo	ring (dar	k brown wood patte	ern) & Mastic (yel	low) & Leve	eling Compo	und (grey	) - Room 218	
Layer 1	Flooring			Stereoscopic	Examination					
•	•			Color	Texture	Homog	geneous? % I	ibrous %	Asbestos % o	of Sample
				Dk. Brown	Hard	Y	es l	ND	ND	90
PLM Examin	nation:				C-1/	D11-1	D 1:1.	_	F	C:
Components		%	+/-	Morphology	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index		Extinction Angle	Sign of Elongation
	te/Vinyl Binders	100	<u></u>	Non-fibrous						=g
Prep/treatme	ent: heat / melt				Asbesto	os Content:	None Detec	ted		
Layer 2	Yellow Mastic			Stereoscopic						_
				Color					Asbestos % o	
PLM Examin	matian.			Yellow-Tan	Rubbery	Y	es l	ND	ND	1
PLIVI EXAIIIII	nation:				Color/	Parallel	Perpendicula		Extinction	Sign of
Components	_	%	<u>+/-</u>	Morphology	Pleochroism		Ref. Index		Angle	Elongation
Glue Bin	nders	100		Non-fibrous						
Prep/treatme	ent: heat / melt				Asbesto	os Content:	None Detec	ted		
Layer 3	Leveling Compou	ınd		Stereoscopic	— — — — — — Examination					
				<u>Color</u>	<u>Texture</u>	Homog	geneous? % I	Fibrous %	Asbestos % o	of Sample
				Grey	Blocky	Y	'es l	ND	ND	9
PLM Examin	nation:				Color/	Parallel	Perpendicula		Extinction	Sign of
Components		%	+/-	Morphology	Pleochroism		Ref. Index	Biref	Angle	Elongation
Cellulos		3	<u>.,,</u>	ribbons	<u> </u>	11011 1110011	<u> </u>	high	<u> </u>	<u> 21011ganton</u>
Aggrega	te/Binders	97		Non-fibrous				•		
Prep/treatme	ent: mechanical se	parati	on		Asbesto	os Content:	None Detec	ted		
	ent: mechanical se	parati	on	Non-fibrous		os Content:	None Detec	ted — — —		_

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: **CL847825** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-23736 Apex TITAN** Client: 35092

Sample Description: Resilient Vinyl Flooring (dark brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 218

Project (Line 1): UNT - Gibson Library Floor #2

Set #:

Project (Line 2):

PLM Examination:

Project #: 725010720021 Sample #: **CL847826** 

Field ID #: 2-111 Page 1 of 1

longation

Layer 1 **Flooring** Stereoscopic Examination Color **Texture** Homogeneous? % Fibrous % Asbestos % of Sample ND 90 Dk. Brown Hard Yes ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Ref. Index Components Pleochroism Biref Elongation Angle Aggregate/Vinyl Binders 100 Non-fibrous <u>Prep/treatment:</u> heat / melt **None Detected** Asbestos Content: **Yellow Mastic** Layer 2 Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan Rubbery Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Ref. Index Ref. Index Components <u>%</u> +/-Morphology Pleochroism Biref Angle **Elongation Glue Binders** 100 Non-fibrous Prep/treatment: heat / melt Asbestos Content: None Detected **Leveling Compound** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Grey Blocky Yes ND ND

Components Cellulose Fibers Aggregate/Binders	% +/- 3 97	<u>Morphology</u> ribbons Non-fibrous	Color/ <u>Pleochroism</u>	Parallel <u>Ref. Index</u>	Perpendicular Ref. Index	Biref high	Extinction Angle	Sign of Elongation
Prep/treatment: mechanica	I separation		Asbesto	os Content:	None Detecte	ed		
								· <del></del>

Comments: Analyst: **Curtis Grigg** 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847826



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library Floor #2** Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847827** 

ayer 1 Flooring			Stereoscopic	Examination					
			Color	<u>Texture</u>	Homog	eneous? % Fib	rous %	Asbestos % o	of Sample
			Lt. Brown	Hard	Y	es NC	)	ND	90
LM Examination:				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents	%	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Aggregate/Vinyl Binders	100		Non-fibrous					_	
rep/treatment: heat / melt				Asbesto	os Content:	None Detecte	d		
ayer 2 Yellow Mastic			Stereoscopic	— — — — — Examination	- — — -				_
			Color	<u>Texture</u>	Homog	geneous? % Fib			of Sample
IME 1 2			Yellow-Tan	Rubbery	Y	es NE	)	ND	1
LM Examination:				Color/	Parallel	Perpendicular		Extinction	Sign of
<u>omponents</u>	_%	+/-	Morphology	Pleochroism		Ref. Index		Angle	Elongation
Glue Binders	100		Non-fibrous						
rep/treatment: heat / melt					os Content:	None Detecte	d		
ayer 3 Leveling Compo			Stereoscopic		. — — -				_
			<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fib	rous %	Asbestos % o	of Sample
			Grey	Blocky	Y	es NC	)	ND	9
LM Examination:				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents	%	<u>+/-</u>	Morphology	Pleochroism		Ref. Index	Biref	Angle	Elongation
Cellulose Fibers	3	<del></del>	ribbons				high		
Aggregate/Binders	97		Non-fibrous				_		
	eparati	on		Asbesto	s Content:	None Detecte	d		

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847827</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-23736 Apex TITAN** Client: 35092

Project (Line 1): UNT - Gibson Library Floor #2

Set #:

Project (Line 2):

Project #: 725010720021 Sample #: **CL847828** 

Field ID #: 2-113 Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown wood pattern) & Mastic (yellow) & Leveling Compound (grey) - Room 222 **Flooring** Layer 1 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Lt. Brown Hard Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Ref. Index Ref. Index Pleochroism Biref Angle Elongation Aggregate/Vinyl Binders 100 Non-fibrous <u>Prep/treatment:</u> heat / melt None Detected Asbestos Content: **Yellow Mastic** Layer 2 Stereoscopic Examination Texture Color <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan Rubbery Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Glue Binders** 100 Non-fibrous Prep/treatment: heat / melt Asbestos Content: None Detected Layer 3 Leveling Compound Stereoscopic Examination Color Texture Grey **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle **Elongation Cellulose Fibers** high ribbons Aggregate/Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847828</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021

Sample #: **CL847829** Field ID #

ayer 1 Flooring		Stereoscopic	Examination				
ayer i riooring		Color	Texture	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Lt. Brown	Hard	Yes	ND	ND	90
LM Examination:							
Y	0/ . /	Ml1	Color/ Pleochroism	Parallel Perpend		Extinction	Sign of
Components Aggregate/Vinyl Binders	<u>%</u> +/-	<u>Morphology</u> <b>Non-fibrous</b>	Pieociiroisiii	Ref. Index Ref. In	dex Biref	<u>Angle</u>	Elongation
	100	Non-librous	A 1 .	G Nama D	-441		
<u>Prep/treatment:</u> heat / melt			Aspesto	os Content: None D	etectea		
ayer 2 Yellow Mastic		Stereoscopic	Examination				_
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	1
LM Examination:			Color/	Parallel Perpend	icular	Extinction	Sign of
Components	% +/-	Morphology	Pleochroism	Ref. Index Ref. In		Angle	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None D	etected		
	— — — — — ound	Stereoscopic	— — — — — Examination	- — — — — —			_
,		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Grey	Blocky	Yes	ND	ND	9
LM Examination:			G.1. /	D 11 1 D 1	. 1	E ' '	G: C
Components	<u>%</u> +/-	Morphology	Color/ Pleochroism	Parallel Perpendi Ref. Index Ref. In		Extinction Angle	Sign of Elongation
Cellulose Fibers	3	ribbons	<u>r recemoism</u>	Ker. Hidex Ker. His	high		Liongation
Aggregate/Binders	97	Non-fibrous			3		
Prep/treatment: mechanical s	separation		Asbesto	os Content: None D	etected		
							_

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: **CL847829** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library Floor #2** Set #: 35092

Project (Line 2):

ample Description: 12" X 12" Flo	oor Tile (pink w	/black & white streat	(s) & Mastic (yell	ow) & Leve	ling Compoun	d (grey)	- Room 222/	4
ayer 1 Floor Tile		Stereoscopic						
		<u>Color</u>	<u>Texture</u>		geneous? % Fil			
PLM Examination:		Pink/Black	Hard	Y	es NI	)	ND	90
Components Aggregate/Vinyl Binders	<u>%</u> +/-	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		
		Stereoscopic	— — — — — — Examination					_
		Color	<u>Texture</u>	Homog	geneous? % Fit	orous %	Asbestos % o	f Sample
NAC ' '		Yellow-Tan	Rubbery	Y	es NI	)	ND	1
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components Glue Binders	<u>%</u> +/- 100	Morphology Non-fibrous	Pleochroism	Ref. Index		<u>Biref</u>	Angle	Elongation
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		
	 ound	Stereoscopic	— — — — — — Examination					
,gg		Color	Texture	Homog	geneous? % Fit	orous %	Asbestos % o	f Sample
		Grey	Blocky		es NI		ND	9
PLM Examination:			C 1 /	D 11.1	D 11 1		E di di	a. c
Components Cellulose Fibers Aggregate/Binders	<u>%</u> ±/- 3 97	Morphology ribbons Non-fibrous	Color/ <u>Pleochroism</u>	Parallel Ref. Index	Perpendicular Ref. Index	Biref high	Extinction Angle	Sign of Elongation
Prep/treatment: mechanical s			Asbesto	os Content:	None Detecte	ed		
								_

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847830</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #2
 Set #:
 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847831** 

Field ID #: **2-116** Page 1 of 1

Layer 1 Floor Tile		Stereoscopic	Examination					
		Color	<u>Texture</u>	<u>Homo</u>	geneous?	% Fibrous 9	6 Asbestos %	of Sample
		Pink/Black	Hard	Y	'es	ND	ND	90
PLM Examination:								
lammananta	0//	Mambalaav	Color/ Pleochroism	Parallel Ref. Index		icular dex Biref		Sign of Elongation
omponents Aggregate/Vinyl Binders	<u>%</u> <u>+/-</u>	<u>Morphology</u> <b>Non-fibrous</b>	Pieociiroisiii	Kei. Ilidex	Kei. Ilic	iex bitei	Angle	Eloligation
		Non-librous						
rep/treatment: heat / melt	İ		Asbesto	os Content:	None D	etected		
ayer 2 Yellow Mastic	;	Stereoscopic	Examination					· <del></del>
		Color	<u>Texture</u>	Homo	geneous?	% Fibrous 9	6 Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	'es	ND	ND	1
LM Examination:								
omnonants	0/- 1/	Mambalagy	Color/ Pleochroism	Parallel Ref. Index	Perpendi			Sign of Elongation
omponents Glue Binders	<u>%</u> +/- 100	<u>Morphology</u> <b>Non-fibrous</b>	Pieociiroisiii	Kei. Ilidex	Kei. Ilic	iex bitei	<u>Angle</u>	Eloligation
		Non-librous		<b>G</b>	N D	-111		
rep/treatment: heat / melt	: 		<u>Asbesto</u>	os Content:	None D	etectea 		
ayer 3 Leveling Com	pound	Stereoscopic	Examination					
		Color	<u>Texture</u>	<u>Homo</u>	geneous?	% Fibrous 9	6 Asbestos %	of Sample
		Grey	Blocky	Y	'es	ND	ND	9
LM Examination:			C-1/	D11. 1	D 1'	1	E-titi-	C: C
components	% +/-	Morphology	Color/ Pleochroism	Parallel Ref. Index			Extinction Angle	Sign of Elongation
Cellulose Fibers	3 ±7-	<u>ribbons</u>	<u>i ieociiioisiii</u>	Ker. Huex	Kei. Ilic	high		Liongation
Aggregate/Binders	97	Non-fibrous				iligii	ı	
rep/treatment: mechanica	al separation		Asbesto	os Content:	None D	etected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847832** 

Components Aggregate/Vinyl Binders Prep/treatment: heat / melt Layer 2 Yellow Mastic  Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of San Yellow-Tan Rubbery Yes ND ND 1	-
PLM Examination:  Components Aggregate/Vinyl Binders Prep/treatment: heat / melt Layer 2 Yellow Mastic  Color/ Parallel Perpendicular Extinction Signal Ref. Index Re	gn of
Components	
Layer 2 Yellow Mastic Stereoscopic Examination  Color Texture Homogeneous? % Fibrous % Asbestos % of San  Yellow-Tan Rubbery Yes ND ND 1	
ColorTextureHomogeneous?% Fibrous% Asbestos% of SanYellow-TanRubberyYesNDND1	
ColorTextureHomogeneous?% Fibrous% Asbestos% of SanYellow-TanRubberyYesNDND1	
	<u>nple</u>
DI M Evamination	
	gn of
	ngation
<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected	
Layer 3 Leveling Compound Stereoscopic Examination	
<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of San</u>	nple
Grey Blocky Yes ND ND 9	
PLM Examination:  Color/ Parallel Perpendicular Extinction Signal Color Signal	gn of
	ngation
Cellulose Fibers 3 ribbons high Aggregate/Binders 97 Non-fibrous	
Prep/treatment: mechanical separation Asbestos Content: None Detected	



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847833** 

Field ID #: **2-118** Page 1 of 1

Sample Description: 4" Cove Base (black) w/Mastic (tan) - Room 206

Bampie Bescription: 1 GG16 Baco	(widen)	o (tail) 1100iii 200						
Layer 1 Cove Base		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? 9	6 Fibrous %	Asbestos % o	of Sample
		Black	Rubbery	Υ	es	ND	ND	95
PLM Examination:			-					
			Color/	Parallel	Perpendicu		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>x</u> <u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Vinyl Binders	100	Non-fibrous						
<u>Prep/treatment:</u> heat / melt			Asbesto	s Content:	None Det	ected		
		Stereoscopic E	. — — — — — xamination					_
•		Color	Texture	Homog	geneous? 9	6 Fibrous %	Asbestos % o	of Sample
		Tan	Rubbery	Y	es	ND	ND	5
PLM Examination:			,					-
			Color/	Parallel	Perpendicu	ılar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	x Biref	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
<u>Prep/treatment:</u> heat / melt			Asbesto	s Content:	None Det	ected		

 Comments:
 Analyst:
 Curtis Grigg

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847833



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847834** 

Field ID #: **2-119** Page 1 of 1

Sample Description: 4" Cove Base (black) w/Mastic (tan) - Hallway 2L4

Bampie Bescription: 1 GG16 Baco	(Black) Willack	o (tan) Tianway 22	<u> </u>					
Layer 1 Cove Base		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? %	6 Fibrous %	Asbestos % c	of Sample
		Black	Rubbery	Υ	es	ND	ND	95
PLM Examination:			•					
			Color/	Parallel	Perpendicu		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	s Content:	None Dete	ected		
		Stereoscopic E	xamination					
		Color	Texture	Homos	geneous? %	6 Fibrous %	Asbestos % o	of Sample
		Tan	Rubbery		es	ND ND	ND	5
PLM Examination:		ran	Rubbery	1	62	ND	ND	5
			Color/	Parallel	Perpendicu	lar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Glue Binders	100	Non-fibrous						
<u>Prep/treatment:</u> heat / melt			Asbesto	s Content:	None Dete	ected		

 Comments:
 Analyst:
 Curtis Grigg

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847834



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847835** 

Field ID #: **2-120** Page 1 of 1

Sample Description: 4" Cove Base (black) w/Mastic (tan) - Room 222C

Layer 1 Cove Base		Stereoscopic l	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos % o	of Sample
		Black	Rubbery	Yes	ND	ND	95
PLM Examination:			•				
			Color/	Parallel Perpen	dicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index Ref. I	ndex Biref	<u>Angle</u>	Elongation
Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None	Detected		
Layer 2 Tan Mastic		Stereoscopic l	Examination				
Layer 2 Tan Mastic		Stereoscopic l <u>Color</u>	Examination <u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos % o	of Sample
Layer 2 Tan Mastic		*		Homogeneous?	% Fibrous %	Asbestos % o	of Sample <b>5</b>
Layer 2 Tan Mastic  PLM Examination:		Color	Texture				
.,.		Color	Texture		ND		
.,.	<u>%</u> ±/-	Color	Texture Rubbery	Yes	ND dicular	ND	5
PLM Examination:	<u>%</u> +/− <b>100</b>	<u>Color</u> <b>Tan</b>	Texture Rubbery Color/	Yes Parallel Perpen	ND dicular	ND Extinction	5 Sign of



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Lab Proj #: **PLM-23736** Project (Line 1): UNT - Gibson Library Floor #2 35092 Set #: Project (Line 2): Project #: 725010720021 Sample #: **CL847836** Field ID #: 2-121 Page 1 of 1 Sample Description: Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 2L2 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes ND ND PLM Examination: Extinction Sign of Color/ Parallel Perpendicular Ref. Index Ref. Index Morphology Pleochroism Biref Elongation Components Angle Aggregate/Binders/Paint 100 Non-fibrous Prep/treatment: solvent dissolution None Detected Asbestos Content: **Joint Tape** Layer 2 Stereoscopic Examination Color Texture Cream Fibrous Yes 100 ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> <u>+/-</u> Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Joint Compound Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blockv Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous 95 Perlite **Glass Foam** Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 Stereoscopic Examination Color Texture Tan **Fibrous** Yes 100 ND 10 PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 5 Wallboard Material Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** ribbons high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected **Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed:

Lab Job #: **PLM-23736** 

Sample #: CL847836



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Lab Proj #: **PLM-23736** Project (Line 1): UNT - Gibson Library Floor #2 35092 Set #: Project (Line 2): Project #: 725010720021 Sample #: **CL847837** Field ID #: 2-122 Page 1 of 1 Sample Description: Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 234 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes ND ND PLM Examination: Extinction Sign of Color/ Parallel Perpendicular Ref. Index Ref. Index Morphology Pleochroism Biref Elongation Components Angle Aggregate/Binders/Paint 100 Non-fibrous Prep/treatment: solvent dissolution None Detected Asbestos Content: **Joint Tape** Layer 2 Stereoscopic Examination Color Texture Cream Fibrous Yes 100 ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> <u>+/-</u> Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Joint Compound Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous 95 Perlite **Glass Foam** Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 Stereoscopic Examination Color Texture Tan **Fibrous** Yes 100 ND 10 PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 5 Wallboard Material Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** ribbons high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected **Curtis Grigg** Comments: Analyst: 8/14/2020

Date Analyzed:

Lab Job #: **PLM-23736** 

Sample #: **CL847837** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Lab Proj #: **PLM-23736** Project (Line 1): UNT - Gibson Library Floor #2 35092 Set #: Project (Line 2): Project #: 725010720021 Sample #: **CL847838** Field ID #: 2-123 Page 1 of 1 Sample Description: Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 222F **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample White ND **Blocky** Yes ND PLM Examination: Extinction Sign of Color/ Parallel Perpendicular Ref. Index Ref. Index Morphology Pleochroism Biref Elongation Components Angle Aggregate/Binders/Paint 100 Non-fibrous Prep/treatment: solvent dissolution None Detected Asbestos Content: **Joint Tape** Layer 2 Stereoscopic Examination Color Texture Cream Fibrous Yes 100 ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> <u>+/-</u> Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Joint Compound Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous 95 Perlite **Glass Foam** Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 Stereoscopic Examination Color Texture Tan **Fibrous** Yes 100 ND 10 PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 5 Wallboard Material Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** ribbons high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected **Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed:

Lab Job #: **PLM-23736** 

Sample #: CL847838



2-124

Field ID #:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Page 1 of 1

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #2
 Set #:
 35092

 Project (Line 2):
 Project #:
 725010720021
 Sample #:
 CL847839

Sample Description: Wall/Ceiling	Texture (white,	semi-smooth) Dry	wall/Joint Compo	und - Room	n 220			rage ror
Layer 1 Paint Texture		Stereoscopic	Examination					
		Color	<u>Texture</u>	Homo	geneous? % Fi	brous %	Asbestos %	of Sample
D1145		White	Blocky	•	Yes N	D	ND	10
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	% +/-	Morphology	Pleochroism		Ref. Index		Angle	Elongation
Aggregate/Binders/Paint	100	Non-fibrous						
Prep/treatment: solvent dissol	lution		Ashesto	os Content:	None Detect	he		
			-					_
Layer 2 Joint Tape		Stereoscopic	Examination					
		Color	<u>Texture</u>		geneous? % Fi			
		Cream	Fibrous	•	Yes 10	0	ND	10
PLM Examination:			Color/	Dorollal	Perpendicular		Extinction	Sign of
Components	% +/-	<u>Morphology</u>	Pleochroism		Ref. Index	Biref	Angle	Elongation
Cellulose Fibers	100	ribbons				high		
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detect	ed		
		Stereoscopic	Examination					
-ayo. o comi compound		Color	Texture	Homo	geneous? % Fi	brous %	Asbestos %	of Sample
		White	Blocky		Yes N		ND	10
PLM Examination:			,					
			Color/		Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Aggregate/Binders Perlite	95 5	Non-fibrous Glass Foam				0		
	-	Giass Fuaili		_		•		
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detector	ed		
Layer 4 Paper		Stereoscopic	Examination					
		Color	<u>Texture</u>	Homo	geneous? % Fi	brous %	Asbestos %	of Sample
		Tan	Fibrous	•	Yes 10	0	ND	10
PLM Examination:			G 1 /	D 11.1	D 1' 1		<b></b>	G: C
Components	<u>%</u> <u>+/-</u>	Morphology	Color/ Pleochroism	Parallel Ref Index	Perpendicular Ref. Index		Extinction Angle	Sign of Elongation
Cellulose Fibers	100	ribbons	<u>1 leochroisin</u>	Ker. muex	Kei. Ilidex	high	Aligie	Elongation
		Hibbons	A -14	Ctt-	Nena Datast	•		
Prep/treatment: mechanical se			Asbesic		None Detecto	<b>=</b> u 		
ayer 5 Wallboard Materi	al		Examination					
			<u>Texture</u>				Asbestos %	of Sample
		White	Blocky	•	Yes 1		ND	60
PLM Examination:			Color/	Parallel	Dornar diaul		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism		Perpendicular Ref. Index	Biref	Angle	Sign of Elongation
Cellulose Fibers	1	ribbons		Tion moon	Ttor. Index	high	<u>g.c</u>	<u>gunon</u>
Aggregate	4	Non-fibrous						
Gypsum Binders	95	Non-fibrous						
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detecto	ed		
								· <u></u>
Comments:				l l	Analyst: Date Analyzed:		ırtis Grigg 14/2020	
								01.047000
					Lab Job #: PLM-	23/36	Sample #:	CL847839



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Set #: 35092

Project (Line 1): **UNT - Gibson Library Floor #2** 

Project (Line 2):

Sample #: **CL847840** Project #: 725010720021

Field ID #: 2-125 Page 1 of 1

Sample Description: Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 218E

ayer 1 Joint Compound	Stereoscopic	Examination						
,	Color	Texture	Homogeneous?	% Fibrous	% Asbestos %	of Sample		
	White	Blocky	Yes	ND	ND	10		
PLM Examination:								
Tomponents 0/ 1/	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		2	Sign of Elongation		
Components % +/- Aggregate/Binders 95	<u>Morphology</u> <b>Non-fibrous</b>	Pieociiroisiii	Kei. Ilidex Kei. Ili	uex bilei	<u>Angle</u>	Eloligation		
Perlite 5	Glass Foam			0				
Prep/treatment: mechanical separation Asbestos Content: None Detected								
 .ayer 2  Paper	Stereoscopic	Examination		. — — — –				
	Color	<u>Texture</u>	Homogeneous?	% Fibrous 9	% Asbestos %	of Sample		
	Tan	Fibrous	Yes	100	ND	10		
PLM Examination:		G 1 /			<b>.</b>	a: a		
Components % +/-	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In			Sign of Elongation		
Cellulose Fibers 100	ribbons	<u>i ieociiioisiii</u>	Kei. Ilidex Kei. Ili	high		Lionganor		
	11000113		a	•	-			
Prep/treatment:         mechanical separation		Asbesto	os Content: None D	etected 				
ayer 3 Wallboard Material	Stereoscopic	Examination						
	Color	<u>Texture</u>	Homogeneous?	% Fibrous 9	% Asbestos %	of Sample		
	White	Blocky	Yes	1	ND	80		
PLM Examination:		G 1 /			<b>.</b>	a: a		
Tompopopts 04 1/	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction	Sign of Elongation		
Components         %         +/-           Cellulose Fibers         1	ribbons	<u>FICOCIIIOISIII</u>	Kei, iliuex Kei, ili	high		Eloligation		
Aggregate 4	Non-fibrous			iligi	1			
Gypsum Binders 95	Non-fibrous							
Prep/treatment: mechanical separation		Asbesto	os Content: None D	etected				
		11300310						

Comments:	Analyst: Date Analyzed:	Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847840</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Set #: 35092

Project (Line 1): **UNT - Gibson Library Floor #2** 

Project (Line 2):

Project #: 725010720021

Sample #: **CL847841** Field ID #: 2-126

Page 1 of 1

Sample Description: Wall/Ceiling Texture (white, semi-smooth) Drywall/Joint Compound - Room 211

Layer 1 Joint Compou	ınd	Stereoscopio	Examination				
		Color	<u>Texture</u>	Homogeneou	s? % Fibrous	% Asbestos %	of Sample
		White	Blocky	Yes	ND	ND	10
PLM Examination:			•				
_			Color/		endicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref	. Index Bire	f Angle	Elongation
Aggregate/Binders Perlite	95 5	Non-fibrous Glass Foam			0		
	-	Glass Foam			0		
rep/treatment: mechanica	al separation		Asbesto	os Content: Non	e Detected		
		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneou	s? % Fibrous	% Asbestos %	of Sample
		Tan	Fibrous	Yes	100	ND	10
LM Examination:							
			Color/	1	endicular	Extinction	Sign of
omponents	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index Ref			Elongatio
Cellulose Fibers	100	ribbons			hig	h	
rep/treatment: mechanica	•			os Content: Non	e Detected		
ayer 3		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneou	s? % Fibrous	% Asbestos %	of Sample
		White	Blocky	Yes	1	ND	80
LM Examination:			-				
			Color/		endicular	Extinction	Sign of
omponents	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref	. Index Bire		Elongatio
Cellulose Fibers	1 4	ribbons Non-fibrous			hig	h	
Aggregate Gypsum Binders	4 95	Non-fibrous					
Oypoulli Dillucio		14011-1101003		os Content: Non	e Detected		
	Prep/treatment: mechanical separation						

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847841</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library Floor #2** Set #: 35092

Project (Line 2):

Field ID #:

Project #: 725010720021

2-127

Sample #: **CL847842** 

Page 1 of 1

ayer 1 Joint Compo	ound	Stereoscopio	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		White	Blocky	Yes	ND	ND	10
PLM Examination:				n n			a
Components	% +/-	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction Angle	Sign of Elongation
Aggregate/Binders	95	Non-fibrous	1 leochioisiii	Ker. Hidex Ker. H	idex <u>Bitet</u>	Aligie	Liongano
Perlite	5	Glass Foam			0		
Prep/treatment: mechani	ical separation		Asbesto	os Content: None I	Detected		
 .ayer 2  Paper		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Tan	Fibrous	Yes	100	ND	10
LM Examination:			G 1 /	D 11.1 D		<b></b>	G: C
Components	% +/-	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction Angle	Sign of Elongatio
Cellulose Fibers	100	ribbons	<u>1 leochroisin</u>	Ker. Hidex Ker. H	high		Liongano
		11000113	A 1 .	G None I	Detected		
<u>Prep/treatment:</u> <b>mechan</b> i			Asbesto	os Content: None [	)etectea 		
ayer 3 Wallboard N	laterial	Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		White	Blocky	Yes	1	ND	80
PLM Examination:				n n			a
Components	0/- 1/	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction Angle	Sign of Elongation
Cellulose Fibers	<u>%</u> <u>+/-</u>	ribbons	Pieociiroisiii	Kei. ilidex Kei. ii	high		Eloligatio
Aggregate	4	Non-fibrous			nign		
Gypsum Binders	95	Non-fibrous					
rep/treatment: mechani	ical separation		Asbesto	os Content: None I	Detected		

Comments:	Analyst: Date Analyzed:	Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847842</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847843** 

Field ID #: **2-128** Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 200

Layer 1 Ceiling Tile Cov	ering	Stereoscopic	Examination					
		Color	<u>Texture</u>	<u>Homog</u>	geneous? % Fi	brous %	Asbestos %	of Sample
		White	Fibrous/Wov	en Y	es 7	5	ND	5
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	Angle	<u>Elongation</u>
Glass Fibers	75	straight	none			none		
Binders / Fillers	25	Non-fibrous						
<u>Prep/treatment:</u> mechanical separation <u>Asbestos Content:</u> None Detected								
Layer 2 Ceiling Tile								_
Layer 2 Centring The		1		11		<b>1</b> 0/	A =1 + 0/	-£ C 1 -
		Color	<u>Texture</u>					of Sample
		Yellow	Fibrous	Y	es 9	D	ND	95
PLM Examination:			G 1 /	D 11.1	D 1' 1		E di di	C. C
Components	0/ /	Morphology	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	Biref	Extinction	Sign of Elongation
Mineral Wool Fibers	<u>%</u> +/- <b>90</b>	Rods	FIEOCIIIOISIII	Kei. ilidex	Kei. Ilidex	<u> </u>	<u>Angle</u>	Eloligation
Resin Binders	90 10	Non-fibrous				U		
	-	NOII-IIDI OUS						
<u>Prep/treatment:</u> mechanical s	separation		Asbesto	s Content:	None Detecte	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847844** 

Field ID #: **2-129** Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 129

Layer 1 Ceiling Tile Co	vering	Stereoscopic	Examination					
_		<u>Color</u>	<u>Texture</u>	<u>Homo</u>	geneous? % Fi	brous %	Asbestos %	of Sample
		White	Fibrous/Wov	en ۱	res 7:	5	ND	5
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glass Fibers	75	straight	none			none		
Binders / Fillers	25	Non-fibrous						
<u>Prep/treatment:</u> mechanical separation <u>Asbestos Content:</u> None Detected								
		Stereoscopic	Examination					
		Color	Texture	Homo	geneous? % Fi	brous %	Asbestos %	of Sample
		Yellow	Fibrous		/es 9		ND	95
PLM Examination:				•		-		
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index	Ref. Index	<b>Biref</b>	<u>Angle</u>	Elongation
Mineral Wool Fibers	90	Rods				0		-
Resin Binders	10	Non-fibrous						
Prep/treatment: mechanica	l separation		Asbesto	os Content:	None Detecto	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847845** 

Field ID #: **2-130** Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 200

			-					
Layer 1 Ceiling Tile Cov	ering	Stereoscopic	Examination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % Fil	orous %	Asbestos %	of Sample
		White	Fibrous/Wov	en Y	es 75	5	ND	5
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	Angle	Elongation
Glass Fibers	75	straight	none			none		
Binders / Fillers	25	Non-fibrous						
Prep/treatment: mechanical separation Asbestos Content: None Detected								
Layer 2 Ceiling Tile		Stereoscopic	 Examination					
		Color	Texture	Homog	eneous? % Fil	arous %	Asbestos %	of Sample
		Yellow	Fibrous		es 90		ND	95
PLM Examination:		reliow	Fibrous	T	es st	,	ND	90
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	% +/-	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Mineral Wool Fibers	90	Rods	1 Icochioisin	Ker. macx	KCI. HIGCA	0	Aligic	Liongation
Resin Binders	10	Non-fibrous				U		
	-	Non-indious						
Prep/treatment: mechanical s	separation		Asbesto	s Content:	None Detecte	ed		

\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847846** 

Field ID #: **2-131** Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 222

Layer 1 Co	eiling Tile		Stereoscopic E	xamination					
			<u>Color</u>	<u>Texture</u>	Homo	geneous? % Fi	brous %	Asbestos %	of Sample
			Beige w/wht pt	Fibrous	•	es 6	0	ND	100
PLM Examinati	on:								
				Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose F	ibers	30	ribbons				high		
Mineral Wo	ol Fibers	30	Rods				Ō		
Perlite		30	Glass Foam				0		
Binders / P	aint	10	Non-fibrous						
Prep/treatment:	mechanical	separation		Asbesto	s Content:	None Detect	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847847** 

Field ID #: **2-132** Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 202

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	eneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es 60	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical s	separation		Asbesto	os Content:	None Detecte	ed		

\_\_\_\_\_\_\_

 Comments:
 Analyst:
 Curtis Grigg

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847847



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847848** 

Field ID #: **2-133** Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 2T2

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
_		<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Υ	es 6	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanica	I separation		Asbesto	os Content:	None Detect	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847849** 

Field ID #: **2-134** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 2L2

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
_		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Υ	'es 60	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	<b>Elongation</b>
Cellulose Fibers	55	ribbons				high		
Mineral Wool Fibers	5	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanica	I separation		Asbesto	os Content:	None Detecte	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847850** 

Field ID #: **2-135** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 230C

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es	60	ND	100
PLM Examination:		- •						
			Color/	Parallel	Perpendicula	ır	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose Fibers	55	ribbons				high		
Mineral Wool Fibers	5	Rods				0		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Pren/treatment: mechanical	separation		Asbesto	os Content:	None Detec	cted		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847851** 

Field ID #: **2-136** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 230

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	<u>Homog</u>	geneous? % Fi	ibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Υ	es 6	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	<b>Elongation</b>
Cellulose Fibers	55	ribbons				high		
Mineral Wool Fibers	5	Rods				0		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detect	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847852** 

Field ID #: **2-137** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 2A

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fi	ibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Υ	es 6	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detect	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847853** 

Field ID #: **2-138** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 222F

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % F	Fibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es (	60	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular	r	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	<b>Elongation</b>
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical s	eparation		Asbesto	s Content:	None Detec	ted		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847854** 

Field ID #: **2-139** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 212

Layer 1 Ceiling Tile		Stereoscopic E	Examination					
		<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es 60	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Pren/treatment: mechanical	separation		Ashesto	os Content:	None Detecte	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847855** 

Field ID #: 2-140 Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 204

**Grey Mastic** Layer 1 Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

Yes ND 100 Grey Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation Components

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847855



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847856** 

Field ID #: 2-141 Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 2ME2

**Grey Mastic** Layer 1 Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

Yes ND 100 Grey Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation Components

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: None Detected Prep/treatment:

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847856



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847857** 

Field ID #: 2-142 Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 2T1A

**Grey Mastic** Layer 1 Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

Yes ND 100 Grey Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation Components

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed:

Lab Job #: PLM-23736

Sample #: CL847857



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #2
 Set #:
 35092

Project (Line 2):

Project #: **725010720021** 

Field ID #: **2-143** 

Sample Description: Duct Mastic (white) - Room 200

Sample #: **CL847858** 

Page 1 of 1

Layer 1 White Mastic			Stereoscopic E	Examination					
			<u>Color</u>	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
			White	Hard	Υ	es	ND	ND	20
PLM Examination:									
				Color/	Parallel	Perpendicula		Extinction	Sign of
Components	<u>%</u> <b>5</b>	<u>+/-</u> <b>4</b>	Morphology	Pleochroism	Ref. Index			<u>Angle</u>	Elongation
Chrysotile		4	Silky / Wavy	None	1.556	1.549	low	Parallel	+
Binders / Fillers	95		Non-fibrous						
Prep/treatment: heat / melt				Asbesto	os Content:	5% Chryso	tile		
 .ayer 2   Wrap			Stereoscopic E	_					
			Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
			Brown / Silver	Fibrous	ľ	No	75	ND	20
PLM Examination:									
				Color/	Parallel	Perpendicula		Extinction	Sign of
<u>Components</u>	·	<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index		<u>Angle</u>	Elongation
Cellulose Fibers	70		ribbons				high		
Glass Fibers	5		straight	none			none		
Metal Foil Binders	15 10		Non-fibrous	Opaque					
			Non-librous						
rep/treatment: mechanica	l separatioi	n		Asbesto	os Content:	None Detec	cted		
ayer 3 Insulation			Stereoscopic E	Examination					
			Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
			Yellow-Tan	Fibrous	Y	es	95	ND	60
LM Examination:									
	0/	. /	M 1 1	Color/	Parallel	1		Extinction	Sign of
Components		<u>+/-</u>	Morphology	Pleochroism	ket. Index	Ref. Index		<u>Angle</u>	Elongation
Mineral Wool Fibers Resin Binders	95 5		Rods Non-fibrous				0		
	_		NOII-IIDIOUS						
Prep/treatment: mechanical	separation	n		Asbesto	s Content:	None Detec	cted		

Comments:	Analyst: Date Analyzed:	Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847858</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847861** 

Field ID #: **2-146** Page 1 of 1

Sample Description: Interior Building Caulking (white) above Ceiling - Room 2T1A

Layer 1 Caulking Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

White Rubbery Yes ND ND 100 PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of

<u>Components</u> <u>%</u> <u>+/-</u> <u>Morphology</u> <u>Pleochroism</u> <u>Ref. Index</u> <u>Biref</u> <u>Angle</u> <u>Elongation</u>

Aggregate/Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847862** 

Field ID #: 2-147 Page 1 of 1

Sample Description: Interior Building Caulking (white) above Ceiling - Room 230

Layer 1 Caulking Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

White Yes ND 100 Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Components Elongation Angle

100 Non-fibrous Aggregate/Binders

Prep/treatment: heat / melt Asbestos Content: **None Detected** 

Comments: Analyst: **Curtis Grigg** 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847862



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847863** 

Field ID #: **2-148** Page 1 of 1

Sample Description: Interior Building Caulking (white) above Ceiling - Room 218C

Layer 1 Caulking Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % <u>Asbestos</u> % of <u>Sample</u>

White Rubbery Yes ND ND 100

PLM Examination:

Aggregate/Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847864** 

Field ID #: 2-149 Page 1 of 1

Sample Description: Firestop (red, yellow) - Room 2T1A

Layer 1 **Firestop** Stereoscopic Examination

> Color <u>Texture</u>

Yes ND 100 Red Rubbery 2

PLM Examination:

Color/ Sign of Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Components +/-Elongation Angle

straight **Glass Fibers** 5 none none **Binders / Fillers** 95 Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847864



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: 725010720021 Sample #: **CL847865** 

Field ID #: 2-150 Page 1 of 1

Sample Description: Firestop (red, yellow) - Room 206

Layer 1 **Firestop** Stereoscopic Examination

> Color <u>Texture</u>

Yes ND 100 Red Rubbery 2

PLM Examination:

Color/ Sign of Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Components +/-Elongation Angle

straight **Glass Fibers** 5 none none **Binders / Fillers** 95 Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:

**Curtis Grigg** Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847865



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847866** 

Field ID #: **2-151** Page 1 of 1

Sample Description: Firestop (red, yellow) - Room 2ME1

Layer 1 Firestop Stereoscopic Examination

 $\underline{Color} \qquad \underline{Texture} \qquad \underline{Homogeneous?} \quad \underline{\% \; Fibrous} \; \; \underline{\% \; Asbestos} \; \; \underline{\% \; of \; Sample}$ 

Yellow Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Binders / Fillers 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Curtis Grigg
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847866



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-23736 Apex TITAN** Client: Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092 Project (Line 2): Project #: 725010720021 Sample #: CL847867 Field ID #: 2-279 Page 1 of 1 Sample Description: Thermal System Insulation (white) - Room 200 **White Mastic** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample White Rubbery Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Ref. Index Pleochroism Biref Components Angle Elongation Wollastonite 5 Laths +/-Aggregate/Binders 95 Non-fibrous Prep/treatment: heat / melt Asbestos Content: None Detected Wrap Layer 2 Stereoscopic Examination Color Texture White / Silver **Fibrous** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of +/-Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Components Angle Elongation **Cellulose Fibers** 70 ribbons high Glass Fibers straight none none Metal Foil 15 **Opaque Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Insulation Layer 3 Stereoscopic Examination Color <u>Texture</u> Yellow-Tan **Fibrous** Yes PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Mineral Wool Fibers** Rods 0 Resin Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847867</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj.#.
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #2
 Set #:
 35092

 Project (Line 2):
 Project #:
 725010720021
 Sample #:
 CL847868

 Field ID #:
 2-280
 Page 1 of 1

 Sample Description:
 Thermal System Insulation (white) - Room 204A

Layer 1 White Mastic		Stereoscopic I	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		White	Rubbery	Yes	ND	ND	20
PLM Examination:			Color/	Parallel Perpend	icular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index Ref. In	dex Biref	<u>Angle</u>	Elongation
Wollastonite	5	Laths					+/-
Aggregate/Binders	95	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None D	etected		
Layer 2 Wrap		Stereoscopic I	Examination				_
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		White / Silver	Fibrous	No	75	ND	20
PLM Examination:							
Commonweate	0/ . /	M 1	Color/ Pleochroism	Parallel Perpend		Extinction	Sign of
Components Cellulose Fibers	<u>%</u> +/- <b>70</b>	<u>Morphology</u> ribbons	Pleochroism	Ref. Index Ref. In	dex Biref high	<u>Angle</u>	Elongation
Glass Fibers	5	straight	none		none		
Metal Foil	15	onaigin	Opaque				
Binders	10	Non-fibrous					
Prep/treatment: mechanical s	eparation		Asbesto	os Content: None D	etected		
Layer 3 Insulation		Stereoscopic I	 Examination				_
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Fibrous	Yes	95	ND	60
PLM Examination:							
Commonweate	0/ . /	M 1	Color/	Parallel Perpend		Extinction	Sign of
Components Mineral Wool Fibers	<u>%</u> +/- <b>95</b>	<u>Morphology</u> <b>Rods</b>	Pleochroism	Ref. Index Ref. In	dex Biref  0	<u>Angle</u>	Elongation
Resin Binders	95 5	Non-fibrous			U		
Prep/treatment: mechanical s	•		Asbesto	os Content: None D	etected		

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847868</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-23736 Apex TITAN** Client: Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092 Project (Line 2): Project #: 725010720021 Sample #: **CL847869** Field ID #: 2-281 Page 1 of 1 Sample Description: Thermal System Insulation (white) - Room 206 Layer 1 **White Mastic** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White ND Rubbery Yes ND PLM Examination: Extinction Color/ Parallel Perpendicular Sign of Morphology Ref. Index Ref. Index Pleochroism Biref Components Angle Elongation Wollastonite 5 Laths +/-Aggregate/Binders 95 Non-fibrous Prep/treatment: heat / melt Asbestos Content: None Detected Wrap Layer 2 Stereoscopic Examination Color Texture White / Silver **Fibrous** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index +/-Morphology Pleochroism <u>Biref</u> Components Angle Elongation **Cellulose Fibers** 70 ribbons high Glass Fibers straight none none Metal Foil 15 **Opaque Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Insulation Layer 3 Stereoscopic Examination Color **Texture** Yellow-Tan **Fibrous** Yes PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Mineral Wool Fibers** Rods 0 Resin Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected

Comments:		Curtis Grigg 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847869</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #2 Set #: 35092

Project (Line 2):

Project #: **725010720021** Sample #: **CL847870** 

Field ID #: **2-282** Page 1 of 1

Sample Description: Mastic (black) associated w/Perimeter Walls - Room 207

 Layer 1
 Black Mastic
 Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Black Asphaltic Yes 2 2 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Chrysotile 10 5 Silky / Wavy None 1.556 1.549 low Parallel + Tar Binders 90 Non-fibrous

Tar Binders 90 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: 10% Chrysotile

\_\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847873** 

Field ID #: **3-152** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern) - Room 300

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847873



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847874** 

Field ID #: **3-153** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern) - Room 302

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847875** 

Field ID #: **3-154** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/blue & red stripe pattern) - Room 318

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847875



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847876** 

Field ID #: 3-155 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design) - Room 316

**Yellow Mastic** Layer 1 Stereoscopic Examination

> Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

ND 100 Yellow-Tan Rubbery Yes ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Biref Components Ref. Index Elongation Angle

**Glue Binders** 100 Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: **CL847876** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847877** 

Field ID #: **3-156** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design) - Room 306

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847877



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847878** 

Field ID #: **3-157** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/yellow & black spot design) - Room 316

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847879** 

Field ID #: **3-158** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey) - Room 308

Layer 1 Yellow Mastic		Stereoscopic l	Examination				
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % Fibro	ous % Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es ND	ND	50
PLM Examination:			-				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref Angle	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected	l	
	- — — — — — oound	Stereoscopic	– — — — — Examination				
	oound	Stereoscopic l	— — — — — Examination <u>Texture</u>	_ — — — - <u>Homog</u>	geneous? % Fibro		of Sample
	- — — — — — pound	•			eneous? % Fibro	ous % Asbestos %  ND	of Sample
Layer 2 Leveling Comp	- — — — — — pound	Color	Texture				
	oound	Color	Texture				
		Color	Texture Blocky	Y	es ND Perpendicular	ND	50 Sign of
PLM Examination:		<u>Color</u> <b>Grey</b>	Texture Blocky Color/	Yarallel	es ND Perpendicular	ND Extinction	50



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847880** 

Field ID #: **3-159** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey) - Room 308

Layer 1 Yellow Mastic		Stereoscopic 1	Examination					
		<u>Color</u>	<u>Texture</u>	Homogeneo	us? % Fibrous 9	6 Asbestos %	% of Sample	
		Yellow-Tan	Rubbery	Yes	ND	ND	50	
PLM Examination:			-					
			Color/	Parallel Perp	endicular	Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Re	f. Index Biref	<u>Angle</u>	Elongation	
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content: Nor	ne Detected			
	 ound	Stereoscopic		os Content: Nor	ne Detected			
	 ound	Stereoscopic Color		os Content: Nor Homogeneo		- — — — — — — — — — — — — — — — — — — —	— of Sample	
	 oound	•	Examination			% Asbestos % % ND	of Sample 50	
	. — — — — — ound	Color	Examination Texture	Homogeneo	us? % Fibrous 9			
	. — — — — — ound	Color	Examination Texture	Homogeneo Yes	us? % Fibrous 9			
		Color	Examination Texture Blocky	Homogeneo <b>Yes</b> Parallel Perp	us? % Fibrous 9	ND	50	
Layer 2 Leveling Comp		<u>Color</u> <b>Grey</b>	Examination Texture Blocky Color/	Homogeneo <b>Yes</b> Parallel Perp	us? % Fibrous 9  ND  pendicular	ND Extinction	50 Sign of	



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847881** 

Field ID #: **3-160** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) & Leveling Compound (grey) - Room 308

_ayer 1 Yellow Mastic		Stereoscopic l	Examination					
		<u>Color</u>	<u>Texture</u>	Homog	geneous? % F	Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es N	ND	ND	50
PLM Examination:			-					
			Color/	Parallel	Perpendicular	•	Extinction	Sign of
omponents	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Glue Binders	100	Non-fibrous						
rep/treatment: heat / melt			Asbesto	os Content:	None Detec	ted		
ayer 2 Leveling Com	 pound	Stereoscopic l	— — — — — Examination	- — — —				
ayer 2 Leveling Com	 pound	Stereoscopic l	Examination  Texture	- — — — - Homog	geneous? % F	— — — Fibrous <u>%</u>	Asbestos %	of Sample
ayer 2 Leveling Com	pound	•				— — — Fibrous <u>%</u>	Asbestos %	of Sample 50
ayer 2 Leveling Com	pound	Color	<u>Texture</u>					
	pound	Color	<u>Texture</u>			ND		
		Color	Texture Blocky	Y	es N	ND	ND	50 Sign of
LM Examination:	•	<u>Color</u> <b>Grey</b>	Texture Blocky Color/	Y Parallel	es N	ND	ND Extinction	50



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Sample #: **CL847882** Project #: 725010720021

Field ID #: 3-161 Page 1 of 1

Sample Description: Mastic (yello	ow) associated v	w/Carpet (grey w/blu	ie & green stripe	pattern) & Le	eveling Compound (	grey) - Room	1 313	
Layer 1 Yellow Mastic		Stereoscopic	pic Examination					
		<u>Color</u>	<u>Texture</u>	<u>Homoge</u>	neous? % Fibrous %	Asbestos %	of Sample	
		Yellow-Tan	Rubbery	Ye	s ND	ND	50	
PLM Examination:			_					
			Color/	Parallel 1	Perpendicular	Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation	
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected			
							_	
Layer 2 Leveling Compo	ound	Stereoscopic	Examination					
		Color	Texture	Homoge	neous? % Fibrous %	Asbestos %	of Sample	
		Grey	Blocky	Ye	s ND	ND	50	
PLM Examination:		•	•					
			Color/	Parallel 1	Perpendicular	Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation	
Aggregate/Binders	100	Non-fibrous						
Prep/treatment: mechanical s	separation		Asbesto	os Content:	None Detected			
	•							

Kathy Schosek Comments: Analyst: 8/14/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: **CL847882** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847883** 

Field ID #: **3-162** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (grey w/blue & green stripe pattern) & Leveling Compound (grey) - Room 313B

Layer 1 Yellow Mastic		Stereoscopic 1	Examination					
		Color	<u>Texture</u>	Homoger	eneous? % Fibrous		% Asbestos % of Sample	
		Yellow-Tan	Rubbery	Ye	s N	D	ND	50
PLM Examination:			•					
			Color/	Parallel I	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detect	ed		
Layer 2 Leveling Com	 pound	Stereoscopic	Examination					_
Layer 2 Leveling Com	 pound	Stereoscopic S	Examination  Texture	Homoge	eneous? % Fi	 ibrous <u>%</u>	Asbestos %	of Sample
Layer 2 Leveling Com	 pound	•		Homoge <b>Ye</b> :		 ibrous	Asbestos %	of Sample 50
Layer 2 Leveling Com PLM Examination:	 pound	Color	<u>Texture</u>					
	 pound	Color	<u>Texture</u>	Ye				
		Color	Texture Blocky	Ye	s N		ND	50 Sign of
PLM Examination:	•	<u>Color</u> <b>Grey</b>	Texture Blocky Color/	Ye:	s N	D	ND Extinction	50

Comments: Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847883



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Sample #: **CL847884** Project #: 725010720021

Field ID #: 3-163 Page 1 of 1

Sample Description	: Mastic (yello	ow) associated v	v/Carpet (grey w/blu	ie & green stripe	pattern) & L	_eveling Comp	ound (g	grey) - Room	313A
Layer 1 Yello	ow Mastic		Stereoscopic	Examination					
-			Color	Texture	Homog	geneous? % Fit	orous %	Asbestos % o	of Sample
			Yellow-Tan	Rubbery	Υ	es NI	)	ND	50
PLM Examination:	•			•					
				Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Glue Binders		100	Non-fibrous						
Prep/treatment:	heat / melt			Asbesto	s Content:	None Detecte	ed		
Layer 2 Leve	eling Compo	ound	Stereoscopic	Examination					
-			Color	Texture	Homog	geneous? % Fil	rous %	Asbestos % o	of Sample
			Grey	Blocky	Υ	es NI	)	ND	50
PLM Examination:	:		•	•					
				Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	<b>Elongation</b>
Aggregate/Bir	nders	100	Non-fibrous						
Prep/treatment:	mechanical s	eparation		Asbesto	os Content:	None Detecte	ed		

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Sample #: **CL847884** Lab Job #: PLM-23736



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847885** 

Field ID #: 3-164 Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown) - Room 310

Layer 1 Sheet Floorin PLM Examination:	_	<u>Color</u>	Texture	Homogeneous?	0/ E'1 0/		
PLM Examination:			- Ontare	nomogeneous?	% Fibrous %	6 Asbestos % of	of Sample
PLM Examination:		Brown	Rubbery	Yes	ND	ND	85
			•				
_			Color/	Parallel Perpend		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. In	dex Biref	<u>Angle</u>	Elongatio
Aggregate/Vinyl Binders	s 100	Non-fibrous					
Prep/treatment: heat / mel	t		Asbesto	os Content: None D	etected		
	 ;	Stereoscopic 1	Examination		. — — — —	. — — — —	
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	6 Asbestos % o	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	5
LM Examination:							
			Color/	Parallel Perpend		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. In	dex Biref	<u>Angle</u>	<u>Elongatio</u>
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / mel	t		Asbesto	os Content: None D	etected		
		Stereoscopic 1	Examination		. — — — —	. — — — —	
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	6 Asbestos % o	of Sample
		Black	Rubbery/Fibro	ous Yes	ND	ND	10
PLM Examination:			-				
			Color/	Parallel Perpend		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. In	dex Biref	<u>Angle</u>	Elongatio
Vinyl Binders	100	Non-fibrous					
Prep/treatment: mechanic	al separation		Asbesto	os Content: None D	etected		

 Comments:
 Analyst: Nathy Schosek Date Analyzed:
 Kathy Schosek B/14/2020

 Lab Job #: PLM-23736
 Sample #: CL847885



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847886** 

Field ID #: **3-165** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown) - Room 310C

Layer 1 She	et Flooring			Stereoscopic l	Examination					
	_			Color	<u>Texture</u>	Homog	eneous?	% Fibrous	% Asbestos %	of Sample
				Brown	Rubbery	Υ	es	ND	ND	85
PLM Examination:	:				-					
~					Color/	Parallel	Perpendi		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Inc	dex Biref	<u>Angle</u>	<u>Elongatio</u>
Aggregate/Vir	nyi Binders	100		Non-fibrous						
Prep/treatment:	heat / melt				Asbesto	os Content:	None D	etected		
Layer 2 Yell	ow Mastic			Stereoscopic 1	— — — — — — Examination					
				Color	<u>Texture</u>	Homog	eneous?	% Fibrous	% Asbestos %	of Sample
				Yellow-Tan	Rubbery	Υ	es	ND	ND	5
PLM Examination:	:				•					
					Color/	Parallel	Perpendi		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Inc	dex Biref	<u>Angle</u>	Elongatio
Glue Binders		100		Non-fibrous						
Prep/treatment:	heat / melt				Asbesto	os Content:	None D	etected		
 Layer 3 Vap	or Barrier			Stereoscopic 1	— — — — — — Examination					
				<u>Color</u>	<u>Texture</u>	Homog	eneous?	% Fibrous	% Asbestos %	of Sample
				Black	Rubbery/Fibro	ous Y	es	ND	ND	10
PLM Examination:	:									
~			,		Color/	Parallel	Perpendi		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Inc	dex Biref	<u>Angle</u>	Elongatio
Vinyl Binders	i	100		Non-fibrous						
Prep/treatment:	mechanical se	parati	on		Asbesto	s Content:	None D	etected		

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847886



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847887** 

Field ID #: **3-166** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (brown) - Hallway 3A

bampie Description. 1	Coment vinyi i i	Joining (ingin	t brown, wood patte	erri) & Mastic (bit	Owiij - Haliv	vay JA			
Layer 1 Sheet	Flooring		Stereoscopic I	Examination					
			Color	<u>Texture</u>	Homog	geneous?	% Fibrous	% Asbestos %	of Sample
			Brown	Rubbery	Υ	es	ND	ND	85
PLM Examination:				-					
_				Color/	Parallel	Perpendic		Extinction	Sign of
Components	<u>%</u>		Morphology	Pleochroism	Ref. Index	Ref. Ind	ex Biref	Angle	Elongation
Aggregate/Vinyl	Binders 10	0	Non-fibrous						
Prep/treatment: he	eat / melt			Asbesto	os Content:	None De	tected		
Layer 2 Yellov	v Mastic		Stereoscopic I	Examination					
			Color	<u>Texture</u>	Homog	geneous?	% Fibrous	% Asbestos %	of Sample
			Yellow-Tan	Rubbery	Υ	es	ND	ND	5
PLM Examination:				-					
				Color/	Parallel	Perpendic		Extinction	Sign of
Components	_%	_	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Ind	ex <u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Glue Binders	10	0	Non-fibrous						
Prep/treatment: he	eat / melt			Asbesto	os Content:	None De	tected		
Layer 3 Vapor	Barrier		Stereoscopic I	– – – – – – Examination	- — — -				_
			Color	<u>Texture</u>	<u>Homog</u>	geneous?	% Fibrous	% Asbestos %	of Sample
			Black	Rubbery/Fibro	ous Y	es	ND	ND	10
PLM Examination:									
				Color/	Parallel	Perpendic		Extinction	Sign of
Components	_%		Morphology	Pleochroism	Ref. Index	Ref. Ind	ex <u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Vinyl Binders	10	0	Non-fibrous						
Prep/treatment: m	echanical separa	ation		Asbesto	s Content:	None De	tected		

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847887



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847888** 

Field ID #: **3-167** Page 1 of 1

Sample Description: 4" Cove Base (dark grey) w/Mastic (tan) - Room 300

Layer 1 Cove Base		Stereoscopic	Examination				
		Color	<u>Texture</u>	<u>Homoge</u>	eneous? % Fibrous	% Asbestos %	of Sample
		Dk. Grey	Rubbery	Ye	s ND	ND	95
PLM Examination:							
			Color/		Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	f Angle	Elongation
Vinyl Binders	100	Non-fibrous					
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Tan Mastic		Stereoscopic	Examination	- — — — —			_
		<u>Color</u>	<u>Texture</u>	Homoge	eneous? % Fibrous	% Asbestos %	of Sample
		Tan	Rubbery	Ye	s ND	ND	5
PLM Examination:			•				
			Color/	Parallel	Perpendicular	Extinction	Sign of
	0/ ./	Morphology	Pleochroism	Ref. Index	Ref. Index Bire	<u>f</u> Angle	Elongation
Components	<u>%</u> +/-						
Components Glue Binders	<u>%</u> +/- 100	Non-fibrous					
*		Non-fibrous	Ashesto	os Content:	None Detected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847889** 

Field ID #: **3-168** Page 1 of 1

Sample Description: 4" Cove Base (dark grey) w/Mastic (tan) - Room 310G

Layer 1 Cove Base		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	<u>Homoger</u>	neous? % Fibrous	% Asbestos % o	of Sample
		Dk. Grey	Rubbery	Yes	s ND	ND	95
PLM Examination:							
			Color/		Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	Angle	Elongation
Vinyl Binders	100	Non-fibrous					
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Tan Mastic		Stereoscopic	Examination		. — — — — –		
		Color	Texture	Homoger	neous? % Fibrous	% Asbestos % o	of Sample
		Tan	Rubbery	Yes	s ND	ND	5
PLM Examination:			,				
			Color/	Parallel I	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	Angle	Elongation
	100	Non-fibrous					
Glue Binders	.00						
Glue Binders Prep/treatment: heat / melt	.00		Ashesto	s Content:	None Detected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847890** 

Field ID #: **3-169** Page 1 of 1

Sample Description: 4" Cove Base (dark grey) w/Mastic (tan) - Room 312

Sample Beschphon: . CCTC Back	( 9 ),	,						
Layer 1 Cove Base		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % Fi	brous %	Asbestos % o	of Sample
		Dk. Grey	Rubbery	Υ	es Ni	D	ND	95
PLM Examination:		-	-					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Vinyl Binders	100	Non-fibrous						
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content:	None Detecte	ed		
Layer 2 Tan Mastic		Stereoscopic E	xamination					_
		Color	Texture	Homog	geneous? % Fi	brous %	Asbestos % o	of Sample
		Tan	Rubbery	Υ	es NI	D	ND	5
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<b>Biref</b>	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	s Content:	None Detecte	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Angle

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Aggregate/Binders

Project #: 725010720021 Sample #: **CL847891** 

Field ID #: 3-170 Page 1 of 1

Sample Description: Sink Undercoating (grey) - Room 313A

Layer 1 **Sink Undercoating** Stereoscopic Examination

70

Color **Texture** 

**Fibrous** Yes ND 100 Grey 5 PLM Examination:

Color/ Sign of Parallel Perpendicular Extinction Biref Elongation

Morphology Pleochroism Ref. Index Ref. Index Components **Cellulose Fibers** 30 ribbons high

Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847892** 

Field ID #: 3-171 Page 1 of 1

Sample Description: Sink Undercoating (grey) - Room 313A

heat / melt

Layer 1 **Sink Undercoating** Stereoscopic Examination Color **Texture Fibrous** Yes ND 100 Grey 5 PLM Examination: Color/ Sign of Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Components Angle **Cellulose Fibers** 30 ribbons high Aggregate/Binders Non-fibrous 70

**None Detected** 

Prep/treatment: Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847893** 

Field ID #: **3-172** Page 1 of 1

Sample Description: Sink Undercoating (grey) - Room 313A

Layer 1 **Sink Undercoating** Stereoscopic Examination Color **Texture Fibrous** Yes ND 100 Grey 5 PLM Examination: Color/ Sign of Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Components Angle

Cellulose Fibers 30 ribbons high Aggregate/Binders 70 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847893



Comments:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Kathy Schosek

Sample #: CL847894

8/14/2020

Analyst:

Date Analyzed:

Lab Job #: **PLM-23736** 

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Set #: 35093 Project (Line 2): Project #: 725010720021 Sample #: **CL847894** Field ID #: 3-173 Page 1 of 1 Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 320 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample Yes ND Grey **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Morphology Pleochroism Biref Elongation Components Angle Aggregate/Binders/Paint 100 Non-fibrous Prep/treatment: solvent dissolution None Detected Asbestos Content: **Joint Tape** Layer 2 Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> +/-Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Joint Compound Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous 100 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Paper Layer 4 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan Fibrous Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Components % Morphology **Biref** Angle Elongation **Cellulose Fibers** ribbons 100 high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 5 **Wallboard Material** Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White **Blocky** Yes 1 ND 60 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Non-fibrous Aggregate **Gypsum Binders** 95 Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client:Apex TITANLab Proj #:PLM-23736Project (Line 1):UNT - Gibson LibrarySet #:35093

rioject (Emic 1). Citi Cibeci

Project (Line 2):

Project #: **725010720021** 

Field ID #: **3-174** 

Sample #: **CL847895**Page 1 of 1

Layer 1 Paint Texture		Stereoscopio	c Examination					
		Color	Texture	Homog	geneous?	% Fibrous %	Asbestos %	of Sample
		Grey	Blocky	Υ	'es	ND	ND	15
PLM Examination:		•	•					
	0/	34 1 1	Color/	Parallel			Extinction	Sign of
Components Aggregate/Binders/Beint	<u>%</u> +/- 100	Morphology Non-fibrous	Pleochroism	Ref. Index	Ref. Inde	ex Biref	<u>Angle</u>	Elongatio
Aggregate/Binders/Paint		Non-tibrous						
Prep/treatment: solvent dis	ssolution		·	os Content:		tected		
	 und	Stereoscopio	Examination					_
		<u>Color</u>	<u>Texture</u>	Homog	geneous?	% Fibrous %	Asbestos %	of Sample
		White	Blocky	Y	'es	ND	ND	10
PLM Examination:							<b>.</b>	a
G	0/	M11	Color/		Perpendic		Extinction	Sign of Elongation
Components Aggregate/Pindore	<u>%</u> +/- 100	<u>Morphology</u> Non-fibrous	Pleochroism	Ref. Index	Ref. Inde	ex Biref	<u>Angle</u>	Elongatio
Aggregate/Binders		Non-fibrous						
Prep/treatment: mechanica	•			os Content:	None De	tected		
			Examination					
				 <u>Ното</u>	geneous?	% Fibrous %	Asbestos %	of Sample
		Stereoscopio	c Examination		geneous?	% Fibrous %	Asbestos % (	of Sample
		Stereoscopio <u>Color</u>	Examination Texture Fibrous	Y	es	100	ND	10
Layer 3 Paper PLM Examination:		Stereoscopio <u>Color</u> <b>Tan</b>	Examination Texture Fibrous Color/	Y Parallel	<b>'es</b> Perpendic	100 cular	ND Extinction	10 Sign of
Layer 3 Paper PLM Examination: Components	<u>%</u> +/-	Stereoscopio <u>Color</u> <b>Tan</b> <u>Morphology</u>	Examination Texture Fibrous	Y	<b>'es</b> Perpendic	100 cular ex Biref	ND	10 Sign of
PLM Examination:  Components Cellulose Fibers	<u>%</u> ±/- 100	Stereoscopio <u>Color</u> <b>Tan</b>	Examination Texture Fibrous Color/ Pleochroism	Parallel Ref. Index	Perpendic Ref. Indo	100 cular ex Biref high	ND Extinction	10 Sign of
PLM Examination:  Components Cellulose Fibers	<u>%</u> <u>+/-</u> 100 al separation	Stereoscopio <u>Color</u> <b>Tan</b> <u>Morphology</u> <b>ribbons</b>	Examination Texture Fibrous Color/ Pleochroism Asbeste	Y Parallel	Perpendic Ref. Indo	100 cular ex Biref high	ND Extinction	10
Layer 3 Paper  PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanica	<u>%</u> <u>+/-</u> 100 al separation — — — — — —	Stereoscopic Color Tan  Morphology ribbons	Examination Texture Fibrous Color/ Pleochroism Asbeste	Parallel Ref. Index	Perpendic Ref. Indo	100 cular ex Biref high	ND Extinction	10 Sign of
PLM Examination:  Components  Cellulose Fibers  Prep/treatment: mechanica	<u>%</u> <u>+/-</u> 100 al separation — — — — — —	Stereoscopic Color Tan  Morphology ribbons  Stereoscopic Color	Examination  Texture Fibrous  Color/ Pleochroism  Asbeste  Examination  Texture	Parallel Ref. Index os Content: Homos	Perpendic Ref. Inde None De	100  cular ex Biref high  tected  % Fibrous %	Extinction Angle  Asbestos %	10 Sign of Elongation  — of Sample
Layer 3 Paper  PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanica  ———————————————————————————————————	<u>%</u> <u>+/-</u> 100 al separation — — — — — —	Stereoscopic Color Tan  Morphology ribbons  Stereoscopic	Examination  Texture Fibrous  Color/ Pleochroism  Asbeste  Examination	Parallel Ref. Index os Content: Homos	Perpendic Ref. Indo	tular  ex Biref high  tected	Extinction Angle	Sign of Elongatio
PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanica	<u>%</u> <u>+/-</u> 100 al separation — — — — — —	Stereoscopic Color Tan  Morphology ribbons  Stereoscopic Color	Examination Texture Fibrous Color/ Pleochroism  Asbeste Examination Texture Blocky	Parallel Ref. Index os Content: Homog	Perpendic Ref. Inde None De	tected  % Fibrous %	Extinction Angle  Asbestos % of ND	Sign of Elongation  of Sample 65
PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanica — — — — — — — — — — — — — — — — — — —	<u>%</u> ±/- 100 al separation — — — — — uterial	Stereoscopic Color Tan  Morphology ribbons  Stereoscopic Color White	Examination  Texture Fibrous  Color/ Pleochroism  Asbeste Examination  Texture Blocky  Color/	Parallel Ref. Index os Content: Homog Y	Perpendic Ref. Inde None De	100  cular ex Biref high  tected  % Fibrous % 1	Extinction Angle  Asbestos % ND  Extinction	Sign of Elongation  of Sample  65  Sign of
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanica ————————————————————————————————————	<u>%</u> ±/- 100 al separation — — — — — aterial	Stereoscopic Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology	Examination Texture Fibrous Color/ Pleochroism  Asbeste Examination Texture Blocky	Parallel Ref. Index os Content: Homog	Perpendic Ref. Inde None De	tected  % Fibrous % 1  cular  bular  sular  sular  cular  ex Biref	Extinction Angle  Asbestos % of ND	Sign of Elongation  of Sample 65
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanica ————————————————————————————————————		Stereoscopic Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons	Examination  Texture Fibrous  Color/ Pleochroism  Asbeste Examination  Texture Blocky  Color/	Parallel Ref. Index os Content: Homog Y	Perpendic Ref. Inde None De	100  cular ex Biref high  tected  % Fibrous % 1	Extinction Angle  Asbestos % ND  Extinction	Sign of Elongation  of Sample 65  Sign of
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanica — — — — — — — — — — — — — — — — — — —	<u>%</u> ±/- 100 al separation — — — — — aterial	Stereoscopic Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology	Examination  Texture Fibrous  Color/ Pleochroism  Asbeste Examination  Texture Blocky  Color/	Parallel Ref. Index os Content: Homog Y	Perpendic Ref. Inde None De	tected  % Fibrous % 1  cular  bular  sular  sular  cular  ex Biref	Extinction Angle  Asbestos % ND  Extinction	Sign of Elongation  of Sample 65  Sign of

Comments:		Kathy Schosek 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847895</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Project #: 725010720021

Sample #: **CL847896** Field ID #: 3-175

Page 1 of 1

Layer 1 Paint Texture		Stereoscopio	Examination					
		Color	<u>Texture</u>		geneous? % Fi	brous %	Asbestos %	of Sample
DIME ' d'		Grey	Blocky	Y	'es N	D	ND	15
PLM Examination: <u>Components</u> Aggregate/Binders/Paint	<u>%</u> +/-	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation
Prep/treatment: solvent dissol	ution		Asbesto	os Content:	None Detect	ed		
		Stereoscopic	Examination					
		Color	Texture	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
DIME ' d'		White	Blocky	Y	'es N	D	ND	10
PLM Examination:  Components  Aggregate/Binders	<u>%</u> +/- <b>100</b>	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index		Extinction Angle	Sign of Elongation
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detect	ed		
			Examination					
		<u>Color</u> <b>Tan</b>	<u>Texture</u> <b>Fibrous</b>		geneous? % Fi	brous <u>%</u>	Asbestos %	of Sample 10
PLM Examination:				D "'	D 11 1		ne di di	C: 1
Components Cellulose Fibers	<u>%</u> ±/- 100	Morphology ribbons	Color/ <u>Pleochroism</u>		Perpendicular Ref. Index		Extinction Angle	Sign of Elongation
Prep/treatment: mechanical se	-			os Content:	None Detect	ed		
 _ayer 4  Wallboard Materi			Examination					
NATE ' '		<u>Color</u> White	<u>Texture</u> <b>Blocky</b>	-	geneous? % Fi	brous %	Asbestos % ND	of Sample 65
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism		Ref. Index	<u>Biref</u>	Angle	Elongation
Cellulose Fibers Glass Fibers Aggregate Gypsum Binders	1 1 3 95	ribbons straight Non-fibrous Non-fibrous	none			high none		
,,	paration			os Content:	None Detect	od		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093 Project (Line 2): Project #: 725010720021 Sample #: **CL847897** 

Field ID #: Page 1 of 1

Field ID #: <b>3-176</b>								Page 1 of 1
Sample Description: Wall/Ceiling	Texture (grey,	semi-smooth) Dryw	all/Joint Compou	nd - Room	311A			
Layer 1 Texture		Stereoscopic	Examination					
		Color	<u>Texture</u>	<u>Homo</u>	geneous? % Fil	brous %	Asbestos %	of Sample
		White	Blocky	١	res NI	D	ND	15
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	% +/-	Morphology	Pleochroism	Ref. Index		Biref	Angle	Elongation
Aggregate/Binders	100	Non-fibrous		<del></del>				
Prep/treatment: solvent disso	olution		Asbesto	os Content:	None Detecte	ed		
Layer 2 Joint Compound	t	Stereoscopic	Examination					
		Color	Texture	Homo	geneous? % Fil	brous %	Asbestos %	of Sample
DIAGE.		White	Blocky	١	res NI	D	ND	10
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism		Ref. Index		Angle	<u>Elongation</u>
Aggregate/Binders	100	Non-fibrous		_			-	-
<u>Prep/treatment:</u> mechanical s	eparation			os Content:	None Detecte	ed		
			Examination					
		<u>Color</u>	<u>Texture</u>	<u>Hom</u> o	geneous? % Fil	brous %	Asbestos %	of Sample
		Tan	Fibrous		res 10		ND	10
PLM Examination:			C.1 /	D-: 11 1	D 1' 1		Darkin di	C: C
Components	% +/-	Morphology	Color/ Pleochroism	Parallel Ref Index	Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation
Cellulose Fibers	100	ribbons	recemoism	rer. macx	Ker. Hidex	high	<u>ringic</u>	Liongation
Prep/treatment: mechanical s	eparation		Asbesto	os Content:	None Detecte	ed		
Layer 4 Wallboard Mater	 vial							
Layer 4 Wanboard Water	ıaı	Color	Examination Texture	Homo	geneous? % Fil	hrous %	Ashestos %	of Sample
		White	Blocky		'es 2		ND	65
PLM Examination:			,	•				
			Color/	Parallel	Perpendicular	D: 6	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	Morphology ribbons	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose Fibers Glass Fibers	1 1	straight	none			high none		
Aggregate	3	Non-fibrous						
Gypsum Binders	95	Non-fibrous						
<u>Prep/treatment:</u> mechanical s	eparation		Asbesto	os Content:	None Detecte	ed		
								_
				1				
Comments:					analyst: Date Analyzed:		athy Schose 14/2020	k
					ab Job #: PLM-		Sample #:	CL847897



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Project #: 725010720021

Sample #: **CL847898** Field ID #: 3-177

Page 1 of 1

Components Aggregate/Binders/Paint 1 Prep/treatment: solvent dissoluti		Color Grey  Morphology Non-fibrous  Stereoscopic	Texture Blocky Color/ Pleochroism  Asbesto	Parallel Ref. Index	Yes N Perpendicular	D ND  Ext Biref	estos % of Sample  15  tinction Sign of Angle Elongation
=	100	Morphology Non-fibrous	Color/ Pleochroism	Parallel <u>Ref. Index</u>	Perpendicular Ref. Index	Ext Biref A	tinction Sign of
Components Aggregate/Binders/Paint Prep/treatment: solvent dissoluti	100	Non-fibrous	Pleochroism	Ref. Index	Ref. Index	Biref A	
Prep/treatment: solvent dissoluti		— — — — — — Stereoscopic	<u>Asbesto</u>	os Content:	None Detect	- al	
Layer 2 Joint Compound						ea	
			Examination				
		Color	Texture	Homog	geneous? % Fi	brous % Asbe	estos % of Sample
DI M Eiii		White	Blocky	Y	es N	D ND	10
	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index		tinction Sign of Angle Elongation
Prep/treatment: mechanical sepa		11011 1101 040	Asbesto	os Content:	None Detecto	ed	
			Examination				
		<u>Color</u> <b>Tan</b>	<u>Texture</u> <b>Fibrous</b>		geneous? <u>% Fi</u> 'es 10		estos % of Sample 10
PLM Examination:			Color/	Parallel	Perpendicular	Ext	tinction Sign of
*	<u>%</u> <u>+/-</u>	Morphology ribbons	Pleochroism		Ref. Index		Angle Elongation
Prep/treatment: mechanical sepa	ration		Asbesto	os Content:	None Detecto	ed	
		_	Examination				
		<u>Color</u> <b>White</b>	<u>Texture</u> <b>Blocky</b>		geneous? <u>% Fi</u> 'es 1		estos % of Sample 65
PLM Examination:			Color/	Parallel	Perpendicular	Ext	tinction Sign of
	<u>%</u> <u>+/-</u>	Morphology	Pleochroism		Ref. Index	Biref A	Angle Elongation
Aggregate	1 4 95	ribbons Non-fibrous Non-fibrous				high	
Prep/treatment: mechanical sepa	ration		Asbesto	os Content:	None Detecto	ed	



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

725010720021 Project #:

Field ID #: 3-178 Sample Description: Wall/Ceili	ina Texture (arev. :	semi-smooth) Drvw	all/Joint Compou	nd - Room :	310D			Page 1 of 1
Layer 1 Paint Texture			Examination	na Room	5.05			
		<u>Color</u> <b>Grey</b>	<u>Texture</u> <b>Blocky</b>	,	geneous? % Fit		Asbestos % (	of Sample 15
PLM Examination:  Components  Aggregate/Binders/Paint	<u>%</u> +/- t 100	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation
rep/treatment: solvent dis		Non ilbrodo	Asbesto	os Content:	None Detecte	d		
_								
ayer 2 Contracting Compact	ana	<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fit	rous %	Asbestos %	of Sample
LM Examination:		White	Blocky	Y	es NI	)	ND	10
omponents Aggregate/Binders	<u>%</u> +/− <b>100</b>	<u>Morphology</u> Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation
rep/treatment: mechanica		Non horous	Asbesto	os Content:	None Detecte	d		
ayer 3 Paper		<u>Color</u>	Examination <u>Texture</u>	Homos	geneous? % Fil	rous %	Asbestos %	of Sample
LM Examination:		Tan	Fibrous		es 10		ND	10
omponents Cellulose Fibers	<u>%</u> <u>+/-</u> 100	Morphology ribbons	Color/ Pleochroism	Parallel <u>Ref. Index</u>	Perpendicular Ref. Index	Biref high	Extinction Angle	Sign of Elongation
rep/treatment: mechanica	al separation		Asbesto	os Content:	None Detecte	d		
ayer 4 Wallboard Ma	— — — — — — nterial	Stereoscopic	Examination					
		Color	<u>Texture</u>		geneous? % Fit	rous %		•
LM Examination:		White	Blocky	Y	es 1		ND	65
Components Cellulose Fibers Aggregate Gypsum Binders	<u>%</u> ±/- 1 4 95	Morphology ribbons Non-fibrous Non-fibrous	Color/ <u>Pleochroism</u>	Parallel <u>Ref. Index</u>	Perpendicular Ref. Index	Biref high	Extinction Angle	Sign of Elongation
rep/treatment: mechanica	al separation		Asbesto	os Content:	None Detecte	d		
								_
Comments:					.nalyst: eate Analyzed:		nthy Schose 14/2020	k



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

725010720021 Project #:

Field ID #: <b>3-179</b> Sample Description: <b>Wall/Ceil</b>	ina Texture (arev.	semi-smooth) Drvw	/all/Joint Compou	ınd - Room 3	3SC1			Page 1 of 1
Layer 1 Paint Texture			Examination					
		<u>Color</u> <b>Grey</b>	<u>Texture</u> <b>Blocky</b>	-	geneous? % Fit		sbestos %	of Sample 15
PLM Examination: <u>Components</u> Aggregate/Binders/Pain	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation
Prep/treatment: solvent di		Non horous	Asbesto	os Content:	None Detecte	ed		
		Stereoscopic						
ayer 2 Contracting of	unu	<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fit	orous % A	sbestos %	of Sample
LM Examination:		White	Blocky	Y	es NI	)	ND	10
Components Aggregate/Binders	<u>%</u> +/- <b>100</b>	<u>Morphology</u> Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index		Extinction Angle	Sign of Elongation
Prep/treatment: mechanic		Non horous	Asbesto	os Content:	None Detecte	ed		
 .ayer 3   Paper								
ayer 3 Paper		<u>Color</u>	Examination <u>Texture</u>	Homog	geneous? % Fil	orous % A	sbestos %	of Sample
LM Examination:		Tan	Fibrous		es 10		ND	10
Components Cellulose Fibers	<u>%</u> <u>+/-</u> 100	Morphology ribbons	Color/ Pleochroism	Parallel <u>Ref. Index</u>	Perpendicular Ref. Index	Biref high	Extinction Angle	Sign of Elongation
Prep/treatment: mechanic	al separation		Asbesto	os Content:	None Detecte	ed		
 .ayer 4   Wallboard Ma	— — — — — — aterial	Stereoscopic	Examination					-
		Color	Texture	-	geneous? % Fil			•
LM Examination:		White	Blocky	Y	'es 1		ND	65
Components Cellulose Fibers Aggregate Gypsum Binders	_ <u>%</u> +/- 1 4 95	Morphology ribbons Non-fibrous Non-fibrous	Color/ <u>Pleochroism</u>	Parallel <u>Ref. Index</u>	Perpendicular Ref. Index	Biref high	Extinction Angle	Sign of Elongation
Prep/treatment: mechanic	al separation		Asbesto	os Content:	None Detecte	ed		
								-
Comments:					nalyst:		hy Schose	k



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Set #: 35093 Project (Line 2): Project #: 725010720021 Sample #: **CL847901** Field ID #: 3-180 Page 1 of 2 Sample Description: Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300 **Wall Covering** Layer 1 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Lt. Mauve-Grey **Fibrous** Yes 30 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index +/-Morphology Pleochroism Elongation Components Biref Angle **Cellulose Fibers** 15 ribbons high Monofilaments **Synthetic Fibers** 15 **Binders** 10 Non-fibrous Vinyl 60 Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 2 Joint Tape Stereoscopic Examination Color Texture Cream **Fibrous** PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Components Angle Elongation **Cellulose Fibers** 100 ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected \_\_\_\_\_ Joint Compound Stereoscopic Examination Laver 3 Color <u>Texture</u> White **Blocky** ND Yes ND 10 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of <u>Morpho</u>logy Components Ref. Index Pleochroism Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected **Paper** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan **Fibrous** ND Yes 100 10 PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Cellulose Fibers** 100 ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected **Wallboard Material** Layer 5 Stereoscopic Examination Color <u>Texture</u> White **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation ribbons **Cellulose Fibers** high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 Comments: Kathy Schosek Analyst: 8/14/2020 Date Analyzed:

Lab Job #: PLM-23736



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847901** 

Field ID #: **3-180** Page 2 of 2

Sample Description: Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300

Prep/treatment: Mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

8/14/2020

Sample #: CL847902

Date Analyzed: Eab Job #: PLM-23736

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Set #: 35093 Project (Line 2): Project #: 725010720021 Sample #: **CL847902** Field ID #: 3-181 Page 1 of 2 Sample Description: Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300 **Wall Covering** Layer 1 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Lt. Mauve-Grey **Fibrous** Yes 30 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index +/-Morphology Pleochroism Elongation Components Biref Angle **Cellulose Fibers** 15 ribbons high **Synthetic Fibers** Monofilaments 15 **Binders** 10 Non-fibrous Vinyl 60 Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 2 Joint Tape Stereoscopic Examination Color Texture Cream **Fibrous** PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Components Angle Elongation **Cellulose Fibers** 100 ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected \_\_\_\_\_ Joint Compound Stereoscopic Examination Laver 3 Color <u>Texture</u> White **Blocky** ND Yes ND 10 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of <u>Morpho</u>logy Components Ref. Index Pleochroism Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected **Paper** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan **Fibrous** ND Yes 100 10 PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected **Wallboard Material** Layer 5 Stereoscopic Examination Color <u>Texture</u> White **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation ribbons **Cellulose Fibers** high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 Comments: Kathy Schosek Analyst:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847902** 

Field ID #: 3-181 Page 2 of 2

Sample Description: Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300

Prep/treatment: mechanical separation Asbestos Content: None D

Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Set #: 35093 Project (Line 2): Project #: 725010720021 Sample #: **CL847903** Field ID #: 3-182 Page 1 of 2 Sample Description: Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300 **Wall Covering** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample Lt. Mauve-Grey **Fibrous** Yes 30 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index +/-Morphology Pleochroism Elongation Components Biref Angle **Cellulose Fibers** 15 ribbons high Monofilaments **Synthetic Fibers** 15 **Binders** 10 Non-fibrous Vinyl 60 Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 2 Joint Tape Stereoscopic Examination Color Texture Cream **Fibrous** PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Components Angle Elongation **Cellulose Fibers** 100 ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected \_\_\_\_\_ Joint Compound Stereoscopic Examination Laver 3 Color <u>Texture</u> White **Blocky** ND Yes ND 10 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of <u>Morpho</u>logy Components Ref. Index Pleochroism Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected **Paper** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan **Fibrous** ND Yes 100 10 PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Cellulose Fibers** 100 ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: **None Detected Wallboard Material** Layer 5 Stereoscopic Examination Color <u>Texture</u> White **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation ribbons **Cellulose Fibers** high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 Comments: Kathy Schosek Analyst: 8/14/2020 Date Analyzed:

Lab Job #: PLM-23736



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847903** 

Field ID #: **3-182** Page 2 of 2

Sample Description: Wall/Ceiling Cover Paper (light purple, rough) Drywall/Joint Compound - Room 300

Prep/treatment: Mechanical separation Asbestos Content: None Detected

\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Project #: 725010720021

Sample #: **CL847904** Field ID #: 3-183

Page 1 of 1

Unfinished Drywall/ Joint Compound - Room 3ME1

∟ayer 1	Joint Tape		•	Examination					
			<u>Color</u>	<u>Texture</u>		geneous? % Fi			•
PLM Exam	ination		Cream	Fibrous	Y	'es 10	0	ND	15
PLIVI EXAIII	manon:			Color/	Parallel	Perpendicular		Extinction	Sign of
Component	<u>s</u>	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index		Biref	Angle	Elongation
Cellulos	se Fibers	100	ribbons				high		
-	ent: mechanical	-			os Content:		ed		
 .ayer 2				Examination					_
			Color	Texture	Homo	geneous? % Fi	brous %	Asbestos %	of Sample
			White	Blocky	Y	′es N	D	ND	10
PLM Exam	ination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Component	<u>s</u>	<u>%</u> +/-	Morphology	Pleochroism		Ref. Index		Angle	Elongatio
	ate/Binders	100	Non-fibrous				· <u></u>		
Prep/treatm	ent: mechanical	separation		Asbesto	os Content:	None Detecte	ed		
									_
_ayer 3	Paper		Color	Examination Texture	Цото	geneous? % Fi	broug 0/	Ashastas 0/	of Comple
			<u> </u>	Fibrous		'es 10		ND	10
PLM Exam	ination:		Tan	Tibious	'	<b>C</b> 3 10		ND	10
				Color/	Parallel	Perpendicular		Extinction	Sign of
Component		<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongatio</u>
	se Fibers	100	ribbons				high		
<u>'rep/treatm</u>	ent: mechanical	•		· · · · · · · · · · · · · · · · · · ·	os Content:	None Detecte	ed		
 .ayer 4				Examination					
			<u>Color</u>	<u>Texture</u>		geneous? % Fi			
W. A. F.			White	Blocky	Y	es 2	!	ND	65
PLM Exam	ination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Component	S	<u>%</u> +/-	Morphology	Pleochroism		Ref. Index		Angle	Elongatio
*	se Fibers	1	ribbons				high		
Glass F		1	straight	none			none		
Aggreg		3 95	Non-fibrous Non-fibrous						
Cyncus	n binders ent: <b>mechanical</b>		Non-innous			Nama Barari			
Gypsun				Asbesto	os Content:	None Detecte	ea 💮		

Comments:		Kathy Schosek 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847904</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): **UNT - Gibson Library** Set #: 35093

Project (Line 2):

Sample #: **CL847905** Project #: 725010720021

Field ID #: 3-184 Page 1 of 1

Sample Description: Unfinished D	rywall/Joint Co	ompound - Room 3N	ME2					Page I of I	
Layer 1 Joint Tape		•	Examination						
		Color	<u>Texture</u>		geneous? % Fi			•	
D		Cream	Fibrous	•	Yes 10	00	ND	15	
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index		Biref	Angle	Elongation	
Cellulose Fibers	100	ribbons				high			
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detecte	ed			
		Stereoscopic	Examination					_	
		Color	<u>Texture</u>	Homo	geneous? % Fi	brous %	Asbestos %	of Sample	
		White	Blocky	•	Yes N	D	ND	10	
PLM Examination:			Color/	Parallel	Domon di culon		Extinction	Sian of	
Components	<u>%</u> +/-	Morphology	Pleochroism		Perpendicular Ref. Index		Angle	Sign of Elongation	
Aggregate/Binders	100	Non-fibrous	<u> </u>	11011 1110011	11011 1110011	<u> </u>	<u></u>	<u> 21011ganton</u>	
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detecte	ed			
 Layer 3   Paper		Stereoscopic							
Layer o Taper		Color	Texture	Homo	geneous? % Fi	brous %	Asbestos %	of Sample	
		Tan	Fibrous		Yes 10		ND	10	
PLM Examination:									
~			Color/	Parallel	Perpendicular		Extinction	Sign of	
Components Cellulose Fibers	<u>%</u> <u>+/-</u>	Morphology ribbons	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation	
		ribudis		~		high			
Prep/treatment: mechanical se	•		<u>Asbesto</u>	os Content:	None Detecte	ed 			
Layer 4 Wallboard Materi	al	Stereoscopic	Examination						
		<u>Color</u>	<u>Texture</u>	Homo	geneous? % Fi	brous %	Asbestos %	of Sample	
		White	Blocky	•	Yes 2	2	ND	65	
PLM Examination:			Color/	Parallel	Domon di culon		Extination	Sian of	
Components	<u>%</u> +/-	Morphology	Pleochroism		Perpendicular Ref. Index	Biref	Extinction Angle	Sign of Elongation	
Cellulose Fibers	1	ribbons	<u> </u>	11011 1110011	11011 1110011	high	<u> </u>	<u> 21011Ganton</u>	
Glass Fibers Aggregate	1 3	straight Non-fibrous	none			none			
Gypsum Binders	95	Non-fibrous		_		_			
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Detected				
								_	
				Γ.	A malerate	17 -	athy Cabaaa		
Comments:					Analyst: Date Analyzed:		thy Schose	K	
				I	_ab Job #: PLM-	23736	Sample #: 0	CL847905	
							•		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021

Sample #: **CL847906** Field ID #: 3-185

Page 1 of 1

Sample Description: Unfinished Drywall/Joint Compound - Room 3ME2 **Joint Tape** Layer 1 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Cream **Fibrous** Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Components Angle **Cellulose Fibers** 100 ribbons high **None Detected** <u>Prep/treatment:</u> mechanical separation Asbestos Content: Layer 2 Joint Compound Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components Morphology <u>%</u> +/-Pleochroism Ref. Index Ref. Index Biref Angle **Elongation** 100 Non-fibrous Aggregate/Binders Prep/treatment: mechanical separation Asbestos Content: None Detected **Paper** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan **Fibrous** Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Cellulose Fibers ribbons high 100 **None Detected** <u>Prep/treatment:</u> mechanical separation Asbestos Content: **Wallboard Material** Layer 4 Stereoscopic Examination Color Texture White Blocky Yes 2 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components +/-Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle Elongation Cellulose Fibers ribbons high Glass Fibers straight none none Aggregate Non-fibrous 3 **Gypsum Binders** 95 Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected

Comments:		Kathy Schosek 8/14/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847906</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847907** 

Field ID #: 3-186 Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 300

Layer 1 **Ceiling Tile** Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color **Texture**

Yellow/White **Fibrous** Yes 100 90 ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index <u>Biref</u> Pleochroism Ref. Index Elongation Components Angle

Rods **Mineral Wool Fibers** 90 **Binders / Paint** Non-fibrous 10

**None Detected** Prep/treatment: mechanical separation Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847908** 

Field ID #: **3-187** Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 300

Layer 1 Ceiling Tile Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow/White Fibrous Yes 90 ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Mineral Wool Fibers 90 Rods 0
Binders / Paint 10 Non-fibrous

<u>Prep/treatment:</u> mechanical separation <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847908



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847909** 

Field ID #: 3-188 Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 306

Layer 1 **Ceiling Tile** Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color **Texture**

Yellow/White **Fibrous** Yes 100 90 ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index <u>Biref</u> Pleochroism Ref. Index Elongation Components Angle

Rods **Mineral Wool Fibers** 90 **Binders / Paint** Non-fibrous 10

**None Detected** Prep/treatment: mechanical separation Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847910** 

Field ID #: **3-189** Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 319

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homos	geneous?	% Fibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	'es	60	ND	100
PLM Examination:		- •						
			Color/	Parallel	Perpendic	ular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Inde	<u>Biref</u>	<u>Angle</u>	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Det	tected		

\_\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847911** 

Field ID #: **3-190** Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 312

Layer 1 Ceiling Tile		Stereoscopic Examination							
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? %	Fibrous %	Asbestos % of Sample		
		Beige w/wht pt	Fibrous	Yes		60	ND	100	
PLM Examination:									
			Color/	Parallel	Perpendicula	ır	Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation	
Cellulose Fibers	30	ribbons				high			
Mineral Wool Fibers	30	Rods				0			
Perlite	30	Glass Foam				0			
Binders / Paint	10	Non-fibrous							
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detec	cted			

\_\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847912** 

Field ID #: **3-191** Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Restroom 3T1

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es 6	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Pren/treatment: mechanical	separation		Asbesto	os Content:	None Detect	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847913** 

Field ID #: 3-192 Page 1 of 1

Sample Description: Firestop (red) - Room 3ME1

Layer 1 **Firestop** Stereoscopic Examination

> Color <u>Texture</u>

Rubbery Yes ND 100 Red 2

PLM Examination:

Sign of Color/ Parallel Perpendicular Extinction +/-Morphology Pleochroism Ref. Index Ref. Index Biref Components Elongation Angle

**Glass Fibers** 2 straight none none **Binders / Fillers** Non-fibrous 98

heat / melt **None Detected** Prep/treatment: Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847914** 

Field ID #: 3-193 Page 1 of 1

Sample Description: Firestop (red) - Room 3ME2

Layer 1 **Firestop** Stereoscopic Examination

98

Color <u>Texture</u>

Rubbery Yes ND 100 Red 2

PLM Examination:

Sign of Color/ Parallel Perpendicular Extinction +/-Morphology Pleochroism Ref. Index Ref. Index Biref Components Elongation Angle

**Glass Fibers** 2 straight none none **Binders / Fillers** Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847915** 

Field ID #: 3-194 Page 1 of 1

Sample Description: Firestop (red) - Room 3ME2

98

Layer 1 **Firestop** Stereoscopic Examination Color <u>Texture</u> Rubbery Yes ND 100 Red 2 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction +/-Morphology Pleochroism Ref. Index Ref. Index Biref Components Elongation Angle

**Glass Fibers** 2 straight none none **Binders / Fillers** Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847916** 

Field ID #: **3-195** Page 1 of 1

Sample Description: Thermal System Insulation (white) - Room 3ME2

Layer 1 White Mastic		Stereoscopic E	xamination					
		Color	<u>Texture</u>	<u>Homog</u>	eneous? % Fi	brous %	Asbestos % o	of Sample
		White	Rubbery	Y	es N	D	ND	50
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	s Content:	None Detecte	ed		
Layer 2 Wrap		Stereoscopic E	xamination					
		Color	<u>Texture</u>	<u>Homog</u>	eneous? % Fi	brous %	Asbestos % o	of Sample
		White / Silver	Fibrous	N	lo 7	5	ND	50
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Cellulose Fibers	70	ribbons				high		
Glass Fibers	5	straight	none			none		
Metal Foil	15		Opaque					
Binders	10	Non-fibrous						
Prep/treatment: mechanical se	paration		Asbesto	os Content:	None Detecte	ed		
Prep/treatment: mechanical se	paration		Asbesto	os Content:	None Detecte	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847917** 

Field ID #: **3-196** Page 1 of 1

Sample Description: Thermal System Insulation (white) - Room 300

Layer 1 White Mastic		Stereoscopic I	Examination					
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		White	Rubbery	Y	es N	D	ND	50
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		
Layer 2 Wrap		Stereoscopic I	Examination					
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		White / Silver	Fibrous	N	lo 7	5	ND	50
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
<u>Components</u>	<u>%</u> +/-	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	Biref	<u>Angle</u>	<b>Elongation</b>
Cellulose Fibers	70	ribbons				high		
Glass Fibers	5	straight	none			none		
			Opaque					
Metal Foil	15		Opaque					
Metal Foil Binders	15 10	Non-fibrous	Opaque					
	10	Non-fibrous		os Content:	None Detecte	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847918** 

Field ID #: **3-197** Page 1 of 1

Sample Description: Thermal System Insulation (white) - Room 300

Layer 1 White Mastic		Stereoscopic Examination								
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos % o	of Sample		
		White	Rubbery	Υ	es N	D	ND	50		
PLM Examination:										
			Color/	Parallel	Perpendicular	D: 0	Extinction	Sign of		
Components	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	Angle	Elongation		
Aggregate/Binders	100	Non-fibrous								
<u>Prep/treatment:</u> heat / melt	Asbestos Content: None Detected									
				. — — — .						
Layer 2 Wrap Stereoscopic Examination										
		Color	Texture	Homog	geneous? % Fi	brous %	Asbestos % o	of Sample		
		White / Silver	Fibrous	1	No 7	5	ND	50		
PLM Examination:										
			Color/	Parallel	Perpendicular		Extinction	Sign of		
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>		
Cellulose Fibers	70	ribbons				high				
Glass Fibers	5	straight	none			none				
Metal Foil	15		Opaque							
Binders	10	Non-fibrous								
Prep/treatment: mechanical se	paration		Asbesto	s Content:	None Detect	ed				
								_		

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/14/2020

Lab Job #: PLM-23736 Sample #: CL847918



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847919** 

Field ID #: **3-198** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 313

Layer 1 Ceiling Tile		Stereoscopic Examination							
		Color	<u>Texture</u>	<u>Homog</u>	eneous? % l	Fibrous %	Asbestos %	of Sample	
		Beige w/wht pt	Fibrous	Ye	es	60	ND	100	
PLM Examination:									
			Color/	Parallel	Perpendicula	r	Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation	
Cellulose Fibers	55	ribbons				high			
Mineral Wool Fibers	5	Rods				0			
Perlite	30	Glass Foam				0			
Binders / Paint	10	Non-fibrous							
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detec	ted			

\_\_\_\_\_\_

 Comments:
 Analyst: Date Analyzed:
 Kathy Schosek 8/14/2020

 Lab Job #: PLM-23736
 Sample #: CL847919



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847920** 

Field ID #: **3-199** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 313AA

Layer 1 Ceil	ing Tile			Stereoscopic Examination						
				Color	<u>Texture</u>	Homos	geneous?	% Fibrous %	Asbestos %	of Sample
				Beige w/wht pt	Fibrous	Y	'es	60	ND	100
PLM Examination	:									
					Color/	Parallel	Perpendic	cular	Extinction	Sign of
Components		%	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Ind	ex Biref	<u>Angle</u>	Elongation
Cellulose Fibe	ers	55		ribbons				high		
Mineral Wool	Fibers	5		Rods				Ō		
Perlite		30		Glass Foam				0		
Binders / Pair	nt	10		Non-fibrous						
Prep/treatment:	mechanical sep	arati	on		Asbesto	s Content:	None De	tected		

\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847921** 

Field ID #: **3-200** Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Room 310

Layer 1 Ceil	ling Tile		Stereoscopic E	xamination					
			Color	<u>Texture</u>	Homo	geneous?	% Fibrous %	Asbestos %	of Sample
			Beige w/wht pt	Fibrous	Y	'es	60	ND	100
PLM Examination	:								
				Color/	Parallel	Perpendic	cular	Extinction	Sign of
Components	%	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Inde	ex Biref	Angle	Elongation
Cellulose Fib	ers 55	i	ribbons				high		
Mineral Wool	Fibers 5		Rods				Ō		
Perlite	30	)	Glass Foam				0		
Binders / Pair	nt 10	)	Non-fibrous						
Prep/treatment:	mechanical separa	tion		Asbesto	os Content:	None De	tected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847922** 

Field ID #: 3-201 Page 1 of 1

Sample Description: Firestop (grey) - Room 3ME1

Layer 1 **Firestop** Stereoscopic Examination

> Color **Texture**

Yes ND ND 100 Grey Putty

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: **CL847922** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847923** 

Field ID #: 3-202 Page 1 of 1

Sample Description: Firestop (grey) - Room 3ME2

Stereoscopic Examination Layer 1 **Firestop** 

Color **Texture** 

Yes ND 100 Grey Putty ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: CL847923



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: CL847924

Field ID #: **3-203** Page 1 of 1

Sample Description: Firestop (grey) - Room 3ME2

Layer 1 Firestop Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Grey Putty Yes ND ND 100

PLM Examination:

Binders / Fillers 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847925** 

Field ID #: **3-204** Page 1 of 1

Sample Description: Mastic (black) associated w/Perimeter Walls - Room 300

Layer 1 Black Mastic			Stereoscopic	Examination					
			Color	Texture	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
			Black	Asphaltic	Υ	es	5	ND	100
PLM Examination:				•					
				Color/	Parallel	Perpendicula	ır	Extinction	Sign of
Components	%	+/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Chrysotile	5	4	Silky / Wavy	None	1.556	1.549	low	Parallel	+
Cellulose Fibers	5		ribbons				high		
Tar Binders	90		Non-fibrous						

Prep/treatment: heat / melt Asbestos Content: 5% Chrysotile



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Prep/treatment:

Project #: 725010720021 Sample #: **CL847928** 

Field ID #: 3-207 Page 1 of 1

Sample Description: Duct Mastic (white) - Room 300

heat / melt

**Duct Mastic** Layer 1 Stereoscopic Examination

> <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color

> > Asbestos Content:

20% Chrysotile

White Yes 100 Rubbery 30 15

PLM Examination:

Sign of Color/ Parallel Perpendicular Extinction Components <u>+/-</u> Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Angle

Chrysotile 20 10 Silky / Wavy 1.556 1.549 low Parallel None **Glass Fibers** straight 15 none none

**Binders** 65 Non-fibrous

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: CL847928



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847931** 

Field ID #: **3-210** Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 300

Layer 1 Grey Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Grey Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Binders / Fillers 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847931



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847932** 

Field ID #: **3-211** Page 1 of 1

Sample Description: **Duct Mastic (grey) - Room 300** 

Layer 1 Grey Mastic Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Grey Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Binders / Fillers 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: 725010720021 Sample #: **CL847933** 

Field ID #: 3-212 Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 311

**Grey Mastic** Layer 1 Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

Yes ND 100 Grey Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Elongation Components Angle

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: **CL847933** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847934** 

Field ID #: **3-213** Page 1 of 1

Sample Description: Fireproofing (grey) - Room 300

Layer 1 Fireproofing Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Lt. Grey Fibrous Yes 100 ND 100

PLM Examination:

Cellulose Fibers 100 ribbons high

Prep/treatment: mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Project #: **725010720021** Sample #: **CL847935** 

Field ID #: **3-214** Page 1 of 1

Sample Description: Fireproofing (grey) - Room 300

Layer 1 Fireproofing Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Lt. Grey Fibrous Yes 100 ND 100

PLM Examination:

Cellulose Fibers 100 ribbons high

Prep/treatment: mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Prep/treatment:

Project #: 725010720021 Sample #: **CL847936** 

Field ID #: 3-215 Page 1 of 1

Sample Description: Fireproofing (grey) - Room 300

mechanical separation

**Fireproofing** Layer 1 Stereoscopic Examination

> Color <u>Texture</u>

> > **None Detected**

Asbestos Content:

**Fibrous** Yes 100 ND 100 Lt. Grey

PLM Examination:

Sign of Color/ Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Biref Ref. Index Angle Elongation Components

100 ribbons **Cellulose Fibers** high

Comments: Analyst: Kathy Schosek 8/14/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: CL847936



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Prep/treatment:

Project #: **725010720021** Sample #: **CL847937** 

Field ID #: **3-216** Page 1 of 1

Sample Description: Fireproofing (grey) - Room 300

mechanical separation

Layer 1 Fireproofing Stereoscopic Examination

**None Detected** 

Asbestos Content:

Lt. Grey Fibrous Yes 100 ND 100

PLM Examination:

Cellulose Fibers 100 ribbons high

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/14/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847937



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Set #: 35093

Project (Line 2):

Prep/treatment:

Project #: **725010720021** Sample #: **CL847938** 

Field ID #: **3-217** Page 1 of 1

Sample Description: Fireproofing (grey) - Room 300

mechanical separation

Layer 1 Fireproofing Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

**None Detected** 

Asbestos Content:

Lt. Grey Fibrous Yes 100 ND 100

PLM Examination:

Cellulose Fibers 100 ribbons high

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/14/2020

 Lab Job #: PLM-23736
 Sample #: CL847938



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847939** 

Field ID #: 4-218 Page 1 of 1

Sample Description: Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey) - Room 470

 Layer 1
 Red Mastic
 Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Red Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847940** 

Field ID #: 4-219 Page 1 of 1

Sample Description: Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey) - Room 450

Layer 1 Red Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % Asbestos % of Sample

Red Rubbery Yes ND ND 100 PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847941** 

Field ID #: 4-220 Page 1 of 1

Sample Description: Mastic (red) associated w/Carpet (tan w/multi-color green stripes) & Leveling Compound (grey) - Hallway 4L1

 Layer 1
 Red Mastic
 Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % Asbestos % of Sample

Red Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/17/2020

Lab Job #: **PLM-23736** Sample #: **CL847941** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847942** 

Field ID #: 4-221 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) - Room 404

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847943** 

Field ID #: 4-222 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) - Room 404

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: CL847944

Field ID #: 4-223 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (red, blue, & tan multi-color pattern) - Room 405

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847945** 

Field ID #: 4-224 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels) - Stairway 4S4

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/17/2020

Lab Job #: **PLM-23736** 

Sample #: **CL847945** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847946** 

Field ID #: 4-225 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels) - Stairway 3S4

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #: PLM-23736
 Sample #: CL847946



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847947** 

Field ID #: 4-226 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (tan w/green spot pattern) (stairway, all levels) - Stairway 2S4

Layer 1 Yellow Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous</u> % Asbestos % of Sample

Yellow-Tan Rubbery Yes ND ND 100

PLM Examination:

Glue Binders 100 Non-fibrous

Prep/treatment: Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Sample #: **CL847948** Project #: 725010720021

Field ID #: 4-227 Page 1 of 1

Sample Description: 12" X 12" Flo	oor Tile (grey w/	dark grey & white st	reaks) & Mastic	(yellow) & L	eveling Compound	l (grey) - Room	450A
Layer 1 Floor Tile		Stereoscopic I	Examination				
-		Color	Texture	Homog	geneous? % Fibrous	% Asbestos %	of Sample
		Grey	Hard	Y	es ND	ND	99
PLM Examination:		•					
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	f Angle	<b>Elongation</b>
Aggregate/Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Yellow Mastic		Stereoscopic I	Examination				
		Color	<u>Texture</u>	Homog	geneous? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es ND	ND	1
PLM Examination:			-				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	f Angle	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
							<del></del>

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: **CL847948** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847949** 

Field ID #: 4-228 Page 1 of 1

Sample Description: 12" X 12" Floor Tile (grey w/dark grey & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 450A

Layer 1 Floor Tile		Stereoscopic 1	Examination					
		Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Grey	Hard	Y	es	ND	ND	99
PLM Examination:		•						
			Color/	Parallel	Perpendicula	r	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Ashesto	s Content:	None Detec	ted		
			71300310	os content.	None Belee	icu		
		Stereoscopic				— — —		_
		Stereoscopic S					Asbestos %	of Sample
			Examination	 Homog	geneous? %		Asbestos %	of Sample
Layer 2 Yellow Mastic		Color	Examination Texture	 Homog	geneous? %	Fibrous %		of Sample
		Color	Examination Texture	 Homog	geneous? %	Fibrous %		of Sample  1  Sign of
Layer 2 Yellow Mastic	<u>%</u> ±/-	Color	Examination Texture Rubbery	Homog	geneous? % ]	Fibrous %	ND	1
Layer 2 Yellow Mastic	<u>%</u> +/- 100	<u>Color</u> Yellow-Tan	Examination Texture Rubbery Color/	Homog <b>Y</b> Parallel	geneous? % ]	— — — Fibrous <u>%</u> <b>ND</b> r	ND Extinction	1 Sign of



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847950** 

Field ID #: 4-229 Page 1 of 1

Sample Description: 12" X 12" Floor Tile (grey w/dark grey & white streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 450A

Layer 1 Floor Tile		Stereoscopic 1	Examination				
		Color	<u>Texture</u>	<u>Homoge</u>	neous? % Fibrous %	Asbestos %	of Sample
		Grey	Hard	Ye	s ND	ND	99
PLM Examination:		-					
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
		Ct					
Layer 2 Yellow Mastic		Stereoscopic	Examination				
Layer 2 Yellow Mastic		<u>Color</u>	Examination <u>Texture</u>	Homoge	neous? % Fibrous %	Asbestos %	of Sample
Layer 2 Yellow Mastic				<u>Homoge</u> <b>Ye</b>		Asbestos % o	of Sample 1
		Color	<u>Texture</u>				of Sample  1
PLM Examination:		Color	<u>Texture</u>	Ye			of Sample  1  Sign of
PLM Examination:	<u>%</u> +/-	Color	Texture Rubbery	Ye	s ND	ND	1 Sign of
	<u>%</u> +/− <b>100</b>	<u>Color</u> Yellow-Tan	Texture Rubbery Color/	Ye Parallel	s ND Perpendicular	ND Extinction	1

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847950



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847951** 

Field ID #: 4-230 Page 1 of 1

Sample Description: 12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 410

Sample Description: 12" X	12" Floor Tile (dark bi	ue w/black streaks)	& Mastic (yellow)	) & Leveling	Compound	grey) -	Room 410	
Layer 1 Floor Tile		Stereoscopic 1	Examination					
		Color	<u>Texture</u>	Homog	geneous? % F	ibrous %	Asbestos %	of Sample
		Grey-Blue	Hard	Υ	es N	D	ND	99
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Vinyl Bind	ders 100	Non-fibrous						
Prep/treatment: heat /	melt		Asbesto	os Content:	None Detect	ed		
Layer 2 Yellow Ma		Stereoscopic	Examination	- — — -				
		Color	Texture	Homog	geneous? % F	ibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es N	D	ND	1
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat /	melt		Asbesto	os Content:	None Detect	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847952** 

Field ID #: 4-231 Page 1 of 1

Sample Description: 12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 410

Layer 1 Floor Tile		Stereoscopic 1	Examination				
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % Fibrous	% Asbestos %	of Sample
		Grey-Blue	Hard	Y	es ND	ND	99
PLM Examination:		•					
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	ef Angle	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Yellow Mastic		Stereoscopic	Examination				
		Color	Texture	Homog	geneous? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es ND	ND	1
PLM Examination:			,				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bird	ef Angle	Elongation
Glue Binders	100	Non-fibrous					



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847953** 

Field ID #: 4-232 Page 1 of 1

Sample Description: 12" X 12" Floor Tile (dark blue w/black streaks) & Mastic (yellow) & Leveling Compound (grey) - Room 410

o: :::o (aa::: a:a				, , ,	,	
	Stereoscopic E	xamination				
	<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fibrous	8 % Asbestos % o	of Sample
	Grey-Blue	Hard	Υ	es ND	ND	99
	-					
		Color/	Parallel	Perpendicular	Extinction	Sign of
<u>%</u> +/-	Morphology	Pleochroism	Ref. Index	Ref. Index Bir	ref Angle	Elongation
100	Non-fibrous					
		Asbesto	os Content:	None Detected		
	Stereoscopic E	xamination	- — — -			
	Color	Texture	Homog	geneous? % Fibrous	8 Masbestos Masb	of Sample
	Yellow-Tan	Rubbery	Υ	es ND	ND	1
		-				
		Color/	Parallel	Perpendicular	Extinction	Sign of
<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bir	ref Angle	Elongation
100	Non-fibrous					
		Asbesto	os Content:	None Detected		
	<u>%</u> +/-	Stereoscopic E Color Grey-Blue  Morphology Non-fibrous  Stereoscopic E Color Yellow-Tan  Morphology	Stereoscopic Examination Color Texture Grey-Blue Hard  Color/ Pleochroism  Non-fibrous  Stereoscopic Examination Asbestor  Asbestor  Stereoscopic Examination Color Texture Yellow-Tan Rubbery  Color/ Pleochroism  Non-fibrous	Stereoscopic Examination Color Texture Homogous Grey-Blue Hard Y  Morphology Pleochroism Ref. Index  Non-fibrous  Stereoscopic Examination Color Texture Homogous Asbestos Content:  Stereoscopic Examination Color Texture Homogous Yellow-Tan Rubbery Y  Color/ Parallel Ref. Index  Pleochroism Ref. Index  Ref. Index  Ref. Index	Stereoscopic Examination  Color Texture Homogeneous? % Fibrous  Grey-Blue Hard Yes ND  Color/ Parallel Perpendicular Ref. Index Bin  Non-fibrous  Stereoscopic Examination  Color Texture None Detected  Stereoscopic Examination  Color Texture Homogeneous? % Fibrous  Yellow-Tan Rubbery Yes ND  Color/ Parallel Perpendicular  Ref. Index Bin  Color/ Parallel Perpendicular  Yellow-Tan Rubbery Yes ND  Color/ Parallel Perpendicular  Non-fibrous  Ref. Index Bin  Non-fibrous	Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Grey-Blue Hard Yes ND ND  Color/ Parallel Perpendicular Ref. Index Ref. Index Biref Angle  Non-fibrous  Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Asbestos Content: None Detected  Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Yellow-Tan Rubbery Yes ND ND  Color/ Parallel Perpendicular Extinction NOne Detected  Color/ Parallel Perpendicular Extinction Ref. Index Ref. Index Ref. Index Biref Angle  Non-fibrous



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4

Set #:

35094

Project (Line 2):

Field ID #:

Project #: 725010720021

4-233

Sample #: **CL847954** 

Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow) - Room 401

_ayer 1	Flooring			Stereoscopic	Examination					
-	•			Color	<u>Texture</u>	Homog	geneous?	% Fibrous %	Asbestos % o	of Sample
				Lt. Brown	Rubbery	Y	'es	ND	ND	85
LM Examina	ation:				•					
_					Color/	Parallel	Perpendi		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Ind	lex Biref	<u>Angle</u>	Elongatio
Aggregate	e/Vinyl Binders	100		Non-fibrous						
rep/treatment	t: heat / melt				Asbesto	os Content:	None De	etected		
 .ayer 2	Yellow Mastic			Stereoscopic	— — — — — Examination					
				Color	<u>Texture</u>	Homog	geneous?	% Fibrous %	Asbestos % o	of Sample
				Yellow-Tan	Rubbery	Υ	'es	ND	ND	5
LM Examina	ation:				•					
					Color/	Parallel	Perpendi		Extinction	Sign of
components	_	<u>%</u>	<u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Ind	<u>Biref</u>	<u>Angle</u>	Elongatio
Glue Bind	lers	100		Non-fibrous						
rep/treatment	t: heat / melt				Asbesto	os Content:	None De	etected		
 ayer 3	Vapor Barrier			Stereoscopic	Examination	- — — —				_
				Color	<u>Texture</u>	Homog	geneous?	% Fibrous %	Asbestos % o	of Sample
				Black	Rubbery	Y	'es	ND	ND	10
LM Examina	ation:									
					Color/	Parallel	Perpendi		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Ind	<u>Biref</u>	<u>Angle</u>	<u>Elongatio</u>
Vinyl Bind	ders	100		Non-fibrous						
rep/treatment	t: mechanical s	enarati	on		Ashesto	s Content:	None De	etected		

Comments:		Kathy Schosek 8/17/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847954</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847955** 

Field ID #: 4-234 Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow) - Room 400

Layer 1 Flooring		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Lt. Brown	Rubbery	Yes	ND	ND	85
PLM Examination:							
C	0/ . /	M1	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In	dicular	Extinction	Sign of Elongation
Components Aggregate/Vinyl Bind	ers <u>%</u> <u>+/-</u>	<u>Morphology</u> <b>Non-fibrous</b>	Pieociiroisiii	Kei. ilidex Kei. il	ildex bilei	Angle	Eloligatio
		Non-innous					
Prep/treatment: heat / n	nelt		Asbesto	os Content: None I	Detected		
 Layer 2 Yellow Mas	 stic	Stereoscopic	Examination				
		Color	Texture	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	5
PLM Examination:			-				
			Color/	1	dicular		Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. I	ndex Biref	Angle	<u>Elongatio</u>
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / n	nelt		Asbesto	os Content: None I	Detected		
<i>—                                    </i>	_	Stereoscopic	— — — — — Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Black	Rubbery	Yes	ND	ND	10
PLM Examination:							
	0/	37. 1.1	Color/		dicular	Extinction	Sign of
Components Vinyl Binders	<u>%</u> <u>+/-</u> 100	<u>Morphology</u> <b>Non-fibrous</b>	<u>Pleochroism</u>	Ref. Index Ref. In	ndex Biref	Angle	Elongatio
Prep/treatment: <b>mecha</b>	nical separation		Asbesto	os Content: None I	Detected		

Comments:	,	Kathy Schosek 8/17/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847955</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847956** 

Field ID #: 4-235 Page 1 of 1

Sample Description: Resilient Vinyl Flooring (light brown, wood pattern) & Mastic (yellow) - Room 454

Layer 1 Flooring		Stereoscopic l	Examination				
Layer i Flooring		Color	Texture	Homogeneous'	% Fibrous	% Asbestos %	of Sample
		Lt. Brown	Rubbery	Yes	ND	ND	85
PLM Examination:			•				
			Color/	ı.	dicular	Extinction	Sign of
Components Aggregate Winyl Binders	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Pleochroism	Ref. Index Ref. I	ndex Biref	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-tibrous					
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content: None	Detected		
Layer 2 Yellow Mastic		Stereoscopic I	— — — — — — Examination				
		Color	Texture	Homogeneous'	% Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	5
PLM Examination:			-				
			Color/		dicular	Extinction	Sign of
Components	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index Ref. I	ndex Biref	<u>Angle</u>	<u>Elongation</u>
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None	Detected		
Layer 3 Vapor Barrier		Stereoscopic I	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Black	Rubbery	Yes	ND	ND	10
PLM Examination:							
C	0/	M 1	Color/		dicular		Sign of
Components Vinyl Binders	<u>%</u> <u>+/-</u> 100	Morphology Non-fibrous	Pleochroism	Ref. Index Ref. I	ndex Biref	<u>Angle</u>	Elongation
•		Non-fibrous					
<u>Prep/treatment:</u> mechanical s	eparation		Asbesto	os Content: None	Detected		

Comments:		Kathy Schosek 8/17/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847956</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847957** 

Field ID #: 4-236 Page 1 of 1

Sample Description: 4" Cove Base (dark grey) w/Mastic (tan) - by Room 470

Layer 1 Cove Base		Stereoscopic	Examination					
		<u>Color</u>	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Dk. Grey	Rubbery	Υ	'es	ND	ND	95
PLM Examination:		-	-					
			Color/	Parallel	Perpendicul	ar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			A 1 .	a Contonti	None Dete	-4-d		
<u> </u>			Aspesto	os Content:	None Dete	ctea		
		Stereoscopic	Asbesto Asbesto Examination	- — — -	None Dete		. — — —	
		Stereoscopic Color				. — — —	Asbestos %	of Sample
		•	Examination			. — — —	Asbestos %	of Sample 5
		Color	Examination Texture		geneous? %	Fibrous %		
		Color	Examination Texture		geneous? %	Fibrous %		-
	— — — — — — — — — — — — — — — — — — —	Color	Examination Texture Rubbery	Homog	geneous? %	Fibrous % ND ar	ND	5
ayer 2 Tan Mastic	<u>%</u> +/-	<u>Color</u> <b>Tan</b>	Examination Texture Rubbery Color/	Homog <b>Y</b> Parallel	geneous? % (es Perpendicul	Fibrous % ND ar	ND Extinction	5 Sign of



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847958** 

Field ID #: 4-237 Page 1 of 1

Sample Description: 4" Cove Base (dark grey) w/Mastic (tan) - by Room 4T1

Layer 1 Cove Base		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneous	? % Fibrous %	Asbestos %	of Sample
		Dk. Grey	Rubbery	Yes	ND	ND	95
PLM Examination:		•	•				
			Color/	Parallel Perper	ndicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index Ref.	<u>Index</u> <u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None	Detected		
		Stereoscopic	— — — — — Examination	- — — — — ·			
-		<u>Color</u>	Texture	Homogeneous	? % Fibrous %	Asbestos %	of Sample
		Tan	Rubbery	Yes	ND	ND	5
PLM Examination:			•				
							c. c
			Color/	Parallel Perper	ndicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Color/ <u>Pleochroism</u>		ndicular Index Biref	Extinction Angle	Sign of Elongation
Components Glue Binders	<u>%</u> <u>+/-</u>	<u>Morphology</u> <b>Non-fibrous</b>					_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847958



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847959** 

Field ID #: 4-238 Page 1 of 1

Sample Description: 4" Cove Base (dark grey) w/Mastic (tan) - Room 448

Sample Description: 4" Cove Bas	se (dark grey) w/	wastic (tan) - Room	448				
Layer 1 Cove Base		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	<u>Homoge</u>	eneous? % Fib	rous % Asbestos	% of Sample
		Dk. Grey	Rubbery	Ye	s ND	ND ND	95
PLM Examination:		_	-				
			Color/	Parallel	Perpendicular	Extinction	n Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u> <u>Angle</u>	<u>Elongation</u>
Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	d	
Layer 2 Tan Mastic		Stereoscopic	Examination				
		Color	Texture	Homoge	eneous? % Fib	rous % Asbestos	% of Sample
		Tan	Rubbery	Ye	s ND	ND ND	5
PLM Examination:			•				
			Color/	Parallel	Perpendicular	Extinction	n Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u> <u>Angle</u>	<b>Elongation</b>
Glue Binders	100	Non-fibrous					
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content:	None Detecte	d	



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847960** 

Field ID #: 4-239 Page 1 of 1

Sample Description: Sink Undercoating (grey) - Room 401

Layer 1 Sink Undercoating Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous? % Fibrous % Asbestos % of Sample</u>

Grey-Off White Fibrous Yes 5 ND 100

PLM Examination:

Components Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Cellulose Fibers 30 ribbons high Aggregate/Binders 70 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: **CL847961** 

Field ID #: 4-240 Page 1 of 1

Sample Description: Sink Undercoating (grey) - Room 401

Layer 1 **Sink Undercoating** Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color **Texture**

**Grey-Off White Fibrous** Yes ND 100 5

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of +/-Morphology Pleochroism Ref. Index Biref Ref. Index Elongation Components Angle

**Cellulose Fibers** 30 ribbons high Aggregate/Binders Non-fibrous 70

heat / melt **None Detected** Prep/treatment: Asbestos Content:

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847961



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: **CL847962** 

Field ID #: 4-241 Page 1 of 1

Sample Description: Sink Undercoating (grey) - Room 401

Layer 1 **Sink Undercoating** Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color **Texture**

**Grey-Off White Fibrous** Yes ND 100 5

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of +/-Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Components Angle

**Cellulose Fibers** 30 ribbons high Aggregate/Binders Non-fibrous 70

heat / melt **None Detected** Prep/treatment: Asbestos Content:

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847962



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #4
 Set #:
 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847963** 

Field ID #: 4-242 Page 1 of 2

Layer 1 Paint Texture		Stereoscopic	Examination					
•		Color	<u>Texture</u>	Homo	ogeneous? %	Fibrous %	Asbestos %	of Sample
		White	Blocky	,	Yes	ND	ND	10
PLM Examination: <u>Components</u> Aggregate/Binders/Paint Perlite	% <u>+/-</u> 95 5	Morphology Non-fibrous Glass Foam	Color/ Pleochroism	Parallel Ref. Index	Perpendicul Ref. Index		Extinction Angle	Sign of Elongation
Prep/treatment: solvent disso	_	Class I call	Asbesto	os Content:	None Dete	•		
 _ayer 2   Joint Tape								
Layer 2 Johnt Tape		Color	Texture	Homo	geneous? %	Fibrous %	Asbestos %	of Sample
		Cream	Fibrous		Yes	100	ND	5 5
PLM Examination:		3.00	040		<del>-</del>			•
a	0/ /	M 1 1	Color/	Parallel	Perpendicul		Extinction	U
Components Cellulose Fibers	<u>%</u> <u>+/-</u> 100	Morphology ribbons	Pleochroism	Ref. Index	Ref. Index	·	<u>Angle</u>	Elongation
		ZHOUUH		~		high		
Prep/treatment: mechanical se	eparation		<u>Asbesto</u>	os Content:	None Dete	ected 		
ayer 3 Joint Compound	t	•	Examination			T-11		
		<u>Color</u>	<u>Texture</u>		ogeneous? %			-
PLM Examination:		White	Blocky		Yes	ND	ND	15
DAI DAMIIII AUOII.			Color/	Parallel	Perpendicul	ar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism		Ref. Index		Angle	Elongation
Aggregate/Binders	100	Non-fibrous						
Prep/treatment: mechanical se	eparation		Asbesto	os Content:	None Dete	ected		
 _ayer 4		Stereoscopic	Examination					
		Color	Examination <u>Texture</u>	Homo	ogeneous? %	Fibrous %	Asbestos %	of Sample
		•			ogeneous? % Yes	Fibrous % <b>100</b>	Asbestos %	of Sample 10
		Color	<u>Texture</u> <b>Fibrous</b>	,	Yes	100	ND	10
LM Examination:	<u>%</u> +/-	Color	Texture	Parallel		<b>100</b>		
PLM Examination:	<u>%</u> +/− <b>100</b>	<u>Color</u> <b>Tan</b>	Texture Fibrous Color/	Parallel	<b>Yes</b> Perpendicul	<b>100</b>	ND Extinction	10 Sign of
PLM Examination:  Components  Cellulose Fibers	100	Color Tan  Morphology	Texture Fibrous  Color/ Pleochroism	Parallel Ref. Index	<b>Yes</b> Perpendicul	ar Biref high	ND Extinction	10 Sign of
PLM Examination:  Components  Cellulose Fibers  Prep/treatment: mechanical se	100 separation	Color Tan  Morphology ribbons	Texture Fibrous  Color/ Pleochroism	Parallel Ref. Index	Yes Perpendicul Ref. Index	ar Biref high	ND Extinction	10 Sign of
PLM Examination:  Components  Cellulose Fibers  Prep/treatment: mechanical se	100 separation	Color Tan  Morphology ribbons  Stereoscopic Color	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture	Parallel Ref. Index os Content:	Yes  Perpendicul Ref. Index  None Dete	ar Biref high ected Fibrous %	ND Extinction	10 Sign of Elongation
PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanical section — — — — — — — — — — — — — — — — — — —	100 separation	Color Tan  Morphology ribbons  Stereoscopio	Texture Fibrous  Color/ Pleochroism  Asbeste	Parallel Ref. Index os Content: - — —	Yes  Perpendicul Ref. Index  None Dete	ar Biref high ected	ND Extinction Angle	10 Sign of Elongation
PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanical section — — — — — — — — — — — — — — — — — — —	100 separation	Color Tan  Morphology ribbons  Stereoscopic Color	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky	Parallel Ref. Index os Content: Homo	Perpendicul Ref. Index  None Dete  ogeneous? % Yes	ar Biref high ected Fibrous %	ND  Extinction Angle  Angle  Asbestos % ND	Sign of Elongation  of Sample 60
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanical selection in the component of the c	100 separation — — — — — rial	Color Tan  Morphology ribbons  Stereoscopic Color White	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture	Parallel Ref. Index os Content: - — —	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul	ar Biref high ected Fibrous % 2	ND  Extinction Angle  — — — —	Sign of Elongation  of Sample  60  Sign of
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanical selection in the component of the c	100 separation	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/	Parallel Ref. Index os Content: Homo	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul	ar Biref high ected Fibrous % 2	ND  Extinction Angle  Asbestos % ND  Extinction	Sign of Elongation  of Sample  60  Sign of
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanical society ayer 5 Wallboard Mater  PLM Examination:  Components Cellulose Fibers Glass Fibers	100 separation	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons straight	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/	Parallel Ref. Index os Content: Homo	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul	ar Biref high ected Fibrous % 2 ar Biref	Extinction Angle  Asbestos % ND  Extinction Angle	Sign of Elongation  of Sample  60  Sign of
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanical state and the state are also and the state are also are	100 separation	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons straight Non-fibrous	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/ Pleochroism	Parallel Ref. Index os Content: Homo	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul	ar Biref high cted Fibrous % 2 ar Biref high	Extinction Angle  Asbestos % ND  Extinction Angle	Sign of Elongation  of Sample  60  Sign of
PLM Examination:  Components Cellulose Fibers Prep/treatment: mechanical selection and the selection a	100 separation ————————————————————————————————————	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons straight	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/ Pleochroism  none	Parallel Ref. Index os Content: Homo	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul	ar Biref high cted Fibrous % 2 ar Biref high none	Extinction Angle  Asbestos % ND  Extinction Angle	Sign of Elongation  of Sample 60
PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanical selection of the components Components Cellulose Fibers Glass Fibers Aggregate Gypsum Binders  Prep/treatment: mechanical selections	100 separation ————————————————————————————————————	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons straight Non-fibrous	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/ Pleochroism  none	Parallel Ref. Index os Content:  Homo Parallel Ref. Index	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul Ref. Index  None Dete	ar Biref high cted Fibrous % 2 ar Biref high none	Extinction Angle  Asbestos % ND  Extinction Angle	Sign of Elongation  of Sample  for Sign of Elongation
PLM Examination:  Components Cellulose Fibers  Prep/treatment: mechanical selection of the components  Components Cellulose Fibers Glass Fibers Aggregate Gypsum Binders	100 separation ————————————————————————————————————	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons straight Non-fibrous	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/ Pleochroism  none	Parallel Ref. Index os Content:  Homo Parallel Ref. Index	Perpendicul Ref. Index  None Dete  geneous? %  Yes  Perpendicul Ref. Index	ar Biref high cted  Fibrous % 2 ar Biref high none	Extinction Angle  Asbestos % ND  Extinction Angle	Sign of Elongation  of Sample  for Sign of Elongation



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847963** 

Field ID #: 4-242 Page 2 of 2

Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 470

 Comments:
 Analyst: Nathy Schosek Date Analyzed: 8/17/2020

 Lab Job #: PLM-23736
 Sample #: CL847963



mechanical separation

Prep/treatment:

Comments:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Lab Proj #: **PLM-23736** Project (Line 1): UNT - Gibson Library Floor #4 35094 Set #: Project (Line 2): Project #: 725010720021 Sample #: **CL847964** Field ID #: 4-243 Page 1 of 2 Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 460 **Paint Texture** Layer 1 Stereoscopic Examination Color **Texture** Homogeneous? % Fibrous % Asbestos % of Sample White ND **Blocky** Yes ND PLM Examination: Perpendicular Sign of Color/ Parallel Extinction Ref. Index Ref. Index Morphology Pleochroism Biref Components Angle Elongation Aggregate/Binders/Paint 95 Non-fibrous Perlite 5 **Glass Foam** solvent dissolution Asbestos Content: None Detected Prep/treatment: Layer 2 Joint Tape Stereoscopic Examination Color **Texture** Cream **Fibrous** Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Components Angle Elongation **Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected **Joint Compound** Layer 3 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White **Blocky** Yes ND ND 15 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 4 Stereoscopic Examination Color Texture Tan **Fibrous** Yes 100 ND 10 PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 5 Wallboard Material Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation** Cellulose Fibers ribbons high **Glass Fibers** straight none none Non-fibrous Aggregate 3 **Gypsum Binders** Non-fibrous

Asbestos Content:

**None Detected** 

Lab Job #: PLM-23736

Analyst:

Date Analyzed:

Kathy Schosek

Sample #: CL847964

8/17/2020



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: **Apex TITAN** Lab Proj #: **PLM-23736** 35094

Project (Line 1): UNT - Gibson Library Floor #4 Set #:

Project (Line 2):

Project #: 725010720021 Sample #: **CL847964** 

Field ID #: 4-243 Page 2 of 2

Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 460

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: **CL847964** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

8/17/2020

Sample #: CL847965

Date Analyzed:

Lab Job #: PLM-23736

**Apex TITAN** Client: Lab Proj #: **PLM-23736** Project (Line 1): UNT - Gibson Library Floor #4 35094 Set #: Project (Line 2): Project #: 725010720021 Sample #: **CL847965** Field ID #: 4-244 Page 1 of 1 Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 428 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> White ND **Blocky** Yes ND 10 PLM Examination: Perpendicular Extinction Color/ Parallel Sign of Ref. Index Ref. Index Morphology Pleochroism Biref Components Angle Elongation Aggregate/Binders/Paint 95 Non-fibrous Perlite 5 Glass Foam solvent dissolution Asbestos Content: None Detected Prep/treatment: Layer 2 Joint Tape Stereoscopic Examination Color **Texture** Cream **Fibrous** Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index <u>Biref</u> Components Ref. Index Angle Elongation **Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected **Joint Compound** Layer 3 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White **Blocky** Yes ND ND 15 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 4 Stereoscopic Examination Color Texture Tan **Fibrous** Yes 100 ND 10 PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 5 Wallboard Material Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White **Blocky** Yes PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** ribbons high Aggregate Non-fibrous Non-fibrous **Gypsum Binders** 95 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Kathy Schosek Comments: Analyst:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Job #: **PLM-23736** Sample #: **CL847966** 

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #4
 Set #:
 35094

 Project (Line 2):
 Project #:
 725010720021
 Sample #:
 CL847966

 Field ID #:
 4-245
 Page 1 of 1

Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 401

Color	Layer 1 Paint Texture		Stereoscopio	Examination					
Public   P			•		Homo	geneous? % Fi	brous %	Asbestos %	of Sample
PLM Examination:   Components			<del></del>						
Components	PLM Examination:			2.00,	•		_		
Aggregate/Binders/Paint 100 Non-fibrous    Aghestos Content:   Solvent dissolution									Sign of
Ashestos Content:   Solvent dissolution   Ashestos Content:   None Detected				Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongatio
Color   Texture   Homogeneous?   % Fibrous   % Asbestos   % of Sample			Non-tibrous						
Color   Texture   Homogeneous   % Fibrous   % Fibro	Prep/treatment: solvent disso	olution		Asbesto	os Content:	None Detecte	∌d		
Cream Fibrous Yes 100 ND 5    Color   Parallel   Perpendicular   Ref. Index   Ref.	 .ayer 2   Joint Tape		Stereoscopic	Examination					
Margin   M			Color	<u>Texture</u>	<u>Homo</u>	geneous? % Fi	brous %	Asbestos % o	of Sample
Colory Parallel Perpendicular Biref Angle Elongati (Colory Texture Blocky Yes ND ND 15 (Colory Parallel Perpendicular Biref Angle Elongati (Colory Texture Blocky Yes ND ND 15 (Colory Parallel Perpendicular Biref Angle Elongati (Colory Texture Blocky Perpendicular Biref Angle Elongati (Colory Texture Blocky Perpendicular Biref Angle Elongati (Colory Texture Blocky Perpendicular Biref Angle Elongati (Colory Texture Brock) (Colory Texture Brock) (Colory Texture Brock) (Colory Parallel Perpendicular Biref Angle Elongati (Colory Texture Brock) (Colory Parallel Perpendicular Biref Angle Elongati (Colory Parallel Perpendicular Biref Angle El			Cream	Fibrous	١	Yes 10	0	ND	5
Collulose Fibers   100   Morphology   Pleochroism   Ref. Index   Ref. Index   Biref   Angle   Elongati   Frep/treatment:   mechanical separation   Asbestos Content:   None Detected	PLM Examination:			G.1. /	D 11.1	D 11 1		F .: .:	a. c
Cellulose Fibers   100   ribbons   Asbestos Content:   None Detected	Components	0/4 1/	Morphology						
Asbestos Content: Mone Detected  Stereoscopic Examination:  Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes ND ND 15  Components % #/- Aggregate/Binders 100 Non-fibrous  Asbestos Content: None Detected  Stereoscopic Examination:  Color/ Parallel Perpendicular Extinction Sign of Non-fibrous  Asbestos Content: None Detected  Stereoscopic Examination:  Color/ Texture Homogeneous? % Fibrous % Asbestos % of Sample Fibrous with the propendicular of the propendicula	*			<u>1 leochioisiii</u>	Kei. Iliuex	Ker. Hidex		Aligie	Liongano
Asbestos Content:    Asbestos Content:   Asbestos Content:   Analyst:   Asbestos   Serios   S			IIDDUIG	A 1 .	C ·	Nene Data - 1	•		
Color White Blocky Yes ND ND 15  LM Examination:  Color Parallel Perpendicular Biref Non-fibrous  Ref. Index R	rep/treatment: mechanical s	eparation		Asbesto	os Content:	None Detect	- — —		
White Blocky Yes ND ND 15  LM Examination:  Color/ Parallel Ref. Index Ref. I	ayer 3 Joint Compound	t	•						
M Examination:    Color				·					-
Components			White	Blocky	١	res N	D	ND	15
Components   % +/- Morphology   Pleochroism   Ref. Index   Ref. Inde	'LM Examination:			Color/	Dorollo1	Dornandiaular		Extination	Sign of
Aggregate/Binders 100 Non-fibrous  Asbestos Content: None Detected  Asbestos Content: None Detected  Stereoscopic Examination  Color Texture Homogeneous? % Fibrous Asbestos % of Sample Tan Fibrous Yes 100 ND 10  PLM Examination:  Components % ±/- Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongati  Cellulose Fibers 100 ribbons  Asbestos Content: None Detected  Stereoscopic Examination  Color Texture Homogeneous? % Fibrous Asbestos Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongati  Asbestos Content: None Detected  Stereoscopic Examination  Color Texture Homogeneous? % Fibrous Asbestos % of Sample  White Blocky Yes 1 ND 60  Extinction Sign of Color/ Parallel Perpendicular Extinction Sign of None Detected  Collulose Fibers 1 ND 60  Color/ Parallel Perpendicular Ref. Index Biref Angle Elongati  Collulose Fibers 1 ribbons Ref. Index Ref. Index Biref Angle Elongati  Cellulose Fibers 1 ribbons Non-fibrous  Aggregate 4 Non-fibrous  Aggregate 4 Non-fibrous  Components 95 Non-fibrous  Components 95 Non-fibrous  Comments: Kathy Schosek	Components	% +/-	Morphology						_
Stereoscopic Examination  Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan Fibrous Yes 100 ND 10  **Color Texture Homogeneous? ND ND 10  **Color Texture Homogeneous? ND ND 10  **Color Parallel Perpendicular Extinction Sign of Cellulose Fibers 100 ribbons  **Texture Homogeneous? ND	*			recement	rter. maex	rter. Hidex	<u> Bircr</u>	ringie	Dioligano
Color Tan Fibrous Yes 100 ND 10  Tan Fibrous Yes 100 ND 10  Tan Fibrous Yes 100 ND 10  Components	55 5			Asbesto	os Content:	None Detecto	∍d		
Color Tan Fibrous Yes 100 ND 10  PLM Examination:    Color   Paralle   Perpendicular   Extinction   Sign of Components   Stereoscopic Examination									
Tan Fibrous Yes 100 ND 10  LM Examination:  Color/ Parallel Perpendicular Extinction Sign of Perpendicular Interpretation Sign of Sample Sign of Sign of Sample Sign of Sign of Sample Sign of Sample Sign of Sign of Sample Sign of Sa	ayer 4 Paper		•		11	9 0/ E:	1 0/	A =1= == == == 0/	- f C 1 -
Components   Sign of Components   Sign of Color   Parallel   Perpendicular   Extinction   Sign of Color   Perpendicular   Extinction   Sign of Color   Perpendicular   Extinction   Sign of Nigh   Perpendicular   Extinction   Sign of Sample   Perpendicular   Perpendicular   Extinction   Sign of Sample   Perpendicular   Perpendicular   Extinction   Sample   Perpendicular   Perpendicular   Perpe			·						
Components  Morphology ribbons  Asbestos Content:  Color/ Parallel Perpendicular Ref. Index Ref. In	OI M Evamination:		ran	Fibrous	1	res 10	U	ND	10
Collulose Fibers 100 ribbons Ref. Index Ref. Index Biref Angle Elongation Asbestos Content: None Detected  Layer 5 Wallboard Material Stereoscopic Examination  Color Texture Homogeneous? Fibrous Asbestos of Sample White Blocky Yes 1 ND 60  LAM Examination:  Color/ Parallel Perpendicular Extinction Sign of Components	LIVI Examination.			Color/	Parallel	Perpendicular		Extinction	Sign of
Cellulose Fibers 100 ribbons  Rep/treatment: mechanical separation  Asbestos Content: None Detected  Layer 5 Wallboard Material  Stereoscopic Examination  Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes 1 ND 60  PLM Examination:  Color/ Parallel Perpendicular Extinction Sign of Components % +/- Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongati Aggregate 4 Non-fibrous Gypsum Binders 95 Non-fibrous  Rep/treatment: mechanical separation  Asbestos Content: None Detected	Components	% +/-	Morphology			1			Elongatio
Analyst: Kathy Schosek	Cellulose Fibers						high	<del></del>	
Color   Homogeneous?   % Fibrous   % Asbestos   % of Sample	Prep/treatment: mechanical s	separation		Asbesto	os Content:	None Detecto	∌d		
Color   Homogeneous?   % Fibrous   % Asbestos   % of Sample   Blocky   Yes   1   ND   60		— — — — — rial	Staransconic						
White Blocky Yes 1 ND 60  PLM Examination:  Components		iui	•		Ното	geneous? % E:	broug 0/	Acheetoe 0/	of Sample
Components Components Cellulose Fibers Aggregate Gypsum Binders Components: Components Asbestos Content: Color/ Parallel Perpendicular Ref. Index Ref. Ind			·	· · · · · · · · · · · · · · · · · · ·		~			-
Components	PLM Examination:		vvnite	ыску	١	i <del>c</del> 5 1		אט	OU
Components	Z Zaminimuoii.			Color/	Parallel	Perpendicular		Extinction	Sign of
Aggregate 4 Non-fibrous Gypsum Binders 95 Non-fibrous  Prep/treatment: mechanical separation Asbestos Content: None Detected  Comments: Analyst: Kathy Schosek	<u>Components</u>	<u>%</u> <u>+/-</u>	Morphology				<u>Biref</u>	<u>Angle</u>	Elongatio
Gypsum Binders 95 Non-fibrous  Prep/treatment: mechanical separation Asbestos Content: None Detected  Comments: Analyst: Kathy Schosek							high		
Prep/treatment: mechanical separation Asbestos Content: None Detected									
omments:  Analyst: Kathy Schosek	Gypsum Binders	95	Non-fibrous						
	Prep/treatment: mechanical s	eparation		Asbesto	os Content:	None Detecto	∌d		
Date Analyzed: <b>8/17/2020</b>									
	Comments:				I .	•		•	k



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094 Project (Line 2): Project #: 725010720021 Sample #: **CL847967** Field ID #: 4-246 Page 1 of 1 Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 244 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample White Yes ND **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Morphology Pleochroism Biref Elongation Components Angle Aggregate/Binders/Paint 100 Non-fibrous Prep/treatment: solvent dissolution None Detected Asbestos Content: **Joint Tape** Layer 2 Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> +/-Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Joint Compound Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous 100 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Paper Layer 4 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan Fibrous Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Components % Morphology **Biref** Angle Elongation **Cellulose Fibers** ribbons 100 high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 5 **Wallboard Material** Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White **Blocky** Yes 1 ND 60 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Non-fibrous Aggregate **Gypsum Binders** 95 Non-fibrous Asbestos Content: None Detected Prep/treatment: mechanical separation Kathy Schosek Comments: Analyst: 8/17/2020 Date Analyzed:

Lab Job #: **PLM-23736** 

Sample #: **CL847967** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

8/17/2020

Sample #: CL847968

Date Analyzed:

Lab Job #: **PLM-23736** 

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094 Project (Line 2): Project #: 725010720021 Sample #: **CL847968** Field ID #: 4-247 Page 1 of 1 Sample Description: Wall/Ceiling Texture (grey, semi-smooth) Drywall/Joint Compound - Room 448 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> Homogeneous? % Fibrous % Asbestos % of Sample White Yes ND **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Morphology Pleochroism Biref Elongation Components Angle Aggregate/Binders/Paint 100 Non-fibrous Prep/treatment: solvent dissolution None Detected Asbestos Content: **Joint Tape** Layer 2 Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> +/-Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation Cellulose Fibers** 100 ribbons high Prep/treatment: mechanical separation Asbestos Content: None Detected Joint Compound Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation Aggregate/Binders Non-fibrous 100 <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Paper Layer 4 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan Fibrous Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Components % Morphology **Biref** Angle Elongation **Cellulose Fibers** ribbons 100 high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 5 **Wallboard Material** Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White **Blocky** Yes 1 ND 60 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation **Cellulose Fibers** ribbons high Non-fibrous Aggregate **Gypsum Binders** 95 Non-fibrous Asbestos Content: None Detected Prep/treatment: mechanical separation Kathy Schosek Comments: Analyst:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094 Project (Line 2):

Sample #: **CL847969** Project #: 725010720021 Field ID #: 4-248

Page 1 of 1

Sample Description: Wall/Ceiling	Texture (grey,	semi-smooth) Dryw	all/Joint Compou	nd - Room	257		
Layer 1 Paint Texture		Stereoscopic	Examination				
		<u>Color</u> <b>White</b>	<u>Texture</u> <b>Blocky</b>		yes ND	ns % Asbestos % ND	of Sample 10
PLM Examination:			Color/	Parallel	Perpendicular	Extinction	Sign of
Components Aggregate/Binders/Paint	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Pleochroism	Ref. Index	1	iref Angle	Elongation
Prep/treatment: solvent disso	olution		Asbesto	os Content:	None Detected		
Layer 2 Joint Tape			Examination				<del>-</del>
		Color	<u>Texture</u>	Homo	geneous? % Fibrou	s <u>% Asbestos</u> <u>%</u>	of Sample
53.45		Cream	Fibrous	•	Yes 100	ND	5
PLM Examination:			Color/	Parallel	Perpendicular	Extinction	Sign of
Components Cellulose Fibers	<u>%</u> +/- <b>100</b>	Morphology ribbons	<u>Pleochroism</u>		Ref. Index Bi	iref Angle	Elongation
<u>Prep/treatment:</u> mechanical s	eparation		Asbesto	os Content:	None Detected		
Layer 3 Joint Compound	 d	Stereoscopic	Examination				
<del>-</del>		Color	<u>Texture</u>		ogeneous? % Fibrou		*
DIM Eiti		White	Blocky	,	Yes ND	ND	15
PLM Examination:			Color/	Parallel	Perpendicular	Extinction	Sign of
Components Aggregate/Binders	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Pleochroism			iref Angle	Elongation
Prep/treatment: mechanical s	•			os Content:	None Detected		
			Examination				
		Color	<u>Texture</u>	Homo	geneous? % Fibrou	ıs % Asbestos %	of Sample
		Tan	Fibrous	•	Yes 100	ND	10
PLM Examination:			Color/	Parallel	Perpendicular	Extinction	Sign of
Components Cellulose Fibers	<u>%</u> +/- <b>100</b>	Morphology ribbons	<u>Pleochroism</u>		Ref. Index B	iref Angle	Elongation
<u>Prep/treatment:</u> mechanical s	eparation		Asbesto	os Content:	None Detected		
Layer 5 Wallboard Mater	 rial	Stereoscopic	Examination				
		<u>Color</u> White	<u>Texture</u> <b>Blocky</b>		yes % Fibrou	ns % Asbestos % ND	
PLM Examination:			Color/	Parallel	Perpendicular	Extinction	Sign of
Components Cellulose Fibers	<u>%</u> <u>+/-</u>	Morphology ribbons	Pleochroism	Ref. Index	Ref. Index B	iref Angle	Elongation
Aggregate Gypsum Binders	4 95	Non-fibrous Non-fibrous					
Prep/treatment: mechanical s	eparation		Asbesto	os Content:	None Detected		
Comments:					Analyst: Date Analyzed:	Kathy Schose 8/17/2020	ek
					Lab Job #: <b>PLM-237</b>	'36 Sample #:	CL847969



Sample Description: Unfinished Drywall/Joint Compound - Room 4ME1

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj. #
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #4
 Set #:
 35094

 Project (Line 2):
 Project #:
 725010720021
 Sample #:
 CL847970

 Field ID #:
 4-249
 Page 1 of 1

**Joint Tape** Layer 1 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Cream **Fibrous** Yes 100 ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Components Angle Elongation **Cellulose Fibers** 100 ribbons high **None Detected** <u>Prep/treatment:</u> mechanical separation Asbestos Content: Stereoscopic Examination

Layer 2 Joint Compound Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White Blocky Yes ND ND PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components <u>%</u> <u>+/-</u> Morphology Pleochroism Ref. Index Ref. Index Biref Angle **Elongation** 100 Non-fibrous Aggregate/Binders Prep/treatment: mechanical separation Asbestos Content: None Detected **Paper** Stereoscopic Examination

Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Tan **Fibrous** Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation high Cellulose Fibers 100 ribbons <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected **Wallboard Material** Layer 4 Stereoscopic Examination

Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White **Blocky** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation **Cellulose Fibers** ribbons high Aggregate Non-fibrous **Gypsum Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094 Project (Line 2):

Project #: 725010720021 Field ID #: 4-250

Sample #: **CL847971** Page 1 of 1

Layer 1 Joint Tape		Stereoscopic	Examination					
		<u>Color</u>	<u>Texture</u>	Homo	geneous? % I	Fibrous %	Asbestos % o	of Sample
		Cream	Fibrous	Y	'es 1	00	ND	10
PLM Examination:								
Tommononto	0/ /	Morphology	Color/ Pleochroism	Parallel Ref. Index	Perpendicular Ref. Index	r Biref	Extinction Angle	Sign of Elongation
Components Cellulose Fibers	<u>%</u> +/- 100	ribbons	Pieociiroisiii	Kei. Ilidex	Kei. Ilidex	high	Aligie	Eloligation
		TIDDOIIS		_		Ū		
rep/treatment: mechanica	•		·	os Content:	None Detec	ted 		
ayer 2 Joint Compou			Examination					
		Color	Texture	Homo	geneous? % I	Fibrous %	Asbestos % o	of Sample
		White	Blocky	Y	es l	ND	ND	15
PLM Examination:			Color/	Parallel	Domondie1-	_	Entimatic -	Cian of
Components	<u>%</u> +/-	Morphology	Pleochroism		Perpendicular Ref. Index		Extinction Angle	Sign of Elongatio
Aggregate/Binders	70 ±7- 100	Non-fibrous	1 ICOCIII OISIII	ici. mdex	ACI. HIGEX	Ditti	Augic	Liongano
Prep/treatment: mechanica			A aboots	oc Contant:	None Detec	tod		
			Asbesto	- — — —		.eu — — —		_
ayer 3 Paper		•	Examination					
		<u>Color</u>	<u>Texture</u>		geneous? % I			_
NACE ' .'		Tan	Fibrous	Y	'es 1	00	ND	10
PLM Examination:			Color/	Parallel	Perpendicula		Extinction	Sign of
Components	<u>%</u> +/-	Morphology	Pleochroism		Ref. Index	Biref	Angle	Elongatio
Cellulose Fibers	100	ribbons				high	<del></del>	
Prep/treatment: mechanica	al separation		Asbesto	os Content:	None Detec	ted		
 _ayer 4  Wallboard Ma								_
ayer 4 Waliboard Ma	iteriai	Color	Texture	Homo	geneous? % I	Sibrous %	Ashestos %	of Sample
		White	Blocky			1010us //	ND	65
PLM Examination:		Wille	Бюску	'	63	•	ND	03
			Color/	Parallel	Perpendicula	r	Extinction	Sign of
Tommononto	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongatio
-	1	ribbons				high		
Cellulose Fibers		Non-fibrous Non-fibrous						
Cellulose Fibers Aggregate	4							
	95	Non-fibrous			None Detec			

Comments:		Kathy Schosek 8/17/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847971</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: **CL847972** 

Layer 1 Joint Tape		_	Examination	**	9 0/ F"	0/		66 1
		<u>Color</u> Cream	<u>Texture</u> <b>Fibrous</b>		geneous? <u>% Fib</u> 'es 100		Asbestos % o	10
PLM Examination:		Cream	Fibrous	ľ	es 100	,	ND	10
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	Morphology ribbons	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose Fibers	100	ribbons		_		high		
Prep/treatment: mechanical s	•		·		None Detecte	d 		_
ayer 2 Joint Compound			Examination					
		Color	Texture		geneous? % Fib			
PLM Examination:		White	Blocky	Y	es ND	1	ND	15
Q	0/	Nr. 1.1	Color/	Parallel		D: C	Extinction	Sign of
Components Aggregate/Binders	<u>%</u> +/- 100	<u>Morphology</u> <b>Non-fibrous</b>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Prep/treatment: mechanical s	•		Asbesto	s Content:	None Detecte	d		
 Layer 3 Paper			Examination	. — — -				_
		Color	<u>Texture</u>	Homog	geneous? % Fib	rous %	Asbestos % o	of Sample
		Tan	Fibrous	Y	es 100	)	ND	10
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism		Ref. Index	<u>Biref</u>	Angle	Elongation
Cellulose Fibers	100	ribbons				high		
Prep/treatment: mechanical s	•		· · · · · · · · · · · · · · · · · · ·	s Content:	None Detecte	d		
			Examination	· — — -				_
		Color	<u>Texture</u>				Asbestos % o	_
OLM Englished		White	Blocky	Y	'es 1		ND	65
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism		Ref. Index	<u>Biref</u>	Angle	Elongation
Cellulose Fibers	1	ribbons Non-fibrous				high		
Aggregate	4 95	Non-fibrous Non-fibrous						
Gypsum Bingers			Ashesto	s Content:	None Detecte	d		
Gypsum Binders Prep/treatment: mechanical s	enaration			s Content.	MONE Detecte	ч		

Comments:		Kathy Schosek 8/17/2020
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847972</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847973** 

Field ID #: 4-252 Page 1 of 1

Sample Description: Firestop (red) - Room 4ME2

Layer 1 **Firestop** Stereoscopic Examination Color <u>Texture</u> Rubbery Yes ND 100 Red 2 PLM Examination: Color/ Sign of Parallel Perpendicular Extinction +/-Morphology Pleochroism Ref. Index Ref. Index Biref Components Elongation Angle **Glass Fibers** 2 straight none none

Binders / Fillers 98 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

**Binders / Fillers** 

Project #: 725010720021 Sample #: **CL847974** 

4-253 Field ID #: Page 1 of 1

Sample Description: Firestop (red) - Room 4ME2

Layer 1 **Firestop** Stereoscopic Examination

98

Color <u>Texture</u>

Rubbery Yes ND 100 Red 2

PLM Examination:

Color/ Sign of Parallel Perpendicular Extinction +/-Morphology Pleochroism Ref. Index Ref. Index Biref Components Elongation Angle

**Glass Fibers** 2 straight none none

Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: **CL847974** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847975** 

Field ID #: 4-254 Page 1 of 1

Sample Description: Firestop (red) - Room 4ME1

Layer 1 Firestop Stereoscopic Examination

Red Rubbery Yes 2 ND 100

PLM Examination:

Components Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Glass Fibers 2 straight none none
Binders / Fillers 98 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847976** 

Field ID #: 4-255 Page 1 of 1

Sample Description: Firestop (grey) - Room 4ME1

Layer 1 Firestop			Stereoscopic	Examination					
			<u>Color</u>	<u>Texture</u>	Homo	geneous? % I	ibrous 9	6 Asbestos %	of Sample
			Grey	Putty	Υ	es l	ND	ND	100
PLM Examination:			•	•					
				Color/	Parallel	Perpendicula	•	Extinction	Sign of
Components	%	+/-	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Chrysotile	2	2	Silky / Wavy	None	1.556	1.549	low	Parallel	+
Binders / Fillers	98		Non-fibrous						
Prep/treatment: heat / melt				Asbest	os Content:	2% Chrysot	ile		

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #: PLM-23736
 Sample #: CL847976



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847979** 

Field ID #: 4-258 Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 446

Layer 1 Ceiling Tile Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow/White Fibrous Yes 90 ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Mineral Wool Fibers 90 Rods 0
Binders / Paint 10 Non-fibrous

<u>Prep/treatment:</u> mechanical separation <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847980** 

Field ID #: 4-259 Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 460

Layer 1 Ceiling Tile Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Yellow/White Fibrous Yes 90 ND 100 PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Mineral Wool Fibers 90 Rods 0
Binders / Paint 10 Non-fibrous

<u>Prep/treatment:</u> mechanical separation <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: CL847981

Field ID #: 4-260 Page 1 of 1

Sample Description: 4' X 6' Acoustical Ceiling Tile (light grey, pinhole) - Room 430

Layer 1 Ceiling Tile Stereoscopic Examination

Yellow/White Fibrous Yes 90 ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Biref Angle Elongation

Mineral Wool Fibers 90 Rods 0
Binders / Paint 10 Non-fibrous

<u>Prep/treatment:</u> mechanical separation <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847982** 

Field ID #: 4-261 Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 450A

Layer 1 C	eiling Tile		S	tereoscopic Ex	xamination					
				Color	<u>Texture</u>	Homog	geneous?	% Fibrous %	Asbestos %	of Sample
			Beige	w/wht pt	Fibrous	Y	es	60	ND	100
PLM Examinati	ion:									
					Color/	Parallel	Perpendic	ular	Extinction	Sign of
Components		<u>%</u> +/	/- Morph	ology	Pleochroism	Ref. Index	Ref. Inde	ex Biref	<u>Angle</u>	Elongation
Cellulose F	ibers	30	ribb	ons				high		
Mineral Wo	ol Fibers	30	Ro	ds				Ō		
Perlite		30	Glass	Foam				0		
Binders / P	aint	10	Non-fil	orous						
Prep/treatment:	mechanical s	separation			Asbesto	s Content:	None De	tected		

\_\_\_\_\_\_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847982



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847983** 

Field ID #: 4-262 Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Room 461

Layer 1 Ceiling Tile		Stereoscopic E	Examination					
		<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es 60	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Pren/treatment: mechanical	separation		Ashesto	os Content:	None Detecte	ed		

\_\_\_\_\_\_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847983



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847984** 

Field ID #: 4-263 Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, pinhole, rough finish) - Restroom 4T1

Layer 1 Ceiling Tile		Stereoscopic E	Examination					
		Color	<u>Texture</u>	Homog	eneous? % Fil	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Ye	es 60	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detecte	ed		

\_\_\_\_\_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #: PLM-23736
 Sample #: CL847984



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847985** 

Field ID #: 4-264 Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 418

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % F	ibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es 6	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	<b>Elongation</b>
Cellulose Fibers	30	ribbons				high		
Mineral Wool Fibers	30	Rods				0		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical s	separation		Asbesto	s Content:	None Detect	ed		

\_\_\_\_\_\_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847985



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847986** 

Field ID #: 4-265 Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 432

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es 6	0	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	Angle	Elongation
Cellulose Fibers	55	ribbons				high		
Mineral Wool Fibers	5	Rods				Ŏ		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detect	ed		

\_\_\_\_\_\_



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847987** 

Field ID #: 4-266 Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, fissured) - Room 434

Layer 1	Ceiling Tile		Stereoscopic E	xamination					
			Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
			Beige w/wht pt	Fibrous	Υ	es 6	0	ND	100
PLM Examin	nation:								
				Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Cellulos	e Fibers	30	ribbons				high		
Mineral	Wool Fibers	30	Rods				Ō		
Perlite		30	Glass Foam				0		
Binders	/ Paint	10	Non-fibrous						
Prep/treatme	nt: mechanical	separation		Asbesto	os Content:	None Detect	ed		

\_\_\_\_\_\_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 8/17/2020

 Lab Job #:
 PLM-23736
 Sample #: CL847987



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: **CL847988** 

4-267 Field ID #: Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 4ME3

**Grey Mastic** Layer 1 Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

Yes ND 100 Grey Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Elongation Components Angle

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: CL847988



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847989** 

Field ID #: **4-268** Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 428

Layer 1 Grey Mastic Stereoscopic Examination

<u>Color</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Grey Rubbery Yes ND ND 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Binders / Fillers 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: **CL847990** 

4-269 Field ID #: Page 1 of 1

Sample Description: Duct Mastic (grey) - Room 400

**Grey Mastic** Layer 1 Stereoscopic Examination

> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Color <u>Texture</u>

Yes ND 100 Grey Rubbery ND

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Elongation Components Angle

**Binders / Fillers** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: **PLM-23736** Sample #: **CL847990** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847991** 

Field ID #: **4-270** Page 1 of 1

Sample Description: Duct Mastic (white) - Room 446

Layer 1 Duct Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

White Rubbery Yes ND ND 100

PLM Examination:

Wollastonite 5 Laths Aggregate/Binders 95 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: CL847992

Field ID #: 4-271 Page 1 of 1

Sample Description: Duct Mastic (white) - Room 470

Layer 1 Duct Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

White Rubbery Yes ND ND 100

PLM Examination:

Wollastonite 5 Laths Aggregate/Binders 95 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client:

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: 725010720021 Sample #: **CL847993** 

Field ID #: 4-272 Page 1 of 1

Sample Description: Duct Mastic (white) - Hallway 4C

**Duct Mastic** Layer 1 Stereoscopic Examination

> Color <u>Texture</u>

White Yes ND ND 100 Rubbery

PLM Examination:

Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index Biref Components +/-Elongation Angle +/-

Wollastonite 5 Laths Aggregate/Binders 95 Non-fibrous

heat / melt **None Detected** Prep/treatment: Asbestos Content:

Comments: Analyst: Kathy Schosek 8/17/2020 Date Analyzed: Lab Job #: PLM-23736 Sample #: CL847993



725010720021

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample #: **CL847994** 

Page 1 of 1

Client: Apex TITAN Lab Proj #: PLM-23736
Project (Line 1): UNT - Gibson Library Floor #4
Project (Line 2): Set #: 35094

Field ID #: **4-273** 

Project #:

Sample Description: Thermal System Insulation (white) - Room 460

**White Mastic** Layer 1 Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample White ND Rubbery Yes ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Ref. Index Pleochroism Biref Components Angle Elongation Wollastonite 5 Laths +/-Aggregate/Binders 95 Non-fibrous Prep/treatment: heat / melt Asbestos Content: None Detected Wrap Layer 2 Stereoscopic Examination Color Texture White / Silver **Fibrous** ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index +/-Morphology Pleochroism <u>Biref</u> Components Angle Elongation **Cellulose Fibers** 70 ribbons high Glass Fibers straight none none Metal Foil 15 **Opaque Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Insulation Layer 3 Stereoscopic Examination Color **Texture** Yellow-Tan **Fibrous** Yes PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle **Elongation Mineral Wool Fibers** Rods 0 Resin Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected

Comments:	Analyst: Kathy Schosek Date Analyzed: 8/17/2020	
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847994</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #
 PLM-23736

 Project (Line 1):
 UNT - Gibson Library Floor #4
 Set #:
 35094

 Project (Line 2):
 Project #:
 725010720021
 Sample #:
 CL847995

 Field ID #:
 4-274
 Page 1 of 1

Sample Description: Thermal System Insulation (white) - Room 446

Layer 1 White Mastic		Stereoscopic E	Examination				
		<u>Color</u>	<u>Texture</u>	<u>Homogeneous?</u>		6 Asbestos %	
		White	Rubbery	Yes	ND	ND	40
PLM Examination:			C-1/	D11-1 D	1	E-dia di	C:
Components	% +/-	Morphology	Color/ Pleochroism	Parallel Perpendi Ref. Index Ref. Index		Extinction Angle	Sign of Elongation
Wollastonite	5	Laths	1 icocinoisiii	Ker. Hidex Ker. Hid	dex <u>Blief</u>	Aligic	+/-
Aggregate/Binders	95	Non-fibrous					.,
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content: None D	etected		
Layer 2 Wrap		Stereoscopic E	Examination				
		Color	<u>Texture</u>	<u>Homogeneous?</u>	% Fibrous %	6 Asbestos %	of Sample
		White / Silver	Fibrous	No	75	ND	25
PLM Examination:							
Commence	0/ ./	M 1	Color/	Parallel Perpendi		Extinction	Sign of
Components Cellulose Fibers	<u>%</u> +/- <b>70</b>	Morphology ribbons	Pleochroism	Ref. Index Ref. Ind		<u>Angle</u>	Elongation
Glass Fibers	5	straight	none		high none		
Metal Foil	15	Straight	Opaque		none	•	
Binders	10	Non-fibrous					
Prep/treatment: mechanica	I separation		Asbesto	os Content: None D	etected		
		Stereoscopic E	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Fibrous	Yes	95	ND	35
PLM Examination:							<b></b> -
	0/ . /	M 1 1	Color/	Parallel Perpendi		Extinction	Sign of
Components Mineral Wool Fibers	<u>%</u> <u>+/-</u>	<u>Morphology</u> <b>Rods</b>	Pleochroism	Ref. Index Ref. Ind		<u>Angle</u>	Elongation
Resin Binders	95 5	Roas Non-fibrous			0		
Prep/treatment: mechanica	I separation		Δshesto	os Content: None D	etected		

Comments:	Analyst: Kathy Schosek Date Analyzed: 8/17/2020	
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847995</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-23736** Client: Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Sample #: **CL847996** Project #: 725010720021 4-275 Field ID #:

Page 1 of 1

Sample Description: Thermal System Insulation (white) - Room 4ME3

ayer 1 White Mastic		Stereoscopic I	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous 9	6 Asbestos %	of Sample
		White	Rubbery	Yes	ND	ND	40
PLM Examination:							
Commonants	0/ . /	Mambalaari	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction	Sign of Elongatio
Components Wollastonite	<u>%</u> +/- <b>5</b>	<u>Morphology</u> <b>Laths</b>	Pieociiroisiii	Kei. Ilidex Kei. Ili	dex bilei	<u>Angle</u>	+/-
Aggregate/Binders	95	Non-fibrous					<b>⊤</b> /⁻
Prep/treatment: heat / melt			Asbesto	os Content: None D	etected		
 .ayer 2   Wrap		Stereoscopic E	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous 9	6 Asbestos %	of Sample
		White / Silver	Fibrous	No	75	ND	25
PLM Examination:							
	0/ ./	M = == 1 = = = = = = = = = = = = = = = =	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction	Sign of Elongation
Components Cellulose Fibers	<u>%</u> +/- <b>70</b>	<u>Morphology</u> ribbons	Pieociiroisiii	Kei. Ilidex Kei. Ili		<u>Angle</u>	Elongano
Glass Fibers	70 5	straight	none		high none		
Metal Foil	15	Straight	Opaque		110110	•	
Binders	10	Non-fibrous	• •				
rep/treatment: mechanica	l separation		Asbesto	os Content: None D	etected		
ayer 3 Insulation		Stereoscopic E	Examination		- — — —		
		Color	<u>Texture</u>	Homogeneous?	% Fibrous 9	6 Asbestos %	of Sample
		Yellow-Tan	Fibrous	Yes	95	ND	35
LM Examination:			C 1 /	D 11 1 D 1		F .: .:	a. c
Components	04 1/	Morphology	Color/ Pleochroism	Parallel Perpend Ref. Index Ref. In		Extinction	Sign of
Mineral Wool Fibers	<u>%</u> +/- <b>95</b>	<u>Morphology</u> <b>Rods</b>	<u>F IEOCIIIOISIII</u>	Kei. Illuex Rel. III	<u>dex</u> <u>Birei</u>	<u>Angle</u>	Elongatio
Resin Binders	95 5	Non-fibrous			U		
Prep/treatment: mechanica	Looporation		A shest	os Content: None D	etected		

Comments:	Analyst: Kathy Schosek Date Analyzed: 8/17/2020	
	Lab Job #: <b>PLM-23736</b>	Sample #: <b>CL847996</b>

#### **Bulk Asbestos Analysis Sheet**



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-23736

Project (Line 1): UNT - Gibson Library Floor #4 Set #: 35094

Project (Line 2):

Project #: **725010720021** Sample #: **CL847997** 

Field ID #: 4-276 Page 1 of 1

Sample Description: Mastic (black) associated w/Perimeter Walls - Room 470

Layer 1 Black Mastic Stereoscopic Examination

<u>Color</u> <u>Texture</u> <u>Homogeneous?</u> <u>% Fibrous</u> <u>% Asbestos</u> <u>% of Sample</u>

Black Asphaltic Yes ND ND 100 PLM Examination:

Components%+/-MorphologyPleochroismRef. IndexRef. IndexBirefAngleElongation

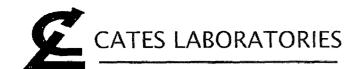
Chrysotile 5 4 Silky / Wavy None 1.556 1.549 low Parallel + Tar Binders 95 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: 5% Chrysotile

Comments:

Analyst: Kathy Schosek
Date Analyzed: 8/17/2020

Lab Job #: PLM-23736 Sample #: CL847997



## CHAIN OF CUSTODY

CL Project No <u>PLM — 23736</u> (Lab Only) SE7-35092

\_ of\_

Company:	Apex			_	
Contact/Results to	Phillip - Veronica - Zu	uri - Edgar	Verbal 🗆	Email  Fax	(check all that apply)
Email(s):	····			_	
Telephone No.:	469 - 732 - 0567	Fax No.:		_	
		Project Infor	mation		
Project: UNT G	ibson Library	los of	Project No	725010720021 D.:	
Address:			F	P.O. No.:	
		Turnaround (c	heck one		
CLEARANCE (P		DAY) 🗆 RUSH (1-DA IATE) 🗅	Y) STANDARD (2-DA	3-DAY 0	5-DAY 🗆
*		heck all that apply, u	se separate COC's for		
PLM-BUI EPA 600/R-9 Point Count (	3/116 <b>G</b> (400) <b>G</b>	PCM-AIR NIOSH 7400 □ OSHA TWA □	AIR (spore trap) - Standa AIR (spore trap) - Expand BULK (tape lift, swab) - S	led Profile (w/insect part	s/pollen/skin) 🔲
CatesLab No 947809	Range (Lab Only) - 8 4 7872	Sample Date	No of Samples 64	Positive Stop	Yes Z No □
Sample No.		Sample D	escription/Location		Volume (åir only)
	Sec	_ A + fa	chmen f		
Relinquis	shed By:	Date/Time:	Recei	ved By:	Date/Time:
Edgar Roque		8/12.50	com	(S:30	8/13/200

#### **HOMOGENEOUS MATERIALS FORM**

Date: **Project No.:** 

Project Name: UNT Gibson Library **Inspector:** Zurisaday Diego/ Edgar Roque

PIM-23736 SET-3509Z

Homo.	Materials Description	Sample	Location
ldent.	Water and Description	No.	Location
CM-01	Mastic (Yellow) associated with Carpet (Grey, with	2.94	Room 200
	Blue And green stripe pattern) and Leveling	2-95	Room 230H
	Compound (grey)	2-96	Room 222G
CM-02	Mastic (Yellow) associated with Carpet (Green, with	2-97	Room 234
	Yellow, blue, and red Spot Pattern)	2-98	Room 230D
		2-99	Room 230A
CM-03	Mastic (Yellow) associated with Carpet (Tan, with	2-100	Room 210
	Green And red dot Pattern) and Leveling	2-101	Room 212
	Compound (Grey)	2.102	Room 208
CM-04	Mastic (Yellow) associated with Carpet (Light Grey,	2-103	Room 218E
	with Dark grey stripe pattern) and Leveling	2-104	Room 218B
	Compound (Grey)	2.105	Room 218D
RVF-01	Resilient Vinyl Flooring (Tan, Wood	2.106	Room 225
	Pattern) and Mastic (Yellow)	2-107	Room 225
i		2-108	Room 225
RVF-01	Resilient Vinyl Flooring (Dark Brown, Wood Pattem)	2-109	Room 218
	And Mastic (Yellow) and leveling Compound (Grey)	2-110	Room 218
		2-111	Room 218
RVF-03	Resilient Vinyl Flooring (Light Brown, Wood Pattern	2-112	Room 230
	And Mastic (Yellow) and leveling compound (Grey)	2-113	Room 222
:		2-114	Room 202
FT-01	12"x12" Floor Tile (Pink with black and white	2 115	Room 222A
	Streaks) and Mastic (Yellow) and leveling	2-116	Room 222A
	Compound (Grey)	2.117	Room 222A
CB-01	4" Cove Base (Black) with Mastic (Tan)	2-118	Room 206
		2.119	Hallway 2L4
		2.120	Room 222C

Homo.	Materials Description	Sample	Location
		No.	10001011
ident.			
WCTX-01	Wall/Ceiling Texture (White, Semi Smooth) Dry	2-121	Room 2L2
	Wall/Joint Compound	2.122	Room 234
		2-123	Room 222F
		2 124	Room 220
		2.125	Room 218 E
		2-126	Room 211
		2-127	Room 206
СТ-01	4'x 6' Acoustical Ceiling Tile (Light Grey, Pinhole)	2.128	Room 200
		2.129	Room 129
		2-130	Room 200
CT-02	2'x 2' Acoustical Ceiling tile (White, pinhole, Rough	2-131	Room 222
	Finish)	2-132	Room 202
,		2-133	Room 2T2
CT-03	2'x4' Acoustica: Ceiling tile (White, Pinhole and	2-134	Room 2L2
	Fissured)	2.135	Room 230C
		2-136	Room 230
CT-04	2'x 4' Acoustical Ceiling tile (White, Fissured)	2-137	Room 2A
		2-138	Room 222F
		2-139	Room 212
DM-01	Duct Mastic (Grey)	2-140	Room 204
ļ		2· <b>1</b> 41	Room 2 VE2
		2-142	Room 2T1A
DM-02	Duct Mastic (White)	2-143	Room 200
		2-144	Room 222
	· · · · · · · · · · · · · · · · · · ·	2 145	Room 204D

Homo.	Materials Description	Sample	Location
1-1		No.	
ldent.			
IC-01	Interior Building Cau'king (White)	2.146	Room 2T1A
	(Above Ceiling)	2 147	Room 230
		2-148	Room 218C
FS-01	Fire Stop (Red, yellow)	2.149	Room 2T1A
		2.150	Room 206
		2-151	Room 2ME1
	12"x 12" Ceramic Floor Tile (Grey)	_	Assume
	(Restrooms)		
	(kestrooms)		
	Mirror Mastic	_	Assume
	(Restrooms)		
	400 450 5 10 10 10 10 10 10 10 10 10 10 10 10 10		A
	12" x 16" Ceramic Wall Tile (White)		Assume
	(Restrooms)		

		PUNI	05736	3E7- 35092
Homo.	Materials Description	Sample		
_		No.	ļ	
ldent.		1001		
TSI-01	Thermal System Insulation (White)	2.279	Room 200	
		2 280	Room 204A	
		2.281	Room 206	
WM-01	Mastic (Black) associated with Perimeter Walls	2.282	Room 207	<del></del>
		2.283	Room 218D	
		2-284	Room 220	
ı				
			<u> </u>	
			<u> </u>	
ļ				
		<del> </del>	-	
		-		



#### CHAIN OF CUSTODY

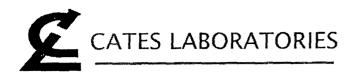
CL Project No <u>PVM - 27736</u> (Lab Only) SET - 35093

				(Lab Only) JE7-	<u> </u>
Company:	Apex		/		
Contact/Results to	Phillip - Veronica - Zi	uri - Edgar- M cr/S	آاعدا / Verbal □	Email 🗆 Fax 🗆	(check all that apply)
Email(s):					
Telephone No.:	469 - 732 - 0567	Fax No.:			
		Project Info	rmation		
Project. UNT G	ibson Library		Project No.:	725010720021	
Address:			P.(	Э- No.:	
77		Turnaround (d	check one)	$\rightarrow$	
CLEARANCE (P	CM)  ASAP (SAME (IMMED	DAY)   RUSH (1-DA	STANDARD (2-DAY	() (Z 3/4-DAY □	5-DAY □
	Testing Services (d	check all that apply, u	se separate COC's for A	sbestos & IAQ)	
	Asbestos		IAQ - I	Mold (Non-Viable)	
PLM-BUI EPA 600/R-9 Point Gount (	3/116 년 (400) □	PCM-AIR NIOSH 7400  OSHA TWA	AIR (spore trap) - Standard AIR (spore trap) - Expanded BULK (tape lift, swab) - Sta	d Profile (w/insect part	s/pollen/skin)
	Range (Lab Only)	Sample Date	No of Samples 66.		
847873	- 847938		No of Samples (OV)	Positive Stop.	Yes-E No D
Sample No.		Sample D	escription/Location		Volume (air only)
	_			_	
	Se-	Attach	ma t		
	0	4 TTUCH	<u> </u>		
			<del></del>		
			-	****	
·					
Relinquis	shed By	Date/Time:	Receive	d By:	Date/Time:
Edgar Roque		3/13.200	o m	15:30	8/13/2020
		/			
AF72017-10 - (ssued 1/	7/2020 Walk-In	D-Drop 🗆 F-Drop 🗆	FedEx□ UPS□ Lo	nestar USPS 🗆	

		17/76	361-33693
Homo.	Materials Description	Sample	Location
ldent.		No.	
CM-01	Mastic (Yellow) Associated with Carpet (Tan with	3-152	Room 300
	Blue and red stripe Pattem)	3 153	Room 302
		3-154	Room 318
CM-02	Mastic (Yellow) Associated with Carpet (Tan with	3-155	Room 316
	yellow And Black Spot Design)	3 156	Room 306
		3.157	Room 316
CM 03	Mastic (Ye-low) Associated with Carpet (Red. Blue,	3.158	Room 308
	and Tan Multico'or Pattern) and Leveling	3-159	Room 308
	Compound (Grey)	3 160	Room 308
CM-04	Mastic (Yellow) associated with Carpet (Grey, with	3-161	Room 313
	Blue And green stripe pattern) and Leveling	3.162	Room 313B
	Compound (Grey)	3-163	Room 313A
RVF-01	Resilient Vinyl Flooring (Light Brown, Wood Pattern	3 164	Room 310
	And Mastic (Brown)	3-165	Room 310C
		3-166	Hallway 3A
CB-01	4" Cove Base (Dark Grey) with Mastic (Tan)	3.167	Room 300
		3.168	Room 310G
		3.169	Room 312
SU 01	Sink Under Coating (Grey)	3·170	Room 313A
		3.171	Room 313A
		3-172	Room 313A
WCTX-01	Wall/ Ceiling Texture (Grey, Semi smooth) Dry wall/	3.173	Room 320
	Joint Compound	3 174	Room 311
	_	3 175	Room 313
		3-176	Room 311A
		3 177	Room 310
		3.178	Room 310D
	<u> </u>		

Homo.	Materials Description	Sample	Location
ldent.		No.	
		3-179	Room 3SC1
WCP-01	Wall/Ceiling Cover Paper (Light Purple, Rough)	3 180	Room 300
	Drywall/Joint Compound	3 181	Room 300
	o ywanyon compound		
		3.182	Room 300
UDW-01	Unfinished Drywall/ Joint Compound	3.183	Room 3ME 1
		3.184	Room 3ME2
		3 185	Room 3ME2
CT-01	4'x 6' Acoustical Cei' ng Tile (Light Grey, Pinhole)	3.186	Room 300
		3.187	Room 300
		3.188	Room 306
C1-05	2'x 2' Acoust cal Ceiling tile (White, pinhole, Rough	3 189	Room 319
	Finish)	3-190	Room 312
		3-191	Restroom 3T1
FS-01	Fire Stop (Red)	3.192	Room 3ME1
		3 193	Room 3ME2
		3-194	Room 3ME2
TSi-01	Thermal System Insulation (White)	3-195	Room 3ME2
		3-196	Room 300
Ì		3-197	Room 300
CT-03	2'x4' Acoustical Ceiling tile (White, Pinhole and	3-198	Room 313
ļ	Fissured)	3 199	Room 313AA
ļ		3-200	Room 310
FS-02	Fire Stop (Grey)	3-201	Room 3ME1
		3.202	Room 3 VE2
-		3·2C3	Room 3VE2

Homo.	Materials Description	Sample	Location
ldent.		No.	
ident.			
WM-01	Mastic (Black) associated with Penmeter Walis	3-204	Room 300
		3 205	Room 312A
		3-206	Room 310B
DM 01	Ouct Mastic (White)	3-207	Room 300
		3.208	Room 300
		3.209	Room 320
DM-02	Duct Mastic (Grey)	3-21C	Room 300
		3-211	Room 300
		3 212	Room 314
FP-C1	Fire Proofing (Grey)	3-213	Roam 300
		3-214	Room 300
		3.215	Room 300
		3-216	Room 300
		3-217	Room 300
		<del> </del>	
	Resilient Vinyl Flooring (Red, Wood Pattern)		Assume
		<del> </del>	
	12"x 12" Ceramic Floor Tile (Grey)		Assume
	(Restrooms)		
	Mirror Mastic		Assume
	(Restrooms)	<u> </u>	
		-	
	12" x 16" Ceramic Wall Tile (White)	-	Assume
	(Restrooms)	<del>                                      </del>	
	(122227)	<del>                                     </del>	



#### CHAIN OF CUSTODY

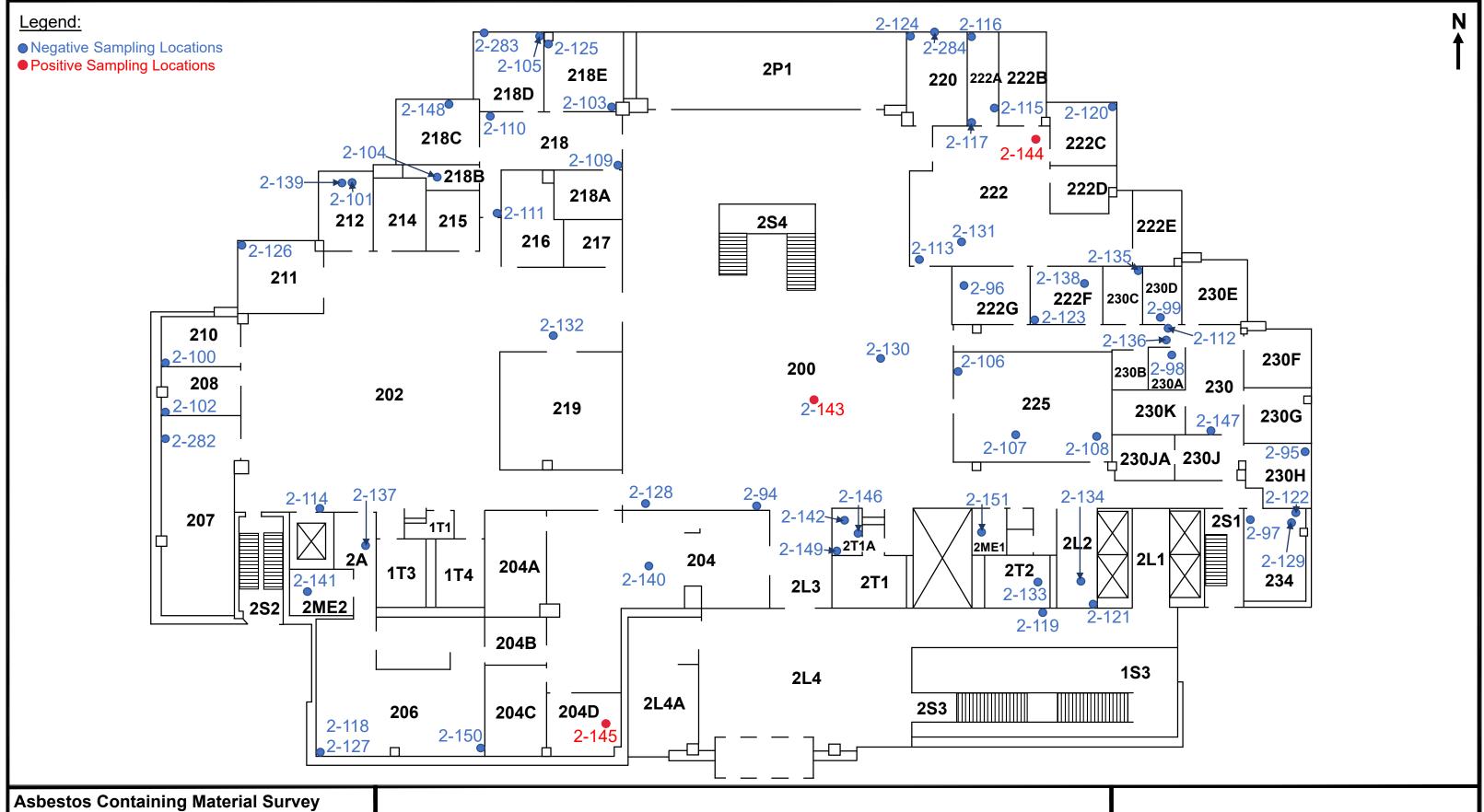
CL Project No PLM — 23736 (Lab Only) SE7 — 35094

			(Edb 0.4)/ 7	
Company:	Apex			
Contact/Results to	Phillip - Veronica - Zi	uri - Edgar	Verbal □ Email □ Fax □ (	check all that apply)
Email(s):				
Telephone No.:	469 - 732 - 0567	Fax No.:		
		Project Info	rmation	
Project: UNT G	ibson Library	-100v H	Project No.: 725010720021	
Address:			P.O. No.:	<del></del>
		Turnaround (c	shook abox	
CLEARANCE (P			Y) A STANDARD (2-DAY) B 3-4 DAY	5-DAY □
	Testing Services (c	check all that apply, u	se separate COG's for Asbestos & IAQ)	
	. Asbestos		IAQ - Mold (Non-Viable)	
PLM-BUI EPA 600/R-9 Point Count (	03/116	PCM-AIR NIOSH 7400 [] OSHA TWA []	AIR (spore trap) - Standard Profile (count/genus id AIR (spore trap) - Expanded Profile (winsect parts BULK (tape lift, swab) - Standard Profile	/pollen/skin) 🔲
	Range (Lab Only)	Sample Date	No of Samples Positive Stop.	Yes ☑ No □
847939	-847999			
Sample No.	,	Sample D	escription/Location	Volume (air only)
	(	- Attach	and the state of t	<del></del>
<del></del>	045	- springach	ma)	
<del></del>				
<del></del>				
				<del></del>
		Data (Time)	Descined Dur	Date/Time:
Relinquis Edgar Roque	shed By:	Date/Time:	Received By:	8/13/202
		5-/7-20.	20 15:30	01.0100
AE72047.40	Those Malk In 19	D Drop II E Drop II	FodEv	

Homo.	Materials Description	Sample	Location
ldent.		No.	
ideiit.			
CM-01	Mastic (red) Associated with Carpet (Tan, with	4-218	Room 470
	Multicolor Green stripes) and Leveling	4-219	Room 450
	Compound (Grey)	4-220	Hallway 4L1
CM-02	Mastic (Yellow) Associated with Carpet (Red. Blue,	4-221	Room 404
	and Tan Multicolor Pattern)	4-222	Room 404
		4-223	Room 405
CM-03	Mastic (Yellow) Associated with Carpet (Tan with	4-224	Stairway 454
	Green spot Pattern)	4.225	Stairway 3S4
	(Stair Way, All Levels)	4-226	Stairway 2S4
FT-01	12"x 12" Floortile (Grey, with Dark grey and white	4-227	Room 450A
	Streaks) and Mastic (Yellow) and Leveling	4.228	Room 450A
	Compound (Grey)	4-229	Room 450A
FT-02	12"x 12" Floortile (Dark Blue with black streaks)	4-230	Room 410
	And Mastic (Yellow) and Leveling Compound	4-281	Room 410
	(Grey)	4-232	Room 410
RVF-01	Resilient Vinyl Flooring (Light Brown, Wood Pattern	4.233	Room 401
	And Mastic (Yellow)	4.234	Room 400
		4-235	Room 454
CB-01	4" Cove Base (Dark Grey) with Mastic (Tan)	4-236	By Room 470
		4-237	By Room 4T1
		4-238	Room 448
SU-01	Sink Under Coating (Grey)	4-239	Room 401
		4-240	Room 401
		4-241	Room 401
WCTX-01	Wall/Ceiling Texture (Grey, Semi smooth) Dry wall/	4-242	Room 470
	Joint Compound	4-243	Room 460
		4-244	Room 428

Homo.	Materials Description	Sample	Location
monio.	iviaterials bescription	1	Location
Ident.		No.	
		4-245	Room 401
		4-246	Room 244
		4-247	Room 448
		4 248	Room 257
	Unfinished Drywall/Joint Compound	4-249	Room 4MF1
	ommissied by ywary surfice this bound		
		4.250	Room 4ME1
		4-251	Room 4ME1
	Fire Stop (Red)	4-252	Room 4ME2
		4-253	Room 4ME2
Les l		4.254	Room 4ME1
W1 V	Fire Stop (Grey) .	4.255	Room 4ME1
		4-256	Room 4ME3
		4-257	Room 4ME3
CT-01	4'x 6' Acoustical Ceiling Tile (Light Grey, Pinhole)	4-258	Room 446
		4-259	Room 460
		4-260	Room 430
CT-02,	2'x 2' Acoustical Ceiling tile (White, pinhole, Rough	4-261	Room 450A
	Finish)	4-262	Room 461
		4-263	Restroom 4T1
CT-03	2'x 4' Acoustical Ceiling tile (White, Fissured)	4-264	Room 418
		4-205	Room 432
		4-266	Room 434
DM-01	Duct Mastic (Grey)	4-267	Room 4ME3
		4-26/8	Room 428
		4-269	Room 400

Homo.	Materials Description	Sample	Location
ldont		No.	
ldent.			
DM-02	Duct Mastic (White)	4-270	Room 446
		4-271	Room 470
		4-272	Hallway 4C
TSI-01	Thermal System Insulation (White)	4-273	Room 460
		4-274	Room 446
		4-275	Room 4ME3
WM-01	Mastic (Black) associated with Perimeter Walls	4-276	Room 470
		4.277	Room 453
		4.278	Room 400
	Mastic associated with Corner Guards		Assume
	12"x 12" Ceramic Floor Tile (Grey)		Assume
	(Restrooms)		
	Mirror Mastic		Assume
	(Restrooms)		
	12" x 16" Ceramic Wall Tile (White)		Assume
	(Restrooms)		



**UNT Health Science Center** Gibson D. Lewis Library 955 Montgomery Street Fort Worth, Texas 76107

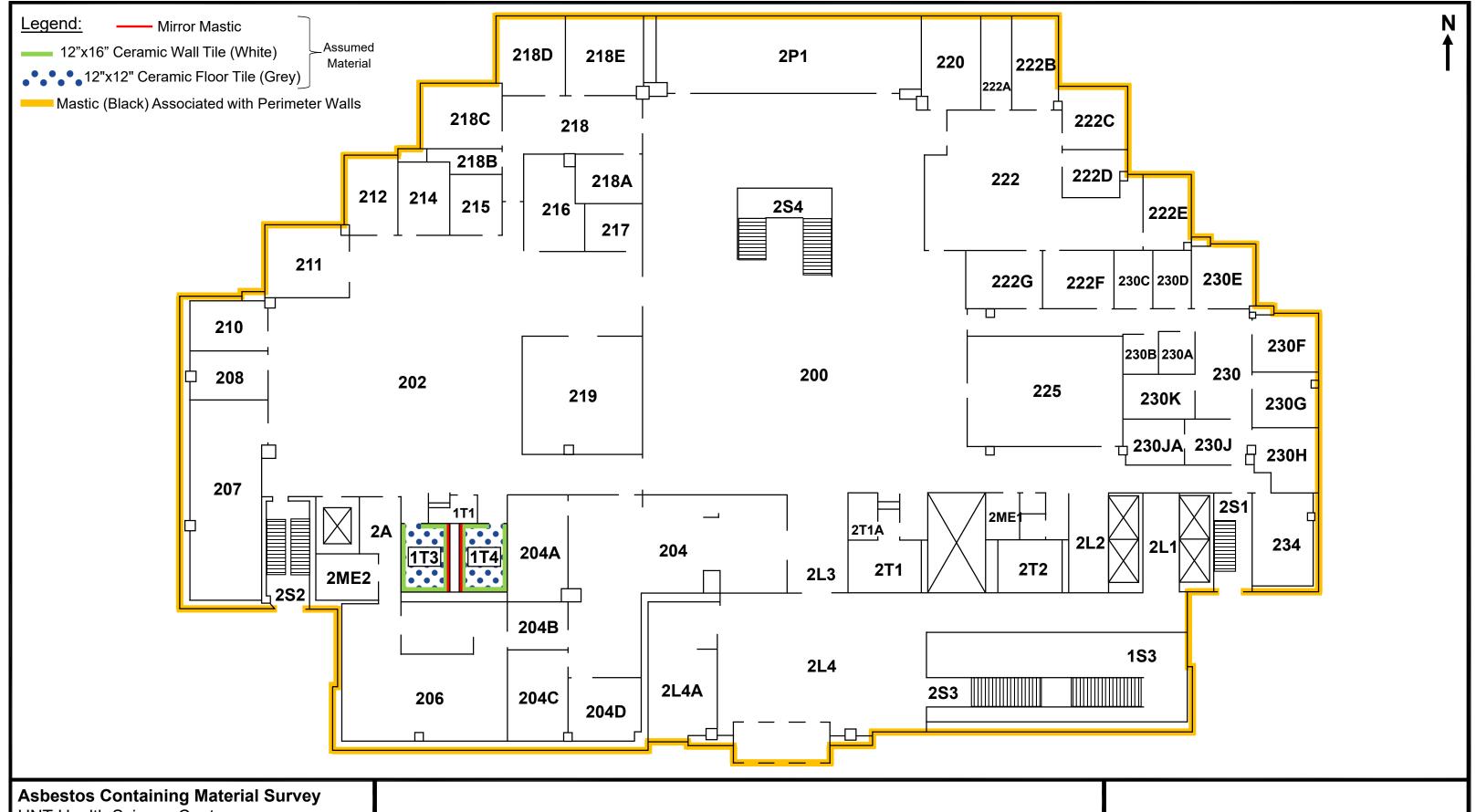
Project No. 725010720021

### FIGURE 1

Level 2 – Sampling Locations



#### **Apex Companies, LLC**



UNT Health Science Center Gibson D. Lewis Library 955 Montgomery Street Fort Worth, Texas 76107

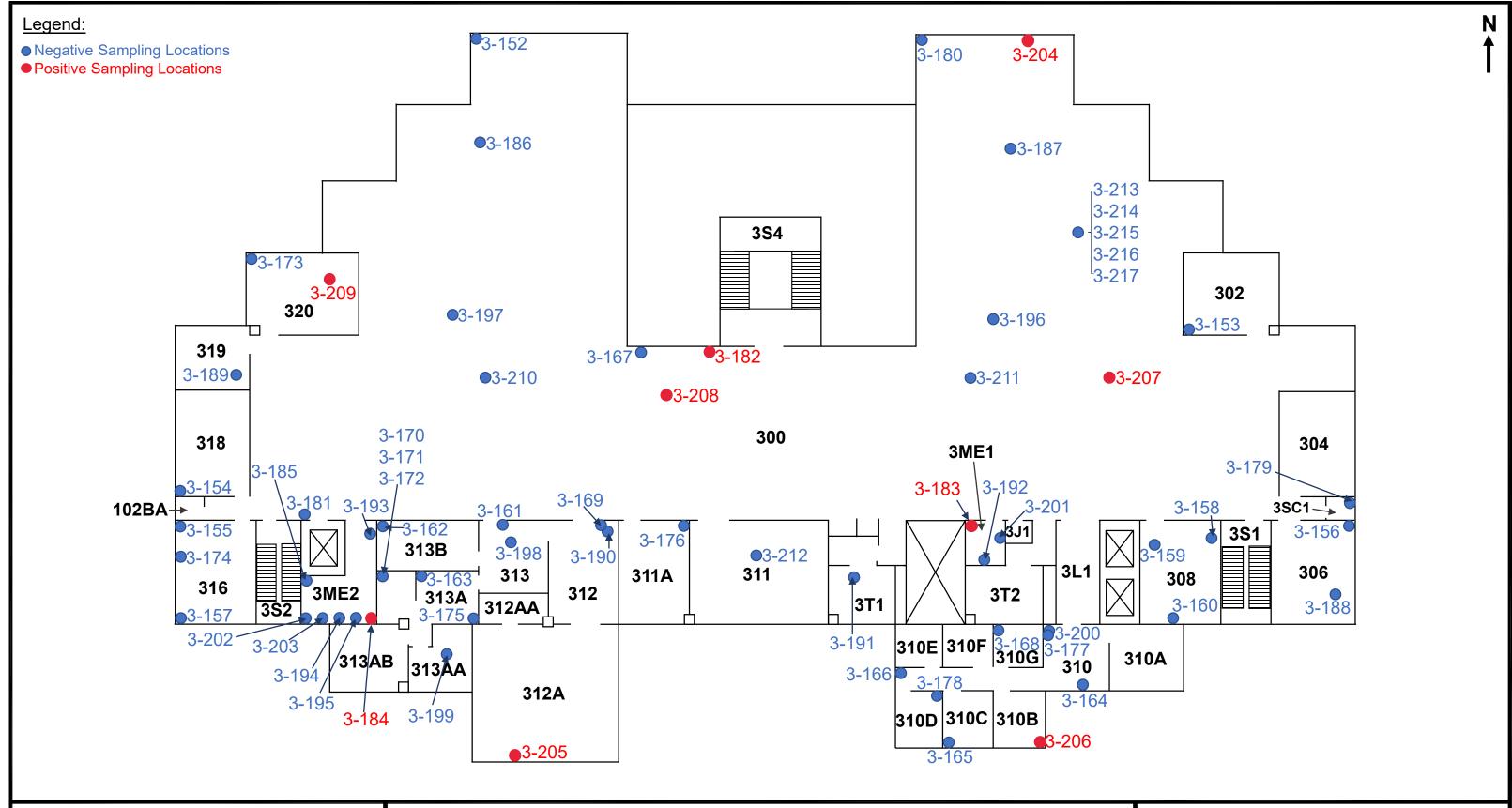
Project No. 725010720021

### FIGURE 2

Level 2 – Asbestos Containing Material Locations



#### **Apex Companies, LLC**



**Asbestos Containing Material Survey** 

UNT Health Science Center Gibson D. Lewis Library 955 Montgomery Street Fort Worth, Texas 76107

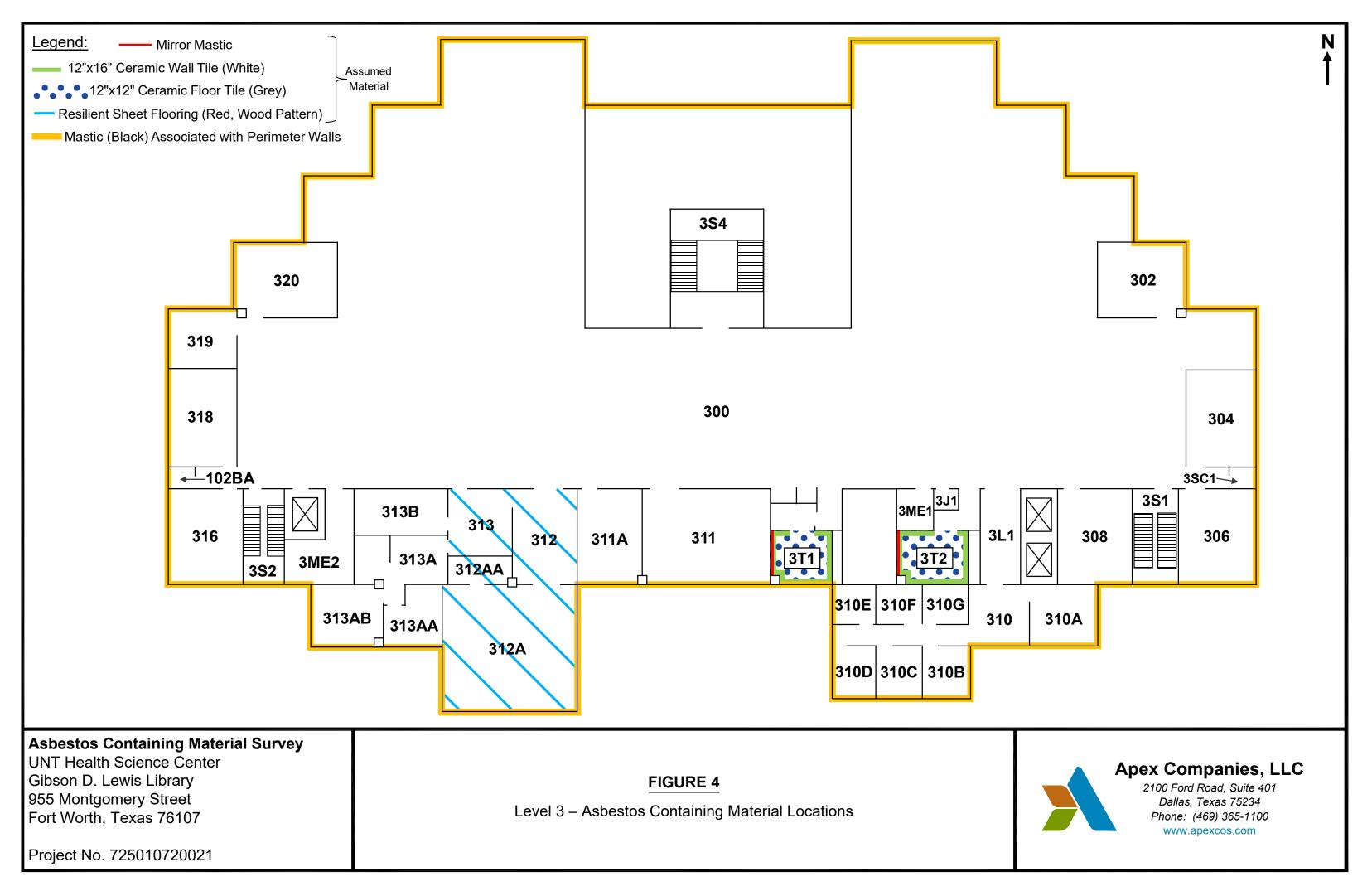
Project No. 725010720021

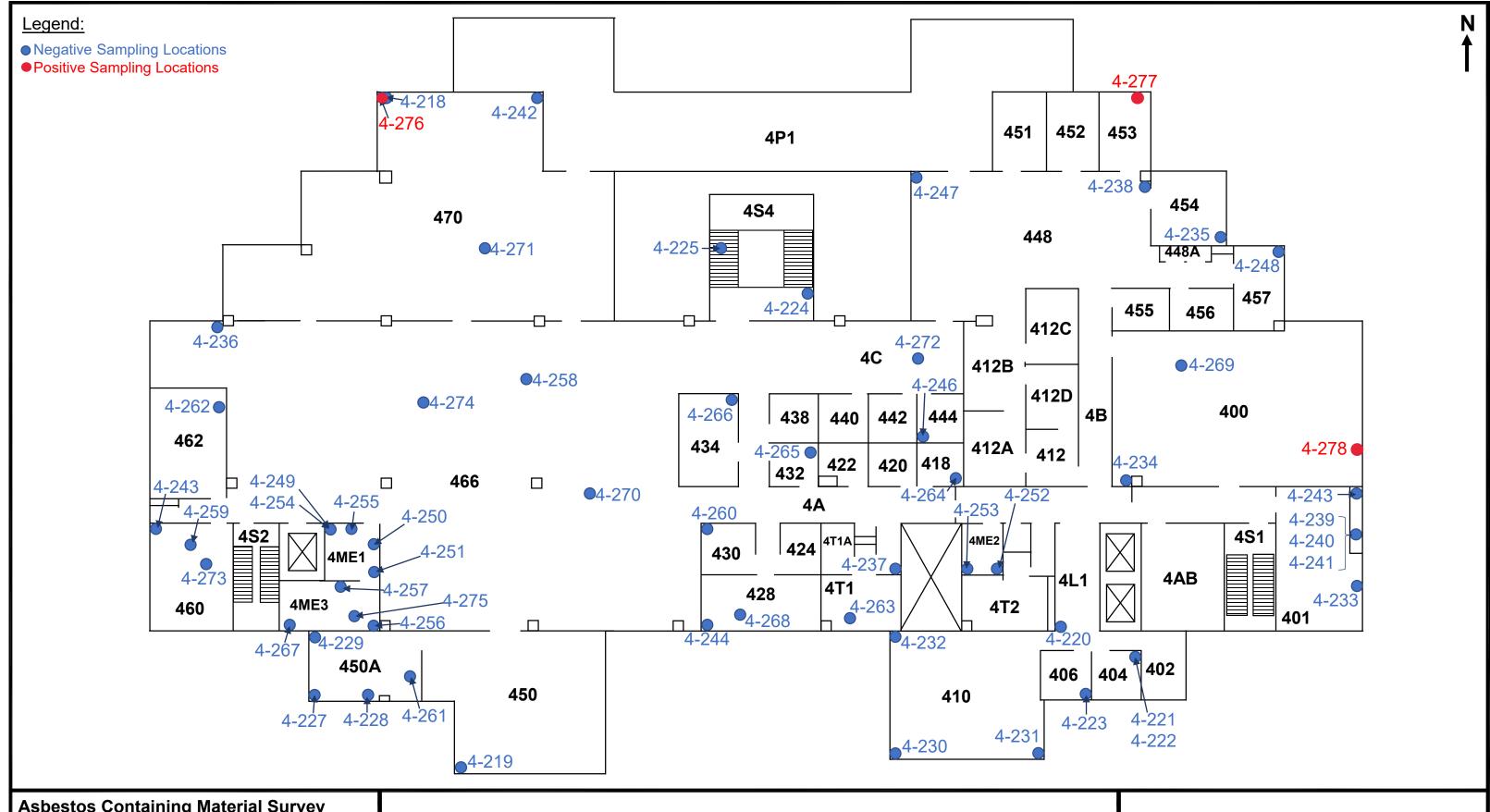
### FIGURE 3

Level 3 – Sampling Locations



**Apex Companies, LLC** 





## **Asbestos Containing Material Survey**

**UNT Health Science Center** Gibson D. Lewis Library 955 Montgomery Street Fort Worth, Texas 76107

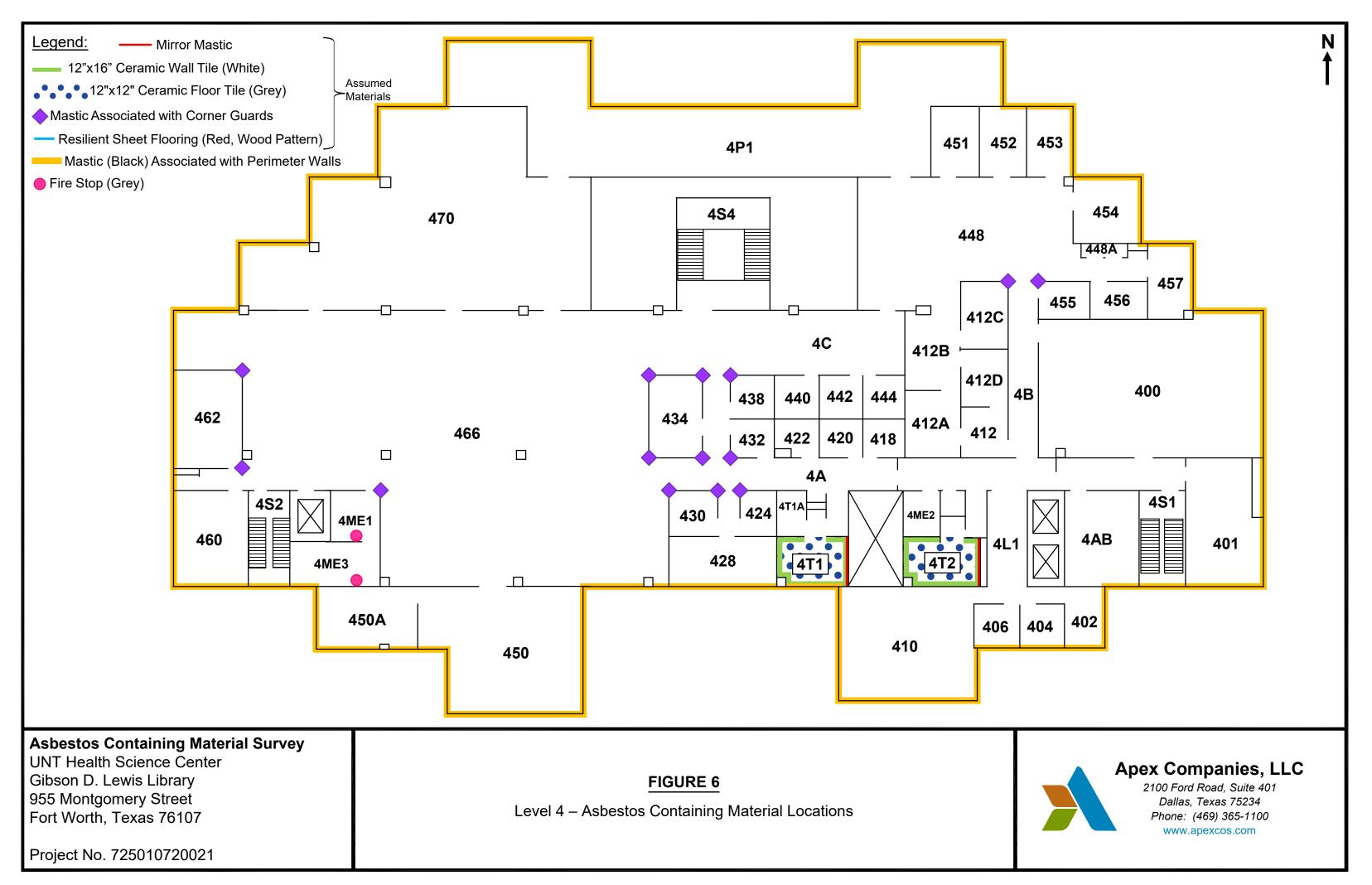
Project No. 725010720021

### FIGURE 5

Level 4 – Sampling Locations



#### **Apex Companies, LLC**





March 16, 2020

University of North Texas Health Science Center 3416 Darcy Street Fort Worth, Texas

Attention: Mr. Robert E. Short, Jr. P.E.

Re: Asbestos Survey

University of North Texas Health Science Center

Gibson D. Lewis Library (LIB) Level 01

955 Montgomery Street Fort Worth, Texas

Apex project No.725010720014

Apex TITAN, Inc., a subsidiary of Apex Companies, LLC (Apex) was retained by University of North Texas Health Science Center to conduct an asbestos survey of the first floor of the Gibson D. Lewis Library (LIB) located at 955 Montgomery Street in Fort Worth, Texas. The survey was performed in March 11, 2020 by Mr. Zurisaday Diego, a Texas Department of State Health Service (TDSHS) licensed asbestos inspector (TDSHS License No. 60-3759). This survey has been performed in accordance with Apex Proposal No. 047828 dated March 5, 2020. The following is a summary of the suspect asbestos containing materials (ACM) collected from the building. ACM previously identified by Apex was incorporated into this report.

The following materials were observed on the day of the survey; however, they were not sampled due to the destructive nature of the sampling:

- Mirror mastic (Women's and Men's Restrooms level 01)
- Mastic associated with raised wooden floor pedestals (Room 114, 114A, 114B, 114C)

These materials must be sampled prior to disturbance or assumed to be asbestos containing and handled according to local, state, and federal regulations.

This survey applies only to the materials sampled on the interior of the first floor of the Gibson D. Lewis Library located at the above referenced address. Any materials located on other floors of the building as well as the roof and building envelope were not evaluated as part of this survey should be assumed to contain asbestos until testing is performed.

The survey activities began with a preliminary visual observation of readily accessible portions of the survey area by Apex personnel to identify homogeneous areas of suspect ACM. A homogeneous area consists of building materials, which appear similar throughout in terms of color, texture and date of application. A visual assessment was conducted throughout the areas surveyed. The identification of homogeneous materials was made by visual observations. Based on results of the visual observation, bulk samples of suspect ACM were collected in general accordance with AHERA sampling protocols.

Each homogeneous area of suspect ACM was physically touched to assess the friability and condition of the materials. A friable material is defined by the EPA as a material which can be crumbled, pulverized or reduced to powder by hand pressure when dry.

The suspect ACM samples collected were obtained by physically removing a small portion of the suspect material using a sharp instrument. Disturbance of adjacent material was kept to a minimum during the sampling program. Appropriately attired inspectors collected bulk samples using wet methods as applicable to reduce the potential for fiber release. Each sample was placed into a separate labeled container, which was then sealed. The sampling instrument was cleaned after each sample was collected. Each sample was placed into a sealable container and labeled with a sample number with an indelible marker.

Ninety-three (93) samples of suspect ACM were obtained from twenty-nine (29) homogeneous materials. Analyses was conducted utilizing Polarized-Light Microscopy (PLM), following the Environmental Protection Agency (EPA) PLM Method EPA-600/R-93/116. The bulk samples were analyzed by Cates Labs located in Dallas, Texas. Cates Labs is accredited by the National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program (NVLAP No. 200569-0) and the TDSHS (License No. 30-0287).

Based on the laboratory results, no ACM was identified in the samples collected by Apex on the day of the survey. However, as mentioned above two materials, mirror mastic and mastic associated with the wooden floor pedestals, were not sampled on the day of the survey and thus must me assumed to be ACM until they can be sampled for asbestos content.

A list of the homogeneous areas/materials sampled as part of this asbestos survey is included in **Appendix A**..

It is Apex's understanding that the areas surveyed are scheduled for renovation/demolition. If any renovation/demolition activities will impact the identified assumed ACMs, the assumed ACMs must be sampled prior to any disturbance or abated per local, state, and federal regulations.

The asbestos abatement must be performed by a State of Texas licensed asbestos abatement contractor in accordance with a project design prepared by a State of Texas licensed asbestos consultant. In addition, third party air monitoring must be performed during the abatement. Some category I non-friable materials may be demolished in place with the structure; however, for the purpose of this report, Apex recommends that all ACM be abated prior to demolition.

If the assumed ACM is not abated, the materials should be incorporated into the existing management plan.

Apex performed its services in a manner consistent with the level of care and expertise exercised by asbestos professionals performing the same or similar services at the same time and in the same geographic area. No express or implied warranties apply to these services or this report. Due to the limited extent of the assessment and sampling activities at the Site, Apex cannot and does not imply, warranty or guarantee that materials *not sampled* contain no asbestos. This Asbestos Survey was intended to identify reasonably accessible materials most likely to contain asbestos in quantities subject to regulation. Please note that due to the non-destructive nature of the survey, the potential exists for additional materials to be present in hidden or concealed areas.



All conclusions and recommendations in this report represent the professional opinions of the Apex personnel involved with the project. The results, findings, conclusions and recommendations expressed in this report are based on access provided and conditions observed, and samples taken during Apex survey of the building. The information contained in this report is relevant as of the date on which the field work was performed and should not be relied upon to represent Site's conditions at a later date. This study and report were prepared on behalf of and for the exclusive use of University of North Texas solely for their use and reliance in determining the presence of asbestos in identified areas of the site. The results of this report are not intended or to be construed as legal interpretation of existing federal, state or local environmental, health and safety laws or regulations. Apex assumes no responsibility or liability for errors in information or data provided to Apex by the Client or any third party or developments resulting from activities or situations outside the scope of this project. This report is not to be used as a bidding document.

Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Apex does not warrant the work of regulatory agencies, laboratories or other third parties supplying information, which may have been used in the preparation of this report. No warranty, express or implied is made.

Apex appreciates the opportunity to be of service on this project. If we can be of further assistance, please contact our office at 469-365-1100.

Sincerely yours, **Apex TITAN, Inc.** 

Zurisaday Diego Asbestos Inspector

TDSHS Lic. No. 60-3759

Phillip G. Fronczek, CHMM

**Program Manager** 

Industrial Hygiene Services TDSHS Lic. No. 10-5737

Attachments:

Appendix A: Asbestos Containing Materials Summary Appendix B: Analytical Results/Chain(s) of Custody

Appendix C: Figures
Appendix D: Licenses



#### **ATTACHMENTS**



#### **APPENDIX A**

Identified Homogeneous Materials Table





# Identified Homogeneous Materials University of North Texas Health Science Center Gibson D. Lewis Library (LIB) Level 01 955 Montgomery Street Fort Worth, Texas

Apex Project No. 725010720014

Material	Category	Condition	ACM	Sample Number
12"x 12" Floor Tile (Pink with Grey Streaks) and Mastic (Yellow)	Category I Non-friable	G	Non-Detected	1-1 1-2 1-3
Mastic (Yellow) associated with Carpet (Dark Green with Red, and White Stripe Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-4 1-5 1-6
Mastic (Tan) associated with Carpet (Brown with Dark Brown Stripe Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-7 1-8 1-9
Mastic (Yellow) associated with Carpet (Yellow, with Multicolor Dot Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-10 1-11 1-12
Mastic (Yellow) associated with Carpet (Dark Yellow with Multicolor Dot Pattern)	Category II Non-friable	G	Non-Detected	1-13 1-14 1-15
Mastic (Yellow) associated with Carpet (Blue with Multicolor Dot Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-16 1-17 1-18
Mastic (Yellow) associated with Carpet (Light Brown)	Category II Non-friable	G	Non-Detected	1-19 1-20 1-21
Mastic (Clear) associated with Carpet (Red) Multilayer	Category II Non-friable	G	Non-Detected	1-22 1-23 1-24
Mastic (Yellow) associated with Carpet (Dark Blue with Light Grey Streak Pattern) Multilayer	Category II Non-friable	G	Non-Detected	1-25 1-26 1-27
Mastic (Yellow) associated with Carpet (Brown with Dark Brown and Grey Stripe Pattern)	Category II Non-friable	G	Non-Detected	1-28 1-29 1-30
12" x 12" Ceramic Floor Tile (Light Grey) with Grout (Grey) and Mortar (Grey)	Category I Non-friable	G	Non-Detected	1-31 1-32 1-33

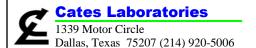
Material	Category	Condition	ACM	Sample Number
Epoxy Floor Coating (Grey, Sandy)	Category II Non-friable	G	Non-Detected	1-34 1-35 1-36
Resilient Vinyl Flooring (Grey with Multicolor Stripes) with Mastic (Yellow) and Leveling Compound (Grey)	Category I Non-friable	G	Non-Detected	1-37 1-38 1-39
Resilient Vinyl Flooring (Brown, Wood Pattern) with Mastic (Yellow)	Category I Non-friable	G	Non-Detected	1-40 1-41 1-42
2"x 6" Ceramic Floor Tile (Brown) with Grout (Grey) and Mortar (Grey)	Category II Non-friable	G	Non-Detected	1-43 1-44 1-45
Mastic (Yellow) associated with 4" Cove Base (Black)	Category II Non-friable	G	Non-Detected	1-46 1-47 1-48
Mastic (Yellow) associated with Fiberglass Reinforced Panel (FRP) (White)	Category II Non-friable	G	Non-Detected	1-49 1-50 1-51
Concrete Wall Texture (Grey, Sandy)	Category II Non-friable	G	Non-Detected	1-52 1-53 1-54 1-55 1-56
CMU Wall Texture (White) with Grout (Grey)	Category II Non-friable	G	Non-Detected	1-57 1-58 1-59
Unfinished Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	1-60 1-61 1-62
Ceiling/Wall Texture (White, Blue, Tan, Sandy) Drywall/Joint Compound	Category II Non-friable	G	Non-Detected	1-63 1-64 1-65 1-66 1-67 1-68 1-69
12"x 24" Ceramic Wall Tile (White) with Grout (White) and Thinset (White)	Category II Non-friable	G	Non-Detected	1-70 1-71 1-72
Sink Under Coating (Black)	Category II Non-friable	G	Non-Detected	1-73 1-74 1-75
Interior Building Expansion Joint Caulking (Tan)	Category II Non-friable	G	Non-Detected	1-76 1-77 1-78
2'x4' Acoustical Ceiling Tile (White, Pinhole and Fissured)	Category II Non-friable	G	Non-Detected	1-79 1-80 1-81

Material	Category	Condition	ACM	Sample Number
2'x2' Acoustical Ceiling Tile (White, Rough Finish)	Category II Non-friable	G	Non-Detected	1-82 1-83 1-84
Duct Mastic (White)	Category II Non-friable	G	Non-Detected	1-85 1-86 1-87
Duct Mastic (Grey)	Category II Non-friable	G	Non-Detected	1-88 1-89 1-90
Thermal System Insulation (White)	Category II Non-friable	G	Non-Detected	1-91 1-92 1-93
	Assume	ed ACM Materi	ials	
Mastic associated with Raised Wooden Floor Pedestals	Category II Non-friable	G	Assumed	N/A
Mirror Mastic	Category II Non-friable	G	Assumed	N/A

#### **APPENDIX B**

Analytical Results/Chain(s) of Custody





Identification: Asbestos, Bulk Sample Analysis

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

Project No: 725010720014 Report Date: 3/16/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 1 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811757	1-1	12" X 12" Floor Tile (pink w/grey streaks) & Mastic (yellow) - Room 100	None Detected - Floor Tile None Detected - Yellow Mastic
CL811758	1-2	12" X 12" Floor Tile (pink w/grey streaks) & Mastic (yellow) - Room 138	None Detected - Floor Tile None Detected - Yellow Mastic
CL811759	1-3	12" X 12" Floor Tile (pink w/grey streaks) & Mastic (yellow) - Room 122	None Detected - Floor Tile None Detected - Yellow Mastic
CL811760	1-4	Mastic (yellow) associated w/Carpet (dark green w/red & white stripe pattern) Multi-Layer - Room 100A	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811761	1-5	Mastic (yellow) associated w/Carpet (dark green w/red & white stripe pattern) Multi-Layer - Room 100A	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811762	1-6	Mastic (yellow) associated w/Carpet (dark green w/red & white stripe pattern) Multi-Layer - Room 100A	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811763	1-7	Mastic (tan) associated w/Carpet (brown w/dark brown stripe pattern) Multi-Layer - Hallway by Room 108D	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic None Detected - Leveling Compound
CL811764	1-8	Mastic (tan) associated w/Carpet (brown w/dark brown stripe pattern) Multi-Layer - Hallway by Women's Restroom	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic None Detected - Leveling Compound
CL811765	1-9	Mastic (tan) associated w/Carpet (brown w/dark brown stripe pattern) Multi-Layer - Hallway by Room 138	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic None Detected - Leveling Compound



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

Project No: 725010720014 Report Date: 3/16/2020

Identification: Asbestos, Bulk Sample Analysis Sample Date: 3/12/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116

Page 2 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811766	1-10	Mastic (yellow) associated w/Carpet (yellow w/multi-colored dot pattern) Multi-Layer - Room 126	None Detected - Yellow Mastic None Detected - Floor Tile 1 None Detected - Yellow Mastic None Detected - Floor Tile 2 None Detected - Yellow Mastic
CL811767	1-11	Mastic (yellow) associated w/Carpet (yellow w/multi-colored dot pattern) Multi-Layer - Room 126J	None Detected - Yellow Mastic
CL811768	1-12	Mastic (yellow) associated w/Carpet (yellow w/multi-colored dot pattern) Multi-Layer - Room 102A	None Detected - Yellow Mastic
CL811769	1-13	Mastic (yellow) associated w/Carpet (dark yellow w/multi-colored dot pattern) - Room 104	None Detected
CL811770	1-14	Mastic (yellow) associated w/Carpet (dark yellow w/multi-colored dot pattern) - Room 140	None Detected
CL811771	1-15	Mastic (yellow) associated w/Carpet (dark yellow w/multi-colored dot pattern) - Room 140	None Detected
CL811772	1-16	Mastic (yellow) associated w/Carpet (blue w/multi-colored dot pattern) Multi-Layer - Room 108	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811773	1-17	Mastic (yellow) associated w/Carpet (blue w/multi-colored dot pattern) Multi-Layer - Room 108B	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811774	1-18	Mastic (yellow) associated w/Carpet (blue w/multi-colored dot pattern) Multi-Layer - Room 108A	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811775	1-19	Mastic (yellow) associated w/Carpet (light brown) - Room 110	None Detected
CL811776	1-20	Mastic (yellow) associated w/Carpet (light brown) - Room 110	None Detected
CL811777	1-21	Mastic (yellow) associated w/Carpet (light brown) - Room 110	None Detected



Identification: Asbestos, Bulk Sample Analysis

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

33628

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.:

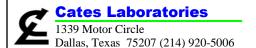
Project No: 725010720014 Report Date: 3/16/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 3 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811778	1-22	Mastic (clear) associated w/Carpet (red) Multi-Layer - Room 122A	None Detected - Clear Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811779	1-23	Mastic (clear) associated w/Carpet (red) Multi-Layer - Room 122A	None Detected - Clear Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811780	1-24	Mastic (clear) associated w/Carpet (red) Multi-Layer - Room 122A	None Detected - Clear Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811781	1-25	Mastic (yellow) associated w/Carpet (dark blue w/light grey streak pattern) Multi-Layer - Room 124B	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811782	1-26	Mastic (yellow) associated w/Carpet (dark blue w/light grey streak pattern) Multi-Layer - Room 124B	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811783	1-27	Mastic (yellow) associated w/Carpet (dark blue w/light grey streak pattern) Multi-Layer - Room 124B	None Detected - Yellow Mastic None Detected - Floor Tile None Detected - Yellow Mastic
CL811784	1-28	Mastic (yellow) associated w/Carpet (brown w/dark brown & grey stripe pattern) - Room 124A	None Detected
CL811785	1-29	Mastic (yellow) associated w/Carpet (brown w/dark brown & grey stripe pattern) - Room 124A	None Detected
CL811786	1-30	Mastic (yellow) associated w/Carpet (brown w/dark brown & grey stripe pattern) - Room 124A	None Detected
CL811787	1-31	12" X 12" Ceramic Floor Tile (light grey) w/Grout (grey) & Mortar (grey) - Restroom 1T3	None Detected - Ceramic Tile None Detected - Grout None Detected - Mortar
CL811788	1-32	12" X 12" Ceramic Floor Tile (light grey) w/Grout (grey) & Mortar (grey) - Restroom 1T4	None Detected - Ceramic Tile None Detected - Grout None Detected - Mortar



Identification: Asbestos, Bulk Sample Analysis

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

Project No: 725010720014 Report Date: 3/16/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 4 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811789	1-33	12" X 12" Ceramic Floor Tile (light grey) w/Grout (grey) & Mortar (grey) - Hallway by Room TJ1	None Detected - Ceramic Tile None Detected - Grout None Detected - Mortar
CL811790	1-34	Epoxy Floor Coating (grey, sandy) - Room 102BA	None Detected
CL811791	1-35	Epoxy Floor Coating (grey, sandy) - Room 102AA	None Detected
CL811792	1-36	Epoxy Floor Coating (grey, sandy) - Room 102AA	None Detected
CL811793	1-37	Resilient Vinyl Flooring (grey w/multi-colored stripes) w/Mastic (yellow) & Leveling Compound (grey) - Room 1J2	None Detected - Sheet Flooring None Detected - Backing/Mastic None Detected - Leveling Compound
CL811794	1-38	Resilient Vinyl Flooring (grey w/multi-colored stripes) w/Mastic (yellow) & Leveling Compound (grey) - Room 1J2	None Detected - Sheet Flooring None Detected - Backing/Mastic None Detected - Leveling Compound
CL811795	1-39	Resilient Vinyl Flooring (grey w/multi-colored stripes) w/Mastic (yellow) & Leveling Compound (grey) - Room 1J2	None Detected - Sheet Flooring None Detected - Backing/Mastic None Detected - Leveling Compound
CL811796	1-40	Resilient Vinyl Flooring (brown, wood pattern) w/Mastic (yellow) - Room 106	None Detected - Sheet Flooring None Detected - Yellow Mastic
CL811797	1-41	Resilient Vinyl Flooring (brown, wood pattern) w/Mastic (yellow) - Room 116	None Detected - Sheet Flooring None Detected - Yellow Mastic
CL811798	1-42	Resilient Vinyl Flooring (brown, wood pattern) w/Mastic (yellow) - Room 142	None Detected - Sheet Flooring None Detected - Yellow Mastic
CL811799	1-43	2" X 6" Ceramic Floor Tile (brown) w/Grout (grey) & Mortar (grey) - Space 1L2	None Detected - Ceramic Tile None Detected - Grout None Detected - Mortar
CL811800	1-44	2" X 6" Ceramic Floor Tile (brown) w/Grout (grey) & Mortar (grey) - Hallway by South Elevators	None Detected - Ceramic Tile None Detected - Grout None Detected - Mortar



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

Project No: 725010720014 Report Date: 3/16/2020

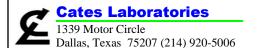
Identification: Asbestos, Bulk Sample Analysis

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 5 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811801	1-45	2" X 6" Ceramic Floor Tile (brown) w/Grout (grey) & Mortar (grey) - Space 1L2	None Detected - Ceramic Tile None Detected - Grout None Detected - Mortar
CL811802	1-46	Mastic (yellow) associated w/4" Cove Base (black) - Hallway by Room 142	None Detected
CL811803	1-47	Mastic (yellow) associated w/4" Cove Base (black) - Hallway by Room 114	None Detected
CL811804	1-48	Mastic (yellow) associated w/4" Cove Base (black) - Hallway by Room 110	None Detected
CL811805	1-49	Mastic (yellow) associated w/Fiberglass Reinforced (FRP) Panel (white) - Room 1J2	None Detected
CL811806	1-50	Mastic (yellow) associated w/Fiberglass Reinforced (FRP) Panel (white) - Room TJ1	None Detected
CL811807	1-51	Mastic (yellow) associated w/Fiberglass Reinforced (FRP) Panel (white) - Room 1J2	None Detected
CL811808	1-52	Concrete Wall Texture (grey, sandy) - South Stairway	None Detected - Paint Texture None Detected - Concrete
CL811809	1-53	Concrete Wall Texture (grey, sandy) - South Stairway	None Detected - Paint Texture None Detected - Concrete
CL811810	1-54	Concrete Wall Texture (grey, sandy) - North Stairway	None Detected - Paint Texture None Detected - Concrete
CL811811	1-55	Concrete Wall Texture (grey, sandy) - Room 1ME1	None Detected - Paint Texture None Detected - Concrete
CL811812	1-56	Concrete Wall Texture (grey, sandy) - Room 1ME1	None Detected - Paint Texture None Detected - Concrete
CL811813	1-57	CMU Wall Texture (white) w/Grout (grey) - Room 1J2	None Detected - Filler/Texture None Detected - CMU Block None Detected - Grout



Identification: Asbestos, Bulk Sample Analysis

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

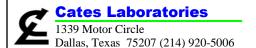
Project No: 725010720014 Report Date: 3/16/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 6 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811814	1-58	CMU Wall Texture (white) w/Grout (grey) - North Stairway	None Detected - Filler/Texture None Detected - CMU Block None Detected - Grout
CL811815	1-59	CMU Wall Texture (white) w/Grout (grey) - South Stairway	None Detected - Filler/Texture None Detected - CMU Block None Detected - Grout
CL811816	1-60	Unfinished Drywall/Joint Compound - Room 1J2	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811817	1-61	Unfinished Drywall/Joint Compound - Room 1E1	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811818	1-62	Unfinished Drywall/Joint Compound - Room 1J2	None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811819	1-63	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Hallway by Main Elevators	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811820	1-64	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 124	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811821	1-65	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 123	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material



Identification: Asbestos, Bulk Sample Analysis

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

Project No: 725010720014 Report Date: 3/16/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

EPA Method 600/R-93/116 Page 7 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811822	1-66	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 115	None Detected - Paint Texture None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811823	1-67	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 114	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811824	1-68	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Restroom 1T4	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811825	1-69	Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 126	None Detected - Paint Texture None Detected - Joint Tape None Detected - Joint Compound None Detected - Paper None Detected - Wallboard Material
CL811826	1-70	12" X 24" Ceramic Wall Tile (white) w/Grout (white) & Thinset (white) - Restroom 1T4	None Detected - Ceramic Tile None Detected - Grout None Detected - Thinset
CL811827	1-71	12" X 24" Ceramic Wall Tile (white) w/Grout (white) & Thinset (white) - Restroom 1T3	None Detected - Ceramic Tile None Detected - Grout None Detected - Thinset
CL811828	1-72	12" X 24" Ceramic Wall Tile (white) w/Grout (white) & Thinset (white) - Restroom 1T3	None Detected - Ceramic Tile None Detected - Grout None Detected - Thinset
CL811829	1-73	Sink Undercoating (black) - Space 1L2	None Detected
CL811830	1-74	Sink Undercoating (black) - Space 1L2	None Detected
CL811831	1-75	Sink Undercoating (black) - Space 1L2	None Detected

### PLM REPORT SUMMARY



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.: 33628

Project No: 725010720014 Report Date: 3/16/2020

Identification: Asbestos, Bulk Sample Analysis Sample Date: 3/12/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

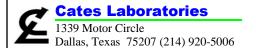
EPA Method 600/R-93/116 Page 8 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811832	1-76	Interior Building Expansion Joint Caulking (tan) - Space 1S3	None Detected
CL811833	1-77	Interior Building Expansion Joint Caulking (tan) - Space 1S3	None Detected
CL811834	1-78	Interior Building Expansion Joint Caulking (tan) - Space 1S3	None Detected
CL811835	1-79	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Hallway by Room 110	None Detected
CL811836	1-80	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Hallway by Room 114	None Detected
CL811837	1-81	2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Hallway by North Elevator	None Detected
CL811838	1-82	2' X 2' Acoustical Ceiling Tile (white, rough finish) - Restroom 1T3	None Detected
CL811839	1-83	2' X 2' Acoustical Ceiling Tile (white, rough finish) - Hallway by Room 123	None Detected
CL811840	1-84	2' X 2' Acoustical Ceiling Tile (white, rough finish) - Room 126A	None Detected
CL811841	1-85	Duct Mastic (white) - Room 124	None Detected - White Mastic None Detected - Wrap
CL811842	1-86	Duct Mastic (white) - Room 1J2	None Detected - White Mastic None Detected - Wrap
CL811843	1-87	Duct Mastic (white) - Hallway by Room 114	None Detected - White Mastic None Detected - Wrap None Detected - Insulation
CL811844	1-88	Duct Mastic (grey) - Hallway by Room 140	None Detected
CL811845	1-89	Duct Mastic (grey) - Hallway by Room 114C	None Detected
CL811846	1-90	Duct Mastic (grey) - Room 1J2	None Detected
CL811847	1-91	Thermal System Insulation (white) - Room 1J2	None Detected - Wrap None Detected - Insulation

These samples were analyzed by layers. The overall percent asbestos for the sample is reported when relevant. The EPA considers a material to be asbestos containing only if it contains greater than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also indicate that Regulated Asbestos Containing Materials (RACM) – materials that are friable or may become friable – be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. CatesLab utilizes CVAE on a routine basis and does not include point counting unless specifically requested by the client. The results may not be reproduced except in full.

### PLM REPORT SUMMARY



Identification: Asbestos, Bulk Sample Analysis

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Sample Date: 3/12/2020

33628

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set No.:

Project No: 725010720014 Report Date: 3/16/2020

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS)

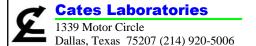
EPA Method 600/R-93/116 Page 9 of 10

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein. The results are summarized below:

Lab Sample No.	Client Field I.D.	Sample Description/Location	Asbestos Content
CL811848	1-92	Thermal System Insulation (white) - Hallway by Restroom 1T4	None Detected - Wrap None Detected - Insulation
CL811849	1-93	Thermal System Insulation (white) - Hallway by Restroom 1T3	None Detected - Wrap None Detected - Insulation

These samples were analyzed by layers. The overall percent asbestos for the sample is reported when relevant. The EPA considers a material to be asbestos containing only if it contains greater than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also indicate that Regulated Asbestos Containing Materials (RACM) – materials that are friable or may become friable – be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. CatesLab utilizes CVAE on a routine basis and does not include point counting unless specifically requested by the client. The results may not be reproduced except in full.

#### PLM REPORT SUMMARY



NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Job No.: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Report Date: 3/16/2020

Project No: 725010720014

Set No.:

Identification: Asbestos, Bulk Sample Analysis

Sample Date: 3/12/2020

Page 10 of 10

33628

Test Method: Polarized Light Microscopy/Dispersion Staining (PLM/DS) EPA Method 600/R-93/116

On 3/13/2020, ninety-three (93) bulk samples were submitted by Mr. Zuri Diego of Apex TITAN for asbestos analysis by PLM/DS. Copies of the lab data sheets are attached; additional information may be found therein.

#### STATEMENT OF LABORATORY ACCREDITATION

The samples were analyzed in general accordance with the procedures outlined in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116 or the U.S. Environmental Protection Agency EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples, by polarized light microscopy. The results of each bulk sample relate only to the material tested and the results shall not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Specific questions concerning bulk sample results shall be directed to the Laboratory Director.

Kathy Schosek Analyst:

Laboratory Director: John R. Cates, P.G.

Approved Signatory:

ally Shusek

NVLAP LAB CODE 200569-0



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project #: **725010720014** Sample #: **CL811757** 

Field ID #: **1-1** Page 1 of 1

Sample Description: 12" X 12" Floor Tile (pink w/grey streaks) & Mastic (yellow) - Room 100

Layer 1 Floor Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homo	geneous? % F	ibrous %	Asbestos % o	of Sample
		Pink-Tan/Grey	Hard	١	res N	ID	ND	99
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Aggregate/Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detect	ed		
Layer 2 Yellow Mastic		Stereoscopic E	xamination					
		Color	<u>Texture</u>	<u>Homo</u>	geneous? % F	ibrous %	Asbestos % o	of Sample
		Yellow-Tan	Rubbery	Υ	res N	ID	ND	1
PLM Examination:			•					
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detect	ed		

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811757



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811758** 

Field ID #: **1-2** Page 1 of 1

Sample Description: 12" X 12" Floor Tile (pink w/grey streaks) & Mastic (yellow) - Room 138

Layer 1 Floor Tile		Stereoscopic E	xamination					
		Color	<u>Texture</u>	Homog	geneous? % F	ibrous 9	6 Asbestos %	of Sample
		Pink-Tan/Grey	Hard	Υ	es N	D	ND	99
PLM Examination:		-						
			Color/	Parallel	Perpendicular		Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Aggregate/Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	s Content:	None Detect	ed		
			<u></u>					
·								
Layer 2 Yellow Mastic		Stereoscopic E	xamination					
Layer 2 Yellow Mastic		Stereoscopic E <u>Color</u>	xamination <u>Texture</u>	 <u>Ното</u> д	geneous? % F	ibrous 9	6 Asbestos %	of Sample
Layer 2 Yellow Mastic						brous 9	6 Asbestos % 6	of Sample
Layer 2 Yellow Mastic  PLM Examination:		<u>Color</u>	<u>Texture</u>					of Sample
		<u>Color</u>	<u>Texture</u>					of Sample  1  Sign of
	<u>%</u> +/-	<u>Color</u>	<u>Texture</u> <b>Rubbery</b>	Y	es N		ND	1
PLM Examination:	<u>%</u> +/- 100	<u>Color</u> Yellow-Tan	Texture Rubbery Color/	Y Parallel	es N Perpendicular	D	ND Extinction	1 Sign of
PLM Examination:  Components		Color Yellow-Tan  Morphology	Texture Rubbery Color/ Pleochroism	Y Parallel	es N Perpendicular	<b>B</b> iref	ND Extinction	1 Sign of

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811758



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811759** 

Field ID #: **1-3** Page 1 of 1

Sample Description: 12" X 12" Floor Tile (pink w/grey streaks) & Mastic (yellow) - Room 122

Layer 1 Floor Tile		Stereoscopic E	xamination					
		Color	Texture	Homo	geneous? % Fit	orous % A	Asbestos % o	of Sample
		Pink-Tan/Grey	Hard	Y	'es NE	)	ND	99
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		
		Stereoscopic E						_
Layer 2 Tellow Mastic				**	0 0/ F3	0/ 1	1 . 0/	6.0 1
		<u>Color</u>	<u>Texture</u>	Homo			Asbestos % o	of Sample
		Yellow-Tan	Rubbery	Y	'es NE	)	ND	1
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed		

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811759



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Page 1 of 1

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811760** Field ID #: 1-4

Sample Description: Mastic (yellow) associated w/Carpet (dark green w/red & white stripe pattern) Multi-Layer - Room 100A

Layer 1	Yellow Mastic			Stereoscopic E	Examination					
-				Color	Texture	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
				Clear-Yellow	Rubbery	Y	es	ND	ND	2
PLM Exam	ination:				•					
					Color/	Parallel	Perpendicula		Extinction	Sign of
Component	_		<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Bi	nders	100		Non-fibrous						
rep/treatm	ent: heat / melt				Asbesto	os Content:	None Detec	cted		
— — — ayer 2	Floor Tile			Stereoscopic E	-					
				Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
				Pink-Tan/Grey	Hard	Υ	es	ND	ND	95
LM Exam	ination:			•						
					Color/	Parallel	Perpendicula		Extinction	Sign of
omponent	<del></del>		<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Aggreg	ate/Vinyl Binders	100		Non-fibrous						
ep/treatm	ent: heat / melt				Asbesto	s Content:	None Detec	cted		
ayer 3	Yellow Mastic			Stereoscopic E	Examination					
				<u>Color</u>	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
				Yellow-Tan	Rubbery	Υ	es	ND	ND	3
LM Exam	ination:									
			,		Color/	Parallel	Perpendicula		Extinction	Sign of
omponent	_		<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Bi	nders	100		Non-fibrous						
rep/treatm	ent: heat / melt				Asbesto	s Content:	None Detec	cted		

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: **CL811760** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811761

 Field ID #:
 1-5
 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark green w/red & white stripe pattern) Multi-Layer - Room 100A

Layer 1	Yellow Mastic			Stereoscopic E	Examination					
•				Color	Texture	Homog	geneous?	6 Fibrous	% Asbestos %	of Sample
				Clear-Yellow	Rubbery	Y	es	ND	ND	2
PLM Exam	nination:				•					
					Color/	Parallel	Perpendicu		Extinction	Sign of
Component		<u>%</u>	<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Inde	<u>x</u> <u>Biref</u>	Angle Angle	Elongation
Glue Bi	inders	100		Non-fibrous						
rep/treatm	nent: heat / melt				Asbesto	os Content:	None Det	ected		
— — — .ayer 2	Floor Tile			Stereoscopic E	 Examination					
				Color	Texture	Homog	geneous?	6 Fibrous	% Asbestos %	of Sample
				Pink-Tan/Grey	Hard	Υ	'es	ND	ND	95
LM Exam	nination:			•						
					Color/	Parallel	Perpendicu		Extinction	Sign of
Component	_	<u>%</u>	<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Inde	x Biref	<u>Angle</u>	Elongation
Aggreg	jate/Vinyl Binders	100		Non-fibrous						
rep/treatm	nent: heat / melt				Asbesto	os Content:	None Det	ected		
ayer 3	Yellow Mastic			Stereoscopic E	zamination					_
				Color	Texture	Homog	geneous?	6 Fibrous	% Asbestos %	of Sample
				Yellow-Tan	Rubbery	Υ	'es	ND	ND	3
LM Exam	nination:				•					
					Color/	Parallel	Perpendicu		Extinction	Sign of
Component		%	<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Inde	<u>x</u> <u>Biref</u>	<u>Angle</u>	Elongation
Glue Bi	inders	100		Non-fibrous						
	nent: heat / melt				A alboata	s Content:	None Det			

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811761</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811762

 Field ID #:
 1-6
 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark green w/red & white stripe pattern) Multi-Layer - Room 100A

Layer 1 Ye	llow Mastic			Stereoscopic E	Examination					
-				Color	Texture	Homos	geneous? %	Fibrous 9	% Asbestos %	of Sample
				Clear-Yellow	Rubbery	Y	es	ND	ND	2
PLM Examination	on:				,					
					Color/	Parallel	Perpendicu	lar	Extinction	Sign of
Components		%	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Binder	s	100		Non-fibrous						
rep/treatment:	heat / melt				Asbesto	os Content:	None Det	ected		
 .ayer 2	 oor Tile			Stereoscopic E	 Examination					
				Color	Texture	Homos	geneous? %	Fibrous 9	% Asbestos %	of Sample
				Pink-Tan/Grey	Hard	Ý	es	ND	ND	95
LM Examination	on:									
					Color/	Parallel	Perpendicu		Extinction	Sign of
Components		%	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/\	/inyl Binders	100		Non-fibrous						
rep/treatment:	heat / melt				Asbesto	os Content:	None Det	ected		
ayer 3 Ye	llow Mastic			Stereoscopic E	zamination					
				Color	Texture	Homos	geneous? %	Fibrous 9	% Asbestos %	of Sample
				Yellow-Tan	Rubbery	Ý	es	ND	ND	3
LM Examination	on:									
					Color/	Parallel	Perpendicu	lar	Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	Angle	Elongation
Glue Binder	'S	100		Non-fibrous						
						s Content:	None Dete			

Comments:	,	Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811762</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0

TDSHS License No. 30-0287 Dallas, Texas 75207 (214) 920-5006 **Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811763** Field ID #: 1-7 Page 1 of 1 Sample Description: Mastic (tan) associated w/Carpet (brown w/dark brown stripe pattern) Multi-Layer - Hallway by Room 108D Layer 1 **Yellow Mastic** Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow Rubbery Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism **Elongation** Biref Angle Glue Binders 100 Non-fibrous Asbestos Content: None Detected Prep/treatment: heat / melt Layer 2 Floor Tile Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Pink-Tan/Grey Hard Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components <u>%</u> +/-Morphology Pleochroism **Biref** Angle **Elongation** Aggregate/Vinyl Binders 100 Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected **Yellow Mastic** Layer 3 Stereoscopic Examination Color <u>Texture</u> Yellow-Tan Rubbery Yes ND ND 2 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation **Glue Binders** Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected

Layer 4 Leveling Compound Stereoscopic Examination Color **Texture** Grey **Blocky** Yes ND ND 20 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Angle Aggregate/Binders 100 Non-fibrous Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: CL811763



Comments:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811764** Field ID #: 1-8 Page 1 of 1 Sample Description: Mastic (tan) associated w/Carpet (brown w/dark brown stripe pattern) Multi-Layer - Hallway by Women's Restroom Layer 1 **Yellow Mastic** Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow Rubbery Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism **Elongation** Biref Angle Glue Binders 100 Non-fibrous Asbestos Content: None Detected Prep/treatment: heat / melt Layer 2 Floor Tile Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample Pink-Tan/Grey Hard Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components <u>%</u> +/-Morphology Pleochroism **Biref** Angle **Elongation** Aggregate/Vinyl Binders 100 Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected **Yellow Mastic** Layer 3 Stereoscopic Examination Color <u>Texture</u> Yellow-Tan Rubbery Yes ND ND 2 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> <u>Angle</u> Elongation **Glue Binders** Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected Layer 4 Leveling Compound Stereoscopic Examination Color **Texture** Grey **Blocky** Yes ND ND 20 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Angle Aggregate/Binders 100 Non-fibrous Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation

Analyst:

Date Analyzed: 3

Lab Job #: PLM-22826

Kathy Schosek 3/16/2020

Sample #: CL811764



Comments:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811765** Field ID #: 1-9 Page 1 of 1 Sample Description: Mastic (tan) associated w/Carpet (brown w/dark brown stripe pattern) Multi-Layer - Hallway by Room 138 Layer 1 **Yellow Mastic** Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow Rubbery Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism **Elongation** Biref Angle Glue Binders 100 Non-fibrous Asbestos Content: None Detected Prep/treatment: heat / melt Layer 2 Floor Tile Stereoscopic Examination Color Texture <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Pink-Tan/Grey Hard Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components <u>%</u> +/-Morphology Pleochroism **Biref** Angle **Elongation** Aggregate/Vinyl Binders 100 Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected **Yellow Mastic** Layer 3 Stereoscopic Examination Color <u>Texture</u> Yellow-Tan Rubbery Yes ND ND 2 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation **Glue Binders** Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected Layer 4 Leveling Compound Stereoscopic Examination Color **Texture** Grey **Blocky** Yes ND ND 20 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Angle Aggregate/Binders 100 Non-fibrous Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation

Analyst:

Date Analyzed:

Lab Job #: **PLM-22826** 

Kathy Schosek 3/16/2020

Sample #: CL811765



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811766** Field ID #: 1-10 Page 1 of 1 Sample Description: Mastic (yellow) associated w/Carpet (yellow w/multi-colored dot pattern) Multi-Layer - Room 126 **Yellow Mastic** Laver 1 Stereoscopic Examination Color <u>Texture</u> Yellow ND Rubbery Yes ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components Morphology Pleochroism **Elongation** <u>+/-</u> Biref Angle **Glue Binders** 100 Non-fibrous Prep/treatment: Asbestos Content: None Detected heat / melt Layer 2 Floor Tile 1 Stereoscopic Examination Color Texture Pink-Tan/Grey Hard Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index Components <u>%</u> +/-Morphology Pleochroism Biref Angle **Elongation** Aggregate/Vinyl Binders 100 Non-fibrous Prep/treatment: heat / melt Asbestos Content: None Detected **Yellow Mastic** Layer 3 Stereoscopic Examination <u>Texture</u> Color Yellow-Tan Rubbery Yes ND ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Ref. Index Ref. Index Components Morphology Pleochroism <u>Biref</u> Angle Elongation **Glue Binders** Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected Layer 4 Floor Tile 2 Stereoscopic Examination Color **Texture** ND ND Lt. Grey Hard Yes 47 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index Biref Elongation Components +/-Angle Aggregate/Vinyl Binders 100 Non-fibrous <u>Prep/treatment:</u> heat / melt Asbestos Content: None Detected **Yellow Mastic** Layer 5 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan Rubbery ND ND Yes PLM Examination: Parallel Perpendicular Color/ Extinction Sign of Ref. Index Ref. Index Components % +/-Morphology Pleochroism Biref Angle **Elongation Glue Binders** 100 Non-fibrous Asbestos Content: None Detected Prep/treatment: heat / melt Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed:

Lab Job #: **PLM-22826** 

Sample #: CL811766



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Set #: **33628**Sample #: **CL811767** 

Field ID #: **1-11** 

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (yellow w/multi-colored dot pattern) Multi-Layer - Room 126J

Layer 1 **Yellow Mastic** Stereoscopic Examination Texture Color <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan 100 Rubbery Yes ND ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Ref. Index Ref. Index Morphology Pleochroism **Biref** Elongation <u>Angle</u> **Glue Binders** 100 Non-fibrous heat / melt Asbestos Content: **None Detected** Prep/treatment:

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811767



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: 33628

Project #: **725010720014** 

Sample #: **CL811768** 

Field ID #: 1-12

Project:

Prep/treatment:

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (yellow w/multi-colored dot pattern) Multi-Layer - Room 102A

Layer 1 **Yellow Mastic** Stereoscopic Examination Texture Color <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan 100 Rubbery Yes ND ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Ref. Index Ref. Index Morphology  $\underline{Pleochroism}$ <u>Biref</u> Elongation <u>Angle</u> **Glue Binders** 100 Non-fibrous heat / melt **None Detected** 

Asbestos Content:

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: PLM-22826 Sample #: CL811768



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811769** 

Field ID #: 1-13

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark yellow w/multi-colored dot pattern) - Room 104

Layer 1 **Yellow Mastic** Stereoscopic Examination Texture Color <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan Rubbery Yes ND ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Ref. Index Ref. Index Morphology  $\underline{Pleochroism}$ <u>Biref</u> Elongation <u>Angle</u>

Glue Binders 100 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811769



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Lab Proj #: **PLM-22826** Set #: **33628** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811770** 

Field ID #: **1-14** 

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark yellow w/multi-colored dot pattern) - Room 140

 Layer 1
 Yellow Mastic
 Stereoscopic Examination

<u>Color</u> <u>Texture</u>
Yellow-Tan Rubbery

 $\begin{tabular}{lll} \underline{Homogeneous?} & \underline{\% \ Fibrous} & \underline{\% \ Asbestos} & \underline{\% \ of \ Sample} \\ \hline \textbf{Yes} & \textbf{ND} & \textbf{ND} & \textbf{100} \\ \end{tabular}$ 

<u>Biref</u>

PLM Examination:

Color/

 $\underline{Pleochroism}$ 

Parallel Perpendicular Ref. Index Ref. Index

Extinction
Angle

n Sign of Elongation

Components%±/-MorphologyGlue Binders100Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

\_\_\_\_\_\_

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811770



heat / melt

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811771** 

Lab Proj #: **PLM-22826** 

Field ID #: **1-15** 

Prep/treatment:

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark yellow w/multi-colored dot pattern) - Room 140

Layer 1 **Yellow Mastic** Stereoscopic Examination Texture Color <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan 100 Rubbery Yes ND ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Ref. Index Ref. Index Morphology  $\underline{Pleochroism}$ <u>Biref</u> Elongation <u>Angle</u> **Glue Binders** 100 Non-fibrous

Asbestos Content:

**None Detected** 

\_\_\_\_\_\_

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811771



Field ID #: 1-16

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811772

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (blue w/multi-colored dot pattern) Multi-Layer - Room 108

Layer 1 Yellow Mastic		Stereoscopic E	Examination				
		Color	<u>Texture</u>	Homogeneous'	? % Fibrous	% Asbestos %	of Sample
		Clear-Yellow	Rubbery	Yes	ND	ND	2
PLM Examination:			•				
			Color/		ıdicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index Ref.	Index Biref	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content: None	Detected		
ayer 2 Floor Tile		Stereoscopic E	-				
		Color	<u>Texture</u>	Homogeneous'	? % Fibrous	% Asbestos %	of Sample
		Pink-Tan/Grey	Hard	Yes	ND	ND	95
LM Examination:							
			Color/		ndicular	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index Ref.	Index Biref	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous					
rep/treatment: heat / melt			Asbesto	os Content: None	Detected		
ayer 3 Yellow Mastic		Stereoscopic E	zamination				
		Color	<u>Texture</u>	Homogeneous'	? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND	ND	3
			•				
LM Examination:			Color/	1	ndicular	Extinction	Sign of
PLM Examination:			D1 1 '	D-f I. I D-f 1	Index Biref	Angle	Elongation
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index Ref.	ilidex Bilei	ringic	Dioligation
	<u>%</u> +/-	Morphology Non-fibrous	Pleochroism	Ref. Index Ref.	<u> Bitet</u>	ringie	Dioligation

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811772



Field ID #: 1-17

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811773

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (blue w/multi-colored dot pattern) Multi-Layer - Room 108B

Layer 1	Yellow Mastic			Stereoscopic E	Examination				
				Color	<u>Texture</u>	Homog	geneous? % Fibrou	us % Asbestos %	of Sample
				Clear-Yellow	Rubbery	Υ	es ND	ND	2
PLM Exam	ination:								
_					Color/	Parallel	Perpendicular	Extinction	Sign of
Component		<u>%</u>	<u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index B	<u> Angle</u>	<u>Elongation</u>
Glue Bi	inders	100		Non-fibrous					
rep/treatm	nent: heat / melt				Asbesto	os Content:	None Detected		
— — — .ayer 2	Floor Tile			Stereoscopic E	 Examination				
				<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fibrou	us % Asbestos %	of Sample
				Pink-Tan/Grey	Hard	Υ	es ND	ND	95
LM Exam	ination:			•					
					Color/	Parallel	Perpendicular	Extinction	Sign of
omponent		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index B	<u>Angle</u>	<u>Elongatio</u>
Aggreg	ate/Vinyl Binders	100		Non-fibrous					
rep/treatm	nent: heat / melt				<del></del>	os Content:	None Detected		
 ayer 3	Yellow Mastic			Stereoscopic E		- — — —			
				<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fibrou	us % Asbestos %	of Sample
				Yellow-Tan	Rubbery	Υ	es ND	ND	3
LM Exam	ination:								
,		0/	. /	M 1 1	Color/	Parallel	Perpendicular	Extinction	Sign of
Component	_	<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index B	<u>Angle</u>	Elongation
Glue Bi	inders	100		Non-fibrous					
rep/treatm	ent: heat / melt				Ashesto	s Content:	None Detected		

 Comments:
 Analyst: Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811773



Field ID #: 1-18

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811774

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (blue w/multi-colored dot pattern) Multi-Layer - Room 108A

Layer 1 Yellow Mastic		Stereoscopic E	Examination				
•		Color	Texture	Homoge	neous? % Fibrous %	6 Asbestos % o	of Sample
		Clear-Yellow	Rubbery	Ye	s ND	ND	2
PLM Examination:			•				
			Color/	Parallel	Perpendicular	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	<b>Elongation</b>
Glue Binders	100	Non-fibrous					
rep/treatment: heat / melt			Asbesto	s Content:	None Detected		
		Stereoscopic E	 Examination	- — — —			
		<u>Color</u>	<u>Texture</u>	Homoge	neous? % Fibrous %	Asbestos % o	of Sample
		Pink-Tan/Grey	Hard	Ye	s ND	ND	95
LM Examination:		•					
			Color/		Perpendicular	Extinction	Sign of
<u>omponents</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous					
gg ga,,a					Maria Batantad		
			Asbesto	s Content:	None Detected		
rep/treatment: heat / melt		— — — — — — Stereoscopic E		s Content:	None Detected 		_
rep/treatment: heat / melt		— — — — — — Stereoscopic E <u>Color</u>		S Content:  Homoge		6 Asbestos % c	 of Sample
rep/treatment: heat / melt		•			neous? % Fibrous %	6 Asbestos % c	of Sample
rep/treatment: heat / melt		<u>Color</u>	Examination Texture	Homoge	neous? % Fibrous %		
<u>rep/treatment:</u> heat / melt		<u>Color</u>	Examination  Texture  Rubbery  Color/	Homoge Ye	neous? % Fibrous %  S ND  Perpendicular		
rep/treatment: heat / melt ayer 3 Yellow Mastic  LM Examination: omponents	<u>%</u> +/-	<u>Color</u> Yellow-Tan <u>Morphology</u>	Examination Texture Rubbery	Homoge Ye	neous? % Fibrous %  S ND	ND	3
rep/treatment: heat / melt	<u>%</u> +/-	<u>Color</u> Yellow-Tan	Examination  Texture  Rubbery  Color/	Homoge Ye	neous? % Fibrous %  S ND  Perpendicular	ND Extinction	3 Sign of

 Comments:
 Analyst: Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811774



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: **33628**Sample #: **CL811775** 

Lab Proj #: **PLM-22826** 

Project #: **725010720014** Field ID #: **1-19** 

Layer 1

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (light brown) - Room 110

Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811775



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811776** 

Field ID #: **1-20** 

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (light brown) - Room 110

Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

Layer 1

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Glue Binders 100 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811776



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811777** 

Field ID #: **1-21** 

Layer 1

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (light brown) - Room 110

Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

 Color/
 Parallel
 Perpendicular
 Extinction
 Sign of

 Pleochroism
 Ref. Index
 Ref. Index
 Biref
 Angle
 Elongation

Components%+/-MorphologyGlue Binders100Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811777



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client:Apex TITANLab Proj #:PLM-22826Project:Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TXSet #:33628

 Project #:
 725010720014
 Sample #:
 CL811778

 Field ID #:
 1-22
 Page 1 of 1

Sample Description: Mastic (clear) associated w/Carpet (red) Multi-Layer - Room 122A

Layer 1 Clear Mastic		Stereoscopic E	Examination				
		Color	Texture	Homoge	eneous? % Fibrous	% Asbestos % o	of Sample
		Clear-Yellow	Rubbery	Ye	es ND	ND	2
PLM Examination:			•				
			Color/	Parallel	Perpendicular	Extinction	Sign of
<u>Components</u>	<u>%</u> +/-	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index Bire	f Angle	Elongation
Glue Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	s Content:	None Detected		
 .ayer 2   Floor Tile		Stereoscopic E	 Examination				
		Color	<u>Texture</u>	Homoge	eneous? % Fibrous	% Asbestos %	of Sample
		Pink-Tan/Grey	Hard	Ye	es ND	ND	95
LM Examination:		•					
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components .	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	f Angle	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous					
			Asbesto	s Content:	None Detected		
rep/treatment: heat / melt							
							_
	· — — — —				eneous? % Fibrous	% Asbestos % o	of Sample
	· — — — —	•	- — — — — — — — — — — — — — — — — — — —			% Asbestos % o	of Sample 3
		<u>Color</u>	Examination Texture Rubbery	Ye	es ND	ND	3
Layer 3 Yellow Mastic		<u>Color</u> Yellow-Tan	Examination  Texture  Rubbery  Color/	Ye Parallel	Perpendicular	ND Extinction	3 Sign of
Layer 3 Yellow Mastic PLM Examination: Components	<u>%</u> +/-	<u>Color</u> Yellow-Tan <u>Morphology</u>	Examination Texture Rubbery	Ye	es ND	ND Extinction	3
	<u>%</u> +/- 100	<u>Color</u> Yellow-Tan	Examination  Texture  Rubbery  Color/	Ye Parallel	Perpendicular	ND Extinction	3 Sign of

 Comments:
 Analyst: Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811778



Field ID #: 1-23

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** 

Sample #: **CL811779** 

Page 1 of 1

Sample Description: Mastic (clear) associated w/Carnet (red) Multi-Layer - Room 122A

_ayer 1 Clear Mastic		Stereoscopic E	Examination					
		Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Clear-Yellow	Rubbery	Υ	es	ND	ND	2
PLM Examination:			•					
			Color/	Parallel	Perpendicula		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
rep/treatment: heat / melt			Asbesto	os Content:	None Dete	cted		
ayer 2 Floor Tile		Stereoscopic E	 Examination					
		Color	<u>Texture</u>	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Pink-Tan/Grey	Hard	Υ	es	ND	ND	95
LM Examination:		•						
			Color/	Parallel	Perpendicula		Extinction	Sign of
<u>omponents</u>	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous						
rep/treatment: heat / melt			Asbesto	os Content:	None Dete	cted		
ayer 3 Yellow Mastic		Stereoscopic E	zamination	- — — -				_
		Color	<u>Texture</u>	<u>Homog</u>	geneous? %	Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Y	es	ND	ND	3
LM Examination:			Color/	Parallel	Perpendicula		Extinction	Sign of Elongation
	0/ . /	M 1 1	DI 1 '	D C T 1				HIOngatio
omponents	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Liongation
LM Examination: omponents Glue Binders	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Pleochroism	Ref. Index	None Dete		Aligie	Liongano

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: **CL811779** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project #: **725010720014** Sample #: **CL811780** 

Field ID #: **1-24** Page 1 of 1

Samp	ole Descrip	tion: Mastic	(clear) ass	ociated w/Ca	rpet (red	d) Multi-La	yer - Room 122A
------	-------------	--------------	-------------	--------------	-----------	-------------	-----------------

₋ayer 1	Clear Mastic			Stereoscopic E	Examination					
				Color	Texture	Homog	geneous?	% Fibrous	% Asbestos %	of Sample
				Clear-Yellow	Rubbery	Υ	es	ND	ND	2
LM Exam	nination:				•					
					Color/	Parallel	Perpendic		Extinction	Sign of
Componen	<del></del>	<u>%</u>	<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Ind	ex Biref	<u>Angle</u>	Elongation
Glue B	inders	100		Non-fibrous						
rep/treatm	nent: heat / melt				Asbesto	os Content:	None De	etected		
— — — ayer 2	Floor Tile			Stereoscopic E	-					
				Color	<u>Texture</u>	Homog	geneous?	% Fibrous	% Asbestos %	of Sample
				Pink-Tan/Grey	Hard	Y	es	ND	ND	95
LM Exam	nination:			•						
					Color/	Parallel	Perpendic		Extinction	Sign of
omponen	<u>ts</u>	%	<u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Ind	ex Biref	<u>Angle</u>	Elongation
Aggreg	jate/Vinyl Binders	100		Non-fibrous						
rep/treatm	nent: heat / melt				Asbesto	s Content:	None De	etected		
ayer 3	Yellow Mastic			Stereoscopic E	Examination					- <del></del>
				Color	<u>Texture</u>	Homog	geneous?	% Fibrous	% Asbestos %	of Sample
				Yellow-Tan	Rubbery	Y	es	ND	ND	3
LM Exam	nination:				,					
					Color/	Parallel	Perpendic	cular	Extinction	Sign of
omponen:	<u>ts</u>	%	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Ind	ex Biref	<u>Angle</u>	Elongation
Glue B	inders	100		Non-fibrous						
rep/treatm	nent: heat / melt				Ashesto	s Content:	None De	tected		
rep/treutr	101101				1100000	<u>o contenti</u>				

 Comments:
 Analyst: Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811780



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811781** Field ID #: **1-25** 

Page 1 of 1

Sample Description: Mastic (yello	ow) associated w	//Carpet (dark blue v	v/light grey strea	ık pattern) I	Multi-Laye	r - Room 12	24B	
Layer 1 Yellow Mastic		Stereoscopic E	Examination					
		Color	Texture	Homog	geneous?	% Fibrous %	Asbestos %	of Sample
		Yellow/Green	Rubbery	Υ	'es	ND	ND	2
PLM Examination:			•					
_			Color/	Parallel	Perpendic		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Inde	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Glue Binders	100	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	os Content:	None De	tected		
Layer 2 Floor Tile		Stereoscopic E	 Examination					
		Color	Texture	Homog	geneous?	% Fibrous %	Asbestos %	of Sample
		Pink-Tan/Grey	Hard	Ý	es	ND	ND	95
PLM Examination:		· · · · · · · · · · · · · · · · · · ·						
			Color/	Parallel	Perpendic	ular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Inde	<u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Aggregate/Vinyl Binders	100	Non-fibrous						
<u>Prep/treatment:</u> heat / melt			Asbesto	os Content:	None De	tected		
Layer 3 Yellow Mastic		Stereoscopic E	 Examination					_
		Color	<u>Texture</u>	Homog	geneous?	% Fibrous %	Asbestos %	of Sample
		Yellow-Tan	Rubbery	Υ	'es	ND	ND	3
PLM Examination:  Components Glue Binders	<u>%</u> +/- 100	Morphology Non-fibrous	Color/ Pleochroism	Parallel Ref. Index	Perpendic Ref. Inde		Extinction Angle	Sign of Elongation
Prep/treatment: heat / melt			Asbesto	os Content:	None De	tected		

Comments:	1 2	Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811781</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811782

 Field ID #:
 1-26
 Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark blue w/light grey streak pattern) Multi-Layer - Room 124B

		Color	Texture	Homoge	eneous? % Fil	orous % A	Asbestos % o	of Sample
		Yellow/Green	Rubbery	Ye	es NC	כ	ND	2
LM Examination:			•					
			Color/		Perpendicular		Extinction	Sign of
<u>omponents</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
ep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed .		
		Stereoscopic E	 Examination	. — — — —		- — — -		
		Color	<u>Texture</u>	Homoge	eneous? % Fit	orous % A	Asbestos % o	of Sample
		Pink-Tan/Grey	Hard	Ye	es NC	כ	ND	95
LM Examination:		•						
			Color/		Perpendicular		Extinction	Sign of
<u>omponents</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Vinyl Binders	100	Non-fibrous						
ep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed :		
ayer 3 Yellow Mastic		Stereoscopic E	 Examination					
		Color	<u>Texture</u>	Homoge	eneous? % Fit	orous % A	Asbestos % o	of Sample
		Yellow-Tan	Rubbery	Ye	es NC	כ	ND	3
LM Examination:			•					
			Color/		Perpendicular		Extinction	Sign of
<u>omponents</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous						
ep/treatment: heat / melt			Ashesto	os Content:	None Detecte	ed be		

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811782



Field ID #: 1-27

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811783

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (dark blue w/light grey streak pattern) Multi-Layer - Room 124B

Layer 1	Yellow Mastic		Stereoscopic I	Examination					
			Color	<u>Texture</u>	Homog	geneous? %	Fibrous 9	6 Asbestos %	of Sample
			Yellow/Green	Rubbery	Υ	'es	ND	ND	2
LM Exam	nination:			-					
				Color/	Parallel	Perpendicul		Extinction	Sign of
omponen		<u>%</u> +/-		Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue B	inders	100	Non-fibrous						
rep/treatm	nent: heat / melt			Asbesto	os Content:	None Dete	cted		
— — — ayer 2	Floor Tile		Stereoscopic F	– — — — — Examination					
			Color	<u>Texture</u>	Homog	geneous? %	Fibrous 9	6 Asbestos %	of Sample
			Pink-Tan/Grey	Hard	Y	'es	ND	ND	95
LM Exam	nination:								
				Color/	Parallel	Perpendicul		Extinction	Sign of
omponen		<u>%</u> +/-		Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggreg	jate/Vinyl Binders	100	Non-fibrous						
rep/treatm	nent: heat / melt			Asbesto	os Content:	None Dete	cted		
ayer 3	Yellow Mastic		Stereoscopic F	_	. — — — .				_
			Color	<u>Texture</u>	Homog	geneous? %	Fibrous 9	6 Asbestos %	of Sample
			Yellow-Tan	Rubbery	Y	'es	ND	ND	3
LM Exam	nination:								
				Color/	Parallel	Perpendicul		Extinction	Sign of
Componen	_	<u>%</u> <u>+/-</u>		Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glue B	inders	100	Non-fibrous						
	nent: heat / melt			A 1	s Content:	None Dete	امدما		

Comments:	Analyst: Date Analyzed:	Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811783</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project #: **725010720014** 

Set #: 33628

Sample #: **CL811784** 

Field ID #: 1-28

Project:

Layer 1

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (brown w/dark brown & grey stripe pattern) - Room 124A

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

**Yellow Mastic** Stereoscopic Examination

> Color Yellow-Tan

Texture Rubbery <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yes

ND ND

PLM Examination:

Color/ Pleochroism

Parallel Ref. Index Ref. Index

Perpendicular <u>Biref</u> Extinction <u>Angle</u>

Sign of

Components **Glue Binders** 

100

Morphology Non-fibrous

Asbestos Content:

**None Detected** 

Elongation

heat / melt Prep/treatment:

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: PLM-22826 Sample #: CL811784



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Lab Proj #: **PLM-22826** 

Project #: **725010720014** 

Set #: **33628**Sample #: **CL811785** 

Field ID #: **1-29** 

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (brown w/dark brown & grey stripe pattern) - Room 124A

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

Project:

Layer 1

 Color/
 Parallel
 Perpendicular
 Extinction
 Sign of

 Pleochroism
 Ref. Index
 Ref. Index
 Biref
 Angle
 Elongation

Components%+/-MorphologyGlue Binders100Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811785



heat / melt

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Project #: **725010720014** 

Set #: 33628

Sample #: **CL811786** 

Field ID #: 1-30

Prep/treatment:

**None Detected** 

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Carpet (brown w/dark brown & grey stripe pattern) - Room 124A

Layer 1 **Yellow Mastic** Stereoscopic Examination Texture Color <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yellow-Tan Rubbery Yes ND ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Ref. Index Ref. Index Morphology Pleochroism <u>Biref</u> Elongation <u>Angle</u> **Glue Binders** 100 Non-fibrous

Asbestos Content:

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: PLM-22826 Sample #: CL811786



Field ID #: 1-31

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811787

Page 1 of 1

Sample Description: 12" X 12" Ceramic Floor Tile (light grey) w/Grout (grey) & Mortar (grey) - Restroom 1T3

Layer 1 C	eramic Tile		Stereoscopic	Examination					
-			Color	Texture	Homoge	neous? % Fib	rous % As	bestos % o	of Sample
			Lt. Grey	Hard	Ye	s NE	N	ID	75
PLM Examinati	ion:		•						
~				Color/		Perpendicular		Extinction	Sign of
Components	_	<u>%</u> +/-	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongatio
Sintered Cl	lays	100	Non-fibrous						
Prep/treatment:	mechanical	separation		Asbestos	Content:	None Detecte	d		
 _ayer 2   G	rout		Stereoscopic	Examination					
			<u>Color</u>	<u>Texture</u>	Homoge	neous? % Fib	rous % As	bestos % o	of Sample
			Grey	Cementitious	ye Ye	s NE	N	ID	5
LM Examinati	ion:								
				Color/		Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate Cement Bir		65 35	Non-fibrous Non-fibrous						
			Non-librous		_	_			
rep/treatment:	mechanical	separation		Asbestos	Content:	None Detecte	d		
 .ayer 3 M	ortar		Stereoscopic	Examination					_
			Color	<u>Texture</u>	Homoge	neous? % Fib	rous % As	bestos % o	of Sample
			Grey	Cementitious	s Ye	s NE	N	ID	20
LM Examinati	ion:								
7 .		0/ . /	M 1 1	Color/		Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggregate Cement Bir		65 35	Non-fibrous Non-fibrous						
			NOII-IIDIOUS						
Prep/treatment:	mechanical	separation		Asbestos	Content:	None Detecte	d		

Comments:		Kathy Schosek 8/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811787</b>



Field ID #: **1-32** 

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811788

Page 1 of 1

Sample Description: 12" X 12" Ceramic Floor Tile (light grey) w/Grout (grey) & Mortar (grey) - Restroom 1T4

Layer 1 Ceramic Tile		Stereoscopic Examination							
		Color		Homoge	nogeneous? % Fibrous % Asbesto			os % of Sample	
		Lt. Grev	Hard	Ύe	s NI	ND ND		75	
PLM Examination:		·							
			Color/		Perpendicular		Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation	
Sintered Clays	100	Non-fibrous							
Prep/treatment: mechanic	cal separation		Asbesto	s Content:	None Detecte	ed			
		Stereoscopic	Examination					_	
		<u>Color</u>	<u>Texture</u>	Homoge	eneous? % Fil	orous % A	Asbestos % o	of Sample	
		Grey	Cementitious	s Ye	s NI	)	ND	5	
PLM Examination:									
	0/		Color/		Perpendicular		Extinction	Sign of	
Components	<u>%</u> <u>+/-</u> <b>65</b>	Morphology Non-fibrous	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation	
Aggregate Cement Binders	35	Non-fibrous							
		Hon horous		<b>G</b>	N D-11-				
rep/treatment: mechanic	cal separation		Asbesto	s Content:	None Detecte	ed 			
ayer 3 Mortar		Stereoscopic	Examination						
		Color	Texture	Homoge	eneous? % Fil	orous <u>% A</u>	Asbestos % o	of Sample	
		Grey	Cementitious	s Ye	es NI	)	ND	20	
PLM Examination:			~						
	0/ . /	M 1 1	Color/		Perpendicular	D: C	Extinction	Sign of	
Components	<u>%</u> <u>+/-</u>	Morphology Non-fibrous	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation	
Aggregate Cement Binders	65 35	Non-fibrous							
		14011-1101043							
Prep/treatment: mechanic	cal separation		<u>Asbesto</u>	s Content:	None Detecte	ed			

Comments:	Analyst: Kathy Schosek Date Analyzed: 3/16/2020	
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811788</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811789

Project #: **725010720014** Sample #: **CL811789** Field ID #: **1-33** Page 1 of 1

Sample Description: 12" X 12" Ceramic Floor Tile (light grey) w/Grout (grey) & Mortar (grey) - Hallway by Room TJ1

Layer 1 Ceramic Til	le	Stereoscopic Examination							
		Color	<u>Texture</u>	Homogeneous?					
		Lt. Grey	Hard	Yes	ND	ND	75		
PLM Examination:		•							
			Color/	Parallel Perpen		Extinction	Sign of		
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index Ref. I	ndex Biref	<u>Angle</u>	Elongation		
Sintered Clays	100	Non-fibrous							
Prep/treatment: mechar	nical separation		Asbesto	s Content: None I	Detected				
		Stereoscopic Examination							
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample		
		Grey	Cementitious	s Yes	ND	ND	5		
PLM Examination:		•							
~			Color/	Parallel Perpen		Extinction	Sign of		
Components	<u>%</u> +/-	Morphology	<u>Pleochroism</u>	Ref. Index Ref. In	ndex Biref	<u>Angle</u>	Elongation		
Aggregate	65 35	Non-fibrous							
Cement Binders		Non-fibrous							
Prep/treatment: mechanical separation			Asbesto	s Content: None I	Detected				
 Layer 3 Mortar		Stereoscopic	Examination						
		Color	<u>Texture</u>	Homogeneous?	% Fibrous %	Asbestos %	of Sample		
		Grey	Cementitious	s Yes	ND	ND	20		
PLM Examination:									
			Color/	Parallel Perpen		Extinction	Sign of		
Components	<u>%</u> +/-	Morphology	<u>Pleochroism</u>	Ref. Index Ref. Is	ndex Biref	<u>Angle</u>	<u>Elongation</u>		
Aggregate	65 35	Non-fibrous							
Cement Binders	35	Non-fibrous							
Prep/treatment: mechar	nical separation		Asbesto	s Content: None I	Detected				

 Comments:
 Analyst: Nathy Schosek Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811789



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Lab Proj #: **PLM-22826** Set #: **33628** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811790** 

Field ID #: **1-34** 

Page 1 of 1

Sample Description: Epoxy Floor Coating (grey, sandy) - Room 102BA

Floor Coating Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Grey
 Hard
 No
 ND
 ND
 100

PLM Examination:

Layer 1

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Aggregate/Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811790



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project:

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: 33628 Sample #: **CL811791** 

Lab Proj #: **PLM-22826** 

Project #: **725010720014** Field ID #: 1-35

Page 1 of 1

Sample Description: Epoxy Floor Coating (grey, sandy) - Room 102AA

Layer 1 **Floor Coating** Stereoscopic Examination

> Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample 100 Grey Hard No ND ND

PLM Examination:

Color/ Sign of Parallel Perpendicular Extinction Components Morphology Ref. Index Ref. Index Pleochroism <u>Biref</u> Elongation <u>Angle</u>

Aggregate/Binders 100 Non-fibrous

**None Detected** heat / melt Asbestos Content: Prep/treatment:

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: PLM-22826 Sample #: **CL811791** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Lab Proj #: **PLM-22826** Set #: **33628** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811792** 

Field ID #: **1-36** 

Page 1 of 1

Sample Description: Epoxy Floor Coating (grey, sandy) - Room 102AA

Layer 1 Floor Coating Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Grey
 Hard
 No
 ND
 ND
 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Aggregate/Binders 100 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811792



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811793

 Field ID #:
 1-37
 Page 1 of 1

Sample Description: Resilient Vinyl Flooring (grey w/multi-colored stripes) w/Mastic (yellow) & Leveling Compound (grey) - Room 1J2

Layer 1	Sheet Flooring			Stereoscopic	Examination					
•				Color	Texture	Homog	geneous? % F	ibrous %	Asbestos %	of Sample
				Tan	Rubbery	Y	es '	10	ND	75
PLM Examin	ation:				•					
					Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index		<u>Angle</u>	Elongation
Cellulose		30		ribbons				high		
	te/Vinyl Binders	70		Non-fibrous						
rep/treatmer	nt: heat / melt				Asbesto	s Content:	None Detec	ted		
Layer 2	Backing/Mastic			Stereoscopic	Examination					
				<u>Color</u>	<u>Texture</u>	<u>Homog</u>	geneous? % F	ibrous %	Asbestos %	of Sample
				Yellow	Rubbery	1	No :	35	ND	5
LM Examin	ation:									
			,		Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Synthetic Glue Bin		35 65		Monofilaments Non-fibrous						
		05		Non-librous						
rep/treatme	nt: heat / melt				Asbesto	s Content:	None Detec	ted		
 .ayer 3	Leveling Compo	und		Stereoscopic	Examination					
				Color	<u>Texture</u>	Homog	geneous? % F	ibrous %	Asbestos %	of Sample
				Grey	Blocky	Y	'es N	ID	ND	20
LM Examin	ation:									
,		0/	,		Color/	Parallel	Perpendicular		Extinction	Sign of
Components	- (Dissala ::-	<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Aggrega	te/Binders	100		Non-fibrous						
rep/treatmer	nt: mechanical se	eparati	on		Asbesto	s Content:	None Detec	ted		

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811793</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811794

 Field ID #:
 1-38
 Page 1 of 1

Sample Description: Resilient Vinvl Flooring (grev w/multi-colored stripes) w/Mastic (vellow) & Leveling Compound (grev) - Room 1J2

Layer 1 Sheet Flooring		Stereoscopic	Examination				
		Color	Texture	Homoge	eneous? % Fil	brous % Asbestos	s % of Sample
		Tan	Rubbery	Ye	es 10	) ND	75
PLM Examination:			•				
			Color/		Perpendicular	Extinct	
<u>Components</u>	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref Angl	le Elongation
Cellulose Fibers	30	ribbons				high	
Aggregate/Vinyl Binders	70	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detecte	ed .	
ayer 2 Backing/Mastic		Stereoscopic	 Examination				
		Color	<u>Texture</u>	Homoge	eneous? % Fil	brous % Asbestos	s % of Sample
		Yellow	Rubbery	N	o 35	5 ND	5
LM Examination:			•				
			Color/		Perpendicular	Extinct	
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref Angl	<u>le</u> <u>Elongation</u>
Synthetic Fibers Glue Binders	35 65	Monofilaments Non-fibrous					
	65	NOII-IIDIOUS					
rep/treatment: heat / melt			Asbesto	s Content:	None Detecte	:d	
ayer 3 Leveling Compo	 ound	Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	Homoge	eneous? % Fil	brous % Asbestos	s % of Sample
		Grey	Blocky	Ye	es NI	D ND	20
LM Examination:		-	•				
			Color/		Perpendicular	Extinct	
<u>Components</u>	<u>%</u> +/-	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	Biref Angl	<u>le</u> <u>Elongation</u>
Aggregate/Binders	100	Non-fibrous					
Prep/treatment: mechanical s	anaration		Ashasta	s Content:	None Detecte	vd	

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811794</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811795** 

Field ID #: <b>1-39</b>								Page 1 of 1
Sample Description: Resilient	Vinyl Flooring (gr	ey w/multi-colored s	tripes) w/Mastic (	(yellow) & L	eveling Comp	ound (g	rey) - Room	1J2
Layer 1 Sheet Floorin	g	Stereoscopic	Examination					
		Color	<u>Texture</u>				Asbestos %	-
PLM Examination:		Tan	Rubbery	Y	es 1	0	ND	75
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Cellulose Fibers Aggregate/Vinyl Binders	30 5 70	ribbons Non-fibrous				high		
Prep/treatment: heat / melt			Ashesto	os Content:	None Detect	ed		
Layer 2 Backing/Mast	ic	Stereoscopic	Examination					
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
DV 14 T		Yellow	Rubbery	ı	No 3	5	ND	5
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	<u>Elongation</u>
Synthetic Fibers	35	Monofilaments						
Glue Binders	65	Non-fibrous						
<u>Prep/treatment:</u> heat / melt				os Content:	None Detect	ed		
Layer 3 Leveling Com		Stereoscopic						_
	-	Color	<u>Texture</u>	<u>Homog</u>	geneous? % Fi	brous %	Asbestos %	of Sample
		Grey	Blocky	Y	es N	D	ND	20
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> +/-	Morphology	<u>Pleochroism</u>		Ref. Index		Angle	Elongation
Aggregate/Binders	100	Non-fibrous						_
Prep/treatment: mechanica	al separation		Asbesto	os Content:	None Detect	ed		
								_

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811795</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project #: **725010720014** Sample #: **CL811796** 

Field ID #: **1-40** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (brown, wood pattern) w/Mastic (yellow) - Room 106

Layer 1 Sheet Flooring		Stereoscopic E	xamination				
		Color	<u>Texture</u>	Homoge	neous? % Fibrous 9	6 Asbestos % o	f Sample
		Brown	Rubbery	Ye	s ND	ND	95
PLM Examination:							
			Color/		Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	<u>Elongation</u>
Aggregate/Vinyl Binders	100	Non-fibrous					
Prep/treatment: heat / melt			Asbesto	os Content:	None Detected		
Layer 2 Yellow Mastic		Stereoscopic E	xamination				
		Color	<u>Texture</u>	<u>Homoge</u>	neous? % Fibrous 9	6 Asbestos % o	f Sample
		Yellow-Tan	Dukkami		- ND	ND	-
		renow-ran	Rubbery	Ye	s ND	ND	5
PLM Examination:		reliow-ran	Rubbery	Ye	S ND	ND	5
PLM Examination:		renow-ran	Color/		S ND Perpendicular	Extinction	Sign of
PLM Examination: <u>Components</u>	<u>%</u> <u>+/-</u>	Morphology	•				
	<u>%</u> +/- 100		Color/	Parallel l	Perpendicular	Extinction	Sign of



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project #: **725010720014** Sample #: **CL811797** Field ID #: 1-41

Page 1 of 1

Sample Description: Resilient Vinyl Flooring (brown, wood pattern) w/Mastic (yellow) - Room 116

Layer 1 Sheet Floorin	ıg	Stereoscopic l	Examination				
		Color	<u>Texture</u>	Homogen	eous? % Fibrous	% Asbestos %	of Sample
		Brown	Rubbery	Yes	. ND	ND	95
PLM Examination:							
			Color/	Parallel Pe	erpendicular	Extinction	Sign of
Components Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	Angle	Elongation
Aggregate/Vinyl Binders	s 100	Non-fibrous					
Prep/treatment: heat / mel	t		Asbesto	os Content: No	one Detected		
Layer 2 Yellow Mastic	 C	Stereoscopic 1	– – – – – – Examination				_
		<u>Color</u>	<u>Texture</u>	Homogen	eous? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Rubbery	Yes	ND ND	ND	5
PLM Examination:			•				
			Color/	Parallel Pe	erpendicular	Extinction	Sign of
<u>Components</u>	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Glue Binders	100	Non-fibrous				_	_
Prep/treatment: heat / mel	<b>.</b>		Achasta	s Content: No	one Detected		

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: **CL811797** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811798** 

Field ID #: **1-42** Page 1 of 1

Sample Description: Resilient Vinyl Flooring (brown, wood pattern) w/Mastic (yellow) - Room 142

Layer 1 S	heet Flooring			Stereoscopic E	xamination					
				<u>Color</u>	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos % o	of Sample
				Brown	Rubbery	Υ	es Ni	D	ND	95
PLM Examinat	ion:									
					Color/	Parallel	Perpendicular		Extinction	Sign of
Components		%	<u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Aggregate/	Vinyl Binders	100		Non-fibrous						
Prep/treatment:	heat / melt				Asbesto	os Content:	None Detecte	ed		
Layer 2 Y	ellow Mastic			Stereoscopic E	xamination	. — — .				
				Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos % o	of Sample
				Yellow-Tan	Rubbery	Υ	es Ni	D	ND	5
PLM Examinat	ion:									
					Color/	Parallel	Perpendicular		Extinction	Sign of
Components		%	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Glue Binde	ers	100		Non-fibrous						
Prep/treatment:	heat / melt				Asbesto	os Content:	None Detecte	ed		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project #: **725010720014**Sample #: **CL811799** 

Field ID #: **1-43** Page 1 of 1

Sample Description: 2" X 6" Ceramic Floor Tile (brown) w/Grout (grey) & Mortar (grey) - Space 1L2

Layer 1 Ceramic Tile		Stereoscopic	Examination				
•		Color	Texture	Homogene	eous? % Fibrous %	6 Asbestos %	of Sample
		Brown	Hard	Yes	ND	ND	75
PLM Examination:							
			Color/		rpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index F	tef. Index Biref	<u>Angle</u>	Elongation
Sintered Clays	100	Non-fibrous					
Prep/treatment: mechanica	al separation		Asbesto	s Content: No	one Detected		
		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	Homogene	ous? % Fibrous %	Asbestos %	of Sample
		Brown	Cementitious	s Yes	ND	ND	5
PLM Examination:							
			Color/		rpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index E	Ref. Index Biref	<u>Angle</u>	Elongation
Aggregate	65	Non-fibrous					
Cement Binders	35	Non-fibrous					
Prep/treatment: mechanica	al separation		Asbesto	s Content: No	one Detected		
Layer 3 Mortar		Stereoscopic	Examination				
		Color	Texture	Homogene	ous? <u>% Fibrous</u> <u>9</u>	Asbestos %	of Sample
		Brown	Cementitious	s Yes	ND	ND	20
PLM Examination:							
			Color/		rpendicular	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index B	<u>Ref. Index</u> <u>Biref</u>	<u>Angle</u>	Elongation
Aggregate	65	Non-fibrous					
Cement Binders	35	Non-fibrous					
	al separation		Asbesto		ne Detected		

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811799</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

 Project #:
 725010720014
 Sample #:
 CL811800

 Field ID #:
 1-44
 Page 1 of 1

Sample Description: 2" X 6" Ceramic Floor Tile (brown) w/Grout (grey) & Mortar (grey) - Hallway by South Elevators

Layer 1	Ceramic Tile		Stereoscopic	Examination				
			Color	<u>Texture</u>	Homoge	neous? % Fibro	us % Asbestos %	of Sample
			Brown	Hard	Ye	s ND	ND	75
PLM Examin	ation:							
				Color/		Perpendicular	Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index E	<u>Angle</u>	Elongation
Sintered	Clays	100	Non-fibrous					
Prep/treatmen	t: mechanical	separation		Asbestos	Content:	None Detected		
 _ayer 2	Grout		Stereoscopic	Examination				
			<u>Color</u>	<u>Texture</u>	<u>Homoge</u>	neous? % Fibro	us % Asbestos %	of Sample
			Brown	Cementitious	s Ye	s ND	ND	5
LM Examina	ation:							
				Color/		Perpendicular	Extinction	Sign of
Components		<u>%</u> +/-	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index E	<u>Angle</u>	<u>Elongati</u>
Aggregat Cement E		65 35	Non-fibrous Non-fibrous					
-			Non-Horous					
rep/treatmen	<u>it:</u> mechanical :	separation		Asbestos	Content:	None Detected		
ayer 3	Mortar		Stereoscopic	Examination				
			Color	Texture	Homoge	neous? % Fibro	us % Asbestos %	of Sample
			Brown	Cementitious	s Ye	s ND	ND	20
LM Examina	ation:							
		0/ . /	M 1 1	Color/		Perpendicular		Sign of
Components	_	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index	Ker. Index E	<u>Angle</u>	Elongation
Aggregat Cement E		65 35	Non-fibrous Non-fibrous					
-			NOII-HDIOUS					
Prep/treatmen	t: mechanical	separation		Asbestos	Content:	None Detected		

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811800</b>



Field ID #: 1-45

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: **Apex TITAN** Lab Proj #: **PLM-22826** Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** 

Sample #: **CL811801** 

Page 1 of 1

Sample Description: 2" X 6" Ceramic Floor Tile (brown) w/Grout (grey) & Mortar (grey) - Space 1L2

Layer 1	Ceramic Tile		Stereoscopic	Examination				
-			Color	Texture	Homogen	eous? % Fibrous	% Asbestos %	of Sample
			Brown	Hard	Yes	ND	ND	75
PLM Exami	nation:							
				Color/		erpendicular	Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Sintered	d Clays	100	Non-fibrous					
Prep/treatme	ent: mechanical	separation		Asbestos	Content: N	one Detected		
 _ayer 2	Grout		Stereoscopic	Examination				
			<u>Color</u>	<u>Texture</u>	Homogen	eous? % Fibrous	% Asbestos %	of Sample
			Brown	Cementitious	s Yes	ND	ND	5
PLM Exami	nation:							
<b>a</b> .		0/		Color/		erpendicular	Extinction	Sign of
Components	='	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Aggrega	ate Binders	65 35	Non-fibrous Non-fibrous					
			Non-librous					
rep/treatme	ent: mechanical	separation		Asbestos	Content: N	one Detected		
ayer 3	Mortar		Stereoscopic	Examination				
			Color	<u>Texture</u>	Homogen	eous? % Fibrous	% Asbestos %	of Sample
			Brown	Cementitious	s Yes	ND	ND	20
LM Exami	nation:			~				~
٠	_	0/	M =l. =1 =	Color/		erpendicular		Sign of
Components	-	<u>%</u> +/- <b>65</b>	<u>Morphology</u> <b>Non-fibrous</b>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongati
Aggrega	ate Binders	95 35	Non-fibrous					
			14011-1101003					
Prep/treatme	ent: mechanical	separation		<u>Asbestos</u>	Content: N	one Detected		

Comments:		Kathy Schosek 8/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811801</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #:

33628

Project #: **725010720014** 

Sample #: **CL811802** 

Lab Proj #: **PLM-22826** 

Field ID #: 1-46

Layer 1

Page 1 of 1

Sample Description: Mastic (yellow) associated w/4" Cove Base (black) - Hallway by Room 142

**Yellow Mastic** Stereoscopic Examination

Color Texture Yellow-Tan

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

<u>Biref</u>

ND

ND

PLM Examination:

Color/  $\underline{Pleochroism}$ 

Rubbery

Parallel Perpendicular Ref. Index Ref. Index

Yes

Sign of Extinction Elongation <u>Angle</u>

100

Components Morphology **Glue Binders** 100 Non-fibrous

heat / melt Asbestos Content: **None Detected** Prep/treatment:

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: PLM-22826 Sample #: CL811802



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811803** 

Field ID #: **1-47** 

Project:

Layer 1

Page 1 of 1

Sample Description: Mastic (yellow) associated w/4" Cove Base (black) - Hallway by Room 114

Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

 Color/
 Parallel
 Perpendicular
 Extinction
 Sign of

 Pleochroism
 Ref. Index
 Ref. Index
 Biref
 Angle
 Elongation

Components%+/-MorphologyGlue Binders100Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811804** 

Lab Proj #: **PLM-22826** 

Field ID #: **1-48** 

Page 1 of 1

Sample Description: Mastic (yellow) associated w/4" Cove Base (black) - Hallway by Room 110

Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

Layer 1

 Color/
 Parallel
 Perpendicular
 Extinction
 Sign of

 Pleochroism
 Ref. Index
 Ref. Index
 Biref
 Angle
 Elongation

Components%+/-MorphologyGlue Binders100Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: 33628

Project #: **725010720014** 

Sample #: **CL811805** 

Field ID #: 1-49

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Fiberglass Reinforced (FRP) Panel (white) - Room 1J2

**Yellow Mastic** Stereoscopic Examination

> Color Texture Yellow-Beige Rubbery

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

ND

ND

PLM Examination:

Layer 1

Color/

Parallel Perpendicular

Yes

Extinction

Sign of

Components

Prep/treatment:

100

Morphology Non-fibrous

Ref. Index Ref. Index  $\underline{Pleochroism}$ 

<u>Biref</u>

<u>Angle</u>

Elongation

**Glue Binders** 

heat / melt

Asbestos Content:

**None Detected** 

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed:

> Lab Job #: PLM-22826 Sample #: CL811805



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Set #: **33628**Sample #: **CL811806** 

Field ID #: **1-50** Page 1 of 1

Sample Description: Mastic (yellow) associated w/Fiberglass Reinforced (FRP) Panel (white) - Room TJ1

Layer 1 Yellow Mastic Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Yellow-Beige
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

 Color/
 Parallel
 Perpendicular
 Extinction
 Sign of

 Pleochroism
 Ref. Index
 Ref. Index
 Biref
 Angle
 Elongation

Components%+/-MorphologyGlue Binders100Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: 33628

Project #: **725010720014** 

Sample #: **CL811807** 

Field ID #: 1-51

Page 1 of 1

Sample Description: Mastic (yellow) associated w/Fiberglass Reinforced (FRP) Panel (white) - Room 1J2

**Yellow Mastic** Stereoscopic Examination

> Color Texture

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yes

Ref. Index Ref. Index

ND ND

<u>Biref</u>

100

PLM Examination:

Layer 1

Yellow-Beige

Rubbery

Color/

 $\underline{Pleochroism}$ 

Parallel Perpendicular

Extinction

Sign of

Components

100

Morphology Non-fibrous

<u>Angle</u>

Elongation

**Glue Binders** heat / melt Prep/treatment:

Asbestos Content: **None Detected** 

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed: Lab Job #: PLM-22826 Sample #: CL811807



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811808** 

Field ID #: **1-52** Page 1 of 1

Sample Description: Concrete Wall Texture (grey, sandy) - South Stairway

~	10 11	-		
Layer 1 Paint Texture	Stereoscopic E	xamination		
	Color	<u>Texture</u> <u>H</u>	Iomogeneous? % Fibro	ous % Asbestos % of Sample
	Grey	Blocky	Yes ND	ND 25
PLM Examination:		-		
		Color/ Para	llel Perpendicular	Extinction Sign of
Components <u>%</u>	<u>+/-</u> <u>Morphology</u>	<u>Pleochroism</u> <u>Ref. I</u>	ndex Ref. Index	Biref Angle Elongation
Wollastonite 3	Laths			+/-
Aggregate/Binders/Paint 97	Non-fibrous			
Prep/treatment: solvent dissolution		Asbestos Conte	ent: None Detected	
Layer 2 Concrete	Stereoscopic E	xamination		
	Color		Iomogeneous? % Fibro	ous % Asbestos % of Sample
	Grey	Cementitious	Yes ND	ND 75
PLM Examination:	Grey	Cementitious	162 ND	ND 75
FLW Examination.		Color/ Para	llel Perpendicular	Extinction Sign of
Components <u>%</u>	+/- Morphology	Pleochroism Ref. I	. I	Biref Angle Elongation
Aggregate 60	Non-fibrous	recinoisii recin	ndex ren maex	<u>Fingle</u> <u>Fingle</u>
Cement Binders 40	Non-fibrous			
<u>Prep/treatment:</u> mechanical separatio	n	Asbestos Conte	nt: None Detected	



Field ID #: 1-53

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628
Project #: 725010720014 Sample #: CL811809

Page 1 of 1

Sample Description: Concrete Wall Texture (grey, sandy) - South Stairway

	Stereoscopic	Examination					
	Color	Texture	Homog	geneous? % Fi	brous %	Asbestos % o	of Sample
	Grey	Blocky	Y	es N	D	ND	25
	•	•					
		Color/	Parallel	Perpendicular		Extinction	Sign of
<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
3	Laths						+/-
t 97	Non-fibrous						
ssolution		Asbesto	os Content:	None Detect	ed		
	Stereoscopic	Examination					_
	Color	Texture	<u>Homog</u>	geneous? % Fi	brous %	Asbestos % o	of Sample
	Grev	Cementitiou	ıs Y	es N	D	ND	75
	•						
		Color/	Parallel	Perpendicular		Extinction	Sign of
	M 1 - 1	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
<u>%</u> <u>+/-</u>	<u>Morphology</u>	1 ICOCIII OISIII	Ker. Hidex	ICI. HIGCA	Direi	7111510	Diongation
t	3 97	Color   Grey	Grey   Blocky   Color/	Color Grey Blocky Y  Color/ Parallel  Morphology Pleochroism Ref. Index  Laths  Non-fibrous  Stereoscopic Examination  Color Texture Homog  Grey Cementitious Y	Color Grey Blocky Yes N  Color/ Parallel Perpendicular  Morphology Pleochroism Ref. Index Ref. Index  Laths Non-fibrous  Stereoscopic Examination Color Texture Homogeneous? % Fi Grey Cementitious Yes N	Color   Texture   Homogeneous? % Fibrous %   Fibrous	Color Grey Blocky Yes ND ND  Color/ Parallel Perpendicular Extinction Morphology Pleochroism Ref. Index Ref. Index Biref Angle  Laths Non-fibrous  Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Grey Cementitious Yes ND ND



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811810** 

Field ID #: **1-54** Page 1 of 1

Sample Description: Concrete Wall Texture (grey, sandy) - North Stairway

Layer 1 Paint Texture		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homog	geneous? % Fit	brous % Asbestos %	of Sample
		Grey	Blocky	Υ	es NE	O ND	25
PLM Examination:		•	•				
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref Angle	Elongation
Wollastonite	3	Laths					+/-
Aggregate/Binders/Paint	97	Non-fibrous					
Prep/treatment: solvent disso	olution		Asbest	os Content:	None Detecte	ed	
		Stereoscopic	Examination				
•		Color	Texture	Homos	geneous? % Fit	brous % Asbestos %	of Sample
		Grev	Cementitio	ıs Y	es NE	D ND	75
PLM Examination:		,		-			
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	Biref Angle	Elongation
Aggregate	60	Non-fibrous					-
Cement Binders	40	Non-fibrous					
Pren/treatment: mechanical s	anaratian		A almost	os Content:	None Detecte	ad.	



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811811** 

Field ID #: **1-55** Page 1 of 1

Sample Description: Concrete Wall Texture (grey, sandy) - Room 1ME1

Layer 1 Paint Texture	Stereoscopic	Examination				
	Color	<u>Texture</u>	Homogeneous	? % Fibrous %	Asbestos % o	of Sample
	Grey	Blocky	Yes	ND	ND	25
PLM Examination:	-	_				
		Color/	Parallel Perper	ndicular	Extinction	Sign of
Components <u>%</u>	<u>+/-</u> <u>Morphology</u>	<u>Pleochroism</u>	Ref. Index Ref.	<u>Index</u> <u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Wollastonite 3	Laths					+/-
Aggregate/Binders/Paint 97	Non-fibrous					
Prep/treatment: solvent dissolution		Asbestos	S Content: None	Detected		
Layer 2 Concrete	Stereoscopic	Examination				
	Color	<u>Texture</u>	Homogeneous	? % Fibrous %	Asbestos % o	of Sample
	Grey	Cementitious	s Yes	ND	ND	75
PLM Examination:						
		Color/	Parallel Perper	ndicular	Extinction	Sign of
Components <u>%</u>	<u>+/-</u> <u>Morphology</u>	Pleochroism	Ref. Index Ref.	Index Biref	<u>Angle</u>	<u>Elongation</u>
Aggregate 60	Non-fibrous					
Cement Binders 40	Non-fibrous					
Prep/treatment: mechanical separation	n	Asbestos	Content: None	Detected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014

Sample #: **CL811812** 

Field ID #: **1-56** Page 1 of 1

Sample Description: Concrete Wall Texture (grey, sandy) - Room 1ME1

77						
Layer 1 Paint Texture	Stereoscopic	Examination				
	Color	Texture	Homoge	eneous? % Fibrous	% Asbestos % o	of Sample
	Grey	Blocky	Ye	s ND	ND	25
PLM Examination:	•	•				
		Color/	Parallel I	Perpendicular	Extinction	Sign of
Components <u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Wollastonite 3	Laths					+/-
Aggregate/Binders/Paint 97	Non-fibrous					
<u>Prep/treatment:</u> solvent dissolution		Asbestos	s Content:	None Detected		
	Stereoscopic	— — — — — Examination				
	Color	Texture	Homoger	neous? % Fibrous 9	% Asbestos % o	of Sample
	Grey	Cementitious	s Ye	s ND	ND	75
PLM Examination:	•					
		Color/	Parallel 1	Perpendicular	Extinction	Sign of
<u>Components</u> <u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	<b>Elongation</b>
Aggregate 60 Cement Binders 40	Non-fibrous Non-fibrous					
Prep/treatment: mechanical separation		Ashestos	s Content:	None Detected		



Field ID #: **1-57** 

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Sample #: **CL811813** Project #: **725010720014** 

Page 1 of 1

Layer 1 Filler/Tex	ture	Stereoscopio	Examination				
		Color	Texture	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		White	Blocky	Yes	ND	ND	15
PLM Examination:			•				
~			Color/	Parallel Perpen		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. I	ndex Biret	f Angle	Elongation
Aggregate/Binders	/Paint 100	Non-fibrous					
Prep/treatment: solve	ent dissolution		Asbestos	S Content: None	Detected		
Layer 2 CMU Blo	· — — — — — — - ck	Stereoscopic	Examination				
		Color	Texture	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Grey	Blocky/Hard	Yes	ND	ND	50
PLM Examination:		•	•				
			Color/	ī	dicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref. I	ndex Biret	f Angle	Elongation
Aggregate/Binders	100	Non-fibrous					
Prep/treatment: mecl	nanical separation		Asbestos	S Content: None	Detected		
 Layer 3   Grout	. — — — — — —	Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Grey	Cementitious	s Yes	ND	ND	35
PLM Examination:							
<b>a</b>	0/	N. 1.1	Color/	1	dicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u> <b>Non-fibrous</b>	Pleochroism	Ref. Index Ref. I	ndex Biret	f Angle	Elongation
Aggregate Cement Binders	65 35	Non-fibrous					
	ar & pestle	Non-librous					
Prep/treatment: mort			Asbestos	Contonte None	Detected		

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811813</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811814

Field ID #: **1-58** Page 1 of 1

Sample Description: CMU Wall Texture (white) w/Grout (grey) - North Stairway

Layer 1 Filler/Texture		Stereoscopio	Examination				
		Color	Texture	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		White	Blocky	Yes	ND	ND	15
PLM Examination:			•				
			Color/	Parallel Perpend		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index Ref. Ir	<u>idex</u> <u>Biref</u>	<u>Angle</u>	Elongation
Aggregate/Binders/Paint	100	Non-fibrous					
Prep/treatment: solvent dis	ssolution		Asbesto	s Content: None I	Detected		
		Stereoscopic	Examination	- — — — —			_
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Grey	Blocky/Hard	d Yes	ND	ND	50
PLM Examination:		•	•				
			Color/		licular		Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index Ref. Ir	idex Biref	<u>Angle</u>	Elongation
Aggregate/Binders	100	Non-fibrous					
rep/treatment: mechanica	al separation		Asbesto	s Content: None I	Detected		
		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneous?	% Fibrous	% Asbestos %	of Sample
		Grey	Cementitious	s Yes	ND	ND	35
PLM Examination:		-					
			Color/	Parallel Perpend		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index Ref. Ir	idex Biref	<u>Angle</u>	Elongation
Aggregate	65	Non-fibrous					
	35	Non-fibrous					
Cement Binders							

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811814



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811815

Field ID #: **1-59** Page 1 of 1

Sample Description: CMU Wall Texture (white) w/Grout (grey) - South Stairway

Layer 1 Filler/Texture		Stereoscopio	Examination				
		Color	Texture	Homog	eneous? % Fibr	ous % Asbestos %	of Sample
		White	Blocky	Y	es ND	ND	15
PLM Examination:			•				
			Color/	Parallel	Perpendicular	Extinction	0
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u> <u>Angle</u>	<u>Elongation</u>
Aggregate/Binders/Paint	100	Non-fibrous					
Prep/treatment: solvent dis	solution		Asbestos	Content:	None Detected	l	
 .ayer 2  CMU Block		Stereoscopic	Examination				<del>_</del>
		Color	<u>Texture</u>	<u>Homog</u>	eneous? % Fibr	ous % Asbestos %	of Sample
		Grey	Blocky/Hard	Y	es ND	ND	50
LM Examination:							
			Color/	Parallel	Perpendicular	Extinction	
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	Biref Angle	<u>Elongation</u>
Aggregate/Binders	100	Non-fibrous					
rep/treatment: mechanical	separation		Asbestos	Content:	None Detected	İ	
 ayer 3  Grout		Stereoscopic	Examination				<del></del>
		<u>Color</u>	<u>Texture</u>	<u>Homog</u>	eneous? % Fibr	ous % Asbestos %	of Sample
		Grey	Cementitious	s Ye	es ND	ND	35
LM Examination:							
			Color/	Parallel	Perpendicular	Extinction	C
Components	<u>%</u> <u>+/-</u>	Morphology	<u>Pleochroism</u>	Ref. Index	Ref. Index	Biref Angle	<u>Elongation</u>
Aggregate Cement Binders	65 35	Non-fibrous Non-fibrous					
		Non-fibrous					
Prep/treatment: mortar & pe	etla		Ashestos	Content:	None Detected	1	

 Comments:
 Analyst: Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811815



Comments:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811816** Field ID #: 1-60 Page 1 of 1 Sample Description: Unfinished Drywall/Joint Compound - Room 1J2 Layer 1 Joint Tape Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index Biref Components Angle **Elongation** Cellulose Fibers 100 ribbons high None Detected Prep/treatment: mechanical separation Asbestos Content: Layer 2 **Joint Compound** Stereoscopic Examination Color Texture White **Blocky** Yes ND ND 25 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Ref. Index Components Pleochroism Biref Angle **Elongation** Aggregate/Binders Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 3 Paper Stereoscopic Examination Color **Texture** Tan **Fibrous** Yes 100 ND PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Ref. Index Components Morphology Pleochroism Ref. Index <u>Biref</u> <u>Angle</u> Elongation **Cellulose Fibers** ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Wallboard Material Layer 4 Stereoscopic Examination Color <u>Texture</u> White ND **Blocky** Yes 1 60 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Ref. Index Ref. Index Elongation +/-Pleochroism Biref Angle Components **Cellulose Fibers** 1 ribbons high Aggregate Non-fibrous **Gypsum Binders** 95 Non-fibrous Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation

Analyst:

Date Analyzed:

Lab Job #: **PLM-22826** 

Kathy Schosek 3/16/2020

Sample #: CL811816



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: **725010720014** Sample #: **CL811817** Field ID #: 1-61 Page 1 of 1 Sample Description: Unfinished Drywall/Joint Compound - Room 1E1 Layer 1 **Joint Tape** Stereoscopic Examination Color Texture Homogeneous? % Fibrous % Asbestos % of Sample

		Cream	Fibrous	ı	No 10	0	ND	10
PLM Examination:			Color/	Parallel	Perpendicular		Extinction	Cian of
Components	<u>%</u> +/-	Morphology	Pleochroism		Ref. Index		Angle	Sign of Elongation
Cellulose Fibers	80 17-	ribbons	<u>i icocinoisiii</u>	KCI. HIGCA	KCI. HIGCA	high	Aligic	Liongation
Glass Fibers	20	straight	none			none		
Prep/treatment: mechanica	al separation		Asbesto	os Content:	None Detecte	ed		
ayer 2 Joint Compou	 und	Stereoscopic	Examination					
-		Color	<u>Texture</u>	Homog	geneous? % Fib	orous % A	Asbestos %	of Sample
		White	Blocky	Ý	es NI	)	ND	25
LM Examination:								
			Color/	Parallel			Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongatio
Aggregate/Binders	100	Non-fibrous						
rep/treatment: mechanica	al separation		Asbesto	os Content:	None Detecte	ed		
aver 3 Paper		Stereoscopic	Examination					
ayer 3 Paper		1		Homog	geneous? % Fil	orous % A	Asbestos %	of Sample
ayer 3 Paper		<u>Color</u>	Texture		geneous? % File			of Sample 5
ayer 3 Paper  LM Examination:		1					Asbestos % (	
,		<u>Color</u>	Texture	Y		0		
LM Examination:  omponents	<u>%</u> +/-	<u>Color</u>	<u>Texture</u> <b>Fibrous</b>	Y Parallel	es 10	0	ND	5 Sign of
LM Examination:	<u>%</u> +/− <b>100</b>	<u>Color</u> <b>Tan</b>	Texture Fibrous Color/	Y Parallel	es 10 Perpendicular	0	ND Extinction	5 Sign of
LM Examination:  omponents  Cellulose Fibers	100 al separation	Color Tan  Morphology ribbons	Texture Fibrous Color/ Pleochroism  Asbeste	Parallel Ref. Index	es 10 Perpendicular	Biref high	ND Extinction	5 Sign of
LM Examination:  Components  Cellulose Fibers  rep/treatment: mechanica	100 al separation	Color Tan  Morphology ribbons	Texture Fibrous Color/ Pleochroism  Asbeste	Parallel Ref. Index	Perpendicular Ref. Index	Biref high	ND Extinction	5 Sign of
LM Examination:  Components  Cellulose Fibers  rep/treatment: mechanica	100 al separation	Color Tan  Morphology ribbons	Texture Fibrous Color/ Pleochroism  Asbeste	Parallel Ref. Index os Content:	Perpendicular Ref. Index	Biref high	ND Extinction Angle	5 Sign of Elongatio
LM Examination:  omponents  Cellulose Fibers  rep/treatment: mechanica	100 al separation	Color Tan  Morphology ribbons  Stereoscopic	Texture Fibrous  Color/ Pleochroism  Asbeste  Examination Texture	Parallel Ref. Index os Content: Homos	Perpendicular Ref. Index  None Detecte  geneous? % Fit	Biref high ed	ND Extinction Angle	5 Sign of Elongation
LM Examination:    Components	100 al separation	Color Tan  Morphology ribbons  Stereoscopic Color	Texture Fibrous  Color/ Pleochroism  Asbeste  Examination	Parallel Ref. Index os Content: Homos	Perpendicular Ref. Index  None Detecte  geneous? % Fit	Biref high ed	Extinction Angle	5 Sign of Elongation
LM Examination:    Components	100 al separation	Color Tan  Morphology ribbons  Stereoscopic Color	Texture Fibrous  Color/ Pleochroism  Asbeste  Examination Texture	Parallel Ref. Index os Content: Homos Y	Perpendicular Ref. Index  None Detecte  eneous? % Fit fes 1  Perpendicular	Biref high ed orous % A	Extinction Angle	5 Sign of Elongation  of Sample 60 Sign of
Components Cellulose Fibers Prep/treatment: mechanica	100 al separation — — — — — terial	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky	Parallel Ref. Index os Content: Homos Y	Perpendicular Ref. Index  None Detecte  geneous? % Fit les 1	Biref high ed orous % A	Extinction Angle  Asbestos % o	5 Sign of Elongation  of Sample 60 Sign of
LM Examination:  Components Cellulose Fibers  rep/treatment: mechanica  ayer 4 Wallboard Mark  LM Examination:  Components Cellulose Fibers	100 al separation — — — — — terial	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/	Parallel Ref. Index os Content: Homos Y	Perpendicular Ref. Index  None Detecte  eneous? % Fit fes 1  Perpendicular	Biref high ed orous % A	Extinction Angle  Asbestos % of ND  Extinction	5 Sign of Elongation  of Sample 60 Sign of
LM Examination:  Components Cellulose Fibers rep/treatment: mechanica	100 al separation — — — — — — terial	Morphology ribbons  Stereoscopic Color White  Morphology ribbons Non-fibrous	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/	Parallel Ref. Index os Content: Homos Y	Perpendicular Ref. Index  None Detecte  eneous? % Fit fes 1  Perpendicular	Biref high ed orous % A	Extinction Angle  Asbestos % of ND  Extinction	5 Sign of Elongation  of Sample 60 Sign of
Components Cellulose Fibers Prep/treatment: mechanica Prep/treatment:	100 al separation — — — — — terial	Color Tan  Morphology ribbons  Stereoscopic Color White  Morphology ribbons	Texture Fibrous  Color/ Pleochroism  Asbeste Examination Texture Blocky  Color/	Parallel Ref. Index os Content: Homos Y	Perpendicular Ref. Index  None Detecte  eneous? % Fit fes 1  Perpendicular	Biref high ed orous % A	Extinction Angle  Asbestos % of ND  Extinction	5 Sign of Elongatio

Comments:		athy Schosek 16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811817</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

3/16/2020

Sample #: **CL811818** 

Date Analyzed:

Lab Job #: **PLM-22826** 

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811818** Field ID #: 1-62 Page 1 of 1 Sample Description: Unfinished Drywall/Joint Compound - Room 1J2 Layer 1 Joint Tape Stereoscopic Examination Color Texture **Fibrous** Cream No 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Components Angle **Elongation Cellulose Fibers** ribbons high **Glass Fibers** straight none none Prep/treatment: mechanical separation Asbestos Content: None Detected Layer 2 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Elongation Angle Non-fibrous Aggregate/Binders 100 None Detected <u>Prep/treatment:</u> mechanical separation Asbestos Content: Layer 3 Paper Stereoscopic Examination Color Texture Tan **Fibrous** ND Yes 100 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index Biref Elongation **Components** Angle % **Cellulose Fibers** 100 ribbons high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 **Wallboard Material** Stereoscopic Examination Color Texture White **Blocky** Yes ND 60 1 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle Elongation Components **Cellulose Fibers** ribbons high Aggregate Non-fibrous **Gypsum Binders** Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected Comments: Kathy Schosek Analyst:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
Project #: 725010720014
Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Hallway by Main Elevators

Layer 1 Paint Texture

Stereoscopic Examination
Color Texture Homogeneous? % Fibrous % Asbestos % of Sample

		Stereoscopic	Examination				
		Color	Texture	Homoge	eneous? % Fibrou	us % Asbestos % o	of Sample
		White	Blocky	Ye	es ND	ND	10
LM Examination:			Color/	Parallel	Perpendicular	F	Sign of
Components	% +/-	Morphology	Pleochroism			Extinction <u>Angle</u>	Elongation
Perlite	10	Glass Foam	recemoism	Ker. Hidex	Ker. Hidex D	0	Liongation
Aggregate/Binders/Paint	90	Non-fibrous				•	
rep/treatment: solvent disse			Asbesto	os Content:	None Detected		
		Stereoscopic	Examination	- — — –			_
•		Color	<u>Texture</u>	Homoge	eneous? % Fibro	us % Asbestos % o	of Sample
		White	Blocky	Ye	es ND	ND	25
LM Examination:							
	0/ ./	M 1 1	Color/		Perpendicular	Extinction	Sign of
omponents Aggregate/Pindore	<u>%</u> +/-	Morphology Non-fibrous	Pleochroism	Ref. Index	Ref. Index B	<u>Angle</u>	Elongation
Aggregate/Binders		Non-norous					
rep/treatment: mechanical s	separation		Asbesto	os Content:	None Detected		
ayer 3		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homoge	eneous? % Fibrou	us % Asbestos % o	of Sample
		Tan	Fibrous	Ye	es 100	ND	5
LM Examination:							
ommononto	0/ . /	Mambalaari	Color/ Pleochroism		I	Extinction Biref Angle	Sign of Elongation
	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pieociiroisiii	Ref. Ilidex			Elongation
*	100	ribbone			L	hiah	
Cellulose Fibers	100	ribbons		_		high	
Cellulose Fibers		ribbons	Asbesto	os Content:	None Detected	high	_
Cellulose Fibers rep/treatment: mechanical s	separation		Asbesto 	os Content:		high _ — — — — —	_
Cellulose Fibers  rep/treatment: mechanical s	separation				None Detected	high — — — — — — us <u>% Asbestos</u> <u>% c</u>	— of Sample
Cellulose Fibers  rep/treatment: mechanical s  august 4 Wallboard Mate	separation	— — — — — Stereoscopic	Examination		None Detected		— of Sample <b>60</b>
Cellulose Fibers  rep/treatment: mechanical s  august 4 Wallboard Mate	separation	Stereoscopic <u>Color</u>	Examination Texture Blocky	Homoga Ye	None Detected	us % Asbestos % c	60
Cellulose Fibers  rep/treatment: mechanical s	separation — — — — — erial	Stereoscopic Color White	Examination Texture Blocky Color/	Homoge Ye	None Detected  eneous?	us % Asbestos % c  ND  Extinction	60 Sign of
Cellulose Fibers  rep/treatment: mechanical s  ayer 4 Wallboard Mate  LM Examination:  components	separation	Stereoscopic Color White Morphology	Examination Texture Blocky Color/ Pleochroism	Homoge Ye	None Detected  eneous? % Fibror  s 1  Perpendicular  Ref. Index B	us % Asbestos % c  ND  Extinction  Angle	60 Sign of
rep/treatment: mechanical s	Separation	Stereoscopic Color White  Morphology straight	Examination Texture Blocky Color/	Homoge Ye	None Detected  eneous? % Fibror  s 1  Perpendicular  Ref. Index B	us % Asbestos % c  ND  Extinction	60 Sign of
Cellulose Fibers  rep/treatment: mechanical s  ayer 4 Wallboard Mate  LM Examination:  components	separation	Stereoscopic Color White Morphology	Examination Texture Blocky Color/ Pleochroism	Homoge Ye	None Detected  eneous? % Fibror  s 1  Perpendicular  Ref. Index B	us % Asbestos % c  ND  Extinction  Angle	60

Comments:	Analyst: Kathy Schosek Date Analyzed: 3/16/2020
	Lab Job #: <b>PLM-22826</b> Sample #: <b>CL811819</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811820** Field ID #: 1-64 Page 1 of 1 Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 124 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of % Ref. Index Ref. Index Biref **Elongation** Components +/-Morphology Pleochroism Angle Perlite 10 **Glass Foam** Aggregate/Binders/Paint 90 Non-fibrous <u>Prep/treatment:</u> solvent dissolution Asbestos Content: None Detected Layer 2 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Elongation Angle Non-fibrous Aggregate/Binders 100 None Detected <u>Prep/treatment:</u> mechanical separation Asbestos Content: Layer 3 Paper Stereoscopic Examination Color Texture Tan **Fibrous** ND Yes 100 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index **Biref** Elongation **Components** Angle % **Cellulose Fibers** 100 ribbons high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 **Wallboard Material** Stereoscopic Examination Color Texture White **Blocky** Yes ND 60 1 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle Elongation **Glass Fibers** straight none none Aggregate Non-fibrous **Gypsum Binders** Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected Comments: Kathy Schosek Analyst: 3/16/2020

Date Analyzed: 3

Lab Job #: PLM-22826

Sample #: CL811820



Comments:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Kathy Schosek

Sample #: **CL811821** 

3/16/2020

Analyst:

Date Analyzed: 3

Lab Job #: PLM-22826

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811821** Field ID #: 1-65 Page 1 of 1 Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 123 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of % Ref. Index Ref. Index Biref **Elongation** Components +/-Morphology Pleochroism Angle Perlite 10 **Glass Foam** Aggregate/Binders/Paint 90 Non-fibrous <u>Prep/treatment:</u> solvent dissolution Asbestos Content: None Detected Layer 2 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Elongation Angle Non-fibrous Aggregate/Binders 100 None Detected <u>Prep/treatment:</u> mechanical separation Asbestos Content: Layer 3 Paper Stereoscopic Examination Color Texture Tan **Fibrous** ND Yes 100 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index **Biref** Elongation **Components** Angle % **Cellulose Fibers** 100 ribbons high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 **Wallboard Material** Stereoscopic Examination Color Texture White **Blocky** Yes ND 60 1 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Components Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle Elongation **Glass Fibers** straight none none Aggregate Non-fibrous **Gypsum Binders** Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: PLM-22826 Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811822** Field ID #: 1-66 Page 1 of 1 Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 115 **Paint Texture** Layer 1 Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of % Ref. Index Ref. Index **Biref Elongation** Components +/-Morphology Pleochroism Angle Perlite 10 **Glass Foam** Aggregate/Binders/Paint 90 Non-fibrous <u>Prep/treatment:</u> solvent dissolution Asbestos Content: None Detected Layer 2 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Components Ref. Index Ref. Index Biref Elongation Angle Non-fibrous Aggregate/Binders 100 None Detected <u>Prep/treatment:</u> mechanical separation Asbestos Content: Layer 3 Paper Stereoscopic Examination Color Texture Tan **Fibrous** ND Yes 100 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index **Biref** Elongation **Components** Angle % **Cellulose Fibers** 100 ribbons high Asbestos Content: None Detected <u>Prep/treatment:</u> mechanical separation Layer 4 **Wallboard Material** Stereoscopic Examination Color Texture **Brown Blocky** Yes ND 60 1 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index **Biref** Angle Elongation Components **Cellulose Fibers** ribbons high Aggregate Non-fibrous **Gypsum Binders** Non-fibrous Prep/treatment: mechanical separation Asbestos Content: None Detected Comments: Kathy Schosek Analyst: 3/16/2020

Date Analyzed: 3

Lab Job #: PLM-22826

Sample #: **CL811822** 



**Apex TITAN** 

Client:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811823** Field ID #: 1-67 Page 1 of 1 Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 114 **Paint Texture** Laver 1 Stereoscopic Examination Color Texture Lt. Grey **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index **Elongation** Components Morphology Pleochroism Biref Angle Aggregate/Binders/Paint 100 Non-fibrous <u>Prep/treatment:</u> solvent dissolution Asbestos Content: None Detected **Joint Tape** Layer 2 Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Biref Components Morphology Pleochroism Ref. Index Ref. Index Angle **Elongation Cellulose Fibers** ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 3 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND 10 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation Non-fibrous Aggregate/Binders <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 4 Paper Stereoscopic Examination Color <u>Texture</u> ND Tan **Fibrous** Yes 100 10 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Elongation Ref. Index Ref. Index Biref Components Angle Cellulose Fibers 100 ribbons high <u>Prep/treatment:</u> mechanical separation None Detected Asbestos Content: **Wallboard Material** Layer 5 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White ND **Blocky** Yes 1 PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Morphology Ref. Index Ref. Index Components +/-Pleochroism Biref Angle **Elongation** Cellulose Fibers ribbons high Aggregate Non-fibrous **Gypsum Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Kathy Schosek Comments: Analyst: 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: **CL811823** 



**Apex TITAN** 

Client:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811824** Field ID #: 1-68 Page 1 of 1 Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Restroom 1T4 **Paint Texture** Laver 1 Stereoscopic Examination Color Texture Lt. Grey **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index **Elongation** Components Morphology Pleochroism Biref Angle Aggregate/Binders/Paint 100 Non-fibrous <u>Prep/treatment:</u> solvent dissolution Asbestos Content: None Detected **Joint Tape** Layer 2 Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Biref Components Morphology Pleochroism Ref. Index Ref. Index Angle **Elongation Cellulose Fibers** ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 3 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND 10 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation Non-fibrous Aggregate/Binders <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 4 Paper Stereoscopic Examination Color <u>Texture</u> ND Tan **Fibrous** Yes 100 10 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Elongation Ref. Index Ref. Index Biref Components Angle Cellulose Fibers 100 ribbons high <u>Prep/treatment:</u> mechanical separation None Detected Asbestos Content: **Wallboard Material** Layer 5 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White ND **Blocky** Yes 1 PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Morphology Ref. Index Ref. Index Components +/-Pleochroism Biref Angle **Elongation** Cellulose Fibers ribbons high Aggregate Non-fibrous **Gypsum Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Kathy Schosek Comments: Analyst: 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: CL811824



**Apex TITAN** 

Client:

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811825** Field ID #: 1-69 Page 1 of 1 Sample Description: Ceiling/Wall Texture (white, blue, tan, sandy) Drywall/Joint Compound - Room 126 **Paint Texture** Laver 1 Stereoscopic Examination Color Texture Lt. Grey **Blocky** Yes ND ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Ref. Index Ref. Index **Elongation** Components Morphology Pleochroism Biref Angle Aggregate/Binders/Paint 100 Non-fibrous <u>Prep/treatment:</u> solvent dissolution Asbestos Content: None Detected **Joint Tape** Layer 2 Stereoscopic Examination Color Texture **Fibrous** Cream Yes 100 ND PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Biref Components Morphology Pleochroism Ref. Index Ref. Index Angle **Elongation Cellulose Fibers** ribbons high <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 3 Joint Compound Stereoscopic Examination Color <u>Texture</u> White **Blocky** Yes ND ND 10 PLM Examination: Sign of Color/ Parallel Perpendicular Extinction Components Morphology Pleochroism Ref. Index Ref. Index <u>Biref</u> Angle Elongation Non-fibrous Aggregate/Binders <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Layer 4 Paper Stereoscopic Examination Color <u>Texture</u> ND Tan **Fibrous** Yes 100 10 PLM Examination: Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Elongation Ref. Index Ref. Index Biref Components Angle Cellulose Fibers 100 ribbons high <u>Prep/treatment:</u> mechanical separation **None Detected** Asbestos Content: **Wallboard Material** Layer 5 Stereoscopic Examination Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample White ND **Blocky** Yes 1 PLM Examination: Color/ Parallel Perpendicular Sign of Extinction Morphology Ref. Index Ref. Index Components +/-Pleochroism Biref Angle **Elongation** Cellulose Fibers ribbons high Aggregate Non-fibrous **Gypsum Binders** Non-fibrous <u>Prep/treatment:</u> mechanical separation Asbestos Content: None Detected Kathy Schosek Comments: Analyst: 3/16/2020 Date Analyzed: Lab Job #: **PLM-22826** Sample #: **CL811825** 



Field ID #: **1-70** 

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811826

Page 1 of 1

Sample Description: 12" X 24" Ceramic Wall Tile (white) w/Grout (white) & Thinset (white) - Restroom 1T4

Layer 1 Cer	ramic Tile		Stereoscopic	Examination					
•			Color	Texture	Homog	eneous? % Fi	brous %	Asbestos % o	of Sample
			White	Hard	Y	es N		ND	75
PLM Examination	n:				-		_		
				Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Sintered Clay	ys	100	Non-fibrous						
Prep/treatment:	mechanical se	paration		Asbestos	Content:	None Detect	ed		
 .ayer 2	- — — — — — out		Stereoscopic	Examination					
			<u>Color</u>	<u>Texture</u>	<u>Homog</u>	eneous? % Fi	brous %	Asbestos % o	of Sample
			White	Cementitious	s Ye	es N	D	ND	10
LM Examination	n:								
				Color/	Parallel	Perpendicular		Extinction	Sign of
Components		<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongatio</u>
Aggregate	-	65	Non-fibrous						
Cement Bind	iers	35	Non-fibrous						
rep/treatment:	mechanical sep	paration		Asbestos	Content:	None Detect	ed		
 .ayer 3	 nset		Stereoscopic	Examination					
			Color	Texture	Homog	eneous? % Fi	brous %	Asbestos % o	of Sample
			Off White	Cementitious	s Ye	es N	D	ND	15
LM Examination	n:								
				Color/	Parallel	Perpendicular		Extinction	Sign of
<u>Components</u>		<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongatio
Aggregate	_	65	Non-fibrous						
	lers	35	Non-fibrous						
Cement Bind									

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811826</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811827

Field ID #: **1-71** Page 1 of 1

Sample Description: 12" X 24" Ceramic Wall Tile (white) w/Grout (white) & Thinset (white) - Restroom 1T3

Layer 1 Ceramic Tile		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneou	us? % Fibrous	% Asbestos %	of Sample
		White	Hard	Yes	ND	ND	75
PLM Examination:							
			Color/		endicular	Extinction	Sign of
Components	<u>%</u> +/-	Morphology	<u>Pleochroism</u>	Ref. Index Ref	f. Index Biref	<u>Angle</u>	Elongation
Sintered Clays	100	Non-fibrous					
Prep/treatment: mechanic	al separation		Asbestos	s Content: Non	e Detected		
		Stereoscopic	Examination				
		<u>Color</u>	<u>Texture</u>	<u>Homogeneou</u>	us? % Fibrous	% Asbestos %	of Sample
		White	Cementitious	s Yes	ND	ND	10
PLM Examination:							
_			Color/		endicular	Extinction	Sign of
Components	<u>%</u> +/-	Morphology	Pleochroism	Ref. Index Ref	f. Index Biref	<u>Angle</u>	Elongatio
Aggregate	65 35	Non-fibrous					
Cement Binders	33	Non-fibrous					
Prep/treatment: mechanic	al separation		Asbestos	s Content: Non	e Detected		
ayer 3 Thinset		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneou	us? % Fibrous	% Asbestos %	of Sample
		Off White	Cementitious	s Yes	ND	ND	15
PLM Examination:							
	0/ /	Nr. 1 1	Color/		endicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref	f. Index Biref	<u>Angle</u>	Elongatio
Aggregate Cement Binders	65 35	Non-fibrous Non-fibrous					
		NOII-IIDIOUS					
	al separation		Asbestos	~ · · · · · · · · · · · · · · · · · · ·	e Detected		

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811827



Field ID #: **1-72** 

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

 Client:
 Apex TITAN
 Lab Proj #:
 PLM-22826

 Project:
 Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX
 Set #:
 33628

 Project #:
 725010720014
 Sample #:
 CL811828

Page 1 of 1

Sample Description: 12" X 24" Ceramic Wall Tile (white) w/Grout (white) & Thinset (white) - Restroom 1T3

Layer 1 Ceramic Tile		Stereoscopic	Examination				
		Color	<u>Texture</u>	Homogeneou	ıs? % Fibrous	% Asbestos %	of Sample
		White	Hard	Yes	ND	ND	75
PLM Examination:							
~			Color/		endicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref.	f. Index Biref	<u>Angle</u>	Elongation
Sintered Clays	100	Non-fibrous					
Prep/treatment: mechanic	al separation			Content: Non	e Detected		
			Examination				
		<u>Color</u>	<u>Texture</u>	Homogeneou	ıs? % Fibrous	% Asbestos %	of Sample
		White	Cementitious	s Yes	ND	ND	10
LM Examination:							
			Color/		endicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref.	f. Index Biref	<u>Angle</u>	<u>Elongatio</u>
Aggregate	65 05	Non-fibrous					
Cement Binders	35	Non-fibrous					
rep/treatment: mechanic	al separation		Asbestos	Content: Non	e Detected		
ayer 3 Thinset		Stereoscopic	Examination				_
		Color	<u>Texture</u>	Homogeneou	us? % Fibrous	% Asbestos %	of Sample
		Off White	Cementitious	s Yes	ND	ND	15
LM Examination:							
			Color/		endicular	Bittimetron	Sign of
	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index Ref.	f. Index Biref	<u>Angle</u>	<u>Elongatio</u>
*		Non-fibrous					
Aggregate	65 35	Nan fibraria					
Cement Binders	35 al separation	Non-fibrous		Content: Non	e Detected		

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811828</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811829** 

Field ID #: **1-73** 

Page 1 of 1

Sign of

Elongation

Extinction

<u>Angle</u>

<u>Biref</u>

Sample Description: Sink Undercoating (black) - Space 1L2

Layer 1 Sink Undercoating Stereoscopic Examination

Color Texture Homogeneous? % Fibrous % Asbestos % of Sample

Rlack Asphaltic Yes ND ND 100

Perpendicular

Ref. Index

Parallel

Ref. Index

Black Asphaltic Yes ND ND 100 PLM Examination:

Color/

Pleochroism

 Components
 %
 +/ Morphology

 Aggregate/Tar Binders
 100
 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

\_\_\_\_\_

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811829



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

| Client: Apex TITAN |
| Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Lab Proj #: **PLM-22826** Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811830** 

Field ID #: **1-74** 

Page 1 of 1

Sample Description: Sink Undercoating (black) - Space 1L2

Layer 1 Sink Undercoating Stereoscopic Examination

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Aggregate/Tar Binders 100 Non-fibrous

<u>Prep/treatment:</u> heat / melt <u>Asbestos Content:</u> None Detected

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811830



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project:

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: 33628

Project #: **725010720014** Field ID #: 1-75

Sample #: **CL811831** 

Page 1 of 1

Lab Proj #: **PLM-22826** 

Sample Description: Sink Undercoating (black) - Space 1L2

**Sink Undercoating** Stereoscopic Examination

> Color <u>Texture</u> <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Black 100 **Asphaltic** Yes ND ND

PLM Examination:

Layer 1

Color/ Sign of Parallel Perpendicular Extinction Components Morphology Ref. Index Ref. Index Pleochroism <u>Biref</u> Elongation <u>Angle</u>

Aggregate/Tar Binders 100 Non-fibrous

**None Detected** heat / melt Asbestos Content: Prep/treatment:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: 33628

Project #: **725010720014** 

Sample #: **CL811832** 

Lab Proj #: **PLM-22826** 

Field ID #: **1-76** 

Project:

Page 1 of 1

Sample Description: Interior Building Expansion Joint Caulking (tan) - Space 1S3

Layer 1 Expansion Jt. Caulking Stereoscopic Examination

 Color
 Texture
 Homogeneous?
 % Fibrous
 % Asbestos
 % of Sample

 Tan
 Rubbery
 Yes
 ND
 ND
 100

PLM Examination:

Components Color/ Parallel Perpendicular Extinction Sign of Morphology Pleochroism Ref. Index Ref. Index Biref Angle Elongation

Binders / Fillers 100 Non-fibrous

Prep/treatment: heat / melt Asbestos Content: None Detected

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811832



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project:

Set #:

33628

Project #: **725010720014** 

Sample #: **CL811833** 

Field ID #: 1-77

Layer 1

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Page 1 of 1

Sample Description: Interior Building Expansion Joint Caulking (tan) - Space 1S3

**Expansion Jt. Caulking** 

heat / melt

Stereoscopic Examination

Color Tan

Texture Rubbery <u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yes

ND

ND

PLM Examination:

Prep/treatment:

Color/ Pleochroism

Parallel Perpendicular Ref. Index Ref. Index

<u>Biref</u>

Sign of Extinction

Morphology Components **Binders / Fillers** 100 Non-fibrous

Asbestos Content:

**None Detected** 

<u>Angle</u>

Elongation



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811834** 

Lab Proj #: **PLM-22826** 

Field ID #: 1-78

Prep/treatment:

Project:

Page 1 of 1

Sample Description: Interior Building Expansion Joint Caulking (tan) - Space 1S3

Layer 1 Expansion Jt. Caulking Stereoscopic Examination

ColorTextureTanRubbery

Pleochroism

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample

<u>Angle</u>

Tan PLM Examination:

Color/ Parallel Perpendicular

ND Extinction

ND

<u>Biref</u>

n Sign of Elongation

Components%+/-MorphologyBinders / Fillers100Non-fibrous

heat / melt

Asbestos Content: None Detected

Ref. Index

Yes

Ref. Index

\_\_\_\_\_\_\_

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811834



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #:

33628 Sample #: **CL811835** 

Project #: **725010720014** Field ID #: 1-79

Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Hallway by Room 110

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	Texture	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Υ	'es	60	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicul	lar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Cellulose Fibers	55	ribbons				high		
Mineral Wool Fibers	5	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanica	I separation		Asbesto	os Content:	None Dete	ected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project #: **725010720014** 

Project:

Set #:

33628 Sample #: **CL811836** 

Field ID #: 1-80

Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Hallway by Room 114

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Layer 1 Ceiling Tile		Stereoscopic E	xamination				
		Color	<u>Texture</u>	Homoge	eneous? % Fibrous	s <u>% Asbestos</u> <u>%</u>	of Sample
		Beige w/wht pt	Fibrous	Ye	es 60	ND	100
PLM Examination:							
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index Bir	ref Angle	<b>Elongation</b>
Cellulose Fibers	55	ribbons			hi	igh	
Mineral Wool Fibers	5	Rods				0	
Perlite	30	Glass Foam				0	
Binders / Paint	10	Non-fibrous					
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #:

33628 Sample #: **CL811837** 

Project #: **725010720014** 

Field ID #: 1-81

Page 1 of 1

Sample Description: 2' X 4' Acoustical Ceiling Tile (white, pinhole & fissured) - Hallway by North Elevator

Layer 1 Ceiling Tile		Stereoscopic E	xamination					
		Color	Texture	Homog	geneous? %	Fibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es	60	ND	100
PLM Examination:								
			Color/	Parallel	Perpendicul	lar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<b>Elongation</b>
Cellulose Fibers	55	ribbons				high		
Mineral Wool Fibers	5	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: mechanica	l separation		Asbesto	os Content:	None Dete	ected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN

Lab Proj #: **PLM-22826** 

Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX

Set #: **33628** 

Project #: **725010720014** 

Sample #: **CL811838** 

Field ID #: **1-82** 

Project:

J10720014

Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, rough finish) - Restroom 1T3

Layer 1 Ceiling Tile		Stereoscopic E	xamination				
		Color	<u>Texture</u>	Homoge	eneous? % Fibrous	% Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Υe	es 60	ND	100
PLM Examination:							
			Color/	Parallel	Perpendicular	Extinction	Sign of
Components	<u>%</u> +/-	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Index Bire	<u>Angle</u>	<b>Elongation</b>
Cellulose Fibers	30	ribbons			hig	jh	
Mineral Wool Fibers	30	Rods			0		
Perlite	30	Glass Foam			0		
Binders / Paint	10	Non-fibrous					
Prep/treatment: mechanical	separation		Asbesto	os Content:	None Detected		

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811838



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #:

33628

Project #: **725010720014** 

Sample #: **CL811839** 

Field ID #: 1-83

Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, rough finish) - Hallway by Room 123

Layer 1 Ceiling Tile		Stereoscopic E	examination				
		Color	<u>Texture</u>	Homoger	neous? % Fibrous %	6 Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Yes	s 60	ND	100
PLM Examination:							
			Color/	Parallel P	Perpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index Biref	<u>Angle</u>	Elongation
Cellulose Fibers	30	ribbons			high		
Mineral Wool Fibers	30	Rods			0		
Perlite	30	Glass Foam			0		
Binders / Paint	10	Non-fibrous					
Prep/treatment: mechanical	separation		Asbesto	os Content: N	lone Detected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** 

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #:

33628 Sample #: **CL811840** 

Project #: **725010720014** Field ID #: 1-84

Page 1 of 1

Sample Description: 2' X 2' Acoustical Ceiling Tile (white, rough finish) - Room 126A

Layer 1 Ceilin	g Tile	Stereoscopic E	xamination					
		Color	Texture	Homog	eneous?	% Fibrous %	Asbestos %	of Sample
		Beige w/wht pt	Fibrous	Y	es	60	ND	100
PLM Examination:								
			Color/	Parallel	Perpendic	ular	Extinction	Sign of
Components	<u>%</u> +/-	<ul> <li>Morphology</li> </ul>	Pleochroism	Ref. Index	Ref. Inde	ex Biref	<u>Angle</u>	Elongation
Cellulose Fiber	s 30	ribbons				high		
Mineral Wool Fi	ibers 30	Rods				Ō		
Perlite	30	Glass Foam				0		
Binders / Paint	10	Non-fibrous						
Prep/treatment: n	nechanical separation		Asbesto	os Content:	None De	tected		



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628
Project #: 725010720014 Sample #: CL811841

Page 1 of 1

Sample Description: Duct Mastic (white) - Room 124

Field ID #: 1-85

Layer 1 White Mastic		Stereoscopic E	Examination					
		Color	Texture	Homog	geneous? % Fi	ibrous %	Asbestos %	of Sample
		White	Rubbery	Υ	es 2	0	ND	65
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	Elongation
Glass Fibers	20	straight	none			none		
Wollastonite	5	Laths						+/-
Aggregate/Binders	75	Non-fibrous						
Prep/treatment: heat / melt			Asbesto	s Content:	None Detect	ed		
Layer 2 Wrap		C+						
Layer 2 Wrap		Stereoscopic F	examination					
Layer 2 Wrap		<u>Color</u>	Examination Texture	Homog	geneous? % Fi	ibrous %	Asbestos %	of Sample
Layer 2 Wrap						ibrous <u>%</u>	Asbestos %	of Sample 35
		<u>Color</u>	<u>Texture</u> <b>Fibrous</b>	N				
PLM Examination:		<u>Color</u> Brown / Silver	Texture Fibrous Color/	Parallel	No 7 Perpendicular	5	ND Extinction	35 Sign of
PLM Examination:  Components	<u>%</u> +/-	Color Brown / Silver  Morphology	<u>Texture</u> <b>Fibrous</b>	N	No 7		ND	35
PLM Examination: <u>Components</u> <b>Cellulose Fibers</b>	70	Color Brown / Silver  Morphology ribbons	Texture Fibrous  Color/ Pleochroism	Parallel	No 7 Perpendicular	5	ND Extinction	35 Sign of
PLM Examination: <u>Components</u> Cellulose Fibers Glass Fibers	70 5	Color Brown / Silver  Morphology	Texture Fibrous Color/ Pleochroism none	Parallel	No 7 Perpendicular	Biref	ND Extinction	35 Sign of
PLM Examination: <u>Components</u> Cellulose Fibers Glass Fibers Metal Foil	70 5 15	Color Brown / Silver  Morphology ribbons straight	Texture Fibrous  Color/ Pleochroism	Parallel	No 7 Perpendicular	Biref high	ND Extinction	35 Sign of
PLM Examination: <u>Components</u> Cellulose Fibers Glass Fibers	70 5	Color Brown / Silver  Morphology ribbons	Texture Fibrous Color/ Pleochroism none	Parallel	No 7 Perpendicular	Biref high	ND Extinction	35 Sign of
PLM Examination: <u>Components</u> Cellulose Fibers Glass Fibers Metal Foil	70 5 15 10	Color Brown / Silver  Morphology ribbons straight	Texture Fibrous  Color/ Pleochroism  none Opaque	Parallel	No 7 Perpendicular	Biref high none	ND Extinction	35 Sign of

 Comments:
 Analyst: Date Analyzed: 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811841



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628
Project #: 725010720014 Sample #: CL811842

Page 1 of 1

Sample Description: Duct Mastic (white) - Room 1J2

Field ID #: 1-86

Layer 1 White Ma	stic	Stereoscopic E	Examination					
-		Color	Texture	Homog	geneous? 9	6 Fibrous	% Asbestos %	of Sample
		White	Rubbery	Υ	es	20	ND	65
PLM Examination:			•					
			Color/	Parallel	Perpendicu	ılar	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index	Ref. Inde	x Biret	f Angle	Elongation
Glass Fibers	20	straight	none			non	e	
Wollastonite	5	Laths						+/-
Aggregate/Binders	75	Non-fibrous						
Prep/treatment: heat	/ melt		Asbesto	os Content:	None Det	ected		
		Stereoscopic E						_
		Steleoscopic I	zxammauon					
_u, u,		•		Homos	geneous? 9	6 Fibrous	% Asbestos %	of Sample
		<u>Color</u>	<u>Texture</u>				% Asbestos %	
PLM Examination:		•			geneous? 9	6 Fibrous 75	% Asbestos %	of Sample 35
		<u>Color</u>	<u>Texture</u>			75		
	<u>%</u> <u>+/-</u>	<u>Color</u>	<u>Texture</u> <b>Fibrous</b>		No	<b>75</b>	ND Extinction	35
PLM Examination:	<u>%</u> +/− <b>70</b>	<u>Color</u> Brown / Silver	Texture Fibrous Color/	Parallel	No Perpendicu	<b>75</b>	ND  Extinction  Angle	35 Sign of
PLM Examination:  Components		Color Brown / Silver  Morphology	Texture Fibrous Color/	Parallel	No Perpendicu	<b>75</b> ılar <u>x Bire</u> i	ND  Extinction  Angle  h	35 Sign of
PLM Examination:  Components Cellulose Fibers	70	Color Brown / Silver  Morphology ribbons	Texture Fibrous  Color/ Pleochroism	Parallel	No Perpendicu	75 nlar <u>x Bire</u> hig	ND  Extinction  Angle  h	35 Sign of
PLM Examination:  Components  Cellulose Fibers Glass Fibers	70 5	Color Brown / Silver  Morphology ribbons	Texture Fibrous Color/ Pleochroism none	Parallel	No Perpendicu	75 nlar <u>x Bire</u> hig	ND  Extinction  Angle  h	35 Sign of

 Comments:
 Analyst: Date Analyzed:
 Kathy Schosek 3/16/2020

 Lab Job #: PLM-22826
 Sample #: CL811842



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: **Apex TITAN** Lab Proj #: **PLM-22826** Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628 Project #: 725010720014 Sample #: **CL811843** 

oject #: <b>7250</b>	)10720014								Sample #:	CL81184
eld ID#: <b>1-87</b>										Page 1 o
mple Description	: Duct Mastic	(white)	- Hallwa	ay by Room 114						
ayer 1 Whi	te Mastic			Stereoscopic E	xamination					
				Color	Texture	_	geneous? % Fi			_
LM Examination				White	Rubbery	Y	es 2	0	ND	25
Livi Examination	•				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index		<u>Angle</u>	Elongation
Glass Fibers Wollastonite		20 5		straight Laths	none			none		+/-
Aggregate/Bi	nders	<b>75</b>		Non-fibrous						<del>-</del> 7/-
ep/treatment:	heat / melt				· <u> </u>	s Content:	None Detect	ed		
yer 2 Wra				Stereoscopic E		. — — —				
				Color	<u>Texture</u>	_	geneous? % Fi			-
M Examination				Brown / Silver	Fibrous	ľ	No 7	5	ND	20
avi Examination	<u> </u>				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents		<u>%</u>	<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	· · · · · · · · · · · · · · · · · · ·	<u>Angle</u>	Elongation
Cellulose Fibers	ers	70 5		ribbons straight	none			high none		
Metal Foil		15		Straight	Opaque			Hone		
Binders		10		Non-fibrous						
ep/treatment:	mechanical s	eparati	i <b>on</b>		Asbesto	s Content:	None Detect	ed		
yer 3 Insu	ulation			Stereoscopic E	xamination	. — — —				
				<u>Color</u>	<u>Texture</u>		geneous? % Fi			-
M Examination				Yellow-Tan	Fibrous	Y	es 9	5	ND	55
ZVI Examination	•				Color/	Parallel	Perpendicular		Extinction	Sign of
omponents			<u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	<u>Angle</u>	Elongation
Mineral Wool Resin Binders		95 5		Rods Non-fibrous				0		
itesiii biilaei.		-	ion	Non-indious	Ashasta	s Contont:	None Detect	od		
ep/treatment:								tu		

Comments:		Kathy Schosek 3/16/2020
	Lab Job #: <b>PLM-22826</b>	Sample #: <b>CL811843</b>



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Lab Proj #: **PLM-22826** Set #: 33628

Project #: **725010720014** 

Sample #: **CL811844** 

Field ID #: 1-88

Page 1 of 1

Sample Description: Duct Mastic (grey) - Hallway by Room 140

**Grey Mastic** Stereoscopic Examination

> Color Texture Rubbery Grey Yes

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample 100 ND

PLM Examination:

Prep/treatment:

Layer 1

Color/ Pleochroism

Parallel Perpendicular Ref. Index Ref. Index

ND

<u>Biref</u>

Sign of Extinction

Elongation <u>Angle</u>

Components Morphology **Binders / Fillers** 100 Non-fibrous

heat / melt

**None Detected** Asbestos Content:



**Grey Mastic** 

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client:

Lab Proj #: **PLM-22826** Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Project #: **725010720014** 

Sample #: **CL811845** 

Page 1 of 1

Field ID #: 1-89

Layer 1

Sample Description: Duct Mastic (grey) - Hallway by Room 114C

Stereoscopic Examination

Color Texture

Parallel

Rubbery

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yes

ND

ND

100

Sign of

PLM Examination:

Components

Prep/treatment:

100

Color/ Morphology Pleochroism

Ref. Index Ref. Index

<u>Biref</u>

Extinction <u>Angle</u>

Elongation

**Binders / Fillers** 

heat / melt

Non-fibrous

Grey

Asbestos Content:

**None Detected** 

Perpendicular

Comments: Analyst: Kathy Schosek 3/16/2020 Date Analyzed:

Lab Job #: PLM-22826

Sample #: **CL811845** 



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Lab Proj #: **PLM-22826** Set #: 33628

Project #: **725010720014** 

Sample #: **CL811846** 

Field ID #: 1-90

Sample Description: Duct Mastic (grey) - Room 1J2

heat / melt

Page 1 of 1

Layer 1 **Grey Mastic** Stereoscopic Examination

> Color Grey

Rubbery

Texture

Color/

<u>Homogeneous?</u> % Fibrous % Asbestos % of Sample Yes

ND

PLM Examination:

Components

Prep/treatment:

100

Morphology Pleochroism

Parallel Perpendicular Ref. Index Ref. Index

Extinction <u>Biref</u> <u>Angle</u>

ND

Sign of Elongation

**Binders / Fillers** 

Non-fibrous

**None Detected** Asbestos Content:



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

**Apex TITAN** Lab Proj #: **PLM-22826** Client: Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project #: **725010720014** Sample #: **CL811847** Field ID #: 1-91

Page 1 of 1

Sample Description: Thermal System Insulation (white) - Room 1J2

YAY.							
Layer 1 Wrap		Stereoscopic E	xamination				
		Color	Texture	Homogene	eous? % Fibrous	% Asbestos %	of Sample
		White / Silver	Fibrous	No	75	ND	20
PLM Examination:							
			Color/		erpendicular	Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index F	Ref. Index Bire	<u>Angle</u>	<u>Elongation</u>
Cellulose Fibers	70	ribbons			hig	jh	
Glass Fibers	5	straight	none		noi	ne	
Metal Foil	15	Nam Characa	Opaque				
Binders	10	Non-fibrous					
Prep/treatment: mechanical se	eparation		Asbesto	os Content: No	one Detected		
Layer 2 Insulation		Stereoscopic E	xamination				
		Color	Texture	Homogene	eous? % Fibrous	% Asbestos %	of Sample
		Yellow-Tan	Fibrous	Yes	95	ND	80
PLM Examination:							
			Color/	Parallel Pe	erpendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	Pleochroism	Ref. Index F	Ref. Index Bire	ef Angle	<b>Elongation</b>
Mineral Wool Fibers	95	Rods			0		
Resin Binders	5	Non-fibrous					
Prep/treatment: mechanical se	eparation		Asbesto	os Content: No	one Detected		



Field ID #: 1-92

EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826
Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628
Project #: 725010720014 Sample #: CL811848

Page 1 of 1

Sample Description: Thermal System Insulation (white) - Hallway by Restroom 1T4

Layer 1 Wrap		Stereoscopic E	Examination					
		Color	<u>Texture</u>	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		White / Silver	Fibrous	N	lo 7	5	ND	20
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
<u>Components</u>	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index	Ref. Index	<u>Biref</u>	<u>Angle</u>	<u>Elongation</u>
Cellulose Fibers	70	ribbons				high		
Glass Fibers	5	straight	none			none		
Metal Foil	15		Opaque					
Binders	10	Non-fibrous						
Prep/treatment: mechanical s	eparation		Asbesto	os Content:	None Detect	ed		
Layer 2 Insulation		Stereoscopic E	Examination					
		Color	Texture	Homog	geneous? % Fi	brous %	Asbestos %	of Sample
		Yellow-Tan	Fibrous	Y	es 9	5	ND	80
PLM Examination:								
			Color/	Parallel	Perpendicular		Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	Morphology	Pleochroism	Ref. Index	Ref. Index	Biref	Angle	Elongation
Mineral Wool Fibers	95	Rods				0		
Resin Binders	5	Non-fibrous						
Prep/treatment: mechanical s	eparation		Asbesto	os Content:	None Detect	ed		

Comments:

Analyst: Kathy Schosek
Date Analyzed: 3/16/2020

Lab Job #: PLM-22826 Sample #: CL811848



EPA Method 600/R-93/116

NVLAP Lab No. 200569-0 TDSHS License No. 30-0287

Client: Apex TITAN Lab Proj #: PLM-22826

Project: Gibson D. Lewis Library (LIB) Level 01, 955 Montgomery Street, Fort Worth, TX Set #: 33628
Project #: 725010720014 Sample #: CL811849

Field ID #: **1-93** Page 1 of 1

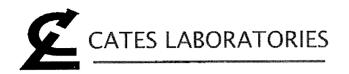
Sample Description: Thermal System Insulation (white) - Hallway by Restroom 1T3

Layer 1 Wrap		Stereoscopic E	Examination				
		Color	<u>Texture</u>	Homogeneo	us? <u>% Fibrous</u> <u>%</u>	Asbestos %	of Sample
		White / Silver	Fibrous	No	75	ND	20
PLM Examination:							
			Color/		pendicular	Extinction	Sign of
Components	<u>%</u> <u>+/-</u>	<u>Morphology</u>	<u>Pleochroism</u>	Ref. Index Re	f. Index Biref	<u>Angle</u>	<u>Elongation</u>
Cellulose Fibers	70	ribbons			high		
Glass Fibers	5	straight	none		none		
Metal Foil	15		Opaque				
Binders	10	Non-fibrous					
D // / /				G N	5		
Prep/treatment: mechanical se	eparation		<u>Asbesto</u>	os Content: Nor	ne Detected		
Prep/treatment:         mechanical services           — — — — — — — — — — — — — — — — — — —	eparation 	— — — — — — Stereoscopic E		os Content: Nor	ne Detected 		
	eparation 	Stereoscopic E		S Content: Nor Homogeneo		Asbestos %	of Sample
	eparation 		xamination			Asbestos % o	 o <u>f Sample</u> <b>80</b>
	eparation 	Color	Examination Texture	Homogeneo	us? % Fibrous %		
	eparation 	Color	Examination Texture	Homogeneo Yes	us? % Fibrous %		
		Color	Examination  Texture  Fibrous	Homogeneo <b>Yes</b> Parallel Perp	us? % Fibrous % 95	ND	80
Layer 2 Insulation  PLM Examination:	<u>%</u> ±/- <b>95</b>	<u>Color</u> Yellow-Tan	Examination  Texture  Fibrous  Color/	Homogeneo <b>Yes</b> Parallel Perp	us? % Fibrous % 95 pendicular	ND Extinction	80 Sign of
Layer 2 Insulation  PLM Examination:  Components	<u>%</u> +/-	<u>Color</u> <b>Yellow-Tan</b> <u>Morphology</u>	Examination  Texture  Fibrous  Color/	Homogeneo <b>Yes</b> Parallel Perp	us? % Fibrous % 95 pendicular of. Index Biref	ND Extinction	80 Sign of

 Comments:
 Analyst:
 Kathy Schosek

 Date Analyzed:
 3/16/2020

 Lab Job #:
 PLM-22826
 Sample #: CL811849



# **CHAIN OF CUSTODY**

CL Project No PLM - 228 36 (Lab Only) 5ET - 33628

Contact/Results to: //Phillip/ Marshall 24646\$ Verbal - Email - Fax - (check all that apply)	
_ Contact/Results to:Zuri/Phillip/ _Marshall _ ZLodeS	
Email(s): Zuri.diego@apexcos.com/phillip.fronczek@apexcos.com/vewald@apexcos.com/Marshall.flales Cafexcos.com	
Telephone No.: 469-732-0567 Fax No.:	
Project Information	
Project: 6:600 D. Lewis Library (118) Level 01 Project No.: 725010720014	
Address: 955 Montgomery street Fort worth, Texas P.O. No.:	
Turnaround (check one)	
RUSH ASAP  RUSH 24HR  2 DAY (standard)  3-4 DAY  5 DAY	
Testing Services (check all that apply)	
Asbestos IAQ - Mold (Non-Viable)	
PLM-BULK EPA 600/R-93/116 NIOSH 7400 OSHA TWA OS	
CatesLab No Range (Lab Only)  Sample Date  No of Samples 93 Positive Stop Yes No No No No No No No No No No No No No	
8/1757 8/1897 3/12/2020	
Sample Sample Description/Location Volume No. (air-only)	•
See Attachment	
,	
Data China Data China	
Relinquished By: Date/Time: Received By: Date/Time:	,d
3/12/2020 Minimate 0700 \$3.13-192	~Y
AF72017-09 issued 4/3/2017 Walk-In D-Drop D F-Drop D FedEx D UPS D Lonestar D USPS D Of Of Of Delias, TX 75207 * (214) 920-5006 Fax 1-972-767-0167	

# **HOMOGENEOUS MATERIALS FORM**

Project No.: 725010720014

Date:3/12/2020

PUM - 22826 567-33628

Project Name: Gibson D. Lewis Library (LIB) Level 01

**Inspector:** Zurisaday Diego

Homo. Ident.	Materials Description	Sample No.	Location
FT-01	12"x 12" Floor tile (pink with grey streaks) and	† 1·1	Room 100
	Mastic (Yellow)	1-2	Room 138
		1.3	Room 122
CM 01	Mastic (Yellow) associated w/ carpet (Dark green	1-4	Room 100A
	With red, and white stripe pattern) Multilayer	1-5	Room 100A
		1-6	Room 100A
CM-02	Mastic (Tan) associated w/ carpet (Brown with dark	1-7	Hallway by room 108D
	Brown stripe pattern) Muitilayer	1-8	Hallway by women's restroom
		1.9	Hallway by room 138
CM-03	Mastic (Yellow) associated w/ carpet (yellow, with	1-10	Room 126
	Multicolor dot pattern) Multilayer	1-11	Room 126J
		1.12	Room 102A
CM-04	Mastic (Yellow) associated w/ carpet (Dark yellow	1-13	Room 104
	With Multicolor dot pattern)	1-14	Room 140
		1-15	Room 140
CM-05	Mastic (Yellow) associated w/ carpet (Blue with	1-16	Room 108
	Multicolor dot pattern) Multilayer	1.17	Room 108B
	·	1.18	Room 108A
CM-06	Mastic (Yellow) associated w/ carpet (light Brown)	1-19	Room 110
		1-20	Room 110
		1-21	Room 110
CM-07	Mastic (Clear) associated w/ carpet (Red)	1.22	Room 122A
	Multilayer	1-23	Room 122A
	·	1.24	Room 122A
CM-08	Mastic (Yellow) associated w/ carpet (Dark Blue	1.25	Room 124B
	With Light grey streak pattern) Multilayer	1-26	Room 124B

			361-33628
		1-27	Room 124B
Homo.	Materials Description	Sample	Location
Ident.		No.	
CM-09	Mastic (Yellow) associated w/ carpet (Brown with	1-28	Room 124 A
	Dark brown and grey stripe pattern)	1-29	Room 124 A
	-	1-30	Room 124 A
CF*-01	12" x 12" Ceramic Floor tile (Light grey) with	1-31	Restroom 1 <sup>T</sup> 3
	Grout (grey) and mortar (grey)	1-32	Restroom 1T4
		1.33	Hallway by room TJ1
EFC-01	Epoxy Floor coating (Grey, sandy)	1.34	Room 102BA
		1-35	Room 102AA
		1-36	Room 102AA
RVF-01	Resilient vinyl flooring (grey with multicolor stripes)	1-37	Room 1J2
	With mastic (Yellow) and leveling compound (Grey)	1.38	Room 1J2
	<del></del>	1-39	; Room 1J2
RVF-01	Resilient vinyl flooring (Brown, wood pattern)	1-40	Room 106
	with mastic (yellow)	1-41	Room 116
	· · · · · · · · · · · · · · · · · · ·	1-42	Room 142
CF T-02	2"x 6" Ceramic floor tile (Brown) with grout (grey)	1-43	Space 1L2
	And mortar (Grey)	1-44	Hallway by south elevators
		1.45	Space 1L2
CB-01	Mastic (Ye:low) associated w/ 4" cove base (black)	1-46	Hallway by room 142
	i	1-47	Hallway by room 114
		1-48	Hailway by room 110
FRP-01	Mastic (Yellow) associated with Fiberglass	1-49	Room 1J2
	reinforced (FRP) panel (White)	1-50	Room TJ1
		1-51	Room 1J2
WTX-01	Concrete Wall texture (Grey, sandy)	1-52	South stairway
	··· ··· ··· · ·	1.53	South stairway
		1.54	North stairway

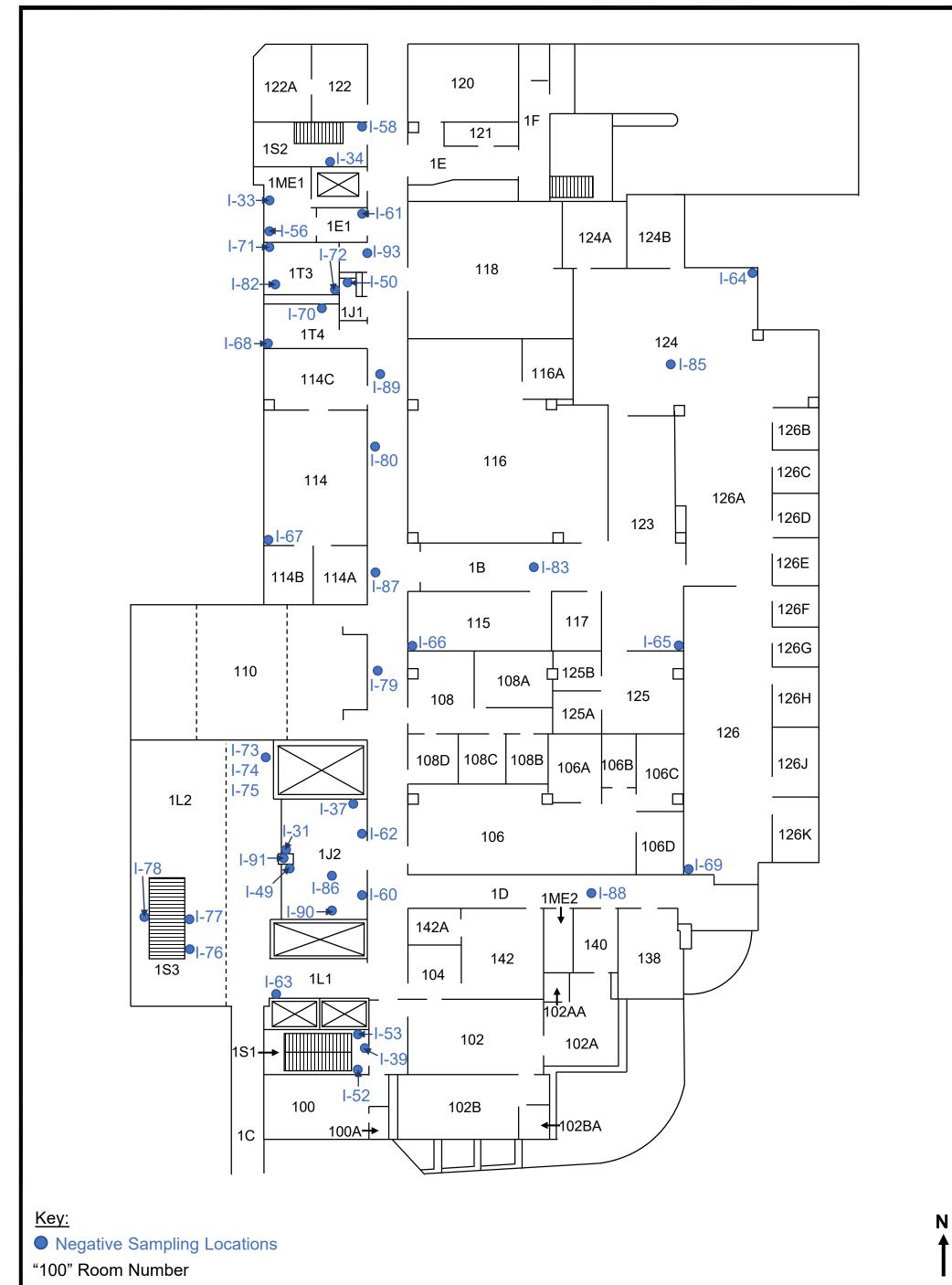
· — ·	<del></del>	<del></del>	3617 33628
Homo.	Materials Description	1	Location
Ident.	1	No.	j
	<u> </u>	<u> </u>	
		1.55	Room 1ME1
		1-56	Room 1ME1
		<del> </del>	
CM∪-01	CMU wall texture (white) with grout (grey)	1.57	Room 1J2
		1.58	North stairway
		1.59	South stairway
UFDW-01	Unfinished drywall/ Joint compound	1-60	Room 1J2
		1 61	Room 1E1
		1-62	Room 1J2
DWJC-01	Ceiling/ Wall texture (White, blue, tan, Sandy)	1.63	Hallway by main elevators
	) Orywall/ Joint compound	1-64	Room 124
		1-65	Room 123
	+	1.66	Room 115
		1-67	Room 114
		1-68	Restroom 1*4
- —		1-69	Room 126
		-	·
		ļ ·	
CWT 01	12"x 24" Ceram c wall tile (White) W/grout	1-70	Restroom 1 <sup>74</sup>
	(White) and thinset (	1-71	Restroom 1 <sup>T</sup> 3
	·	1.72	Restroom 1 7 3
S∪-01	Sink under coating (Black)	1.73	Space 1L2
	<del></del>	1.74	Space 1L2
! !	· ·	1.75	Space 1L2
BC 01	Interior building Expansion joint caulking (Tan)	1.76	Space 1S3
	<u> </u>	1.77	Space 153
	<del></del>	1.78	Space 1S3
	· <del>-</del>	_l l	

			<u> 361 - 3 3628</u>
Homo.	Materials Description	Sample	Location
Ident.	1	No.	
C*-01	2'x4' Acoustical ceiling tile (White, pinhole and	1.79	Hallway by room 110
	Fissured)	1-80	Hallway by room 114
	·	1 81	Hallway by north elevator
C* 02	2'x2' Acoustical ceiling tile (White, Rough finish)	1.82	Restroom 173
		1.83	Hallway by room 123
	-	1-84	Room 126A
DM 01	Duct Mastic (White)	1 85	Room 124
		1-86	Room 1J2
		1.87	Hallway by room 114
_ 0M-02	Duct Mastic (Grey)	1.88	Haliway by room 140
		1 89	Hallway by room 114C
		1.90	Room 1J2
 *S -01	* Thermal system insulation (White)	1 91	Room 1J2
		1-92	Hallway by restroom 174
		1.93	Hallway by restroom 1*3
		-	<del></del>
		+	
		-	
		+	<u> </u>
	†	,	
	•	+	•
	Mastic associated with Raised wooden floor		Assume
	pedestals	- :	· · · · ·
		ļ	<del></del>
	<u> </u>		· · · ·
	Mirror mastic	-	Assume
		<u> </u>	
	l	_1	

# **APPENDIX C**

Figures





Gibson D. Lewis Library - Level 1 Asbestos Survey

University of North Texas HSC 955 Montgomery Street Fort Worth, Texas 76107

FIGURE 1

**Sampling Locations** 



**Apex Companies, LLC** 

2100 Ford Road, Suite 401 Dallas, Texas 75234 Phone: (469) 365-1100 www.apexcos.com

Project No. 725010720014

# **APPENDIX D**

State Licenses





# Texas Department of State Health Services

# **APEX TITAN INC**

is certified to perform as an

# Asbestos Consultant Agency

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas Asbestos Health Protection, as long as this license is not suspended or revoked.



Expiration Date: 02/28/2022

License Number: 100479

John Hellerstedt, M.D., Commissioner of Health

(Void After Expiration Date)

Control Number: 97255

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK



# **Texas Department of State Health Services**

**Asbestos Individual Consultant** 

PHILLIP G FRONCZEK

License No. 105737

Control No. 97603

Expiration Date: 3-Oct-2021





Asbestos Inspector

ZURISADAY DIEGO
License No.603759
Control No. 99236
Expiration Date: 6-Feb-2021





# Texas Department of State Health Services

# CATES LABORATORIES INC

is certified to perform as an

Asbestos Laboratory
PCM, PLM

in the State of Texas and is hereby governed by the rights, privileges and responsibilities set forth in Texas

Occupations Code, Chapter 1954 and Title 12, Texas Administrative Code, Chapter 295 relating to Texas

Asbestos Health Protection, as long as this license is not suspended or revoked.

License Number: 300287

Expiration Date: 04/07/2021

Control Number: 96366

John Hellerstedt, M.D., Commissioner of Health

(Void After Expiration Date)

VOID IF ALTERED NON-TRANSFERABLE

SEE BACK

# United States Department of Commerce National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2005

**NVLAP LAB CODE: 200569-0** 

Cates Laboratories, Inc.

Dallas, TX

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

# **Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

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).

2019-04-01 through 2020-03-31

Effective Dates





# **SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

# Cates Laboratories, Inc.

1339 Motor Circle Dallas, TX 75207 Mr. John R. Cates

Phone: 214-920-5006 Fax: 1-972-767-0167

Email: jrcates@cateslab.com http://www.cateslab.com

### ASBESTOS FIBER ANALYSIS

### **NVLAP LAB CODE 200569-0**

# **Bulk Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

# United States Department of Commerce National Institute of Standards and Technology



# Certificate of Accreditation to ISO/IEC 17025:2017

**NVLAP LAB CODE: 200569-0** 

Cates Laboratories, Inc.

Dallas, TX

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

# **Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

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).

2020-04-01 through 2021-03-31

Effective Dates



# National Voluntary Laboratory Accreditation Program



# **SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017**

# Cates Laboratories, Inc.

1339 Motor Circle Dallas, TX 75207 Mr. John R. Cates

Phone: 214-920-5006 Fax: 1-972-767-0167

Email: jrcates@cateslab.com http://www.cateslab.com

# **ASBESTOS FIBER ANALYSIS**

# **NVLAP LAB CODE 200569-0**

# **Bulk Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A01	EPA 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials