

ASBESTOS MATERIALS SURVEY

Report Date: August 15, 2013

Client: Ann Arbor Housing Commission

Site Address: 2670-2680 South Main Street

Ann Arbor, Michigan

AKT Peerless Project #: 8360e-6-190

SECTION I - ASBESTOS INSPECTION

AKT Peerless conducted field sampling for suspect asbestos containing materials on August 14, 2013. The following suspect materials were identified at the site:

SUSPECT MATERIALS SUMMARY (ASBESTOS MATERIALS IN BOLD CAPS)

Material Description	Material Classification	Function Space (FS) Location	HA No.	Approximate Quantity	EPA Category	Asbestos Content
		Building 1 – Units 2678	and 2680	-		
12" Off white with tan streaks floor tile	ММ	Unit 2678 bedrooms, hall, living room; Unit 2680 Bedrooms and utility room	HA-01	Unit 2678 600 SF; Unit 2680 350 SF	C1	ND
Linoleum with off white and tan squares	MM	Unit 2678 kitchen and utility room	HA-02	150 SF	C2	ND
4" Beige cove base	MM	Unit 2678 utility room	HA-03	5 SF	C2	ND
Drywall	MM	Throughout both units	HA-04	NE	C2	ND
Off white large square pattern linoleum	MM	Unit 2680 kitchen and living room	HA-05	125 SF	C2	ND
4" Brown cove base	MM	Throughout unit 2680	HA-06	80 SF	C2	ND
Roofing Material	ММ	Exterior	HA-07	NE	C2	ASSUMED ACM
		Building 2 – Units 2674	and 2676			
Off white and gray squares pattern linoleum	ММ	Unit 2676 Living room and kitchen	HA-01	125 SF	C2	ND
4" Brown cove base	ММ	Unit 2676 kitchen and bedrooms	HA-02	45 SF	C2	ND



Material Description	Material Classification	Function Space (FS) Location	HA No.	Approximate Quantity	EPA Category	Asbestos Content
4" Gray cove base	ММ	Unit 2676 living room and hallway; Unit 2674 throughout	HA-03	Unit 2676 25 SF; Unit 2674 85 SF	C2	ND
12" Off white with tan streaks floor tile	ММ	Unit 2676 bedrooms, utility room; Unit 2674 living room, hall, north bedroom	HA-04	Unit 2676 350 SF; Unit 2674 400 SF	C1	ND
Drywall	MM	Throughout both units	HA-05	NE	C2	ND
12" Gray floor tile	ММ	Unit 2674 southwest and northwest bedrooms	HA-06	200 SF	C1	ND
Off white marbled linoleum	MM	Unit 2674 bathroom	HA-07	50 SF	C2	ND
4" White cove base	MM	Unit 2674 bathroom	HA-08	5 SF	C2	ND
Off white with spots flooring	ММ	Unit 2674 utility room	HA-09	50 SF	C2	ND
Roofing Material	ММ	Exterior	HA-10	NE	C2	ASSUMED ACM
		Building 3 – Units 267	0 and 2672			
12" Off white with streaks floor tile	ММ	Unit 2670 living room and kitchen; Unit 2672 utility room and bedrooms	HA-01	300 SF	C1	ND
4" Gray cove base	MM	Unit 2670 kitchen, living rooms, bedrooms	HA-02	85 SF	C2	ND
12" Gray with specks floor tile	MM	Unit 2670 bedrooms	HA-03	300 SF	C1	ND
Dots on off white flooring	ММ	Unit 2670 utility room	HA-04	40 SF	C2	ND
Drywall	ММ	Throughout both units	HA-05	NE	C2	ND
Off white squares linoleum	ММ	Unit 2672 Living room and kitchen	HA-06	125 SF	C2	ND
4" brown cove base	ММ	Unit 2672 Throughout	HA-07	85 SF	C2	ND
Roofing Material	ММ	Exterior	HA-08	NE	C2	ASSUMED ACM



Key: F = Friable; NF = Non-friable; FS = Functional Space; ND = No Asbestos Detected; CHR = Chrysotile; AMO = Amosite; SF = Square Feet; LF = Linear Feet; CF = Cubic Feet; MF = Mud Fittings; Classification: SM = Surfacing Material; TSI = Thermal System Insulation; MM = Miscellaneous Material; EPA Material Categories: FR = Friable Regulated; C2 = Category II Non-friable; C1 = Category I Non-friable; NE = Not Estimated

Recommendations:

1. Non-friable roofing materials are assumed to contain asbestos and do not require removal ahead of renovation or demolition activities, unless building materials will be recycled or the roofing will be made friable.

Samples were collected by a State of Michigan Department of Licensing and Regulatory Affairs (LARA) Michigan Occupational Safety & Health Administration (MIOSHA) -Asbestos Program accredited Asbestos Inspector.

Laboratory results are included in Attachment 1. The methodology followed to complete the asbestos survey is included in Attachment 2.

LIMITATIONS

The information and opinions obtained in this report are for the exclusive use of the Ann Arbor Housing Commission. AKT Peerless will not distribute this report without Client's written consent or as required by law or by a Court order. Report contents must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein.

Quantities of identified asbestos containing and other hazardous materials reported are provided for reference only.

Prepared by:

AKT PEERLESS ENVIRONMENTAL AND ENERGY SERVICES

Carl D. Rogers

Environmental Consultant

MIOSHA CSHD Asbestos Inspector

Accreditation Number: A36205

ames C. Joh

Reviewed by:

James C. Fox, RPIH Sr. Project Manager

MIOSHA CSHD Asbestos Inspector, Management Planner, Project Designer

Accreditation Number: A3152



ATTACHMENT 1

Asbestos Laboratory Results and Chain of Custody

APEX # 47251

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991. Web Site: http://apexresearch-inc.com. Email: Bob.Letarte@apexresearchlab.com

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Revision Date. December/2006

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991.

Web Site: http://apexresearch-inc.com. Email: Bob.Letarte@apexresearchlab.com





Project: AAHC - Mallet's Creek Bldg. 1 Project # 8360e-6-190

Report To:

Mr. Carl Rogers AKT Peerless

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47251

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Non-Asbestos

Other - 100%

Lab ID #: 47251 - 01

Cust. #: 1.1-1

Material: 12" Off-White/Tan Floor Tile

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 2

Asbestos Present: **NO**No Asbestos Observed

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

Other - 100%

Lab ID #: 47251 - 01a

Cust. #: 1.1-1

Material: Glue

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 47251 - 02

Cust. #: 1.2-1

Material: 12" Off-White/Tan Floor Tile

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately

Robert T. Letarte Jr. Laboratory Directo

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

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Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Non-Asbestos

Lab ID #: 47251 - 02a

Cust. #: 1.2-1

Material: Glue Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Lab ID #: 47251 - 03

Cust. #: 2.1-1

Material: Linoleum w/Off-White/Tan Sq.

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Cellulose - 20%

Fiberglass - 5%

Other - 75%

Lab ID #: 47251 - 04

Cust. #: 2.2-1

Material: Linoleum w/Off-White/Tan Sq.

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Fiberglass - 5%

Other - 75%

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NVI AP I ab Code 102118-0





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22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47251

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Other - 100%

Lab ID #: 47251 - 05

Cust. #: 3.1-1

Material: 4" Beige Cove Base

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Cust. #: 3.2-1

Lab ID #: 47251 - 06

Material: 4" Beige Cove Base

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 47251 - 07

Cust. #: 4.1-1

Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Other - 80%

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NVLAP Lab Code 102118-0





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ARI Report # 13-47251

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Cellulose - 20%

Other - 80%

Lab ID #: 47251 - 08

Cust. #: 4.2-1

Material: Drywall

Location:

Appearance: grey, fibrous, homogenous

Layer: 1 of 1

Lab ID #: 47251 - 09

Cust. #: 5.1-1

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Fiberglass - 5%

Other - 75%

Location:

Appearance: grey,fibrous,homogenous

Material: Off-White Lg. Square Pattern Linoleum

Material: Off-White Lg. Square Pattern Linoleum

Layer: 1 of 1

Lab ID #: 47251 - 10

Asbestos Present: NO

1 . 01 1

Cellulose - 20%

No Asbestos Observed

Fiberglass - 5%

Other - 75%

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Cust. #: 5.2-1

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Robert T. Letarte Jr. Laboratory Director

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Certificate of Laboratory Analysis



Test Method, Polarized Light Microscopy (PLM)

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Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Other - 100%

Lab ID #: 47251 - 11

Cust. #: 6.1-1

Material: 4" Brown Cove Base

Location:

Appearance: beige, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Cust. #: 6.2-1

Lab ID #: 47251 - 12

Material: 4" Brown Cove Base

Location:

Appearance: beige,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #:

Asbestos Present:

Lau ID π.

Cust. #: Material: Location: Appearance:

Layer:

For Layered Samples, each component will be analyzed and reported separately

of

Robert T. Letarte Jr. Laboratory Directo

47252

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991. Web Site: http://apexresearch-inc.com. Email: Bob.Letarte@apexresearchlab.com

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Project: AAHC Mallet's Creek Bldg. 2 Project # 8360e-6-190

Report To:

Mr. Carl Rogers **AKT Peerless**

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report #

13-47252 Date Collected: 08/14/13

Date Received: 08/15/13 Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Cellulose - 20%

Fiberglass - 5%

Other - 75%

Lab ID #: 47252 - 01

Cust. #: 1.1-2

Material: Off-White/Gray Sq. Linoleum

Location:

Appearance: white, fibrous, homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Cellulose - 25% Other - 75%

Cust. #: 1.2-2

Lab ID #: 47252 - 02

Material: Off-White/Gray Sq. Linoleum

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Lab ID #: 47252 - 03 Cust. #: 2.1-2

Material: 4" Brown Cove Base

Location:

Appearance: beige,nonfibrous,homogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.





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Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Other - 100%

Lab ID #: 47252 - 04

Cust. #: 3.1-2

Material: 4" Gray Cove Base

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Other - 100%

Other - 100%

Cust. #: 4.1-2

Lab ID #: 47252 - 05

Material: 12" Off-White/Tan Floor Tile

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #: 47252 - 06

Cust. #: 4.2-2

Material: 12" Off-White/Tan Floor Tile

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: NO No Asbestos Observed

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22725 Orchard Lake Rd. Farmington, MI 48336

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Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Non-Asbestos

Lab ID #: 47252 - 07

Cust. #: 5.1-2

Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Lab ID #: 47252 - 08

Cust. #: 5.2-2

Material: Drywall

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Lab ID #: 47252 - 09

Cust. #: 6.1-2

Material: 12" Gray Floor Tile

Location:

Appearance: grey,nonfibrous,homogenous

For Layered Samples, each component will be analyzed and reported separately.

Layer: 1 of 1

Asbestos Type/Percent

Asbestos Present: NO

Cellulose - 20%

No Asbestos Observed

Other - 80%

Asbestos Present: **NO**

Cellulose - 20%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 80%

Other - 100%





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Sample Information

Asbestos Type/Percent

Non-Asbestos

Lab ID #: 47252 - 10

Cust. #: 6.2-2

Material: 12" Gray Floor Tile

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 2

Asbestos Present: NO No Asbestos Observed

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 47252 - 10a

Cust. #: 6.2-2 Material: Glue

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 47252 - 11

Cust. #: 7.1-2

Material: Off-White Marbled Linoleum

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.





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Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Fiberglass - 5%

Other - 95%

Lab ID #: 47252 - 12

Cust. #: 7.2-2

Material: Off-White Marbled Linoleum

Location:

Appearance: white, fibrous, homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Cust. #: 8.1-2

Lab ID #: 47252 - 13

Material: 4" White Cove Base

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 47252 - 14

Cust. #: 8.2-2

Material: 4" White Cove Base

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Certificate of Laboratory Analysis



Test Method, Polarized Light Microscopy (PLM)

Project: AAHC Mallet's Creek Bldg. 2 Project # 8360e-6-190

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Sample Information

Asbestos Type/Percent

Non-Asbestos

Lab ID #: 47252 - 15

Cust. #: 9.1-2

Material: Off-White/Spots Flooring

Location:

Appearance: grey,fibrous,nonhomogenous

Layer: 1 of 1

Asbestos Present: NO No Asbestos Observed

Asbestos Present: **NO**

No Asbestos Observed

Cellulose - 10% Fiberglass - 10%

Fiberglass - 10%

Other - 90%

Other - 80%

Lab ID #: 47252 - 16

Cust. #: 9.2-2

Material: Off-White/Spots Flooring

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Asbestos Present:

Lab ID #:

Cust. #: Material:

Location: Appearance:

Layer:

of

For Layered Samples, each component will be analyzed and reported separately.

APEX # 47250

APEX Research,

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991. Web Site: http://apexresearch-inc.com. Email: Bob.Letarte@apexresearchlab.com

APEX

Rusl Other Phone: 28-615-1333 City, St., Zip: Address: Client Name: 48 hour Turn Around Times: (Circle One) Relinquished By: Laboratory ID# Ţ Ú W 3 0 5 0_ 00 AKT 「田のからすると 24 hour 72 hour (Test Till Positive veerless JTTP_ ない公 2,2-3 いた 5 401-3 いったい 21-3 12-3 Customer ID N Fax: Received By: ALTON # 248-615-1334 E. 1 Dots on ort w Gray W off white Wistreaks Floor Tile Lead: Mold: TEM: Asbestos: 3月 Material/Location Specks 270 Bulk Bulk Bulk Contact Person: Project # 8360 Project: Date of Survey: Bulk/NOP 8 ****Ferms and conditions on the other side. かべ たっち Relinquished By: Wipe Tape Wipe R rojers ce artpearless, con AHERA Volume Air Point Count BioSIS EPA Level II Area Relinquished By: Paint Other PCM Results Email: Verbal: Fog-In: Fax: Other Viable_ Soil Report: Lab Use Only

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APE STARON	19 - 9991. m	nc. 9990, Fax (734) 44 apexresearchlab.co	APHX Research, Inc. 11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991. Web Site: http://apexresearch-inc.com. Email: Bob.Letarte@apexresearchlab.com	APEX I rive, Whitmore Lake, M: http://apexresearch-inc	11054 Hi Tech Dı Web Site		





Project: AAHC - Mallet's Creek Bldg. 3

Project # 8360e-6-190

Report To:

Mr. Carl Rogers AKT Peerless

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Other - 100%

Lab ID #: 47250 - 01

Cust. #: 1.1-3

Material: 12" Off-White w/Streaks Floor Tile

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Cust. #: 1.1-3

Lab ID #: 47250 - 01a

Material: Mastic

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 47250 - 02

Cust. #: 1.2-3

Material: 12" Off-White w/Streaks Floor Tile

Location:

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Asbestos Present: **NO**No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr. Laboratory Directo

Test Method EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples tested and to insure the integrity of the results, may only be reproduced in full. This certificate may not be used by the customer to claim product endorsement by NVLAP or any agency of the US Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.

NVLAP Lab Code 102118-0





Project: AAHC - Mallet's Creek Bldg. 3

Project # 8360e-6-190

Report To:

Mr. Carl Rogers **AKT Peerless**

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Non-Asbestos

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 47250 - 02a

Cust. #: 1.2-3

Material: Mastic

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 47250 - 03

Cust. #: 2.1-3

Material: 4" Gray Covebase

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 2

Lab ID #: 47250 - 03a

Cust. #: 2.1-3

Material: Adhesive

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: **NO**

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.





Project: AAHC - Mallet's Creek Bldg. 3

Project # 8360e-6-190

Report To:

Mr. Carl Rogers AKT Peerless

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Non-Asbestos

Other - 100%

Lab ID #: 47250 - 04

Cust. #: 2.2-3

Material: 4" Gray Covebase

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 2

Asbestos Present: **NO**No Asbestos Observed

Lab ID #: 47250 - 04a

Cust. #: 2.2-3

Material: Mastic

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 47250 - 05

Cust. #: 3.1-3

Material: 12" Gray w/Specks Floor Tile

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 2

Asbestos Present: **NO**

Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr. Laboratory Directo

Other - 100%





Project: AAHC - Mallet's Creek Bldg. 3

Project # 8360e-6-190

Report To:

Mr. Carl Rogers **AKT Peerless**

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Non-Asbestos

Lab ID #: 47250 - 05a

Cust. #: 3.1-3

Material: Mastic

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 47250 - 06

Cust. #: 3.2-3

Material: 12" Gray w/Specks Floor Tile

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 2

Lab ID #: 47250 - 06a

Cust. #: 3.2-3

Material: Mastic

Location:

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Asbestos Type/Percent

Asbestos Present: NO

Other - 100%

Other - 100%

Other - 100%

No Asbestos Observed

Asbestos Present: **NO**

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.





Project: AAHC - Mallet's Creek Bldg. 3

Project # 8360e-6-190

Report To:

Mr. Carl Rogers **AKT Peerless**

22725 Orchard Lake Rd. Farmington, MI 48336

ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Cellulose - 20%

Other - 80%

Lab ID #: 47250 - 07

Cust. #: 4.1-3

Material: Off-White Flooring/Dots

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Asbestos Present: **NO**

No Asbestos Observed

Cellulose - 20% Other - 80%

Cust. #: 4.2-3

Lab ID #: 47250 - 08

Material: Off-White Flooring/Dots

Location:

Appearance: grey,fibrous,homogenous

For Layered Samples, each component will be analyzed and reported separately.

Layer: 1 of 1

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Other - 80%

Cust. #: 5.1-3

Material: Drywall

Location:

Lab ID #: 47250 - 09

Appearance: grey,fibrous,nonhomogenous

Layer: 1 of 1





Project: AAHC - Mallet's Creek Bldg. 3

Project # 8360e-6-190

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ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13

Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos

Cellulose - 20%

Other - 80%

Lab ID #: 47250 - 10

Cust. #: 5.2-3

Material: Drywall

Location:

Appearance: grey,fibrous,nonhomogenous

Layer: 1 of 1

Lab ID #: 47250 - 11

Cust. #: 6.1-3

Asbestos Present: **NO**

No Asbestos Observed

Cellulose - 20%

Fiberglass - 5%

Other - 75%

Material: Off-White Squares Linoleum Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

Lab ID #: 47250 - 12

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Fiberglass - 5%

Other - 75%

Material: Off-White Squares Linoleum

Cust. #: 6.2-3

Location:

Appearance: grey,fibrous,homogenous

Layer: 1 of 1

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Project # 8360e-6-190

Report To:

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ARI Report # 13-47250

Date Collected: 08/14/13 Date Received: 08/15/13

Date Analyzed: 08/20/13 Date Reported: 08/20/13

Sample Information

Asbestos Type/Percent

Non-Asbestos

Lab ID #: 47250 - 13

Cust. #: 7.1-3

Material: 4" Brown Covebase

Location:

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

Asbestos Present: NO

Asbestos Present: **NO**

No Asbestos Observed

No Asbestos Observed

Other - 100%

Other - 100%

Lab ID #: 47250 - 14

Cust. #: 7.2-3

Material: 4" Brown Covebase

Location:

Appearance: beige,nonfibrous,homogenous

Layer: 1 of 1

Lab ID #:

Asbestos Present:

Cust. #: Material: Location:

Appearance: Layer:

of

For Layered Samples, each component will be analyzed and reported separately.



ATTACHMENT 2

Asbestos Survey Methodology



ASBESTOS SURVEY METHODOLOGY

The asbestos survey was performed according to the following methodology:

- 1. Numerical functional space (FS) designations were assigned to each space in the structure. In general, an FS is defined as a spatially distinct room or area within the building. Functional Spaces also include attics, closets and basements. For clarification, functional space designations were field marked in each space.
- 2. Suspect Homogeneous Areas (HA) i.e., materials, were inventoried by type based on appearance and other characteristics. Building materials suspect for asbestos content were described based on one of three material classifications:

Surfacing Materials (SM): Sprayed-on, troweled-on, or otherwise applied to surfaces, such as friable acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes. **Thermal System Insulation (TSI):** Material that is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat lost or gain, or water condensation, or for other purposes.

Miscellaneous Materials (MM): A building material on structural components, structural members, or fixtures, such as non-friable hard-wall and ceiling plaster, floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

- 3. When a material is determined to be asbestos-containing either through sampling and laboratory analysis or by assumption, the material is grouped into one of three categories: 1) friable regulated asbestos 2) Category II non-friable asbestos or 3) Category I nonfriable asbestos. All friable regulated materials and Category II non-friable materials that will become friable during demolition were sampled. Category I non-friable materials were not sampled but were assumed asbestos-containing. Category I non-friable materials do not become friable during demolition and do not require removal unless the substrate will be recycled.
- 4. All samples collected were submitted with chain-of-custody documentation to an analytical laboratory that participates in the National Voluntary Laboratory Accreditation Program (NVLAP). All samples were analyzed using polarized light microscopy (PLM) with dispersion staining following United States Environmental Protection Agency (USEPA) Test Method (EPA-600/M4-82-020) and the National Institute of Standards and Technology (NIST) Bulk Asbestos Handbook.
- 5. A Test-Till-Positive (TTP) approach to laboratory analysis was utilized for the samples. TTP involves analyzing samples by homogeneous area groupings. Laboratory analyses were performed sample by sample within each homogeneous area grouping until a sample was determined to be asbestos containing, then no additional samples in that grouping were analyzed.