

Nauset Environmental Services, Inc.

an Air Quality Company.

15 March 2014

NES Job # 2-207
Report No. NES/ASB-14/1607

Mark Marinaccio
Barnstable – Structures and Grounds
800 Pitchers Road
Hyannis, MA 02601

Re: Pre-remodeling asbestos inspection & sampling at
Exterior of JFK Museum (Hyannis)
PO#: 14008894

Dear Mr. Marinaccio:

In response to your authorization Nauset Environmental Services, Inc. (NES) sent a certified Massachusetts Asbestos Inspector, William M. Vaughan, PhD to perform a pre-remodeling asbestos inspection and sampling of the exterior of JFK Museum (Hyannis) looking for asbestos-containing building material (ACBM).

This inspection included photographic documentation found in Attachment A. Table 1 shows the summary of laboratory analysis of samples of suspect materials from 7 locations taken in the building. The full laboratory report is found in Attachment B.

INSPECTION & OBSERVATIONS

On 5 March 2014 Dr. Vaughan conducted an inspection of the exterior of the JFK Museum in preparation for its remodeling. Dr. Vaughan is an accredited Environmental Protection Agency (EPA) AHERA (Asbestos Hazard Emergency Response Act) asbestos inspector (#13-8025-106-230916) and is certified by the Commonwealth of Massachusetts as an asbestos inspector (#AI 040812).

SITE – The JFK Museum (397 Main Street, Hyannis) will undergo exterior remodeling that calls for the determination of ACBM various caulking/sealing applications, hence the need for this asbestos inspection.

- 1) **Thermal Systems:** None involved.
- 2) **Surfacing:** None involved.

**P.O. Box 1385
East Orleans, MA 02643**

**508/247-9167 [800/931-1151]
FAX: 508/255-0738**

- 3) **Miscellaneous:** The caulking and sealants around the building exterior will be impacted by these remodeling activities including caulking around windows, sealants around the front portico structure, fillers on portico columns and caulking used in the copper roof of the portico. Seven samples were collected to assess these suspect ACBMs.

Table 1 lists the sample locations and results of laboratory analyses by the appropriate EPA method as noted below.

The collected samples described above were sent with a Chain of Custody to IATL, Inc. (Mt. Laurel, NJ) for analysis for analysis for asbestos by Polarized Light Microscopy with Dispersion Staining in accordance with EPA/600/R-93/116 Test Method. IATL is part of the AIA Bulk Asbestos Proficiency Testing Program, AIHA's ELLAP accreditation program, NIST's NVLAP accreditation program and a Massachusetts licensed asbestos testing laboratory (#AA-000092). As noted above, the IATL results are found in Attachment B.

SAMPLING RESULTS

Table 1 summarizes the sampling locations and extracts the laboratory results from Attachment B.

Table 1. Sampling locations and analytical results (see Attachment B)
(Photographs of sampling locations are found in Attachment A)

<u>Sample #</u>	<u>Location</u>	<u>Analytical results</u>
207-1	1 st floor rear window – white caulk	4.6% Chrysotile asbestos
207-2	Portico – filler compound (Base of right pillar)	NO ASBESTOS DETECTED
207-3	Right of front door – Dark tan glazing	7.1% Chrysotile asbestos
207-4	Lower left of front door – white caulk	NO ASBESTOS DETECTED
207-5	Upper right of front door – white caulk	NO ASBESTOS DETECTED
207-6	Copper roof – grey caulk	NO ASBESTOS DETECTED
207-7	2 nd floor front window – white caulk	5.2% Crocidolite asbestos

SUMMARY

From sample results, asbestos was found at three locations – the two window frame locations and the caulk/glazing between the brick wall and the front door framing (see photo for sample 207-3). The latter would apply to both sides of the front door and **not** any of the caulk/sealants between wooden structures forming the pseudo Greek columns themselves.

RECOMMENDATIONS

A Massachusetts-licensed asbestos removal contractor should be engaged to remove, collect and properly dispose of:

- Any residual window caulking/glazing found around any/all windows
- The caulking/glazing used to seal the gaps between the bricks and the front door framing on both sides of the door.

The contractor should provide documentation to the down of the proper disposal of the collected material.

I trust the above information is satisfactory for your planning needs at this time.

Please contact us if there are any questions.

Attested by:



William M. Vaughan, PhD, QEP
Asbestos Inspector (Massachusetts AI 040812)
QEP=Qualified Environmental Professional (since 1994)

ATTACHMENT A

Photographs taken during site inspection & sampling

Select Inspection Photos



JFK Museum (397 Main Street) front portico

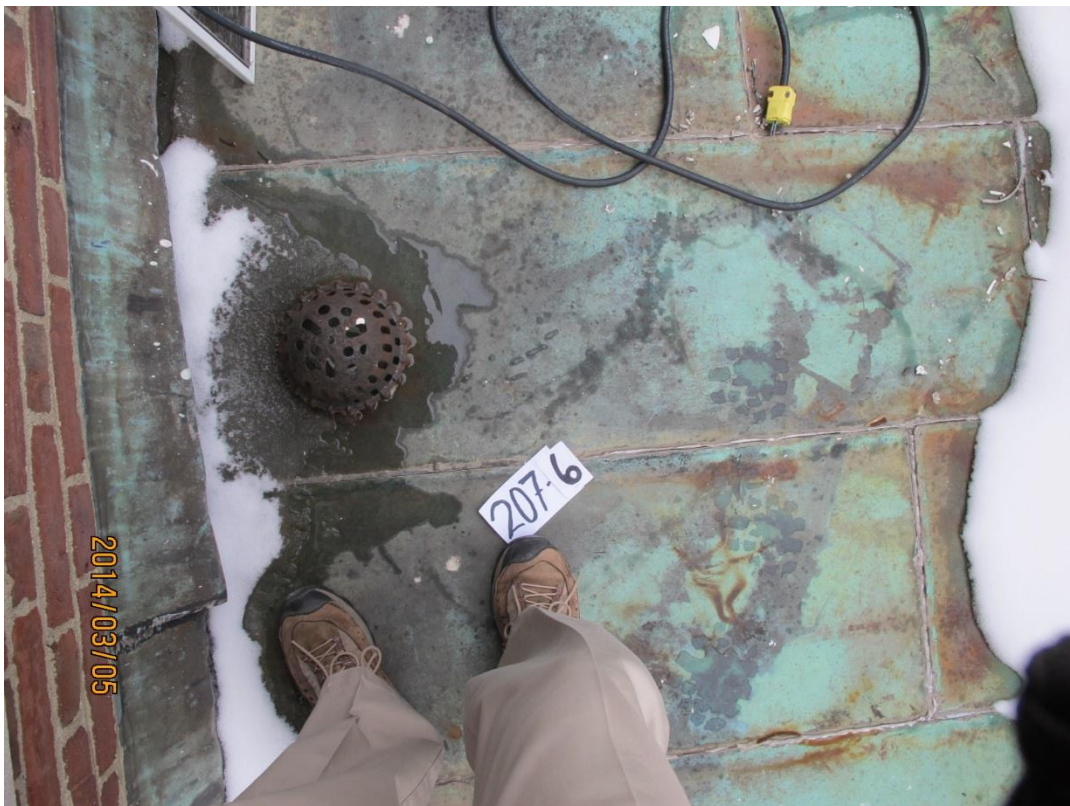


Rear of JFK Museum

Sampling locations









ATTACHMENT B

IATL Laboratory Reports

[NOTE: Left two columns contain the asbestos information]

CERTIFICATE OF ANALYSIS

Client:	Nauset Environmental Services	Report Date:	3/13/2014
	PO Box 1385	Report No.:	327407
	East Orleans MA 02643-1385	Project:	JFK Museum
		Project No.:	2-207

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	5252271	Description / Location:	Grey Glazing Rear Window	
Client No.:	207-1			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 4.6	Chrysotile	None Detected	None Detected	PC 95.4

Lab No.:	5252272	Description / Location:	White Non Fibrous Base Of Right Column	
Client No.:	207-2			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	5252273	Description / Location:	Dk Tan Glazing Right Of Front Door	
Client No.:	207-3			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 7.1	Chrysotile	None Detected	None Detected	PC 92.9

Lab No.:	5252274	Description / Location:	White Caulk Lower Left Of Door	
Client No.:	207-4			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: V. Smith

Approved By: 

Date: 3/13/2014

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client:	Nauset Environmental Services	Report Date:	3/13/2014
	PO Box 1385	Report No.:	327407
	East Orleans MA 02643-1385	Project:	JFK Museum
		Project No.:	2-207

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	5252275	Description / Location:	White Caulk	
Client No.:	207-5		Front Door Upper Right	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	5252276	Description / Location:	Grey Caulk	
Client No.:	207-6		Roof	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	5252277	Description / Location:	White/Brown Glazing	
Client No.:	207-7		Front Window	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 5.2	Crocidolite	None Detected	None Detected	PC 94.8

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
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This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: V. Smith

Date: 3/13/2014



9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
 Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

-Bulk Asbestos -

<u>Contact Information</u>	
Client Company: <u>Nauset Environmental Services, Inc</u>	Project Number: <u>2-207</u>
Office Address: <u>P.O. Box 1385</u>	Project Name: <u>JFK Museum</u>
City, State, Zip: <u>East Orleans, MA 02643-1385</u>	Primary Contact: <u>Bill Vaughan</u>
Fax Number: <u>508-255-0738</u>	Office Phone: <u>508-247-9167</u>
Email Address: <u>nesinfo@capecod.com</u>	Cell Phone: _____

<u>PLM Instructions:</u>	
<input checked="" type="checkbox"/> PLM: Bulk Asbestos Building Materials EPA 600 R-93/116, 1993	<div style="border: 1px solid black; padding: 10px; display: inline-block; transform: rotate(-15deg); font-size: 2em; font-weight: bold;">SEARCHED</div> <div style="font-size: 2em; font-weight: bold; transform: rotate(-15deg);">Seesey</div>
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials EPA 600 M-4/82-020, 1982	
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials NIOSH 9002, 1985	
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.1, 2002	
<input type="checkbox"/> PLM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.6, 2010	
<input type="checkbox"/> TEM: Bulk Asbestos Building Materials NYSDOH-ELAP 198.4, 2009	
<input type="checkbox"/> PLM: Point Counting	
<input type="checkbox"/> PC: via ELAP 198.1	
<input type="checkbox"/> PC: 400 Points	
<input type="checkbox"/> PC: 800 Points *	
<input type="checkbox"/> PC: 1600 Points *	
<input type="checkbox"/> PLM: Analyze Until Positive (Positive Stop)	
<input type="checkbox"/> AUP: by Homogenous Area as Noted	
<input type="checkbox"/> AUP: by Material Type as Noted	
<input type="checkbox"/> PLM: NOB via 198.6	
<input type="checkbox"/> PLM: Friable via EPA 600 2.3	
<input type="checkbox"/> If <1% by PLM, to TEM via 198.4 *	
<input type="checkbox"/> If <1% by PLM, Hold for Instructions	
<input type="checkbox"/> PLM: Instructions for Multi-Layered Samples	
<input type="checkbox"/> Analyze and Report All Separable Layers per EPA 600	
<input type="checkbox"/> Report Composite for Drywall Systems per NESHAP	
<input type="checkbox"/> Report All Layers and Composite Where Applicable	
<input type="checkbox"/> Only Analyze and Report Specifically Noted Layer	
<input type="checkbox"/> PLM: Non-Building Material *** (Dust, Wipe, Tape)	
<input type="checkbox"/> Soil or Vermiculite Analysis	
<input type="checkbox"/> CARB 435	
Special Instructions: _____	
* Additional charge and turnaround may be required ** Alternative Method (ex: EPA 600/R-04/004) may be recommended by Laboratory	

<u>Turnaround Time</u>	
Preliminary Results Requested Date: _____	<input type="checkbox"/> Verbal <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax
<input type="checkbox"/> 10 Day <input checked="" type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day* <input type="checkbox"/> 12 Hour** <input type="checkbox"/> 6 Hour** <input type="checkbox"/> RUSH**	
* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***	

<u>Chain of Custody</u>			
Relinquished (Name/Organization): <u>Bill Vaughan</u>	Date: <u>4/03/05</u>	Time: _____	<div style="font-size: 2em; font-weight: bold; border: 2px solid black; padding: 5px;">RECEIVED</div> <div style="font-size: 1.5em; font-weight: bold; margin-top: 10px;">MAR 7 2014</div> <div style="font-size: 1.5em; font-weight: bold; margin-top: 10px;">IATL - By _____</div>
Received (Name / iATL): _____	Date: _____	Time: _____	
Sample Login (Name / iATL): _____	Date: <u>3/11/14</u>	Time: _____	
Analysis (Name(s) / iATL): _____	Date: <u>3/12/14</u>	Time: _____	
QA/QC Review (Name / iATL): <u>abc 3-14-14</u>	Date: _____	Time: _____	
Archived / Released: _____	QA/QC InterLAB Use: _____	Date: _____	



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Sample Log

- Bulk Asbestos -

Client: Newset Environmental Services Project: 2-207 - JFK Museum

Sampling Date/Time: 140305 / 14:15

Bulk Asbestos Sample Log			
Client Sample #	IATL #	Location/Description	Notes
207-1	5252271	Gray/Brown caulk - Rear window	
207-2	5252272	White Filler compound based right column	
207-3	5252273	Gray caulk - Right of Front door	
207-4	5252274	White/Gray caulk - Lower left of door	
207-5	5252275	White caulk - Front door upper right	
207-6	5252276	Gray Copper Roof caulk	
207-7	5252277	Tan caulk - Front window	