

**ADDENDUM NO. 1  
TO THE BID DOCUMENTS**

**Project:** Homer City Hall Roof Replacement 2019  
**Addendum Issue Date:** May 29, 2019  
**Bid Date:** June 6, 2019 @ 2:00 PM (Thursday)  
**Previous Addenda Issued:** None  
**Issued By:** Dan Gardner  
Public Works Supt.  
City of Homer  
Homer, AK 99603  
[dgardner@ci.homer.ak.us](mailto:dgardner@ci.homer.ak.us)

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Bidders must acknowledge receipt of this addendum prior to the date set for bid opening by one of the following methods:

- (1) By acknowledging receipt of this addendum in the bid submitted (**use addendum acknowledgement form provided in bid documents**).
- (2) By facsimile (fax) or email which will need to include a reference to the project and each of the addendum numbers.

The bid documents require acknowledgement individually of all addenda to the drawings and/or specifications. This is a mandatory requirement and any bid received without acknowledgment of receipt of addenda may cause the bid to be considered non-responsive.

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A pre-bid meeting was held on Wednesday, May 29, 2019 at 1:00 pm. Within the walk-through of the site, a request was made for a copy of the hazardous material report. This addendum No. 1 provides a copy of that report.

Several other questions came up that will be addressed in Addendum No. 2 which will be produced this week.

End Addendum #1



# Hazardous Building Materials Survey

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## City Hall Roofs

Homer, Alaska

### Owner

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City of Homer Public Works  
3575 Heath Street  
Homer, AK 99603



### Client

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City of Homer Public Works  
3575 Heath Street  
Homer, AK 99603



Prepared by  
Satori Group, Inc.  
1310 East 66th Avenue, Suite 2  
Anchorage, AK 99518  
August 2018

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**Figure 4.1-1      Asbestos Sample Locations**

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**APPENDICES**

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**APPENDIX D:      INSPECTOR CERTIFICATES**

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## ACRONYM LIST

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ACM	Asbestos Containing Materials
AHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos School Hazard Abatement Reauthorization Act
CFR	Code of Federal Regulations
COC	Chain of Custody
EPA	Environmental Protection Agency
FAA	Flame Atomic Absorption
HEPA	High Efficiency Particulate Air
HBMS	Hazardous Building Materials Survey
HUD	Housing and Urban Development
HVAC	Heating Ventilation and Air Conditioning
LOD	Limit of Detection
mg/cm <sup>2</sup>	Milligram per centimeter squared
NESHAP	National Emissions and Standards for Hazardous Air Pollutants
NIOSH	National Institute of Occupational Safety and Health
NVLAP	National Voluntary Lab Accreditation Program
OSHA	Occupational Safety and Health Administration
PLM	Polarized Light Microscopy
PPE	Personal Protective Equipment
TSCA	Toxic Substance Control Act

## **1.0 EXECUTIVE SUMMARY**

Satori Group, Inc. was contracted to conduct a Hazardous Building Materials Survey (HBMS) for Asbestos Containing Material (ACM) at the City Hall building located near 491 E Pioneer Ave Homer, AK. The survey efforts focused on identifying the existence of ACM materials. The information obtained will be used to guide health and safety measures in the future for all workers.

### **Asbestos Containing Materials Identified**

All samples collected during the survey were analyzed by Polarized Light Microscopy (PLM) Method 600/R-93/116. Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) regulations define ACM as “any material that contains greater than 1% asbestos”. Review of laboratory analyses revealed that roofing samples tested >1% in multiple areas.

## **2.0 INTRODUCTION**

The City of Homer Public Works Department (herein PWD) subcontracted Satori Group, Inc. (herein Satori) to conduct a HBMS on the City Hall building located at 491 E Pioneer Ave Homer, AK. The primary objective of this inspection is to inspect and identify regulated materials for the protection of human health and any environmental concerns for future projects. Regulated materials in the scope of work include Asbestos Containing Material (ACM).

### ***2.1 Location and Usage***

The building is located at 491 E Pioneer Ave Homer, AK. The building is two stories with a Built up Roof (BUR).

The exterior roofing was about 2 inches thick applied to a wood deck. There was no insulation found in the samples. The roof had three separate levels; with samples taken from each level.

### ***2.2 Project Management and Quality Control***

Mr. Alan Caldwell of Satori conducted the ACM inspection. Mr. Caldwell is an AHERA Building Inspector in accordance with 40 CFR 745 and 763. Mr. Caldwell collected samples of suspected ACM, cataloged all samples for Chain-of-Custody records, and created diagrams of all sample locations.

### ***2.3 Hazardous Materials Overview***

#### **2.3.1 Asbestos Containing Materials**

Asbestos is a naturally occurring mineral. Chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite are all types of asbestos fibers. Asbestos is divided into two mineral groups - serpentine and amphibole. The division between the two types of asbestos is based upon the crystalline structure. Serpentine has sheet or layered structure where amphiboles have a chain-like structure. As the only member of the serpentine group, chrysotile is the most common type of asbestos found in buildings. Chrysotile, also known as “white asbestos”, makes up approximately 90%-95% of all asbestos contained in buildings in the United States.

Asbestos is often referred to as “friable” or “non-friable” for classification purposes by the National Emissions and Standards for Hazardous Air Pollutants (NESHAP). Friable asbestos is defined as “crumbled or reduced to powder by hand pressure”. Asbestos which is friable or has become friable has a greater likelihood of releasing asbestos fibers into the air.

The Asbestos Hazard Emergency Response Act (AHERA) was promulgated in 1986. AHERA mandated that the Environmental Protection Agency (EPA) develop regulations for addressing asbestos in schools. The mandatory AHERA inspector requirement was implemented for any person who performs inspections for ACM on public and commercial buildings; however it failed to include residential apartments or detached single family homes. The Asbestos School Hazard Abatement Reauthorization Act (ASHARA), enacted in 1990 and implemented in 1994, governs the training that asbestos workers, inspectors, supervisors, plan management writers, and abatement designers must receive to become accredited. AHERA instituted the training requirement for any person who inspects for ACM following a recommendation by ASHARA.

Asbestos in buildings does not mean an endangerment to workers or occupants unless the condition of the asbestos is damaged or will become damaged or friable due to human or environmental influences.

## **3.0 FIELD METHODS**

### **3.1 *Visual Inspection and Survey***

#### **3.1.1 Pre-Sampling Activities**

Satori field personnel conducted a thorough visual inspection of existing on-site conditions prior to any testing or sampling activity. Sampling was initiated only after completing the visual inspection of the area. The purpose of the inspection was to identify ACM by bulk sampling.

#### **3.2 *Bulk sampling***

Mr. Caldwell conducted the asbestos survey and performed the bulk sampling for Satori. Mr. Caldwell was responsible for collecting suspect ACM for analysis, cataloging samples for Chain of Custody (CoC) records, and recording diagrams of asbestos testing locations.

A total of one suspect material was visually identified for sampling. This material was the BUR and considered homogenous per roof level sampled.

All disturbances during sampling were done using hand tools and water to minimize the potential for any airborne hazards. When possible, repairs were made to areas disturbed to mitigate any further spread of contamination if it existed. After disturbances were complete, the area was cleaned with a High Efficiency Particulate Air (HEPA) vacuum to ensure exposures to potentially hazardous materials were minimized. The location (building / room), composition or substrate description, and matrix of each bulk sample collected were recorded.



### **3.3 Laboratory Analysis**

#### **3.3.1 Asbestos Analysis**

Satori utilized LA Testing, located in South Pasadena, California for asbestos sample analysis. LA Testing holds a current National Voluntary Lab Accreditation Program (NVLAP) accreditation for all appropriate fields-of-testing.

All samples were shipped via FedEx and packaged with bubble wrap. Special designated containers were used to minimize disturbance or damage of samples.

CoC documents accompanied all shipments to LA Testing and required a signature from the laboratory upon receipt. The CoC documents are located in Appendix C, Chain-of-Custody Records.

All asbestos bulk samples were analyzed using PLM EPA 600/R-93/116 Method. The LA Testing bulk asbestos sample results are located in Appendix D.

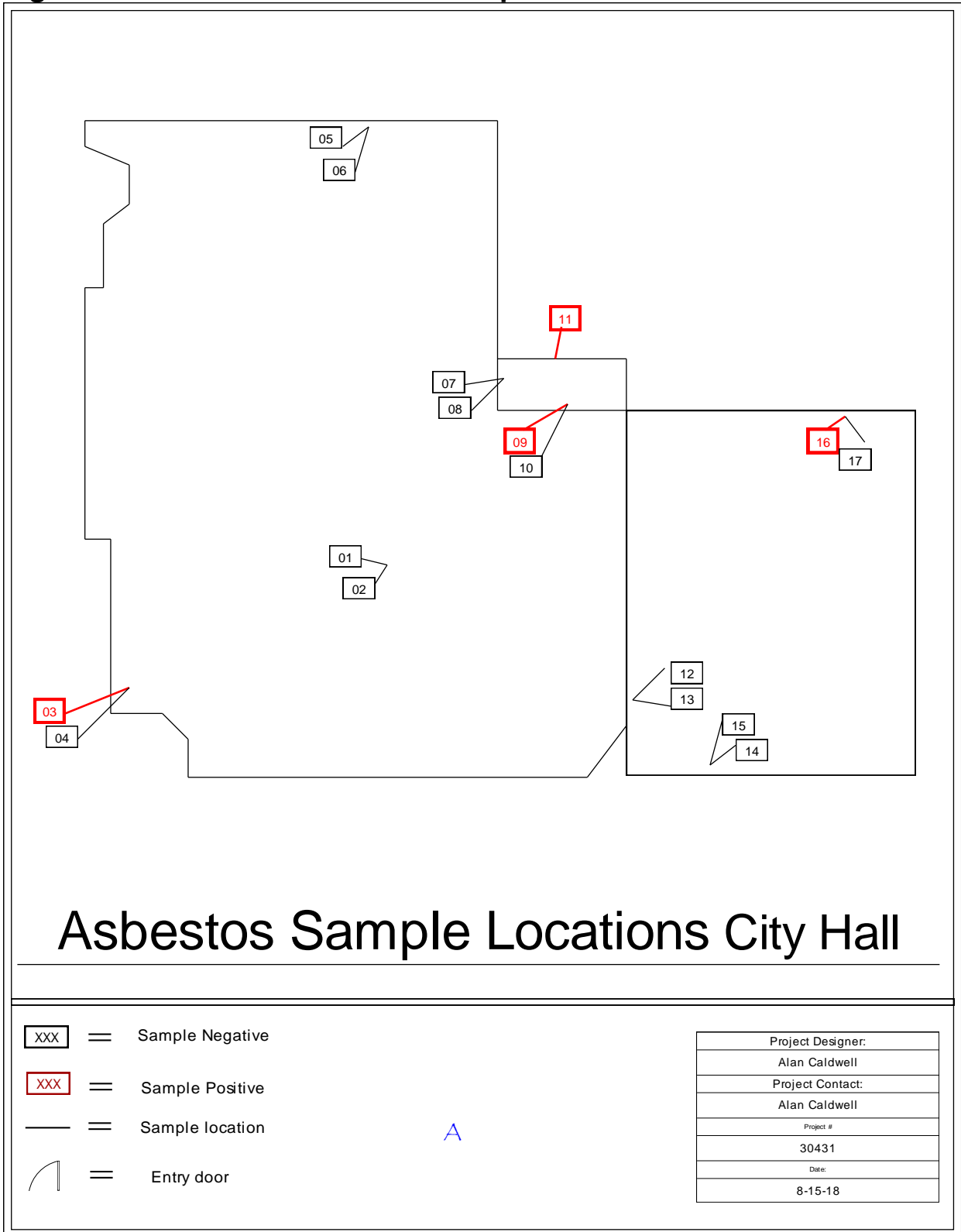
## **4.0 RESULTS OF SAMPLE ANALYSIS**

### **4.1 Asbestos PLM Results**

A total of 17 samples with 26 layers were taken during the survey. The results of the laboratory tests showed that the silver covering on the roof tested > 1% for asbestos on all three roof levels. Multiple samples for the same silver cover tested at <1% for asbestos.

Figure 4.1-1 identifies the locations of where asbestos samples were taken. Appendix B contains the asbestos sample results.

**Figure 4.1-1 Asbestos Sample Locations**



## 5.0 RECOMMENDATIONS

Review of results from the asbestos inspection revealed the top layer silver lining is ACM. We recommend that the removal and disposal of all asbestos containing materials (ACM) be completed by an accredited abatement contractor in accordance with all applicable local, state, and federal regulations pertaining to the removal of asbestos.

If any additional suspect materials are discovered during demolition or renovation activities that have not been sampled in this report, it should be sampled by an accredited building inspector before any further disturbance of the material continues.

## 6.0 SUMMARY

This report presents the limited ACM Inspection completed by Satori Group, Inc. The survey contains contract and introductory information, regulatory inspection framework, sampling methods, results, and recommendations.

### 6.1 *Limitations*

This inspection report has been prepared for the exclusive use of the City of Homer Public Works Division. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Satori Group, Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. This report is based upon and conducted in accordance with EPA rules in effect at the time of this inspection. Satori has no duty to update this report based on subsequent regulatory changes.

Satori is not responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. Areas not accessible at the time of the inspection are excluded from this report. Satori also notes that the facts and conditions referenced in this report may change over time, and that the conclusions set forth here are applicable to the facts and conditions as described only at the time of this report. We believe that the conditions stated here are factual, but no guarantee is made or implied.



Alan Caldwell  
AHERA Building Inspector #166176  
EPA Risk Assessor # AK-8196-4

**APPENDIX A: ASBESTOS BULK SAMPLE RESULTS**

Bulk sample #	Room/location	Description of Material	Condition of Material	Friable / Non Friable	LA Testing Results
B0806-01	Roof #1	Top Layer - Silver - Roofing	Good	Non Friable	None Detected
2nd Layer					<1% Chrysotile
B0806-02	Roof #1	Bottom Layer - Roofing	Good	Non Friable	None Detected
<b>B0806-03</b>	<b>Roof #1</b>	<b>Top Layer - Silver - Roofing</b>	<b>Good</b>	<b>Non Friable</b>	<b>2% Chrysotile</b>
2nd Layer					None Detected
3rd Layer					None Detected
4th Layer					None Detected
B0806-04	Roof #1	Bottom Layer - Roofing	Good	Non Friable	None Detected
B0806-05	Roof #1	Bottom Layer - Roofing	Good	Non Friable	None Detected
B0806-06	Roof #1	Top Layer - Silver - Roofing	Good	Non Friable	None Detected
2nd Layer					<1% Chrysotile
B0806-07	Roof #2	Top Layer - Silver - Roofing	Good	Non Friable	None Detected
2nd Layer					<1% Chrysotile
B0806-08	Roof #2	Bottom Layer - Roofing	Good	Non Friable	None Detected
<b>B0806-09</b>	<b>Roof #2</b>	<b>Top Layer - Silver - Roofing</b>	<b>Good</b>	<b>Non Friable</b>	<b>3% Chrysotile</b>
2nd Layer					None Detected
B0806-10	Roof #2	Bottom Layer - Roofing	Good	Non Friable	None Detected
<b>B0806-11</b>	<b>Roof #2</b>	<b>Caulking</b>	<b>Good</b>	<b>Non Friable</b>	<b>4% Chrysotile</b>
B0806-12	Roof #3	Top Layer - Silver - Roofing	Good	Non Friable	None Detected
2nd Layer					<1% Chrysotile
B0806-13	Roof #3	Bottom Layer - Roofing	Good	Non Friable	None Detected
B0806-14	Roof #3	Top Layer - Silver - Roofing	Good	Non Friable	None Detected
2nd Layer					<1% Chrysotile
B0806-15	Roof #3	Bottom Layer - Roofing	Good	Non Friable	none Detected
<b>B0806-16</b>	<b>Roof #3</b>	<b>Top Layer - Silver - Roofing</b>	<b>Good</b>	<b>Non Friable</b>	<b>2% Chrysotile</b>
B0806-17	Roof #3	Bottom Layer - Roofing	Good	Non Friable	None Detected

**APPENDIX B: CHAIN-OF-CUSTODY RECORDS**



**Asbestos Chain of Custody**  
LA Testing Order Number (Lab Use Only):

#321818055

South Pasadena, CA 91030  
PHONE: 1-800-303-0047  
FAX: 323-254-9982

Company: Satori Group, Inc		EMSL Customer ID:	
Street: 1310 East 66th Avenue Suite 2		City: Anchorage	State/Province: AK
Zip/Postal Code: 99518	Country: US	Telephone #: 907-332-0456	Fax #: 907-332-0457
Report To (Name): Alan Caldwell		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: ahomer@gosatori.com		Purchase Order:	
Project Name/Number: City Hall Home 3043		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	
U.S. State Samples Taken: AK		EMSL Project ID (Internal Use Only):	

LA Testing-Bill to:  Same  Different - If Bill to is Different note instructions in Comments\*\*  
Third Party Billing requires written authorization from third party

**Turnaround Time (TAT) Options\* - Please Check**

3 Hour  6 Hour  24 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

\*For TEM Air 3 hours through 6 hours, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with LA Testing's Terms and Conditions located in the Analytical Price Guide.

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198.8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>TEM - Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>
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Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: Alan Caldwell Samplers Signature: *[Signature]*

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B0806-01	Roof #1 Top Layer Silver	/	8/6/18 10 AM
-02	Roof #1 Bottom Layer on Plywood	/	
-03	Roof #1 Top Layer Silver	/	
-04	Roof #1 Bottom Layer on Plywood	/	
-05	Roof #1 Bottom Layer on Plywood	/	
-06	Roof #1 Top Layer Silver	/	

Client Sample # (s): B0806-01 - B0806-17	Total # of Samples: 17
Relinquished (Client): <i>[Signature]</i> Date: 8/7/18 Time: 10 AM	
Received (Lab): <i>[Signature]</i> Date: 8/8/18 Time: 9:30	

**Comments/Special Instructions:**  
Bill To: Satori Group, Inc, 1310 East 66th Avenue, Suite 2, Anchorage, AK, 99518, US  
Attention: Jill Lucas Phone: 907-332-0456 Email: jlucas@gosatori.com Purchase Order:



**Asbestos Chain of Custody**  
LA Testing Order Number (Lab Use Only):

#321818055

South Pasadena, CA 91030  
PHONE: 1-800-303-0047  
FAX: 323-254-9982

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
B0806-07	Roof # 2 Top Layer Silica	[Handwritten squiggly line]	8/6/18 10AM
-08	Roof # 2 Bottom Layer on Plywood		
-09	Roof # 2 Top Layer Silica		
-10	Roof # 2 Bottom Layer on Plywood		
-11	Roof # 2 Caulking		
-12	Roof # 3 Top Layer Silica		
-13	Roof # 3 Bottom Layer on Plywood		
-14	Roof # 3 Top Layer Silica		
-15	Roof # 3 Bottom Layer on Plywood		
-16	Roof # 3 Top Layer Silica		
-17	Roof # 3 Bottom Layer on Plywood		

**\*Comments/Special Instructions:**  
BillTo: Satori Group, Inc, 1310 East 66th Avenue, Suite 2, Anchorage, AK, 99518, US  
Attention: Jill Lucas Phone: 907-332-0456 Email: jlucas@gosatori.com Purchase Order:



**APPENDIX C: LA TESTING LABORATORY RESULTS**



# LA Testing

520 Mission Street South Pasadena, CA 91030

Tel/Fax: (323) 254-9960 / (323) 254-9982

<http://www.LATesting.com> / [pasadenalab@latesting.com](mailto:pasadenalab@latesting.com)

LA Testing Order: 321818055

Customer ID: 32EHS30

Customer PO:

Project ID:

**Attention:** Alan Caldwell  
Satori Group, Inc  
1310 East 66th Avenue  
Suite 2  
Anchorage, AK 99518

**Project:** City Hall Homer 30431

**Phone:** (907) 350-9919

**Fax:**

**Received Date:** 08/08/2018 9:30 AM

**Analysis Date:** 08/09/2018 - 08/10/2018

**Collected Date:** 08/06/2018

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B0806-01-Roofing 1 <small>321818055-0001</small>	Roof #1 Top Layer Silver	Black/Silver Non-Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
B0806-01-Roofing 2 <small>321818055-0001A</small>	Roof #1 Top Layer Silver	Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	<1% Chrysotile
B0806-02 <small>321818055-0002</small>	Roof #1 Bottom Layer on Plywood	Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
B0806-03-Roofing <small>321818055-0003</small>	Roof #1 Top Layer Silver	Black/Silver Non-Fibrous Homogeneous	5% Glass	93% Non-fibrous (Other)	2% Chrysotile
B0806-03-Felt 1 <small>321818055-0003A</small>	Roof #1 Top Layer Silver	Black Fibrous Homogeneous	25% Cellulose	75% Non-fibrous (Other)	None Detected
B0806-03-Felt 2 <small>321818055-0003B</small>	Roof #1 Top Layer Silver	Black Fibrous Homogeneous	25% Glass	75% Non-fibrous (Other)	None Detected
B0806-03-Tar <small>321818055-0003C</small>	Roof #1 Top Layer Silver	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
B0806-04 <small>321818055-0004</small>	Roof #1 Bottom Layer on Plywood	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
B0806-05 <small>321818055-0005</small>	Roof #1 Bottom Layer on Plywood	Black Non-Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
B0806-06-Roofing 1 <small>321818055-0006</small>	Roof #1 Top Layer Silver	Black/Silver Non-Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
B0806-06-Roofing 2 <small>321818055-0006A</small>	Roof #1 Top Layer Silver	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	<1% Chrysotile
B0806-07-Roofing 1 <small>321818055-0007</small>	Roof #2 Top Layer Silver	Black/Silver Non-Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected
B0806-07-Roofing 2 <small>321818055-0007A</small>	Roof #2 Top Layer Silver	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	<1% Chrysotile
B0806-08 <small>321818055-0008</small>	Roof #2 Bottom on Plywood	Black Fibrous Homogeneous	30% Glass	70% Non-fibrous (Other)	None Detected
B0806-09-Roofing <small>321818055-0009</small>	Roof #2 Top Layer Silver	Black Non-Fibrous Homogeneous	2% Glass	95% Non-fibrous (Other)	3% Chrysotile
B0806-09-Felt <small>321818055-0009A</small>	Roof #2 Top Layer Silver	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected

Initial report from: 08/10/2018 08:19:09



# LA Testing

520 Mission Street South Pasadena, CA 91030

Tel/Fax: (323) 254-9960 / (323) 254-9982

<http://www.LATesting.com> / [pasadenalab@latesting.com](mailto:pasadenalab@latesting.com)

LA Testing Order: 321818055

Customer ID: 32EHS30

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
B0806-10 321818055-0010	Roof #2 Bottom on Plywood	Black/Silver Fibrous Homogeneous	12% Glass	88% Non-fibrous (Other)	None Detected
B0806-11 321818055-0011	Roof #2 Caulking	Gray/Black Non-Fibrous Homogeneous	10% Cellulose 10% Min. Wool	76% Non-fibrous (Other)	4% Chrysotile
B0806-12-Roofing 1 321818055-0012	Roof #3 Top Layer Silver	Black/Silver Non-Fibrous Homogeneous	10% Synthetic	90% Non-fibrous (Other)	None Detected
B0806-12-Roofing 2 321818055-0012A	Roof #3 Top Layer Silver	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	<1% Chrysotile
B0806-13 321818055-0013	Roof #3 Bottom Layer on Plywood	Black Non-Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
B0806-14-Roofing 1 321818055-0014	Roof #3 Top Layer Silver	Black/Silver Non-Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
B0806-14-Roofing 2 321818055-0014A	Roof #3 Top Layer Silver	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	<1% Chrysotile
B0806-15 321818055-0015	Roof #3 Bottom Layer on Plywood	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
B0806-16 321818055-0016	Roof #3 Top Layer Silver	Black Fibrous Homogeneous	15% Glass	83% Non-fibrous (Other)	2% Chrysotile
B0806-17 321818055-0017	Roof #3 Bottom Layer on Plywood	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected

Analyst(s)

Andrew Richards (16)

Rosa Mendoza (10)

Jerry Drapala Ph.D, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing South Pasadena, CA NVLAP Lab Code 200232-0, CA ELAP 2283

Initial report from: 08/10/2018 08:19:09

**APPENDIX D: INSPECTOR CERTIFICATES**

# Certificate of Completion

This is to certify that  
**Alan Caldwell**  
has satisfactorily completed  
4 hours of refresher training as an  
**AHERA Building Inspector**

to comply with the training requirements of  
TSCA Title II, 40 CFR 763 (AHERA)

EPA Provider # 1085

166176  
Certificate Number



Mar 14, 2018 Expires in 1 year.

Date(s) of Training

Exam Score: N/A  
if appropriate:

A handwritten signature in black ink, appearing to be "K. M.", written over a horizontal line.

Instructor

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