



CITY OF DULUTH
PURCHASING DIVISION
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purchasing@duluthmn.gov

Addendum #1
File # 16-0188
Relief Piping Modifications

This addendum serves to notify all bidders of the following changes to the solicitation documents:

- 1) Asbestos abatement of the ceiling insulation is NOT required. Duluth Energy Systems had the roof insulation panels tested by Arrowhead Consulting and Testing March 4, 2015. Per the attached lab results dated March 7, 2015 indicate no asbestos was detected.

Please acknowledge receipt of this Addendum by signing on the Bid Form. Thank you.

Posted March 7, 2016.



March 7, 2016

Arrowhead Consulting & Testing
5606 Miller Trunk Hwy
Duluth, MN 55811

CLIENT PROJECT: Duluth Energy Systems; Suspect ACM
CEI LAB CODE: A16-0965

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on March 7, 2016. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Arrowhead Consulting & Testing

CLIENT PROJECT: Duluth Energy Systems; Suspect ACM

CEI LAB CODE: A16-0965

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 03/07/16

TOTAL SAMPLES ANALYZED: 2

SAMPLES >1% ASBESTOS:

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Duluth Energy Systems; Suspect ACM

CEI LAB CODE: A16-0965

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1A		A2080109	Tan,Brown	Insulation	None Detected
1B		A2080110	Tan,Brown	Insulation	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Arrowhead Consulting & Testing
5606 Miller Trunk Hwy
Duluth, MN 55811

CEI Lab Code: A16-0965

Date Received: 03-07-16

Date Analyzed: 03-07-16

Date Reported: 03-07-16

Project: Duluth Energy Systems; Suspect ACM

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1A A2080109	Insulation	Heterogeneous Tan,Brown Fibrous Bound	90%	Cellulose	10%	Binder	None Detected
1B A2080110	Insulation	Heterogeneous Tan,Brown Fibrous Bound	90%	Cellulose	10%	Binder	None Detected



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

LIMIT OF DETECTION: <1% by visual estimation

REGULATORY LIMIT: >1% by weight

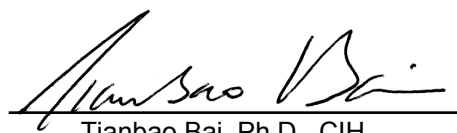
Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST:


Ryan Williams

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director





107 New Edition Court, Cary, NC 27511
Tel: 866-481-1412; Fax: 919-481-1442

CHAIN OF CUSTODY

② AIG-0965
A2080109-
A2080110

LAB USE ONLY:

CEI Lab Code:

CEI Lab I.D. Range:

COMPANY CONTACT INFORMATION

Company: Arrowhead Consulting & Testing, Inc.	Client #: 25596
Address: 5606 Miller Trunk Highway	Job Contact: Linda Thiry
Duluth, Minnesota 55811	Email: thirylt@netzero.net
	Tel: (218) 729-0987
Project Name: <i>Duluth energy systems</i>	Fax:
Project ID #: <i>SUSPECT ACIN</i>	P.O. #:

ASBESTOS	METHOD	TURN AROUND TIME							
		4 HR*	8 HR*	12 HR*	1 DAY	2 DAY	3 DAY	5 DAY	
PLM BULK	EPA 600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PLM GRAVIMETRIC	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM AIR	AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM AIR	EPA Level II	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM DUST WIPE	ASTM D6480-05	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM DUST MICROVAC	ASTM D5755-03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
TEM QUALITATIVE	CEI LABS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

LEAD PAINT	METHOD	4 HR*	8 HR*	12 HR*	24 HR	2 DAY	3 DAY	5 DAY
LEAD PAINT	EPA SW846 7000B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEAD WIPE	EPA SW846 7000B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEAD SOIL	EPA SW846 7000B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEAD AIR	NIOSH 7082	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS: <i>TEST TIL POSITIVE</i>		<input checked="" type="checkbox"/> Accept Samples <input type="checkbox"/> Reject Samples	
Relinquished By:	Date/Time	Received By:	Date/Time
<i>GREG HEIKELLE</i>	<i>3-12-16</i>	<i>AP</i>	<i>3-7-16</i>
			<i>9:20</i>

* Call to confirm RUSH analysis.

Samples will be disposed of 30 days after analysis

COMPANY CONTACT INFORMATION	
Company: Arrowhead Consulting & Testing, Inc	Job Contact: Linda Thiry
Project Name: DULUTH ENERGY PARTNERS ^{SYSTEMS}	
Project ID #:	Tel: 218-729-0987

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