



June 14, 2016

Tetra Tech
3945 Lakefield Court
Suwanee, GA 30024

CLIENT PROJECT: 103X902701052.001F
CEI LAB CODE: T16-0945

Dear Customer:

Enclosed are asbestos analysis results for TEM air samples received at our laboratory on June 14, 2016. The samples were analyzed for asbestos using transmission electron microscopy (TEM) per NIOSH 7402 Method.

The current OSHA 8-hour time weighted average permissible exposure limit (PEL) for asbestos is 0.1 f/cc and the 30 minutes excursion limit is 1 f/cc. The detection limit for the NIOSH 7402 method is one confirmed asbestos fiber above 95% expected mean blank value.

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: Transmission Electron Microscopy

Prepared for

Tetra Tech

CLIENT PROJECT: 103X902701052.001F

CEI LAB CODE: T16-0945

TEST METHOD: Air NIOSH 7402

REPORT DATE: 06/14/16

TEL: 866-481-1412

www.ceilabs.com



ASBESTOS AIR ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Tetra Tech
3945 Lakefield Court
Suwanee, GA 30024

CEI Lab Code: T16-0945
Date Received: 06-14-16
Date Analyzed: 06-14-16
Date Reported: 06-14-16

Project: 103X902701052.001F

TEM AIR NIOSH 7402

Client ID Lab ID	Volume (Liters)	PCM f/cc	Asbestos Type	Asbestos Fibers	Asbestos %	Asbestos f/cc
ODH-AA-L01 -061116 T51079	1515	0.0024	None Detected	0	0	<0.0012
ODH-AA-L02 -061116 T51080	4471	0.0011	None Detected	0	0	<0.00055
ODH-AA-L03 -061116 T51081	4202	0.00093	None Detected	0	0	<0.00023
ODH-AA-L04 -061116 T51082	4150	00.0011	None Detected	0	0	<0.0011
ODH-AA-L05 -061116 T51083	4202	00.0019	None Detected	0	0	<0.0019
ODH-AA-L06 -061116 T51084	4128	00.0024	None Detected	0	0	<0.0012



LEGEND: f/cc = fibers/cubic centimeter

METHOD: NIOSH 7402

Limit of Detection: 1 confirmed asbestos fiber above 95% of expected mean blank value

REGULATORY LIMIT: OSHA Excursion Limit (EL) is 1.0 fibers per cc based on a 30 minute sample; OSHA Permissible Exposure Limit (PEL) is 0.10 fibers per cc based on 8 hour TWA

ANALYTICAL EQUIPMENT: JEOL Electron Microscope (JEM-1200 EXII)
NORAN EDS System 7 (NSS112E)

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.

No Field Blanks were submitted for project T16-0945.

ANALYST:

A handwritten signature in black ink that reads "Kamila Reichert".

Kamila Reichert

APPROVED BY:

A handwritten signature in black ink that reads "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director

MATERIAL ANALYTICAL SERVICES, INC.
3945 Lakefield Court, Suwanee, GA 30024
Tel: (770) 866-3200 / (800) 421-8451
www.mastest.com

T16-0945

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P14098 -
P121056

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/#: 103X902701052.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Michael F. Durbin, CIH

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 6/11/2016
(1 day)

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			SEGMENT VOLUME	TOTAL VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG			
ODH-AA-L01-061116	Location 1	G1	0741	1011	150	10.1	NA	10.1	1515	1515	Analyze samples by NIOSH Method 7402 for a 4 hour TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, and mdurbin@durbinenvironmental.com.
ODH-AA-L02-061116	Location 2	G2	0728	1422	414	10.1	11.5	10.8	4471	4471	
ODH-AA-L03-061116	Location 3	G3	0722	1418	416	10.1	10.0	10.1	4202	4202	
ODH-AA-L04-061116	Location 4	G4	0716	1411	415	10.0	10.0	10.0	4150	4150	
ODH-AA-L05-061116	Location 5	G5	0710	1406	416	10.1	10.0	10.1	4202	4202	
ODH-AA-L06-061116	Location 6	G6	0735	1432	417	9.89	9.91	9.90	4128	4128	
ODH-FB01-061116	Field Blank 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
ODH-FB02-061116	Field Blank 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	
ODH-LB02-061116	Lot Blank	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Turnaround Time:

Normal (5 days): ☐

3 Days Rush: ☐

2 Days Rush: ☐

Next Day Rush: ☒

Comments:

Analyze Samples by NIOSH METHOD 7402

4-Hour TAT

Relinquished By:	<u>Michael F. Durbin, CIH</u>	Date/Time:	<u>6/11/2016, 8:00pm</u>
Received By:	<u>[Signature]</u>	Date/Time:	<u>6-14-16 9:00</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab: ☐

Shipped: ☒

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: _____

PCM results

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P16-1486 (9)
P14048 -
P121056

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701052.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: M. Paul F. Durbin, CIH

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 6/11/2016

Likes

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			SEGMENT VOLUME	TOTAL VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG			
0.0024 ODH-AA-L01-061116 0.0024	-048 Location 1	G1	0741	1011	150	10.1	NA	10.1	1515	1515	Analyze samples by NIOSH Method 7402 for a 4 hour TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, and mdurbin@durbinenvironmental.com.
0.0011 ODH-AA-L02-061116 0.0011	-049 Location 2	G2	0728	1422	414	10.1	11.5	10.8	4471	4471	
0.0013 ODH-AA-L03-061116 0.00093	-050 Location 3	G3	0722	1418	416	10.1	10.0	10.1	4202	4202	
0.0011 ODH-AA-L04-061116 0.0011	-051 Location 4	G4	0716	1411	415	10.0	10.0	10.0	4150	4150	
0.0019 ODH-AA-L05-061116 0.0019	-053 Location 5	G5	0710	1406	416	10.1	10.0	10.1	4202	4202	
0.0024 ODH-AA-L06-061116 0.0024	-053 Location 6	G6	0735	1432	417	9.89	9.91	9.90	4128	4128	
ODH-FB01-061116	Field Blank 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
ODH-FB02-061116	Field Blank 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	
ODH-LB02-061116	Lot Blank	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Turnaround Time:

Normal (5 days):

O

3 Days Rush:

O

2 Days Rush:

O

Next Day Rush:

X

Comments:

Analyze Samples by NIOSH METHOD 7402

4-Hour TAT

Relinquished By:	M. Paul F. Durbin, CIH	Date/Time:	6/11/2016, 8:00pm
Received By:	PK	Date/Time:	6-14-16 9:20
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab: O

Shipped: X

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: