

North Kansas City, Missouri 64117 Telephone: 816.231.5580 Fax: 816.231.5641 www.occutec.com

November 22, 2019

Ms. Diane Czarnecki
Industrial Hygienist
Facilities Management Division
GSA Public Buildings Service – Heartland Region
2300 Main Street
Kansas City, Missouri 64108

RE: Goodfellow Federal Center - Mercury Air Sampling Investigation
Building – #103E
4300 Goodfellow Boulevard
St. Louis, Missouri 63120
OCCU-TEC Project No. 919103

Dear Ms. Czarnecki:

Thank you for the opportunity to assist the General Services Administration (GSA) with the Resource Conservation and Recovery Act (RCRA) metals air sampling investigation of the above referenced buildings located at the Goodfellow Federal Center, in St. Louis, Missouri. OCCU-TEC understands that the purpose of the investigation was to provide sampling data regarding pre-existing conditions noted in investigation reports previously prepared for the facility. The following report summarizes the sample collection activities and the laboratory analytical results of the samples submitted.

On November 4, 2019, Missouri licensed air sampling professionals from OCCU-TEC conducted air sampling for the presence of airborne particulate mercury in Building #103E.

The proposed sampling scheme, the numbers of samples, sample distribution and general methodology was developed based on previous investigation methodology and in coordination with the GSA. Sample locations were determined by OCCU-TEC field personnel while on-site.

Resource Conservation and Recovery Act Metals Air Sampling

Air sampling for particulate mercury was collected on 37-millimeter (mm) cassettes with 0.8 micrometer (μm) mixed cellulose ester (MCE) filters using powered air sampling pumps in accordance with National Institute for Occupational Safety and Health (NIOSH) sampling methods. Samples were collected in a method sufficient to collect a minimum sample volume of 300 liters. Air samples were collected in accordance with NIOSH Method 7300 and submitted under chain-of-custody to Scientific Analytical Institute, Inc. (SAI), for independent analysis of mercury in accordance with NIOSH Method 6009. SAI is accredited by the American Industrial Hygiene Association (AIHA) utilizing the Industrial Hygiene Proficiency Analytical Testing (IHPAT) program. SAI's IHPAT Laboratory ID is 173190.

Results of the air sampling are summarized in the table below by identifying the range of results for Building #103E for the metal sampled. Samples with a "<" sign indicate that the results were below the laboratory's method reporting limit.

Analysis	Lowest	Highest
	Concentration	Concentration
	$(\mu g/m^3)$	$(\mu g/m^3)$
Mercury (Hg)	< 0.057	< 0.057

Results of the air samples collected indicate Building #103E contained concentrations of particulate mercury below the laboratory's method reporting limit and the OSHA Permissible Exposure Limit (PEL). Sample location diagrams are attached is Appendix A. Sample locations and the corresponding results are summarized in the laboratory analytical results that are included in Appendix B. The air sampling professional's Missouri Lead license is in included in Appendix C.

It should be noted that this air sampling investigation was only a screening of airborne particulate mercury and should not be interpreted or used to determine compliance or non-compliance with OSHA personnel monitoring regulations.

OCCU-TEC appreciates the opportunity to work with GSA on this project. If you have any questions concerning this report, or if we may be of any additional service, please feel free to contact us.

Sincerely,



Jeff Smith, Senior Project Manager



Kevin Heriford Environmental Operations Manager (QA/QC)

Appendices:

A: Sample Location Diagrams

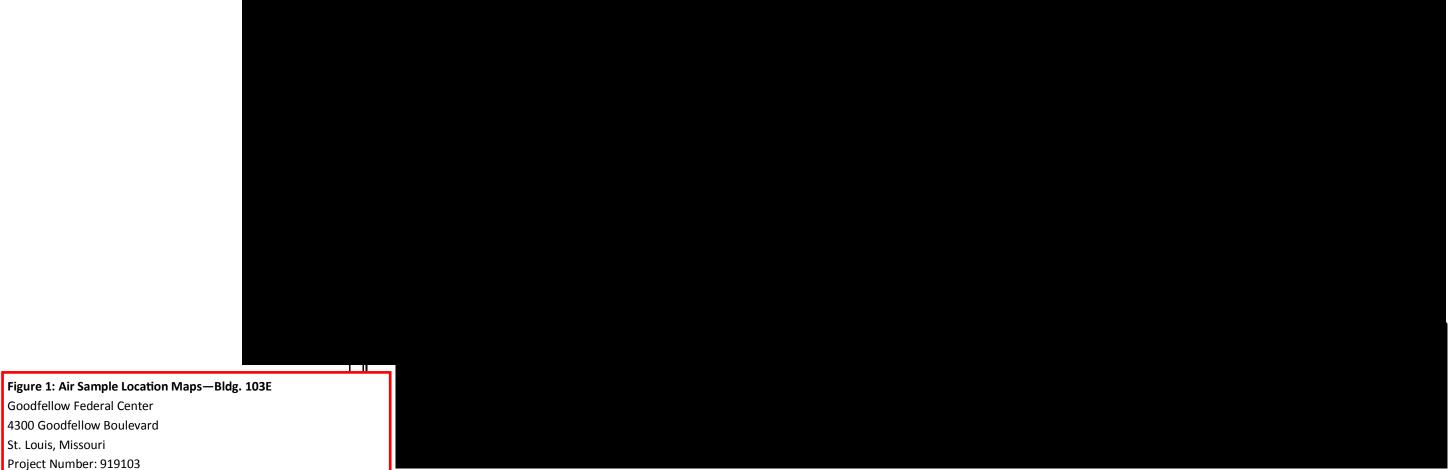
B: Laboratory Analytical Results and Chain of Custody Documentation

C: Qualifications and Licenses

Appendix ASample Location Diagrams







Goodfellow Federal Center 4300 Goodfellow Boulevard

St. Louis, Missouri Project Number: 919103

Appendix B
Laboratory Analytical Results and Chain of Custody
Documentation





Airborne Mercury Concentration by Cold Vapor-Atomic Absorption (CVAA)



NIOSH Method 6009/OSHA ID-140

Client: OCCU-TEC Inc.

2604 NE Industrial Dr #230

North Kansas City, MO 64117

Project: 919103.001

Attn: Austin O'Byrne

Lab Order ID:

Date Received:
Date Reported:

71928703 11/11/2019 11/18/2019

Page: 1 of 1

Sample ID	Description	Sampling	Volume	Concentration	Concentration
Lab Sample ID	Lab Notes	Type	(L)	(μg)	(μg/m ³)
103E-Hg-01	Field Blank	Particulate	-	< 0.025	-
71928703HGA_1					
103E-Hg -02	Lower level – L28	Particulate	436.8	< 0.025	< 0.057
71928703HGA_2					
103E-Hg -03	Upper level – P20	Particulate	436.8	< 0.025	< 0.057
71928703HGA_3					

Melissa Ferrell	(b) (6)
Analyst	Lab Director

This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Scientific Analytical Institute participates in the AIHA IHPAT program. IHPAT Laboratory ID: 173190. Unless otherwise noted blank sample, correction was not performed on analytical results. The reporting limit for an undiluted air sample is 0.01µg total Mercury. Analytical uncertainty available upon request.



Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407

Phone: 336.292.3888 Fax: 336.292.3313

www.sallab.com lab@sailab.com

Lab Use Only Lab Order ID: Client Code:	71928703

	act Information			Ind	ustrial Hygiene Test Ty	pes
Company: OCCU-TEC Inc.		Contact: Austin O'Byrne		Silica as Alpha Quartz (XSZ)* With Respirable Dust (XDZ)		
Address: 2604 NE Industrial Drive, Suite 230		Phone : 816-602-0819		Silica as Cristobalite (XSC)* With Respirable Dust (XDC)		
North Kansas City, MO 64117		Fax : 816-994-3417		Silica as Tridymite (XST)* With Respirable Dust (XDT)		
		Email : aobyrr	e@occutec.com	Silica as (XSA)*	s Alpha Quartz, Cristobalite, Tridym With Respirable Dust (XDA	_
Billing/Invoice Information		Turn Around Times		Silica Bulk (XSI)*		To
SAME		90 Min.	48 Hours	Bulk Phase ID/Whole Rock (XUK)		10
Company:		3 Hours	72 Hours	Total D		
Contact:		6 Hours	96 Hours	NIOSH Method 0500 (GTD) Respirable Dust NIOSH Method 0600 (GRD)		
Address:		12 Hours	120 Hours		NIOSH Method 0600 (GRD) PCM NIOSH 7400-A Rules (PCM)	
		24 Hours	144 ⁺ Hours	B Rul	es (PCB) TWA (PTA)	
		*TATs not available	for certain test types	TEM N	IOSH 7402 (Asbestos) (TNI)	
PO Number:			Hexavalent Chromium (OSHA ID		lent Chromium (OSHA ID-215) from spray paint operations)	
Project Name/Nui	mber: 919103.001			Metals (NIOSH 7300) (Specify Metals Under Comments)		
3					IOSH 6009 - Mercury Air Samples	×
	12:1111	2/	1///		Mercury Air Sampl	es
103E-14-01	Field Bla	nK	NIA	,	Mercury Air Sampl	_
035-148-02	Lower level - L	nK 18	1/A 1436.81	4	Mercury Air Sampl	es
22= 11/	1	nK 18	1/4 436.8 436.8	4	Mercury Air Sampl Mercury Air Sampl	es es
03E-148-02	1	nk 18	1/A 436.81 436.81	4	Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es
03E-148-02	1	nK 18 0	1/4 436.8 436.8	4	Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es es
03E-148-02	1	nK L&	436.8 436.8	4	Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es es
035-148-02	1	nK L&		4	Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es es
103E-148-02	1	nK L8 0		ACC	Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es es
103E-148-02	1	nK L& O			Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es es
103E-14g-02 103E-14g-03	Lower level - L Upper level - P2	L& O e/Time	Received	201	Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl Mercury Air Sampl	es es es es
103E-14g-02 103E-14g-03	Lower level - L Upper level - P2	L& O e/Time		201	Mercury Air Sample Cotal # of Samples	es es es es

Appendix C Qualifications and Licenses



STATE OF MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Austin G. O'Byrne

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

Lead Risk Assessor Category of License

Issuance Date: 12/10/2018
Expiration Date: 12/10/2020

License Number: 181210-300005671





Randall W. Williams, MD, FACOG
Director
Department of Health and Senior Services

Lead Licensing Program, PO Box 570, Jefferson City, MO 65102