OCCU-TEC

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June 9, 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 - Metals in Air Investigation
Building – #103
4300 Goodfellow Boulevard
St. Louis, Missouri 63120
OCCU-TEC Project No. 919083

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 May 16, 2019, Missouri licensed air sampling professionals from OCCU-TEC conducted air sampling for the presence of seven of the RCRA metals including Silver, Arsenic, Barium, Cadmium, Chromium, Lead, and Selenium. Sampling was conducted on Building #103.

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 RCRA metals 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 submitted under chain-of-custody to Scientific Analytical Institute, Inc. (SAI), for independent analysis of RCRA metals in accordance with NIOSH Method 7300. 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 #103 for each of the seven metals that were sampled. **Samples with a "<" sign indicate that the results were below the laboratory's method reporting limit.**

Analysis	Lowest Concentration (µg/m³)	Highest Concentration (µg/m³)
Silver (Ag)	<0.64	<0.64
Arsenic (As)	<0.64	<0.64
Barium (Ba) *	<0.097	0.38
Cadmium (Cd)	<0.064	<0.064
Total Chromium (Cr)	<0.64	0.71
Lead (Pb)	<0.33	<0.33
Selenium (Se)	<0.64	<0.64

* The laboratory reported trace amounts of Barium and total chromium above the laboratory detection limit on many samples, including field blanks. According to the lab, low levels of Barium can be found as a contaminant in varying levels on MCE filters for different manufacturers and lots.

Results of the air samples collected indicate that the air samples collected from Building #103 contained concentrations of RCRA metals below the laboratory's method reporting limit and the OSHA Permissible Exposure Limit (PEL) with the exception of Barium and total Chromium. As previously noted, the elevated Barium results were likely due to contaminated MCE filter media. Sample location diagrams are included in 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 RCRA metals 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,

(b) (6)

Justin Arnold, CIEC
Environmental Scientist

(b) (6)

Jeff Smith
Senior Project Manager (QA/QC)

Appendices:

A: Sample Location Diagrams
B: Laboratory Analytical Results and Chain of Custody Documentation
C: Qualifications and Licenses

Appendix A

Sample Location Diagrams

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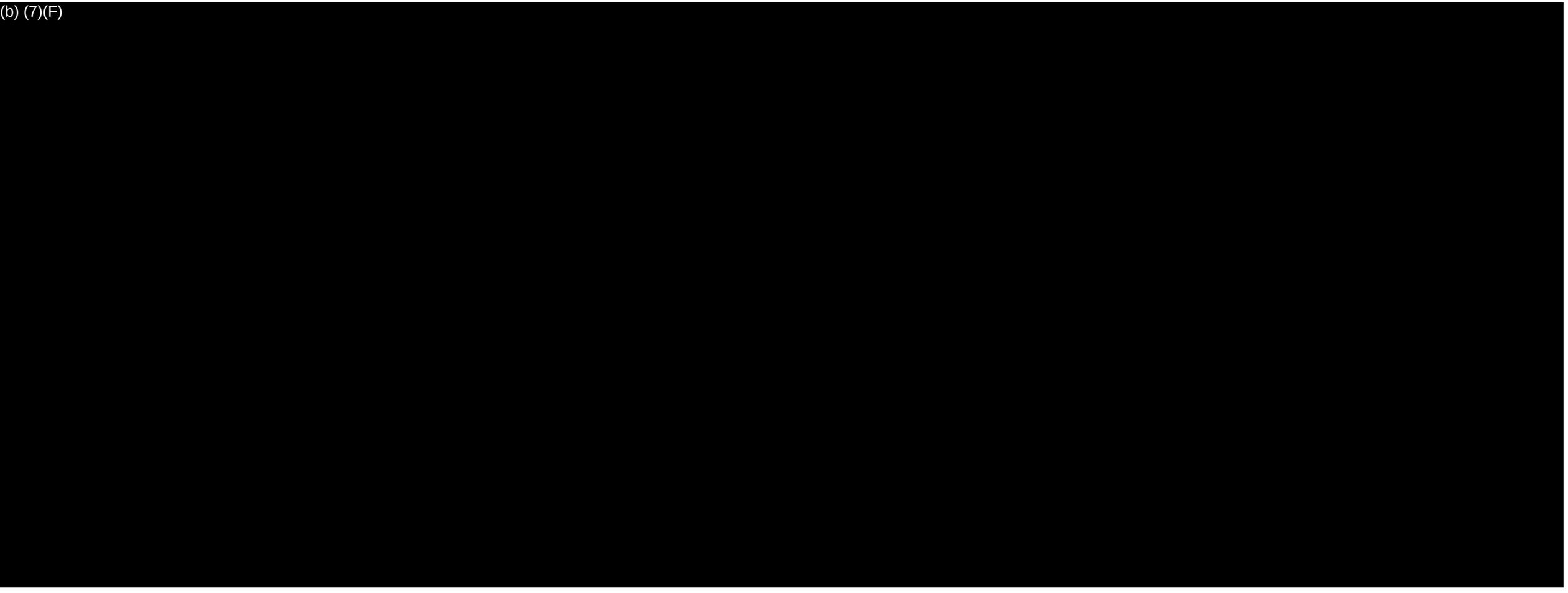

Figure 1: Air Sample Location Maps—Bldg. 103—First Floor
Goodfellow Federal Center
4300 Goodfellow Boulevard
St. Louis, Missouri
Project Number: 919083

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Figure 1: Air Sample Location Maps—Bldg. 103—Second Floor
Goodfellow Federal Center
4300 Goodfellow Boulevard
St. Louis, Missouri
Project Number: 919083

Appendix B

Laboratory Analytical Results and Chain of Custody Documentation

Airborne Metals Concentration by Inductively-Coupled Plasma Analysis (ICP)

NIOSH Method 7303

Client:	**OCCU-TEC Inc.**	**Attn:**	**Justin Arnold**	**Lab Order ID:**	**71913740**
	2604 NE Industrial Drive, Suite 230			**Date Received:**	**05/21/2019**
	North Kansas City, MO 64117			**Date Reported:**	**06/05/2019**
Project:	**919083.001 GFC**			**Page:**	**1 of 14**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-01	LL H2	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.053	0.14
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_1			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-02	LL F5	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.10	0.26
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.28	0.71
71913740IPA_2			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

Melissa Ferrell

Analyst

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Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

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Project:	**919083.001 GFC**			**Page:**	**2 of 14**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-03	LL D6	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.12	0.31
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_3			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-04	LL B5	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.058	0.15
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.28	0.71
71913740IPA_4			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-05	LL D13	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.11	0.28
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_5			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-06	LL H18	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.12	0.31
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_6			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-07	LL C20	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.067	0.17
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.27	0.69
71913740IPA_7			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-08	UL G27	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	< 0.038	< 0.097
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_8			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Project:	**919083.001 GFC**			**Page:**	**5 of 14**

Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-09	UL G12	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	< 0.038	< 0.097
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_9			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-10	UL C19	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.082	0.21
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.27	0.69
71913740IPA_10			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-11	UL C11	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	< 0.038	< 0.097
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.28	0.71
71913740IPA_11			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-12	UL G6	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.15	0.38
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.25	0.64
71913740IPA_12			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Project:	**919083.001 GFC**			**Page:**	**7 of 14**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-13	UL F4	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	< 0.038	< 0.097
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_13			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-14	UL B2	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.11	0.28
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_14			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-15	UL B11	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	< 0.038	< 0.097
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_15			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-16	UL B27	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.063	0.16
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_16			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-17	LL J34	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.099	0.25
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_17			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-18	LL H38	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.052	0.13
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_18			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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Sample ID / *Lab Sample ID*	Description / *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-19	LL G39	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.039	0.099
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_19			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-20	LL A37	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	< 0.038	< 0.097
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_20			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

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103-A-21	UL H33	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.040	0.10
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	< 0.25	< 0.64
71913740IPA_21			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-22	UL G37	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.082	0.21
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.27	0.69
71913740IPA_22			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

Melissa Ferrell

Analyst

(b) (6) [redacted]

Lab Director

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Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Airborne Metals Concentration by Inductively-Coupled Plasma Analysis (ICP)

NIOSH Method 7303

Client:	**OCCU-TEC Inc.** **2604 NE Industrial Drive, Suite 230** **North Kansas City, MO 64117**	**Attn:**	**Justin Arnold**	**Lab Order ID:** **Date Received:** **Date Reported:**	**71913740** **05/21/2019** **06/05/2019**
Project:	**919083.001 GFC**			**Page:**	**12 of 14**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-23	UL F36	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.040	0.10
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.28	0.71
71913740IPA_23			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64
103-A-24	UL B31	392	Ag	0.25	< 0.25	< 0.64
			As	0.25	< 0.25	< 0.64
			Ba	0.038	0.13	0.33
			Cd	0.025	< 0.025	< 0.064
			Cr	0.25	0.27	0.69
71913740IPA_24			Pb	0.13	< 0.13	< 0.33
			Se	0.25	< 0.25	< 0.64

Melissa Ferrell

Analyst

(b) (6)

Lab Director

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Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Airborne Metals Concentration by Inductively-Coupled Plasma Analysis (ICP)

NIOSH Method 7303

Client:	**OCCU-TEC Inc.** **2604 NE Industrial Drive, Suite 230** **North Kansas City, MO 64117**	**Attn:**	**Justin Arnold**	**Lab Order ID:** **Date Received:** **Date Reported:**	**71913740** **05/21/2019** **06/05/2019**
Project:	**919083.001 GFC**			**Page:**	**13 of 14**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-25	FB	-	Ag	0.25	< 0.25	--
			As	0.25	< 0.25	--
			Ba	0.038	0.16	--
			Cd	0.025	< 0.025	--
			Cr	0.25	< 0.25	--
71913740IPA_25			Pb	0.13	< 0.13	--
			Se	0.25	< 0.25	--
103-A-26	FB	-	Ag	0.25	< 0.25	--
			As	0.25	< 0.25	--
			Ba	0.038	0.12	--
			Cd	0.025	< 0.025	--
			Cr	0.25	< 0.25	--
71913740IPA_26			Pb	0.13	< 0.13	--
			Se	0.25	< 0.25	--

Melissa Ferrell

Analyst

(b) (6) [redacted]

Lab Director

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Airborne Metals Concentration by Inductively-Coupled Plasma Analysis (ICP)

NIOSH Method 7303

Client:	**OCCU-TEC Inc.**	**Attn:**	**Justin Arnold**	**Lab Order ID:**	**71913740**
	2604 NE Industrial Drive, Suite 230			**Date Received:**	**05/21/2019**
	North Kansas City, MO 64117			**Date Reported:**	**06/05/2019**
Project:	**919083.001 GFC**			**Page:**	**14 of 14**

Sample ID *Lab Sample ID*	Description *Lab Notes*	Volume (L)	Element	Reporting Limit (µg)	Concentration (µg)	Concentration (µg/m^3)
103-A-27	FB	-	Ag	0.25	< 0.25	--
			As	0.25	< 0.25	--
			Ba	0.038	0.066	--
			Cd	0.025	< 0.025	--
			Cr	0.25	< 0.25	--
71913740IPA_27			Pb	0.13	< 0.13	--
			Se	0.25	< 0.25	--

Melissa Ferrell

Analyst

(b) (6) [redacted]

Lab Director

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Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Scientific Analytical Institute, Inc.
4604 Dundas Dr. Greensboro, NC 27407
Phone: 336.292.3888 Fax: 336.292.3313
www.sailab.com lab@sailab.com

Lab Use Only
Lab Order ID: 19137140
Client Code: _____

Company Contact Information	
Company: OCCU-TEC Inc.	Contact: Justin Arnold
Address: 2604 NE Industrial Drive, Suite 230	Phone ☐: 816-810-3276
North Kansas City, MO 64117	Fax ☐: 816-994-3478
	Email :jarnold@occutec.com

Billing/Invoice Information	Turn Around Times^	
SAME ■	90 Min. ☐	48 Hours ☐
Company:	3 Hours ☐	72 Hours ☐
Contact:	6 Hours ☐	96 Hours ☐
Address:	12 Hours ☐	120 Hours ☐
	24 Hours ☐	144+Hours ■
	^TATs not available for certain test types	
PO Number:		
Project Name/Number: 919083.001 GFC		

Industrial Hygiene Test Types	
Silica as Alpha Quartz (XSZ)* ☐ With Respirable Dust (XDZ) ☐	
Silica as Cristobalite (XSC)* ☐ With Respirable Dust (XDC) ☐	
Silica as Tridymite (XST)* ☐ With Respirable Dust (XDT) ☐	
Silica as Alpha Quartz, Cristobalite, Tridymite (XSA)* ☐ With Respirable Dust (XDA) ☐	
Silica Bulk (XSI)*	☐
Bulk Phase ID/Whole Rock (XUK)	☐
Total Dust NIOSH Method 0500 (GTD)	☐
Respirable Dust NIOSH Method 0600 (GRD)	☐
PCM NIOSH 7400-A Rules (PCM)	☐
B Rules (PCB) ☐ TWA (PTA) ☐	
TEM NIOSH 7402 (Asbestos) (TNI)	☐
Hexavalent Chromium (OSHA ID-215) (Note if from spray paint operations)	☐
Metals (NIOSH 7300) (Specify Metals Under Comments)	☐
Other 6010 C	☒
* *Modified NIOSH 7500/OSHA ID 142*	

Sample ID #	Description/Location	Volume/Area	Comments
103-A-01	LL H2	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-02	LL F5	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-03	LL D6	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-04	LL B5	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-05	LL D13	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-06	LL H18	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-07	LL C20	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-08	UL G27	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-09	UL G12	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-10	UL C19	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-11	UL C11	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-12	UL G6	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-13	UL F4	392 L	Ag, As, Ba, Cd, Cr, Pb, Se

Accepted ☒ Rejected ☐

Total # of Samples _____

Relinquished by	Date/Time	Received by	Date/Time
(b) (6) [redacted]	5/17/19 17:00	(b) (6) [redacted]	5/21 10:30 AO

Scientific Analytical Institute, Inc.
4604 Dundas Dr. Greensboro, NC 27407
Phone: 336.292.3888 Fax: 336.292.3313
www.sailab.com lab@sailab.com

Lab Use Only
Lab Order ID: 21913740
Client Code: ______________

Sample ID #	Description/Location	Volume/Area	Comments
103-A-14	UL B2	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-15	UL B11	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-16	UL B27	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-17	LL J34	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-18	LL H38	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-19	LL G39	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-20	LL A37	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-21	UL H33	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-22	UL G37	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-23	UL F36	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-24	UL B31	392 L	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-25	FB	N/A	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-26	FB	N/A	Ag, As, Ba, Cd, Cr, Pb, Se
103-A-27	FB	N/A	Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se
			Ag, As, Ba, Cd, Cr, Pb, Se

Appendix C

Qualifications and Licenses

STATE OF MISSOURI
DEPARTMENT OF HEALTH AND SENIOR SERVICES

LEAD OCCUPATION LICENSE REGISTRATION

Issued to:

Justin E. Arnold

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:	**6/11/2018**
Expiration Date:	**6/11/2020**
License Number:	**120611-300003622**

(b) (6) [redacted]

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

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