



January 4, 2024

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

Re: Goodfellow Federal Center  
Metals in Settled Dust Sampling – Building 105  
Project No. 121244

Dear Ms. Czarnecki:

Thank you for the opportunity to assist the General Services Administration (GSA) with the metals in settled dust sampling investigation of Building 105 located at the Goodfellow Federal Center (GFC) in St. Louis, Missouri. Burns & McDonnell understands that the purpose of the investigation was to provide additional sampling data of existing environmental conditions that are present at GFC that could adversely impact the health and safety of building occupants as well as workers at the facility. The following report summarizes the sample collection activities and the laboratory analytical results of samples submitted.

## INTRODUCTION

Per historical use and previous characterization, Burns & McDonnell was contracted to perform settled dust sampling for the analysis of seven (7) of the Resource Conservation and Recovery Act (RCRA) target metals (arsenic, barium, cadmium, chromium, lead, selenium, and silver) from various surfaces within buildings. The purpose of this testing was to further characterize the presence and concentration of target metals in common tenant-occupied areas of the building.

The proposed sampling scheme, the number of samples, the sample distribution and general methodology was developed by GSA and Burns & McDonnell. Specific sample locations were determined by sampling personnel while on-site.

Settled dust wipe sampling at Bldg. 105 was conducted on December 5, 6, and 7, 2024 by Ashley Anstaett of Burns & McDonnell.

## METALS IN SETTLED DUST SAMPLING

Metals in settled dust sampling was conducted primarily within tenant-occupied areas. Dust wipe sampling was conducted in accordance with ASTM Standard E1728: *Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination* and ASTM Standard D6966: *Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Determination of Metals*. ASTM Standards E1728 and D6966 are consistent with the methodology described in the Housing and



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Urban Development Guidelines-Appendix 13.1 and 40 CFR 745.63. The Brookhaven National Laboratory's Surface Wipe Sampling Procedure (IH75190) was also used as a guideline.

Dust wipe sampling for the target metals was conducted on a variety of representative surfaces that have the potential of being disturbed by building occupants. A representative surface area of approximately one square foot (1 SF) was measured and delineated with plastic templates. The dust wipe samples were collected using dedicated dust wipe cloths meeting ASTM E1792 Standard. Each dust wipe cloth was pre-moistened and individually wrapped. Each sample was collected by wiping in a back and forth "S" pattern over a measured sampling area using a clean, disposable glove. Then, the wipe was folded over itself and the area was wiped again in a direction perpendicular to the first wipe orientation. Then, the wipe folded over itself again and the area was wiped around the perimeter. The wipe sample was then placed into a labeled, clean container. Dust wipe samples were submitted to Environmental Hazards Services, LLC (EHS) in Richmond, Virginia for Inductively Coupled Plasma (ICP) analysis of metals analysis using Environmental Protection Agency (EPA) method SW846 3050B/6010D. EHS is accredited under the American Industrial Hygiene Association (AIHA) Laboratory Accreditation Program (LAP) identification number LAP-100420.

Whereas the Occupational Safety and Health Administration (OSHA) has not established regulatory limits for surface concentrations of metals, the OSHA Technical Manual Section II: Chapter 2 (III.A) describes a method for calculating "housekeeping" standards, as recommended acceptable surface limits. Brookhaven's IH75190 procedure uses the housekeeping standards to derive a lower, "clean area limit" for non-operational areas that can be accessed or contacted without special training or precautions. Burns & McDonnell calculated clean area limits for metals not included in the Brookhaven procedure, specifically barium, chromium (total), selenium and silver. Wipe results were compared to the Brookhaven procedure's clean area limits for each metal.

Results of the dust wipe samples collected from the building indicate that 23 of the 36 samples contained concentrations of target metals above laboratory reporting limits. The following table identifies the range of results for each of the seven metals that were analyzed. Samples with a "<" sign indicate that the results were below the lab's reportable limit.



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**Table 1. Summary of Dust Wipe Results**

Analyte	Lowest Concentration <sup>(a)</sup> (µg/sq. ft) <sup>(b)</sup>	Highest Concentration <sup>(a)</sup> (µg/sq. ft) <sup>(b)</sup>	Clean Area Limit <sup>(c)</sup> µg/sq. ft <sup>(b)</sup>
Silver	<0.50	<1.5	62
Arsenic	<2.4	<2.5	62
Barium	<0.50	14	3,094
Cadmium	<0.10	1.0	31
Chromium (Total)	<1.0	18	3,094
Lead	<0.50	8.3	10 <sup>(d)</sup>
Selenium	<2.4	<2.5	1,236

(a) Samples with a “<” sign indicate that the results were below the laboratory’s reporting limit.

(b) µg/sq. ft = micrograms per square foot of surface area.

(c) Clean Area Limit per Brookhaven IH75190=OSHA Housekeeping Limit [[PEL (µg/m<sup>3</sup>) x 10 m<sup>3</sup>/100cm<sup>2</sup>] x 929cm<sup>2</sup>/sq.ft.] / 15.

(d) Lead clean area limit: Brookhaven references EPA/HUD limit for floors, set at 10 µg/sq. ft. as of January 2020.

Of the 23 samples that had detectable levels of one or more analytes, none of them exceeded the clean area limit.

Burns & McDonnell appreciates the opportunity to work with the GSA on this project. Please contact us if you have any questions regarding this report or if we may be of any additional service.

Sincerely,

(b) (6)

Matt Shanahan, CHMM  
Project Manager

Attachments:

Appendix A – Sample Summary Table

Appendix B – Laboratory Analysis Report

Information in Appendices A and B is not accessible for people using screen reader technology. If this information is required, it can be furnished upon request by contacting 816-223-6198 or [r6environmental@gsa.gov](mailto:r6environmental@gsa.gov).

**APPENDIX A – SAMPLE SUMMARY TABLE**

## Appendix A

### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-01	Field blank	--	Arsenic	< 2.50	µg	--
			Barium	< 0.500	µg	--
			Cadmium	< 0.100	µg	--
			Chromium	< 1.00	µg	--
			Lead	< 0.500	µg	--
			Selenium	< 2.50	µg	--
			Silver	< 0.500	µg	--
105-W-02	1st floor, storage room exit	Floor tile north of women's restroom	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.80	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-03	1st floor, column F51	Top of table	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	14	µg/ft <sup>2</sup>	3,094
			Cadmium	0.40	µg/ft <sup>2</sup>	31
			Chromium	4.1	µg/ft <sup>2</sup>	3,094
			Lead	8.3	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	1.5	µg/ft <sup>2</sup>	62
105-W-04	1st floor, column B47	Steel table on west wall	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	18	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-05	1st floor, column B51	Work station on south wall	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.58	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-06	1st floor, exit from warehouse	Floor tile in east hallway	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	2.4	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	2.2	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-07	1st floor, southeast stairwell	Handrailing	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	3.3	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	0.74	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-08	1st floor, column D43	Top of steel table	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	0.40	µg/ft <sup>2</sup>	31
			Chromium	1.1	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-09	1st floor, column D43	Top of southeast cooler	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	1.2	µg/ft <sup>2</sup>	3,094
			Cadmium	0.96	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	0.70	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-10	1st floor, column L1	Top shelf of metal shelving	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	2.8	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	1.0	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-11	1st floor, column E49	Table in storage room	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	1.8	µg/ft <sup>2</sup>	3,094
			Cadmium	0.13	µg/ft <sup>2</sup>	31
			Chromium	1.2	µg/ft <sup>2</sup>	3,094
			Lead	0.66	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-12	1st floor, column E49	Floor at southeast storage room exit	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	11	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	1.5	µg/ft <sup>2</sup>	3,094
			Lead	4.2	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-13	1st floor, column C52	Table on north wall of south loading dock	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	11	µg/ft <sup>2</sup>	3,094
			Cadmium	0.55	µg/ft <sup>2</sup>	31
			Chromium	9.3	µg/ft <sup>2</sup>	3,094
			Lead	5.2	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-14	1st floor, column B49	Desk with laptop	Arsenic	< 2.4	µg/ft <sup>2</sup>	62
			Barium	10	µg/ft <sup>2</sup>	3,094
			Cadmium	0.40	µg/ft <sup>2</sup>	31
			Chromium	4.3	µg/ft <sup>2</sup>	3,094
			Lead	2.1	µg/ft <sup>2</sup>	10
			Selenium	< 2.4	µg/ft <sup>2</sup>	1,236
			Silver	< 0.47	µg/ft <sup>2</sup>	62
105-W-15	1st floor, column B46	Top of blue rolling cart	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.54	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-16	1st floor, south offices	Table with microwave on south wall	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-17	1st floor, column F53	South offices, desk on south wall	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-18	Field blank	--	Arsenic	< 2.50	µg	--
			Barium	< 0.500	µg	--
			Cadmium	< 0.100	µg	--
			Chromium	< 1.00	µg	--
			Lead	< 0.500	µg	--
			Selenium	< 2.50	µg	--
			Silver	< 0.500	µg	--
105-W-19	2nd floor, south entrance	Silver rail on ramp into lab	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-20	2nd floor, south offices	Desk at southwest entrance	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-21	2nd floor, south offices	Top of paper cutter in southeast cubicle	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.90	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	0.51	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-22	2nd floor, room 331	Conference table	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-23	2nd floor, room 331	Glass tray underneath monitor	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.58	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-24	2nd floor, entrance to room 342	Floor tile	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.60	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-25	Field blank	--	Arsenic	< 2.50	µg	--
			Barium	< 0.500	µg	--
			Cadmium	< 0.100	µg	--
			Chromium	< 1.00	µg	--
			Lead	< 0.500	µg	--
			Selenium	< 2.50	µg	--
			Silver	< 0.500	µg	--
105-W-26	2nd floor, lab room 339	Counter top to right of sink	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-27	2nd floor, room 337	Top of desk on south wall	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-28	2nd floor, break room	Top of round table	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-29	2nd floor, room 323A	Top of table with coffee pot	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-30	2nd floor, room 320	Floor tile	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.62	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	1.2	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-31	2nd floor, across from room 306	Wooden railing	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	0.16	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	1.7	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-32	2nd floor, across from room 306	Floor tile at bottom of ramp	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	2.3	µg/ft <sup>2</sup>	3,094
			Cadmium	< 0.10	µg/ft <sup>2</sup>	31
			Chromium	2.1	µg/ft <sup>2</sup>	3,094
			Lead	1.3	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

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### Sample Summary Table

Sample Number	Location	Area Description	Analyte	Result	Units	Clean Area Limit*
105-W-33	2nd floor, room 349	2nd shelf of black desk in center of room	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	0.88	µg/ft <sup>2</sup>	3,094
			Cadmium	0.14	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-34	2nd floor, room 361	Top of desk at entrance	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	< 0.50	µg/ft <sup>2</sup>	3,094
			Cadmium	0.10	µg/ft <sup>2</sup>	31
			Chromium	< 1.0	µg/ft <sup>2</sup>	3,094
			Lead	< 0.50	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62
105-W-35	Field blank	--	Arsenic	< 2.50	µg	--
			Barium	< 0.500	µg	--
			Cadmium	< 0.100	µg	--
			Chromium	< 1.00	µg	--
			Lead	< 0.500	µg	--
			Selenium	< 2.50	µg	--
			Silver	< 0.500	µg	--
105-W-36	1st floor, warehouse, column L1	Top of incubator	Arsenic	< 2.5	µg/ft <sup>2</sup>	62
			Barium	5.3	µg/ft <sup>2</sup>	3,094
			Cadmium	0.18	µg/ft <sup>2</sup>	31
			Chromium	1.5	µg/ft <sup>2</sup>	3,094
			Lead	2.2	µg/ft <sup>2</sup>	10
			Selenium	< 2.5	µg/ft <sup>2</sup>	1,236
			Silver	< 0.50	µg/ft <sup>2</sup>	62

\* Clean Area Limit per Brookhaven IH75190=OSHA Housekeeping Limit  $[[\text{PEL } (\mu\text{g}/\text{m}^3) \times 10 \text{ m}^3/100\text{cm}^2] \times 929\text{cm}^2/\text{sq. ft.}] / 15$ . Lead clean area limit: Brookhaven references EPA/HUD limit for floors, set at 10 µg/sq. ft. as of January 2020.

\*\* Indicates results at or above the Clean Area Limit

**APPENDIX B – LABORATORY ANALYSIS REPORT**



Environmental Hazards Services, L.L.C.

7469 Whitepine Rd  
Richmond, VA 23237

Telephone: 800.347.4010

## Wipe Metals Analysis Report

**Client:** Burns & McDonnell Engineering  
9400 Ward Pkwy.  
Kansas City, MO 64114

**Report Number:** 23-12-01169  
**Received Date:** 12/11/2023  
**Analyzed Date:** 12/12/2023  
**Reported Date:** 12/18/2023

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

**Client Number:**  
26-3514

## Laboratory Results

**Fax Number:**  
816-822-3494

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-001	105-W-01	Arsenic (As)		<2.50	---	
		Barium (Ba)		<0.500	---	
		Cadmium (Cd)		<0.100	---	
		Chromium (Cr)		<1.00	---	
		Lead (Pb)		<0.500	---	
		Selenium (Se)		<2.50	---	
		Silver (Ag)		<0.500	---	
23-12-01169-002	105-W-02	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.795	0.80	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-003	105-W-03	Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	13.6	14	
		Cadmium (Cd)	1.00	0.395	0.40	
		Chromium (Cr)	1.00	4.14	4.1	
		Lead (Pb)	1.00	8.32	8.3	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	1.54	1.5	
23-12-01169-004	105-W-04	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	18.2	18	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.580	0.58	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-006	105-W-06	Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	2.44	2.4	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	2.24	2.2	
23-12-01169-007	105-W-07	Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	3.28	3.3	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	0.735	0.74	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-008	105-W-08	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	0.405	0.40	
		Chromium (Cr)	1.00	1.08	1.1	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-009	105-W-09	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	1.20	1.2	
		Cadmium (Cd)	1.00	0.955	0.96	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	0.705	0.70	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-010	105-W-10	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	2.75	2.8	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	1.00	1.0	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-011	105-W-11	Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	1.82	1.8	
		Cadmium (Cd)	1.00	0.130	0.13	
		Chromium (Cr)	1.00	1.20	1.2	
		Lead (Pb)	1.00	0.655	0.66	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
23-12-01169-012	105-W-12	Barium (Ba)	1.00	11.3	11	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	1.54	1.5	
		Lead (Pb)	1.00	4.17	4.2	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	11.4	11	
		Cadmium (Cd)	1.00	0.550	0.55	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-014	105-W-14	Chromium (Cr)	1.00	9.33	9.3	
		Lead (Pb)	1.00	5.16	5.2	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.06	<2.50	<2.4	
		Barium (Ba)	1.06	11.0	10	
		Cadmium (Cd)	1.06	0.420	0.40	
		Chromium (Cr)	1.06	4.59	4.3	
		Lead (Pb)	1.06	2.18	2.1	
		Selenium (Se)	1.06	<2.50	<2.4	
23-12-01169-015	105-W-15	Silver (Ag)	1.06	<0.500	<0.47	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.535	0.54	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-017	105-W-17	Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-018	105-W-18	Arsenic (As)		<2.50	---	
		Barium (Ba)		<0.500	---	
		Cadmium (Cd)		<0.100	---	
		Chromium (Cr)		<1.00	---	
		Lead (Pb)		<0.500	---	
		Selenium (Se)		<2.50	---	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
		Silver (Ag)		<0.500	---	
23-12-01169-019	105-W-19	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-020	105-W-20	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-021	105-W-21	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.905	0.90	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-022	105-W-22	Lead (Pb)	1.00	0.510	0.51	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-023	105-W-23	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.575	0.58	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-024	105-W-24	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.605	0.60	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-025	105-W-25	Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)		<2.50	---	
		Barium (Ba)		<0.500	---	
		Cadmium (Cd)		<0.100	---	
		Chromium (Cr)		<1.00	---	
		Lead (Pb)		<0.500	---	
23-12-01169-026	105-W-26	Selenium (Se)		<2.50	---	
		Silver (Ag)		<0.500	---	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-027	105-W-27	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-028	105-W-28	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
23-12-01169-029	105-W-29	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-030	105-W-30	Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.620	0.62	
		Cadmium (Cd)	1.00	<0.100	<0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	1.24	1.2	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	0.993	<2.50	<2.5	
23-12-01169-031	105-W-31	Barium (Ba)	0.993	<0.500	<0.50	
		Cadmium (Cd)	0.993	0.160	0.16	
		Chromium (Cr)	0.993	<1.00	<1.0	
		Lead (Pb)	0.993	1.74	1.7	
		Selenium (Se)	0.993	<2.50	<2.5	
		Silver (Ag)	0.993	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	2.28	2.3	
		Cadmium (Cd)	1.00	<0.100	<0.10	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
23-12-01169-033	105-W-33	Chromium (Cr)	1.00	2.10	2.1	
		Lead (Pb)	1.00	1.33	1.3	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	0.885	0.88	
		Cadmium (Cd)	1.00	0.135	0.14	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
23-12-01169-034	105-W-34	Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	<0.500	<0.50	
		Cadmium (Cd)	1.00	0.100	0.10	
		Chromium (Cr)	1.00	<1.00	<1.0	
		Lead (Pb)	1.00	<0.500	<0.50	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	<2.5	
		Chromium (Cr)	1.00	<1.00	<1.0	
23-12-01169-035	105-W-35	Lead (Pb)	1.00	<0.500	<0.50	
		Arsenic (As)	1.00	<2.50	---	

# Environmental Hazards Services, L.L.C

**Client Number:** 26-3514

**Report Number:** 23-12-01169

**Project/Test Address:** 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
		Barium (Ba)		<0.500	---	
		Cadmium (Cd)		<0.100	---	
		Chromium (Cr)		<1.00	---	
		Lead (Pb)		<0.500	---	
		Selenium (Se)		<2.50	---	
		Silver (Ag)		<0.500	---	
23-12-01169-036	105-W-36	Arsenic (As)	1.00	<2.50	<2.5	
		Barium (Ba)	1.00	5.33	5.3	
		Cadmium (Cd)	1.00	0.175	0.18	
		Chromium (Cr)	1.00	1.52	1.5	
		Lead (Pb)	1.00	2.22	2.2	
		Selenium (Se)	1.00	<2.50	<2.5	
		Silver (Ag)	1.00	<0.500	<0.50	

# Environmental Hazards Services, L.L.C

Client Number: 26-3514

Report Number: 23-12-01169

Project/Test Address: 168765; GFC; 4300 Goodfellow Blvd

Lab Sample Number	Client Sample Number	Analyte:	Wipe Area (ft <sup>2</sup> )	Total Metal (ug)	Concentration (ug/ft <sup>2</sup> )	Narrative ID
Sample Narratives:						

Analyst: Carlos Gonzalez

Method: EPA SW846 3050B/6010D

(b) (6)

Reviewed By Authorized Signatory:

*Tasha Eaddy*

QA/QC Clerk

Sample Results denoted with a "less than" (<) sign contains less than the reporting limit based on a 50mL volume. The reporting limit for Lead is 0.5ug.

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Unless otherwise noted, samples are reported without a dry weight correction. Sample location, description, area, volume, etc., was provided by the client. If the report does not contain the result for a field blank, it is due to the fact that the client did not include a field blank with their samples. These sample results do not reflect blank correction. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C.

Legend ug = microgram ug/ft<sup>2</sup> = micrograms per square foot  
mL = milliliter ft<sup>2</sup> = square foot

# ENVIRONMENTAL HAZARDS SERVICES, LLC

## Metals Chain of Custody Form

Pg 1 of 3

Company Name	Burns & McDonnell	Account #	26-3514															
Company Address	9400 Ward Parkway	City/State/Zip	Kansas City, MO 64114															
Phone	314-302-4661	Email	ea.pulcher@burnsmcd.com ala.st.aett@burnsmcd.com															
Project Name / Testing Address	GFC / 4300 Goodfellow Blvd	Collected By	A. Anstaett															
PO Number	168765																	
Turn-Around Time	5 DAY      3 DAY      2 DAY      1 DAY      SAME DAY OR WEEKEND - Must Call Ahead																	
		METALS		PARTICULATES		AIR		WIPES										
Client Sample ID	Collection Date & Time	Pb TCP	TCLP RCRA 8	RCRA 8 Total	Toxic Metal Profile	Welding Fume Profile	TX 14 TCLP	GA 17 Total	Other Metals	Total Nuisance Dust	Respirable Dust	TSP Gravimetric	TSP Pb	PMB 10	Total Time	Flow Rate	Vol.	AREA
105-w-01	12/4/23 0653								Ag, As, Ba, Cd, Cr, Pb, Se								cm <sup>3</sup> or ft <sup>3</sup>	
105-w-02	0721																12	
105-w-03	0725																12	
105-w-04	0729																12	
105-w-05	0733																12	
105-w-06	0738																12	
105-w-07	0745																3	
105-w-08	0748																12	
105-w-09	0753																12	
105-w-10	0757																12	
105-w-11	0802																12	
105-w-12	0806																12	
105-w-13	1010																12	
105-w-14	1018																19	
105-w-15	1020																12	
Released By:	A. Anstaett		Date:	12/3/2023		Time:	1030											
Signature:	(b) (6)		LAB USE ONLY - BELOW THIS LINE															

Received By: Scalper

(b) (6)

Signature: \_\_\_\_\_

Date: 12/11/23 Time: 9:55 AM  PM

Portal Contact Added

7469 WHITEPINE RD, RICHMOND, VA 23237 (800)-347-4010

RESULTS VIA CLIENT PORTAL AVAILABLE @ www.leadlab.com

23-12-01169



Due Date:

12/18/2023

(Monday)

EL

MM-L

# ENVIRONMENTAL HAZARDS SERVICES, LLC

## Metals Chain of Custody Form

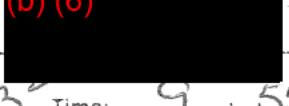
Pg 2 of 3

Company Name	Burns & McDonnell	Account #	26-3514								
Company Address	9400 Ward Parkway	City/State/Zip	Kansas City, MO 64114								
Phone	314-302-4661	Email	<a href="mailto:epulcher@burnsmcd.com">epulcher@burnsmcd.com</a> <a href="mailto:alanstaett@burnsmcd.com">alanstaett@burnsmcd.com</a>								
Project Name / Testing Address	GFC / 4300 Goodfellow Blvd										
PO Number	168765	Collected By	A. Anstaett								
Turn-Around Time	<input checked="" type="checkbox"/> 5 DAY <input type="checkbox"/> 3 DAY <input type="checkbox"/> 2 DAY <input type="checkbox"/> 1 DAY <input type="checkbox"/> SAME DAY OR WEEKEND - Must Call Ahead										
ITEM/TEST	METALS			PARTICULATES			AIR			WIPES	
	Client Sample ID	Collection Date & Time	Pb, TSP	TCLP RCRA 8 RCRA 3 Total Toxic Metal Profile	TX 11 TCLP CA 17 Total	Other Metals	Total Nuisance Dust Respirable Dust TSP Gravimetric	TSP P0 PM <sub>10</sub>	Total Time Mins	Flow Rate l/min	Vol Total Liters
105-W-16	12/4/23 1027				Ag, As, Ba, Cd, Cr, Pb, Se						12 x 12
105-W-17	1030										12 x 12
105-W-18	1031										NA x NA
105-W-19	1324										3 x 48
105-W-20	1328										12 x 12
105-W-21	1332										12 x 12
105-W-22	1338										12 x 12
105-W-23	1341										12 x 12
105-W-24	1346										12 x 12
105-W-25	12/5 1329										NA x NA
105-W-26	1336										12 x 12
105-W-27	1340										12 x 12
105-W-28	1343										12 x 12
105-W-29	1347										12 x 12
105-W-30	1350										12 x 12
Released By:		Date:									
Signature:		Time:									

LAB USE ONLY - BELOW THIS LINE

Received By: J. Soother

(b) (6)

Signature: 

Date: 12/11/23 Time: 9:55  AM  PM

Portal Contact Added

 7469 WHITEPINE RD, RICHMOND, VA 23237 (800)-347-4010

 RESULTS VIA CLIENT PORTAL AVAILABLE @ [www.leadlab.com](http://www.leadlab.com)



## ENVIRONMENTAL HAZARDS SERVICES, LLC

## Metals Chain of Custody Form

Pg 3 of 3

Company Name	Burns & McDonnell	Account #	26-3514
Company Address	9400 Ward Parkway	City/State/Zip	Kansas City, MO 64114
Phone	314-302-4661	Email	eapulcher@burnsmcd.com

Project Name / Testing Address | GFC / 4300 Goodfellow Blvd

PO Number	168765	Collected By
Turn-Around Time	<input checked="" type="checkbox"/> 5 DAY <input type="checkbox"/> 3 DAY <input type="checkbox"/> 2 DAY <input type="checkbox"/> 1 DAY <input type="checkbox"/> SAME DAY OR WEEKEND - Must Call Ahead	

Released By:

Date:

Time:

Signature:

LAB USE ONLY – BELOW THIS LINE

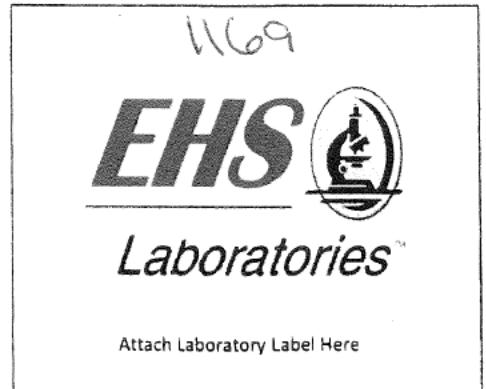
Received By: Jade

(b) (6)

Signature: \_\_\_\_\_

Date: 12/11/25 Time: 9:55  AM  PM

Portal Contact Added



 7469 WHITEPINE RD, RICHMOND, VA 23237 (800)-347-4010

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Attach Laboratory Label Here