September 2, 2022

Ms. Lisa Dunning
Task Order Contracting Officer's Representative
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

Subject: Contract No. 68HERH19D0018; Task Order (TO) No. 68E0719F0190
Former Rath Buildings, 1442, 1508, 1620, and 1656 Sycamore Street,
Waterloo, Black Hawk County, Iowa
Targeted Brownfields Assessment, Hazardous Materials Survey

Dear Ms. Dunning:

Toeroek Associates, Inc. (Toeroek) and our teaming subcontractor, Tetra Tech, Inc. (Tetra Tech), (hereafter "Toeroek Team") are pleased to present the attached Targeted Brownfields Assessment, Hazardous Materials Survey of the Former Rath Buildings (the subject property) located at 1442, 1508, 1620, and 1656 Sycamore Street in Waterloo, Black Hawk County, Iowa. This deliverable has been reviewed internally as part of Tetra Tech's quality assurance program, as well as Toeroek's quality assurance program, and is consistent with Toeroek's Quality Management Plan for the Resource Conservation and Recovery Act (RCRA) Enforcement and Permitting Assistance (REPA) contract. Documentation of this review is retained in the Toeroek Team's project files.

If you have any questions or comments, please contact Greg Hanna at 720-898-4102 or Kaitlyn Mitchell at 816-412-1742.

Sincerely,

Greg Hanna
Toeroek Team Program Manager

Kaitlyn Mitchell
Toeroek Team Project Manager

Enclosure: Targeted Brownfields Assessment, Hazardous Materials Survey

cc: Leanna Balsley, EPA Region 7
Heather Wood, Tetra Tech
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TARGETED BROWNFIELDS ASSESSMENT
HAZARDOUS MATERIALS SURVEY

FORMER RATH BUILDINGS
1442, 1508, 1620, AND 1656 SYCAMORE STREET
WATERLOO, BLACK HAWK COUNTY, IOWA

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7

Task Order	:	68E0719F0190
Subtask	:	010.05
EPA Region	:	7
Date Prepared	:	September 2, 2022
Contract No.	:	68HERH19D0018
Prepared by	:	Toeroek Associates, Inc.
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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked Toeroek Associates, Inc. (Toeroek) and its teaming subcontractor, Tetra Tech, Inc. (Tetra Tech) (hereafter "Toeroek Team") to provide technical support to the EPA Region 7 Brownfields Program under Contract Number (No.) 68HERH19D0018, Task Order (TO) No. 68E0719F0190. EPA Region 7 requested the Toeroek Team conduct a Hazardous Materials Survey (the Survey) as part of a Targeted Brownfields Assessment (TBA) of the Former Rath Buildings (the subject property) located at 1442, 1508, 1620, and 1656 Sycamore Street in Waterloo, Black Hawk County, Iowa. The site name refers to multiple buildings due to the various additions over the years; however, only one building is present on the subject property. The subject property is referred to one building throughout the remainder of this report. Construction of the subject property buildings occurred prior to 1978. As such, asbestos-containing materials (ACM) and lead-based paint (LBP) was likely used in building materials during the build-out of the structures; caulk may have contained polychlorinated biphenyls (PCBs).

The scope of the survey included an inspection of the subject property buildings for the presence of ACM, LBP, and PCBs in caulk. As part of the Survey, the Toeroek Team also conducted a Phase II Environmental Site Assessment (ESA), submitted under separate cover. Appendix B includes the Photographic Documentation Log of observations during the Survey.

The Toeroek Team conducted the survey from June 13 through 17, 2022. The Toeroek Team's Project Manager for the Survey was Ms. Kaitlyn Mitchell. Mr. Zach Usher, State of Iowa-licensed Asbestos and Lead Inspector was the field team leader for this survey. The field team was composed of Ms. Cory Nichols, Ms. Macy LaMasney, Mr. Reed Niemack, and Mr. Zachary Usher. Inspector certifications are provided in Appendix C. Section 10.0, Assumptions and Deviations, presents the assumptions and deviations regarding the Survey at the subject property. Prior to any renovations or demolition of the subject property building, additional building material characterization work may be needed to comply with all local, state, and federal requirements regulating ACM, LBP, and PCBs.

The purpose of the asbestos portion of the Survey was to evaluate subject property buildings for the presence, quantity, locations, and characterization of ACM that may require abatement prior to any development activities, in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations, as adopted by EPA. The intent of the asbestos NESHAP regulations is to protect the public (and workers) by minimizing release of asbestos fibers during activities involving processing, handling, and disposal of ACM. Inhalation of asbestos fibers can cause cancer and other lung diseases

(Agency for Toxic Substances and Disease Registry [ATSDR] 2008). The Survey accorded with industry standard practice for hazardous materials surveys. Collection of samples of suspected ACM accorded with NESHAP regulations, as adopted by EPA.

The Toeroek Team screened for the presence, quantity, and locations of LBP exceeding lead hazard levels, which would require Occupational Safety and Health Administration (OSHA) worker safety precautions during development activities at the subject property buildings. The LBP portion of the Survey proceeded according to protocols similar to the single-family housing inspection procedures in the U.S. Department of Housing and Urban Development (HUD) guidelines (HUD 2012). The Toeroek Team screened paint-covered surfaces using an x-ray fluorescence (XRF) spectrometer.

PCBs may be present within the subject property buildings in caulk associated with windows, doors, and masonry columns. The Toeroek Team collected samples from caulk materials suspected to contain PCBs for laboratory analysis to determine presence, quantity, and locations of PCBs exceeding the EPA action level, which would require OSHA worker safety precautions during development and remodeling activities.

The Toeroek Team submitted a site-specific quality assurance project plan (QAPP) in support of survey activities to EPA on March 17, 2022. EPA approved the QAPP on March 31, 2022, prior to survey activities at the subject property (Toeroek 2022). Field activities accorded with the QAPP, except where noted in Section 10.0.

The Toeroek Team prepared this report in accordance with generally accepted industrial hygiene practices and procedures. This report does not cover or comment on structural areas not assessed either visibly or by sample collection. The data evaluation and assessment stated herein constitute a professional opinion; no other warranty is expressed or implied. Section 10.0 specifies assumptions and deviations regarding the Survey at the subject property.

The Toeroek Team provided these services consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions. This statement is in lieu of other statements either expressed or implied. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document, the findings, conclusions, or recommendations is at the risk of said user. This Survey report does not warrant against future operations or conditions that may not be consistent with its recommendations. Moreover, because of some limitations on destructive sampling during the survey, completion of the Survey does not guarantee

identification of all ACMs, LBP, or PCBs in caulk—hazardous materials may be present in voids of walls, ceilings, or other concealed areas.

This report consists of the following sections:

- Section 2.0 of this report, Subject Property Building, describes the structure at the subject property.
- Section 3.0, ACM Field Survey and Analytical Protocols, specifies the field and analytical protocols for the ACM survey.
- Section 4.0, LBP Screening and Analytical Protocols, specifies field and analytical protocols for the LBP screening.
- Section 5.0, PCB Field Survey and Analytical Protocols, presents field and analytical protocols for the PCB survey.
- Section 6.0, ACM Findings, presents the results of the ACM survey activities.
- Section 7.0, LBP Findings, describes the results of the LBP screening activities.
- Section 8.0, PCB findings, conveys the results of the PCB survey activities.
- Section 9.0, Findings and Recommendations, offers recommendations based on the results of the survey.
- Section 10.0, Assumptions and Deviations, specifies the assumptions and deviations regarding the survey of the subject property building.
- Section 11.0, References, lists the sources referenced during development of this report.

2.0 SUBJECT PROPERTY BUILDING

The subject property encompasses approximately 5.5 acres of land on four parcels and hosts an approximately 750,000-square-foot building that historically operated as a meat packing plant. Currently, portions of the building are used for cold storage warehousing. The subject property is located within a mixed-use commercial and industrial area of Waterloo, Iowa. The subject property building is constructed of brick, mortar, concrete, and metal. Interior finishes include brick and mortar, concrete, metal, plaster walls, and drywall. Flooring materials include vinyl floor tile and concrete.

3.0 ACM FIELD SURVEY AND ANALYTICAL PROTOCOLS

The Toeroek Team made every effort to inspect all areas of the interior of the subject property building. Minor demolition of materials (destructive sampling) was required during the survey effort. The inspector took care to ensure the subject property remained unoccupied during sample collection. Collection of suspect ACM samples accorded with NESHAP, as adopted by EPA, and the Asbestos Hazard and Emergency Response Act of 1986 (AHERA) protocols. AHERA defines "asbestos-containing material" (ACM) as any material or product that contains more than 1 percent asbestos. Suspected ACMs were grouped as homogeneous areas if the material was similar in appearance and texture; however, if the inspector decided a material (for example, wall texturing) was not similar in appearance and texture to other materials in the subject property building, the inspector distinguished the material as unique and collected samples of each unique material accordingly. Because of limitations on destructive sampling methods, additional suspect materials not sampled may be present in walls, voids, or other concealed areas. Section 10.0 specifies assumptions and deviations regarding the survey of the subject property building.

Bulk samples of suspected ACM were collected to ensure each distinct layer of material was represented in the sample. A wetting agent was applied to friable surfaces prior to sample collection to reduce the potential for fiber release. All samples collected were placed in plastic bags, labeled, and sealed immediately upon collection. A unique sample identification number was assigned to each sample. To prevent cross-contamination between samples, the sampling instruments were wiped clean by use of a wet, lint-free cloth after collection of each sample.

The samples remained in the inspector's custody until sent to the laboratory. Upon completion of sampling activities, the bulk samples were sent, along with the Toeroek Team's chain-of-custody documentation, to Eurofins EMLab P&K Laboratories (Eurofins). Suspect ACM samples were analyzed per EPA Method 600/R-93/116 by Eurofins via polarized light microscopy (PLM) analysis. Samples determined by PLM analysis to contain less than 1 percent asbestos were analyzed via EPA Point Count 400 (also EPA Method 600/R-93/116). Eurofins is a National Voluntary Laboratory Accreditation Program (NVLAP)-certified laboratory. Section 6.0 of this report summarizes ACM analytical results which are listed in Table 1. Sample locations are shown on Figures 1 through 9 in Appendix A. Appendix D presents the ACM analytical results and chain-of-custody forms for the bulk samples.

4.0 LBP SCREENING AND ANALYTICAL PROTOCOLS

The Toeroek Team made every effort to inspect all areas of the building. HUD *Guidelines for the Evaluation and Control of LBP in Housing* (2012) (HUD Guidelines) suggests paint applied before 1978 could contain lead.

An XRF screening of suspected LBP accorded with protocols similar to the single-family housing inspection procedures in the HUD Guidelines. The Toeroek Team utilized an Olympus – Delta Professional XRF spectrometer to perform the LBP screening. The Olympus – Delta Professional is an XRF spectrum analyzing system used for quantitative measurement of lead in paint on various substrates. The Toeroek Team screened suspect painted surfaces that possibly would be impacted during renovation activities.

The Toeroek Team utilized the XRF "Lead Paint Mode" for testing, standardized per the equipment instruction manual, and programmed the unit with an action level of 1.0 milligram per square centimeter (mg/cm^2). Paint containing greater than or equal to 1.0 mg/cm^2 lead by XRF testing or 1.0 mg/cm^2 lead by laboratory analysis is considered LBP.

The Toeroek Team performed XRF calibration checks on the Delta Professional XRF spectrometer according to the protocol recommended by the manufacturer and the HUD Guidelines. These quality control readings were used to monitor performance of the Delta Professional XRF spectrometer. Calibration-check readings were taken at the beginning and end of the survey using a Standard Reference Material (SRM) paint film, developed by the National Institute of Standards and Technology (NIST). Section 7.0 of this report summarizes results from XRF screening of painted surfaces at the subject property. Table 2 provides XRF screening results. Some LBP quantities in Table 2 may be combined to avoid duplicate quantity of commingled materials. Screening locations with positive results appear on Figures 1 through 9 in Appendix A.

5.0 PCB FIELD SURVEY AND ANALYTICAL PROTOCOLS

The Toeroek Team made every effort to inspect all areas of the subject property building. Minor demolition of materials (destructive sampling) was required during the survey effort. The inspector took care to ensure the areas remained unoccupied during sample collection. Samples of caulk possibly containing PCBs were collected following EPA guidance. The EPA action level is 50 parts per million (ppm) for PCBs in materials; this was used as the benchmark for the Survey (EPA 2016). Suspected PCB-containing caulk materials were grouped as homogeneous areas if the material was similar in appearance and texture; however, if the inspector decided a material was not similar in appearance and texture to other materials in the building, or that a material was associated with a different building construction date, the inspector distinguished the material as unique and collected samples of each unique material accordingly. Section 10.0 specifies assumptions and deviations regarding the survey of subject property building.

The Toeroek Team collected bulk samples to ensure only suspect PCB-containing caulk materials were represented in the sample. A wetting agent was applied to the material prior to sample collection to reduce potential for particulate release. All samples collected were placed in plastic bags, labeled, and sealed immediately upon collection. A unique sample identification number was assigned to each sample. To prevent cross-contamination between samples, the sampling instruments were wiped clean by use of a wet, lint-free cloth after collection of each sample. Sampling locations appear on Figures 1 through 9 in Appendix A.

The samples remained in the inspector's custody until sent to the laboratory. Upon completion of sampling activities, the bulk samples were sent, along with the Toeroek Team's chain-of-custody documentation, to Pace Analytical (Pace) laboratory in Minneapolis, Minnesota. Pace analyzed bulk samples of suspect PCB-containing caulk materials via EPA Method 8082. Appendix E includes the PCB analytical results from those bulk samples, as well as chain-of-custody forms. Section 8.0 summarizes the analytical results from those samples. No PCBs were detected in any sample; therefore, no summary table is provided.

6.0 ACM FINDINGS

PLM results from samples of suspect ACM collected at the subject property building appear in the laboratory report in Appendix D, and are summarized in Table 1 below. A bolded result in Table 1 indicates a sample containing asbestos detected at a concentration greater than 1 percent. Figures 1 through 9 in Appendix A show the sample locations.

TABLE 1

SUMMARY OF RESULTS FROM LABORATORY ANALYSIS FOR SUSPECT ACM
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
1	RB-WG-01	Window Glaze (Square Pane Windows)	6th and 7th Floor	NA	<0.25% Chry[3]	NA
2	RB-WG-02					
3	RB-WG-03					
4	RB-BG-01	Wall Block Grout	Throughout	NA	ND	NA
5	RB-BG-02					
6	RB-BG-03					
7	**RB-TSI-01**	**White Pipe Insulation (Various Sizes)**	**Throughout**	**F**	**20% Amosite 8% Chry**	**4,700 LF**
8	**RB-TSI-02**					
9	**RB-TSI-03**					
10	RB-TSI2-01	Black 8" - 24" Pipe Insulation	Throughout	NA	ND	NA
11	RB-TSI2-02					
12	RB-TSI2-03					
13	RB-PL-01	Plaster	Throughout	NA	<0.25% Chry[3]	NA
14	RB-PL-02					
15	RB-PL-03					
16	RB-CI-01	Cork Insulation	Behind Walls – Throughout	NA	ND	NA
17	RB-CI-02					
18	RB-CI-03					
19	**RB-TSI3-01**	**Green Pipe Insulation**	**7th Floor – C71, C72**	**F**	**25% Chry**	**300 LF**
20	**RB-TSI3-02**					
21	**RB-TSI3-03**					
22	**RB-INS-01**	**Heater Insulation**	**5th and 7th Floors**	**F**	**10% Amosite 10% Chry**	**1,700 SF**
23	**RB-INS-02**					
24	**RB-INS-03**					
25	**RB-TSI4-01**	**Black Felt-Wrapped (Foam) Pipe Insulation**	**Roofs, 7th Floor, and C51**	**NF**	Grey Insulation – ND **Black Tar and Felt – 30% Chry**	**1,100 LF**
26	**RB-TSI4-02**					
27	**RB-TSI4-03**					

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Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
28	**RB-DC-01**	**Black Door Caulk**	**Elevator Door – All Floors**	**NF**	**5% Chry**	**280 LF**
29	**RB-DC-02**					
30	**RB-DC-03**					
31	**RB-BI-01**	**Boiler Insulation (Scattered Pipe Insulation Debris)**	**6th Floor – C64 Metal Boiler, C71, C72, B56, C51, G51**	**F**	**10% Amosite**	**1,500 SF**
32	**RB-BI-02**					
33	**RB-BI-03**					
34	RB-T-01	Tar	Throughout (Ceilings and Walls)	NA	ND	NA
35	RB-T-02					
36	RB-T-03					
37	**RB-TRAN-01**	**Transite Wall Panels**	**6th Floor – H Area Walls, E61**	**NF**	**15% Chry**	**4,450 SF**
38	**RB-TRAN-02**					
39	**RB-TRAN-03**					
40	**RB-DS-01**	**Black Duct Sealant**	**6th Floor – G Area, A3, C64**	**NF**	**15% Chry**	**300 SF**
41	**RB-DS-02**					
42	**RB-DS-03**					
43	**RB-TSI5-01**	**Aircell Pipe Insulation**	**C51, E51, G22, Basement Boiler Room, East Abandoned Basement Bathroom**	**F**	**20% Chry**	**550 LF**
44	**RB-TSI5-02**					
45	**RB-TSI5-03**					
46	RB-PL-04	Plaster	Throughout	NA	<0.25% Chry[3]	NA
47	RB-PL-05					
48	RB-PL-06					
49	RB-PL-07					
50	**RB-AS-01**	**Asphalt Shingles**	**Upper Columns and Ceiling (B55), B53, C11**	**NF**	**10% Chry**	**11,500 SF**
51	**RB-AS-02**					
52	**RB-AS-03**					
53	RB-DC2-01	White Door Caulk	5th Floor – Northwest Elevator Doors	NA	ND	NA
54	RB-DC2-02					
55	RB-DC2-03					

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Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
56	RB-WC-01	White Window Caulk	B56 (Interior Square Windows)	NA	ND	NA
57	RB-WC-02					
58	RB-WC-03					
59	RB-FH-01	Fire Hose	6th Floor – E61	NA	ND	NA
60	RB-FH-02					
61	RB-FH-03					
62	RB-PW-01	Black Pipe Wrap	F51	NA	ND	NA
63	RB-PW-02					
64	RB-PW-03					
68	RB-T2-01	Black Tar (Brick Walls)	A41, A22	NA	ND	NA
69	RB-T2-02					
70	RB-T2-03					
71	RB-FWC-01	Freezer Wall Coating	Throughout Freezer Walls	NA	ND	NA
72	RB-FWC-02					
73	RB-FWC-03					
74	RB-FWC-04					
75	RB-FWC-05					
76	RB-FWC-06					
77	RB-FWC-07					
78	**RB-TI-01**	**White Tank Insulation**	**G22, CB1**	**F**	**30% Chry**	**100 SF**
79	**RB-TI-02**					
80	**RB-TI-03**					
81	RB-CFT-01	Red Ceramic Floor Tile Grout	C22 – Lab Area	NA	ND	NA
82	RB-CFT-02					
83	RB-CFT-03					
84	**RB-VFT-01**	**Green 9" x 9" Vinyl Floor Tile**	**C22 – Lab Area**	**NF**	**Green Floor Tile – 5% Chry Black Mastic – 5% Chry**	**4,500 SF**
85	**RB-VFT-02**					
86	**RB-VFT-03**					

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Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
87	RB-CB-01	Black 6" Cove Base	C22 – Lab Area	NA	ND	NA
88	RB-CB-02					
89	RB-CB-03					
90	RB-CT-01	Dot Pattern 1' x 1' Ceiling Tile	C22 – Lab Area	NA	ND	NA
91	RB-CT-02					
92	RB-CT-03					
93	**RB-VFT2-01**	**Brown 12" x 12" Vinyl Floor Tile**	**C22 – Lab Hallway**	**NF**	**Brown Floor Tile – 2% Chry Black Mastic – 5% Chry**	**120 SF**
94	**RB-VFT2-02**					
95	**RB-VFT2-03**					
96	**RB-TSI6-01**	**Silver-Painted Pipe Insulation**	**C22 – Lab Area**	**F**	**Silver Coating – ND Grey Wrap – ND Insulation – 20% Amosite, 3% Chry**	**200 LF**
97	**RB-TSI6-02**					
98	**RB-TSI6-03**					
99	RB-VFT3-01	Grey 12" x 12" Vinyl Floor Tile	Loading Dock Office	NA	ND	NA
100	RB-VFT3-02					
101	RB-VFT3-03					
102	RB-CT2-01	White Fissure 2' x 4' Ceiling Tile	Loading Dock Office	NA	ND	NA
103	RB-CT2-02					
104	RB-CT2-03					
105	RB-DWJC-01	Drywall Joint Compound	Breakroom	NA	ND	NA
106	RB-DWJC-02					
107	RB-DWJC-03					
108	RB-CB2-01	White 4" Cove Base	Breakroom Hallway	NA	ND	NA
109	RB-CB2-02					
110	RB-CB2-03					
111	RB-SF-01	Brown Sheet Flooring	1st Floor Closet	NA	ND	NA
112	RB-SF-02					
113	RB-SF-03					

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Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
114	RB-CRT-01	Black Countertop	C22 – Lab Area	NA	ND	NA
115	RB-CRT-02					
116	RB-CRT-03					
117	RB-FP-01	Spray-On Fireproofing	AB2	NA	ND	NA
118	RB-FP-02					
119	RB-FP-03					
120	RB-C-01	White Caulk	Exterior Foundation – South Docks	NA	ND	NA
121	RB-C-02					
122	RB-C-03					
123	**RB-DC3-01**	**White Door Caulk**	**West Exterior Loading Dock Door**	**NF**	**10% Chry**	**8 LF**
124	**RB-DC3-02**					
125	**RB-DC3-03**					
126	**RB-TRAN2-01**	**Corrugated Transite Panels**	**Northwest Office Roof, Southwest Rail Dock Wall**	**NF**	**15% Chry**	**2,500 SF**
127	**RB-TRAN2-02**					
128	**RB-TRAN2-03**					
129	RB-C2-01	Grey Expansion Caulk	Exterior C13 – Southeast Corner, Northeast and North-Center C12, B11, and North A12	NA	ND	NA
130	RB-C2-02					
131	RB-C2-03					
132	RB-FS-01	Asphaltic Floor Seam	Exterior – C13 Ramp	NA	ND	NA
133	RB-FS-02					
134	RB-FS-03					
135	RB-EJ-01	White Expansion Joint (Soft)	Northeast and North-Center C12	NA	ND	NA
136	RB-EJ-02					
137	RB-EJ-03					
138	**RB-WC2-01**	**Old Grey Caulk**	**Exterior – North Street Level Windows**	**NF**	**15% Chry**	**30 LF**
139	**RB-WC2-02**					
140	**RB-WC2-03**					

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Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
141	RB-EJ2-01	Grey Expansion Joint	Northwest Ground Perimeter	NA	ND	NA
142	RB-EJ2-02					
143	RB-EJ2-03					
144	RB-RM-01	Roofing Material	Roof – G and F	NA	ND	NA
145	RB-RM-02					
146	RB-RM-03					
147	RB-RM2-01	Roofing Material	Roof – A11	NA	ND	NA
148	RB-RM2-02					
149	RB-RM2-03					
150	**RB-RT-01**	**Grey/Silver Roofing Tar**	**All Roofs**	**NF**	**8% Chry**	**6,000 SF**
151	**RB-RT-02**					
152	**RB-RT-03**					
153	**RB-RC-01**	**White Roofing Caulk**	**Roof – A**	**NF**	**5% Chry**	**60 LF**
154	**RB-RC-02**					
155	**RB-RC-03**					
156	RB-RT2-01	Black Roofing Tar	Roof – A (Vent)s	NA	ND	NA
157	RB-RT2-02					
158	RB-RT2-03					
159	RB-RM3-01	Roofing Material	Roof – B and C	NA	ND	NA
160	RB-RM3-02					
161	RB-RM3-03					
162	RB-RT3-01	Black Roofing Tar	All Roofs	NA	ND	NA
163	RB-RT3-02					
164	RB-RT3-03					
165	RB-WC3-01	White Window Caulk	Roof – B (Skylight Windows)	NA	ND	NA
166	RB-WC3-01					
167	RB-WC3-01					

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Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM[1])	Quantity[2]
168	RB-AS2-01	Asphalt Shingles	Roof – B/C Transition	NA	ND	NA
169	RB-AS2-02					
170	RB-AS2-03					
171	RB-RM4-01	Roofing Material	Roof – D and H	NA	ND	NA
172	RB-RM4-02					
173	RB-RM4-03					
174	RB-RC2-01	Pink Caulk	Roof – H (South Wall)	NA	ND	NA
175	RB-RC2-02					
176	RB-RC2-03					
177	**RB-RM5-01**	**Roofing Material**	**Roof – E**	**NF**	**10% Chry**	**12,200 SF**
178	**RB-RM5-02**					
179	**RB-RM5-03**					
180	**RB-EJ3-01**	**White Expansion Joint**	**Exterior – North A12 (Behind Metal Vertical Seams)**	**NF**	**3% Chry**	**400 LF**
181	**RB-EJ3-02**					
182	**RB-EJ3-03**					
Assumed ACM						
NA	**NA**	**Fire Doors**	**Throughout**	**NA**	**NA**	**25**
NA	**NA**	**Elevator Equipment**	**Elevators**	**NA**	**NA**	**6**

TABLE 1

SUMMARY OF RESULTS FROM LABORATORY ANALYSIS FOR SUSPECT ACM
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

Notes:

Figure Key above corresponds to the sample key table on the figures.

Bolded result indicates detection of ACM greater than or equal to 1%.

Color description of a material may vary between field observation and laboratory description.

Material Location in the format of a letter followed by a number indicates room number—for example, B71 (“B” conveys area, “7” conveys floor number, and “1” conveys room number).

Samples 65-67 are not included in the table as they were not submitted to the laboratory. The samples collected were of a material that should not have been sampled.

[1] AHERA defines ACM as any material or product that contains more than 1% asbestos.

[2] Quantities for non-ACM materials are not required.

[3] EPA defines ACM as greater than 1% asbestos. These materials contain <1% asbestos; therefore, the materials are not regulated for disposal purposes. However, the materials do contain asbestos, if the materials are disturbed, OSHA regulations must be followed, and personal protective equipment must be used.

”	Inches	LF	Linear feet
’	Feet	NA	Not applicable
%	Percent	ND	Not detected
ACM	Asbestos-containing material	SF	Square feet
AHERA	Asbestos Hazard and Emergency Response Act of 1986	TSI	Thermal systems insulation
Chry	Chrysotile		
EPA	U.S. Environmental Protection Agency		
ID	Identification		

7.0 LBP FINDINGS

A summary of screening results for LBP by use of the XRF spectrometer at the subject property building appears in Table 2 below. A bolded result in Table 2 indicates where LBP was detected at a concentration greater than or equal to 1.0 mg/cm^2. Some LBP quantities in Table 2 may be combined to avoid duplicate quantities of commingled materials. Figures 1 through 9 in Appendix A show any positive (greater than or equal to 1.0 mg/cm^2) results for LBP screening.

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.08/1.12/1.12	NA	NA
12	**Blue**	**B71 – South Wall**	**Door Frame**	**Metal**	**1.73**	**Yes**	**12 LF**
13	**Yellow**	**B71 – South Wall**	**Door Frame**	**Metal**	**1.12**	**Yes**	**6 LF**
14	White	B71 – Southwest Corner	Wall Corner	Concrete	0.04	NA	NA
15	White	B71 – Southwest Corner	Wall Corner	Concrete	0.03	No	NA
16	White	B71 – Southwest Corner	Wall Corner	Metal	0.01	No	NA
17	White	B71 – Southwest Corner	Wall Corner	Concrete	0.03	No	NA
18	**Grey**	**B71 – Southwest Corner**	**Breaker Box**	**Metal**	**5.00**	**Yes**	**5 SF**
19	White	B71 – B Wall (West) Windowsill	Windowsill	Concrete	0.01	NA	NA
20	White	B71 – B Wall (West)	Baseboard	Concrete	0.00	NA	NA
21	White	B71 – B Wall (West)	Windowsill	Concrete	0.18	NA	NA
22	White	B71 – B Wall (West)	Baseboard	Concrete	0.06	NA	NA
23	**Grey**	**B71 – B/C Corner (Northeast)**	**Post**	**Metal**	**5.00**	**Yes**	**10 LF**
24	Blue	B71 – C Wall (East)	Post	Metal	0.53	NA	NA
25	**Blue**	**B71 – Center**	**Post**	**Metal**	**5.00**	**Yes**	**60 LF**
26	Black	B71 – Center	Plumbing	Metal	0.09	NA	NA
27	Blue	B71 – A Wall	Door	Metal	0.01	NA	NA
28	White	B73 – A Wall	Windowsill	Concrete	0.00	NA	NA
29	Blue	B73 – A Wall	Wall Guard	Metal	0.00	NA	NA
30	Blue	B73 – A Wall	Post	Metal	0.32	NA	NA
31	Black	B73 – B Wall	Plumbing	Metal	0.05	NA	NA
32	White	B73 – C Wall (North)	Window Trim	Concrete	0.00	NA	NA
33	Clear Glazing	B73 – C Wall	Wall	Block	0.01	NA	NA
34	**Blue**	**B73 – D Wall**	**Door Frame**	**Metal**	**1.70**	**Yes**	**25 LF**
35	Blue	B73 – D Wall	Door	Wood	0.00	NA	NA
36	Blue	B73 – D Wall	Door	Metal	0.05	NA	NA
37	Blue	B73 – C Wall	Wall Rail Guard	Metal	0.66	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
38	Blue	B73 – D Wall	Roof Ladder	Metal	0.05	NA	NA
39	**Grey**	**B74 – A Wall**	**Escape Hatch**	**Metal**	**1.34**	**No**	**10 SF**
40	White	B72 – A Wall	Windowsill	Concrete	0.00	NA	NA
41	**White**	**B72 – Center**	**Post**	**Metal**	**5.00**	**Yes**	**220 LF**
42	Black	B72 – Center	Plumbing	Metal	0.00	NA	NA
43	**Blue**	**Elevator Room**	**Door**	**Metal**	**5.00**	**Yes**	**60 SF**
44	**Grey**	**B72 – C Wall**	**Door**	**Metal**	**5.00**	**Yes**	**60 SF**
45	Blue	Elevator Room	Door Post	Metal	0.19	NA	NA
46	Blue	Elevator Room – B Wall	Wall Guard	Metal	0.00	NA	NA
47	Blue	Elevator Room	Noll Post	Metal	0.53	NA	NA
48	Blue	Elevator Room	Handrail	Metal	0.15	NA	NA
49	Grey	Elevator Room	Stringer	Concrete	0.05	NA	NA
50	Grey	Elevator Room	Steps	Concrete	0.00	NA	NA
51	Blue	Elevator Room	Elevator Doors	Wood	0.00	NA	NA
52	Blue	Elevator Room	Door Trim	Metal	0.81	NA	NA
53	Yellow	Elevator Room	Door Trim	Metal	0.23	NA	NA
54	Grey	C71 – B Wall	Door	Metal	0.84	NA	NA
55	**Grey**	**C71 – B Wall**	**Door**	**Metal**	**1.06**	**Yes**	**80 SF**
56	**Grey**	**C71 – B Wall**	**Door Frame**	**Metal**	**2.79**	**Yes**	**25 SF**
57	**Grey**	**C71 – B Wall**	**Elevator Door Frame**	**Metal**	**2.20**	**Yes**	**50 SF**
58	**Grey**	**C71 – B Wall**	**Elevator Door**	**Metal**	**4.31**	**Yes**	**60 SF**
59	Grey	C72 – A Wall	Door	Metal	0.40	NA	NA
60	Grey	C71 – C Wall	Door	Metal	0.51	NA	NA
61	**Green**	**C72 – A Wall**	**Steel Beam**	**Metal**	**5.00**	**Yes**	**525 LF**
62	Grey	C72 – B Wall	Door Frame	Metal	0.10	NA	NA
63	Grey	C72 – B Wall	Staircase Door	Metal	0.50	NA	NA
64	Red	C73 – Center	Fire Plumbing	Metal	0.32	NA	NA
65	Grey	C73 – A Wall	Door	Metal	0.28	NA	NA
66	**Green**	**C72 – Center**	**Steel Framing**	**Metal**	**5.00**	**Yes**	**525 LF[2]**

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
67	**Green**	**C71 – Center**	**Pipe Wrap**	**Metal**	**1.43**	**Yes**	**232 LF**
68	Grey	C71 – Center	Equipment	Metal	0.08	NA	NA
69	**Green**	**C71 – Center**	**Structural Steel**	**Metal**	**5.00**	**Yes**	**750 LF**
70	Blue	B73 – Center	Post	Metal	0.55	NA	NA
71	**Grey**	**B71 – Ceiling**	**I - Beam**	**Metal**	**5.00**	**Yes**	**250 LF**
72	**Grey**	**B73 – Ceiling**	**I - Beam**	**Metal**	**5.00**	**Yes**	**1,800 LF**
73	**Black**	**B74 – Ceiling**	**I - Beam**	**Metal**	**5.00**	**Yes**	**2,000 LF**
74	**Black**	**B74 – Post**	**Post**	**Metal**	**5.00**	**Yes**	**200 LF**
75	Grey	H71 – Roof Access Room Wall C	Door	Metal	0.77	NA	NA
76	Grey	H71 –B Wall	Door	Metal	0.55	NA	NA
77	**Grey**	**H71 –B Wall**	**Door Frame**	**Metal**	**2.94**	**Yes**	**20 LF**
78	Grey	H71 –C Wall	Door Joist	Metal	0.81	NA	NA
79	**Grey**	**H71 – Roof Access Room**	**Wall**	**Wood**	**5.00**	**Yes**	**120 SF**
80	**Grey**	**H71 – Roof Access Room**	**Fire Piping**	**Metal**	**5.00**	**Yes**	**60 LF**
81	Black	H71 – Roof Access Room	Wall	Blaster	0.00	NA	NA
82	**Green**	**Elevator Room – Ceiling**	**Structural Steel**	**Metal**	**5.00**	**Yes**	**100 LF**
83	**Red**	**B72 – Ceiling**	**Structural Steel**	**Metal**	**5.00**	**Yes**	**1,000 LF**
84	**Grey**	**Restroom – South Wall**	**Door Frame**	**Metal**	**4.10**	**Yes**	**20 LF**
85	Grey	Restroom – South Wall	Door	Metal	0.30	NA	NA
86	**Grey**	**Restroom – South Wall**	**Pipe**	**Metal**	**1.00**	**No**	**10 LF**
87	**Grey**	**Restroom – South Wall**	**Pipe**	**Metal**	**1.00**	**No**	**10 LF[2]**
88	Grey	Restroom – South Wall	Wall Divider	Plaster	0.18	NA	NA
89	Grey	Restroom – South Wall	Wall	Plaster	0.28	NA	NA
90	White	Restroom – South Wall	Wall	Plaster	0.37	NA	NA
91	Grey	Restroom – South Wall	Ceiling	Plaster	0.13	NA	NA
92	**Blue**	**Staircase by Restrooms**	**Door Frame**	**Metal**	**1.04**	**Yes**	**40 LF**
93	**Blue**	**Staircase by Restrooms**	**Door Frame**	**Metal**	**1.17**	**Yes**	**40 LF[2]**
94	Blue	Staircase by Restrooms	Door	Metal	0.82	NA	NA
95	White	Staircase by Restrooms	Windowsill	Concrete	0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
96	Blue	B61	Staircase	Metal	0.00	NA	NA
97	Green	B61 – Steps to Roof	Door Jamb	Metal	0.63	NA	NA
98	White	B61	Column	Concrete	0.00	NA	NA
99	Black	B61	Plumbing Drain	Metal	0.12	NA	NA
100	Blue	B61	Elevator Door	Wood	0.00	NA	NA
101	Blue	B61	Elevator Door Trim	Metal	0.76	NA	NA
102	**Blue**	**B61**	**Elevator Door Trim**	**Metal**	**1.44**	**Yes**	**35 LF**
103	Yellow	B61	Elevator Door Trim	Metal	0.04	NA	NA
104	Blue	B61 – by Elevator	Wall Guard	Metal	0.19	NA	NA
105	Red	B61	Fire Extinguisher Marking	Wood	0.48	NA	NA
106	Blue	B62	Door	Metal	0.03	NA	NA
107	**Blue**	**B62**	**Door Trim**	**Metal**	**4.99**	**Yes**	**60 LF (3 Doors)**
108	White	B62	Baseboard	Concrete	0.00	NA	NA
109	Silver	B62	Ceiling	Concrete	0.00	NA	NA
110	**Blue**	**B63**	**Door Trim**	**Metal**	**5.00**	**Yes**	**20 LF**
111	Blue	B63	Door	Metal	0.00	NA	NA
112	**Grey**	**B64**	**Wall Guard**	**Metal**	**1.81**	**Yes**	**120 LF / 30 SF**
113	**Green**	**B63**	**Door Trim**	**Metal**	**5.00**	**Yes**	**20 LF**
114	**Silver**	**B63 – NE Corner (4D Walls)**	**Door Trim**	**Metal**	**2.04**	**Yes**	**20 LF**
115	**Green**	**C64 Restroom, Women's D Wall**	**Wall**	**Plaster**	**1.24**	**Yes**	**350 SF**
116	White	C64 Restroom, Women's D Wall	Wall	Plaster	0.26	NA	NA
117	Green	C64 Restroom, Women's B Wall	Wall	Plaster	0.77	NA	NA
118	**White**	**C64 Restroom, Women's B Wall**	**Toilet Stool**	**Porcelain**	**5.00**	**No**	**4 Stools, 1 Urinal**
119	Grey	C64 Restroom, Men's	Wall	Plaster	0.22	NA	NA
120	White	C64	Wall	Plaster	0.54	NA	NA
121	Grey	C64 Restroom	Door	Metal	0.36	NA	NA
122	**Green**	**C64 Staircase**	**Door Trim**	**Metal**	**5.00**	**Yes**	**20 LF**
123	**Silver**	**C64 Elevators**	**Door Trim**	**Metal**	**1.26**	**Yes**	**110 LF**
124	Olive Grey	C64 – C Wall	Beam	Wood	0.30	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
125	Grey	C64 – C Wall	Beam	Wood	0.48	NA	NA
126	**White**	**C63 – Center**	**Post**	**Metal**	**2.42**	**Yes**	**150 LF**
127	White	C63 – Center	Wall	Concrete	0.38	NA	NA
128	Grey	C63 –A Wall	I Beam	Metal	0.24	NA	NA
129	**Grey**	**C63 – Ceiling**	**I Beam**	**Metal**	**1.28**	**Yes**	**400 LF**
130	Blue	C63 –A Wall	Door	Metal	0.51	NA	NA
131	**Blue**	**C63 –A Wall**	**Door Trim**	**Metal**	**1.47**	**Yes**	**80 LF (3 Doors)**
132	White	C61	Post	Concrete	0.58	NA	NA
133	Blue	C61	Door Trim	Metal	0.75	NA	NA
134	**Blue**	**C61 – D Wall**	**Door**	**Metal**	**1.12**	**Yes**	**24 SF (1 Door)**
135	Red	C61 – D Wall	Fire Pipe	Metal	0.66	NA	NA
136	Blue	C61 – A Wall	Door Frame	Metal	0.66	NA	NA
137	Blue	C61 – A Wall	Door	Metal	0.07	NA	NA
138	**Blue**	**C61 – A Wall**	**Door**	**Metal**	**2.00**	**Yes**	**11 SF (4 Doors)**
139	White	C62 - D Wall	Post	Plaster	0.51	NA	NA
140	Blue	C62 – A Wall	Window Frame	Metal	0.70	NA	NA
141	Blue	C62 – A Wall	Window Frame	Metal	0.24	NA	NA
142	White	C62 – A Wall	Wall Trim	Metal	0.01	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.08/1.10/1.07	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.17/1.13/1.12	NA	NA
155	Grey	E51 – D Wall	Door Frame	Metal	0.26	NA	NA
156	Red	E51 – B Wall	Wall Guard	Metal	0.03	NA	NA
157	Red	E51	Fire Pipe Stand	Metal	0.41	NA	NA
158	White	E51	Column	Concrete	0.00	NA	NA
159	Orange	E51	Elevator Door	Metal	0.00	NA	NA
160	Grey	B65 – Men's Restroom	Door	Metal	0.14	NA	NA
161	Grey	B65 – Men's Restroom	Column	Concrete	0.24	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
162	Grey	B65 – Men's Restroom	Drainpipe	Metal	0.13	NA	NA
163	White	B65 – Men's Restroom	Column	Concrete	0.26	NA	NA
164	White	B65 – Men's Restroom	Standpipe	Metal	0.10	NA	NA
165	Grey	B65 – Men's Restroom	Stall Divider	Plaster	0.19	NA	NA
166	Grey	B65	Door Trim	Metal	0.53	NA	NA
167	Green	B65 – Women's Restroom	Door	Metal	0.50	NA	NA
168	**Green**	**B65 – Women's Restroom**	**Door Trim**	**Metal**	**5.00**	**Yes**	**40 LF**
169	Green	B65 – Women's Restroom	Column	Concrete	0.54	NA	NA
170	Green	B65 – Women's Restroom	Stall Dividers	Wood	0.75	NA	NA
171	**Black**	**B65 – Women's Restroom**	**Pipe**	**Metal**	**1.03**	**Yes**	**15 LF**
172	Black	B65 – Women's Restroom	Pipe	Metal	0.59	NA	NA
173	Dark Green	B65 – Women's Restroom	Pipe	Metal	0.61	NA	NA
174	**Red**	**B65 – Center**	**Fire Pipe**	**Metal**	**1.56**	**Yes**	**200 LF**
175	Red	H61 – Center	Fire Pipe	Metal	0.87	NA	NA
176	Red	H61 – Center	Fire Pipe	Metal	0.64	NA	NA
177	**Red**	**F61 – C Wall**	**Fire Pipe**	**Metal**	**4.00**	**No**	**650 LF**
178	**Red**	**F61**	**Door Frame**	**Metal**	**5.00**	**No**	**20 LF**
179	Grey	D61/H61 Connector	Elevator Door	Wood	0.05	NA	NA
180	Grey	D61/H61 Connector	Elevator Door Frame	Metal	0.83	NA	NA
181	Green	F61 – Center	I-Beam	Metal	0.38	NA	NA
182	Green	F61 – Center	Piping	Metal	0.61	NA	NA
183	Grey	F61 – Center	Electrical Box	Metal	0.04	NA	NA
184	Orange	F61 – Southwest Corner B Wall	Elevator Door	Metal	0.00	NA	NA
185	**Grey**	**F61 – Southwest Corner**	**Elevator Door Frame**	**Metal**	**5.00**	**Yes**	**20 LF**
186	**Grey**	**F61 – Southwest Corner**	**Door and Door Trim**	**Metal**	**1.00**	**Yes**	**20 LF[2]**
187	**Grey**	**F61**	**Door and Door Trim**	**Metal**	**1.27**	**Yes**	**20 SF**
188	**Green**	**E61**	**Ceiling**	**Metal**	**4.48**	**Yes**	**4,000 LF**
189	**Red**	**E61 – C Wall**	**Sprinkler**	**Metal**	**4.48**	**Yes**	**115 LF**
Calibration Blank					0.00/0.00/0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
Calibration Standard					1.11/1.14/1.17	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.18/1.12/1.12	NA	NA
214	White	B51 – B Wall	Wall	CMU	0.00	NA	NA
215	White	B51 – D Wall	Column	Concrete	0.09	NA	NA
216	**Blue**	**B51 – D Wall**	**Door Trim**	**Metal**	**4.36**	**No**	**160 LF**
217	**Blue**	**B51 – D Wall**	**Door**	**Metal**	**1.08**	**Yes**	**160 LF**
218	**Blue**	**B51 – C Wall**	**Elevator Door Trim**	**Metal**	**1.37**	**Yes**	**60 LF (3 Doors)**
219	Blue	B51 – C Wall	Elevator Door	Wood	0.00	NA	NA
220	Red	B51 – C Wall	Fire Extinguisher Panel	Wood	0.63	NA	NA
221	**Blue**	**B55 – A Wall**	**Door**	**Metal**	**1.26**	**Yes**	**160 SF (4 Doors)**
222	**Blue**	**B55 – A Wall**	**Door Trim**	**Metal**	**5.00**	**Yes**	**100 LF (8 Door Frames)**
223	Grey	B55 – A Wall	Door Jamb	Metal	0.72	NA	NA
224	White	B55 – D Wall	Baseboard	Concrete	0.00	NA	NA
225	Blue	B55 – B Wall	Rail Guard	Metal	0.83	NA	NA
226	Blue	B55 – B Wall	Rail Guard	Metal	0.79	NA	NA
227	**Blue**	**B53**	**Door Frame**	**Metal**	**1.80**	**No**	**40 LF**
228	Blue	B53	Door	Metal	0.64	NA	NA
229	Blue	B53 – A Wall	Wall	Metal	0.03	NA	NA
230	**Grey**	**B53 – C Wall**	**Door Frame**	**Metal**	**5.00**	**Yes**	**40 LF**
231	**Grey**	**B53 – B Wall**	**Door Braces**	**Metal**	**2.04**	**Yes**	**10 LF**
232	Silver	B53 – Center	Ceiling	Foam	0.00	NA	NA
233	Blue	B54 – D Wall	Rail Guard	Metal	0.65	NA	NA
234	**Olive**	**B54 – D Wall**	**Door**	**Metal**	**1.25**	**Yes**	**20 SF**
235	**Grey**	**B54 – D Wall**	**Door Frame**	**Metal**	**5.00**	**Yes**	**20 LF**
236	Blue	B54 – C Wall	Door Jamb	Metal	0.09	NA	NA
237	**Blue**	**B52 – C Wall**	**Door Trim**	**Metal**	**5.00**	**Yes**	**40 LF**
238	Blue	B52 – C Wall	Door	Metal	0.03	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
239	**Grey**	**B52 – D Wall**	**Door Trim**	**Metal**	**5.00**	**Yes**	**27 LF**
240	Green	B52 – Center	Column	Concrete	0.26	NA	NA
241	White	B52 – Center	Column	Concrete	0.08	NA	NA
242	Grey	B56 – C Wall	Drainpipe	Metal	0.07	NA	NA
243	**Grey**	**B56 – C Wall**	**Door Frame**	**Metal**	**1.00**	**Yes**	**15 LF**
244	**Grey**	**Elevator Room – B56 – C Wall**	**Door Frame**	**Metal**	**5.00**	**Yes**	**15 LF[2]**
245	Grey	Elevator Room – B56 – A Wall	Elevator Door Trim	Metal	0.71	NA	NA
246	White	Elevator Room – B56 – C Wall	Wall	Plaster	0.00	NA	NA
247	Grey	Elevator Room – B56 – D Wall	Door	Wood	0.02	NA	NA
248	Green	C51 – Women's Restroom – D Wall	Wall	Plaster	0.73	NA	NA
249	Green	C51 – Women's Restroom – C Wall	Door	Metal	0.34	NA	NA
250	**Green**	**C51 – Women's Restroom – C Wall**	**Door Trim**	**Metal**	**2.26**	**Yes**	**40 LF**
251	White	C51 – Women's Restroom – D Wall	Wall	Plaster	0.22	NA	NA
252	**White**	**C51 – Women's Restroom**	**Toilet Stool**	**Ceramic**	**5.00**	**Yes**	**4 Stools / 1 Urinal**
253	Grey	C51 – Men's Restroom	Door	Metal	0.00	NA	NA
254	**Grey**	**C51 – Men's Restroom**	**Door Trim**	**Metal**	**1.59**	**Yes**	**40 LF**
255	Grey	C51 – Men's Restroom – B Wall	Wall	Plaster	0.33	NA	NA
256	White	C51 – Men's Restroom – B Wall	Wall	Plaster	0.51	NA	NA
257	Red	C51 – A Wall	Pipe	Metal	0.63	NA	NA
258	Green	C51	Pipe Bracket	Metal	0.54	NA	NA
259	Grey	C51 – D Wall	Elevator Trim	Metal	0.37	NA	NA
260	Grey	C51 – D Wall	Wall	Concrete	0.71	NA	NA
261	**Grey**	**C51 – B Wall**	**Door**	**Metal**	**4.29**	**Yes**	**160 SF**
262	**Grey**	**C51 – B Wall**	**Door Trim**	**Metal**	**5.00**	**Yes**	**120 LF**
263	Grey	C51 – B Wall	Wall Trim/Guard	Metal	0.66	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
264	**Grey**	**F61 – D Wall**	**Door Trim**	**Metal**	**5.00**	**Yes**	**60 LF**
265	Grey	F61 – D Wall	Door	Metal	0.88	NA	NA
266	Grey	F61 – D Wall	Door	Metal	0.37	NA	NA
267	Green	F51 – D Wall	Door	Wood	0.02	NA	NA
268	Red	F51 – Center	Fire Pipe	Metal	0.04	NA	NA
269	Red	G51 – Center	Fire Pipe	Metal	0.02	NA	NA
270	Grey	G51 – Center	Elevator Door Frame	Metal	0.05	NA	NA
271	**Blue**	**G41 – B Wall**	**Door Trim**	**Metal**	**5.00**	**Yes**	**40 LF**
272	Blue	G41 – B Wall	Door	Metal	0.36	NA	NA
273	Yellow	G41 – D Wall	Door Trim	Metal	0.00	NA	NA
274	Blue	G41 – B Wall	Door Trim	Metal	0.02	NA	NA
275	**Blue**	**G41 – B Wall**	**Door**	**Metal**	**1.00**	**No**	**20 SF**
276	Blue	G41 – B Wall	Door	Metal	0.09	NA	NA
277	White	G41	Wall	Plaster	0.00	NA	NA
278	Blue	G41 – A Wall	Door	Wood	0.00	NA	NA
279	**Green**	**G41 – Center**	**Piping**	**Metal**	**1.17**	**No**	**80 LF**
280	**Green**	**G41 – Center**	**Piping**	**Metal**	**1.00**	**No**	**80 LF[2]**
281	Blue	G41 – D Wall	Piping	Metal	0.31	NA	NA
282	Red	G42	Fire Pipe	Metal	0.39	NA	NA
283	White	F42 – A Wall	Guard Pipe	Metal	0.01	NA	NA
284	White	F42 – Center	Column	Metal	0.53	NA	NA
285	Blue	F42 – C Wall	Door Frame	Metal	0.25	NA	NA
286	Blue	F42 – C Wall	Door	Metal	0.87	NA	NA
287	Blue	F42 – C Wall	Door	Metal	0.74	NA	NA
288	Blue	F41 – D Wall	Door	Metal	0.02	NA	NA
289	White	F41 – Center	Column	Concrete	0.53	NA	NA
290	Blue	F41 – Center	Column	Concrete	0.60	NA	NA
291	**Blue**	**Elevator Room – A43**	**Door Frame**	**Metal**	**5.00**	**No**	**40 LF (2 Doors)**
292	**Blue**	**Elevator Room – A43**	**Door Frame**	**Metal**	**5.00**	**No**	**40 LF[2]**

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
293	Grey	Elevator Room	Elevator Door	Metal	0.00	NA	NA
294	Yellow	Elevator Room	Post	Wood	0.00	NA	NA
295	White	Elevator Room – D Wall	Wall	Plaster	0.00	NA	NA
296	White	Elevator Room – D Wall	Post	Wood	0.00	NA	NA
297	Red	Elevator Room – D Wall	Fire Piping	Metal	0.12	NA	NA
298	Blue	Elevator Room – D Wall	Piping	Metal	0.00	NA	NA
299	Blue	A43 – C Wall	Door	Wood	0.00	NA	NA
300	Blue	A43 – C Wall	Door Frame	Wood	0.00	NA	NA
301	Yellow	A41 – D Wall	Door Trim	Wood	0.00	NA	NA
302	Yellow	A41 – D Wall	Guard Rail	Metal	0.13	NA	NA
303	Red	A41 – D Wall	Fire Pipe	Metal	0.25	NA	NA
304	Yellow	A41 – Center	Post	Wood	0.00	NA	NA
305	White	A41 – Center	Post	Wood	0.00	NA	NA
306	White	A42 – C Wall	Door Trim	Wood	0.00	NA	NA
307	White	A42 – C Wall	Door	Wood	0.00	NA	NA
308	**Yellow**	**A42 – C Wall**	**Guard Rail Ammonia Tank**	**Metal**	**3.89**	**No**	**550 LF**
309	Yellow	A42 – C Wall	Guard Rail Ammonia Tank	Metal	0.76	NA	NA
310	Grey	A42 – C Wall	Ammonia Piping	Metal	0.00	NA	NA
311	Red	A42 – C Wall	Ammonia Valves	Metal	0.00	NA	NA
312	Blue	B41 – B Wall	Door Trim	Metal	0.05	NA	NA
313	Blue	B41 – B Wall	Door	Metal	0.00	NA	NA
314	Yellow	B41	Door Trim	Metal	0.06	NA	NA
315	White	B41 – B Wall	Block Wall	Metal	0.00	NA	NA
316	Blue	B41 – Elevator C Wall	Elevator Door Trim	Metal	0.59	NA	NA
317	White	B41 – Elevator C Wall	Door	Wood	0.00	NA	NA
318	White	B41 – Center	Ceiling	PVC	0.00	NA	NA
319	**Blue**	**B41 – C Wall**	**Door Frame**	**Metal**	**1.69**	**No**	**40 LF**

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
320	**Blue**	**B41 – C Wall**	**Door**	**Metal**	**1.34**	**No**	**64 SF**
321	Black	B41 – Restroom	Drainpipe	Metal	0.00	NA	NA
322	Grey	B41 – Restroom	Floor	Concrete	0.00	NA	NA
323	**Blue**	**B41 – Restroom**	**Door Frame**	**Metal**	**5.00**	**No**	**40 LF**
324	Blue	B41 – Restroom	Door	Metal	0.70	NA	NA
325	White	B41 – C Wall	Pillar	Concrete	0.43	NA	NA
326	Blue	B41 – D Wall	Wall	CMU	0.00	NA	NA
327	White	B42 – B Wall	Pillar	Concrete	0.06	NA	NA
328	Yellow	B42 – B Wall	Bollard	Metal	0.00	NA	NA
329	Yellow	B42 – Center Tank	Guard Pipe	Metal	0.19	NA	NA
330	White	B42 – Center Tank	Piping	Metal	0.02	NA	NA
331	White	B42 – C Wall	Support	Concrete	0.13	NA	NA
332	Blue	B42 – D Wall	Door Frame	Metal	0.20	NA	NA
333	**Orange**	**B42 – D Wall**	**Door Frame Trim**	**Metal**	**3.20**	**Yes**	**20 LF**
334	Baby Blue	B42 – D Wall	Door	Wood	0.00	NA	NA
335	Blue	B42 – D Wall	Guard Rail	Metal	0.00	NA	NA
336	**Blue**	**C41 – B Wall**	**Door Frame**	**Metal**	**4.30**	**Yes**	**60 LF (3 Doors)**
337	Blue	C41 – B Wall	Door	Metal	0.03	NA	NA
338	Blue	C41 – Center	Post	Metal	0.00	NA	NA
339	**Blue**	**C41 – Center**	**I-Beam**	**Metal**	**1.34**	**No**	**80 LF**
340	Blue	C41 – B Wall	Guard Rail	Metal	0.02	NA	NA
341	Blue	C41 – D Wall	Electrical Box	Metal	0.02	NA	NA
342	White	C41 – C Wall	Wall	CMU	0.00	NA	NA
344	**Blue**	**C42 – D Wall**	**Door**	**Metal**	**1.12**	**No**	**20 SF**
345	**Blue**	**C42 – D Wall**	**Door**	**Metal**	**1.17**	**No**	**20 SF[2]**
346	Blue	C42 – D Wall	Door Frame	Metal	0.13	NA	NA
347	Blue	C42 – D Wall	Door Frame	Metal	0.03	NA	NA
348	Blue	C42 – B Wall	Guarding	Metal	0.82	NA	NA
349	Blue	C42	Guarding	Metal	0.53	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
350	**Grey**	**H41**	**Door Frame**	**Metal**	**2.15**	**NA**	**25 LF**
351	Grey	H41 – Elevator Room	Door Frame	Metal	0.07	NA	NA
352	**Grey**	**H41 – Staircase**	**Door Frame**	**Wood**	**1.69**	**Yes**	**20 LF**
353	**Grey**	**H41 – Staircase**	**Door Frame**	**Metal**	**5.00**	**Yes**	**20 LF**
354	Grey	H41 – Staircase	Door Frame	Metal	0.02	NA	NA
Calibration Blanks					0.00/0.00/0.00	NA	NA
Calibration Standard					1.10/1.09/1.16	NA	NA
Calibration Blanks					0.00/0.00/0.00	NA	NA
Calibration Standard					1.15/1.12/1.10	NA	NA
367	Blue	Elevator Room Outside F41 – B Wall	Door Trim	Metal	0.06	NA	NA
368	Blue	Elevator Room Outside F41 – B Wall	Door	Metal	0.00	NA	NA
369	Dark Green	Elevator Room – A Wall	Door Trim	Metal	0.25	NA	NA
370	Grey	Elevator Room – A Wall	Piping	Metal	0.19	NA	NA
371	**Grey**	**Elevator Room – D Wall**	**Door Jamb**	**Metal**	**2.01**	**No**	**20 LF**
372	Red	D41 – Hall	Floor	Concrete	0.00	NA	NA
373	Red	D41 – Hallway	Overhead Conveyer	Metal	0.40	NA	NA
374	Grey	E41 – A-D Wall Corner	Door	Metal	0.85	NA	NA
375	White	E41 – A Wall	Piping	Metal	0.45	NA	NA
376	Blue	E41 – A Wall	Pipe	Metal	0.62	NA	NA
377	White	E41 – Center	Rafter	Wood	0.51	NA	NA
378	Grey	E41 – A Wall	Door	Metal	0.35	NA	NA
379	Grey	E41 – B Wall	Door Frame	Metal	0.10	NA	NA
380	Blue	Elevator Room by F31	Door Frame	Metal	0.01	NA	NA
381	Blue	Elevator Room by F31	Door	Metal	0.05	NA	NA
382	White	Elevator Room by F31	Pipe	Metal	0.00	NA	NA
383	White	Elevator Room by F31	Concrete	Wall	0.00	NA	NA
384	Yellow	Elevator Room by F31	Door Trim	Metal	0.01	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
385	Yellow	E31 – Center	Column	Concrete	0.00	NA	NA
386	Off-White	E31 – Center	Column	Concrete	0.02	NA	NA
387	White	E31 – Center	Column	Concrete	0.01	NA	NA
388	White	E31 – Center	Ceiling	Concrete	0.00	NA	NA
389	White	D31 – A Wall	Tile Wall	Tile	0.01	NA	NA
390	White	D31 – A Wall	Door Frame	Metal	0.31	NA	NA
391	White	D31 – A Wall	Pilar	Concrete	0.04	NA	NA
392	**Green**	**D32 – D Wall**	**I-Beam**	**Metal**	**4.69**	**Yes**	**100 LF**
393	White	D32 – A Wall	Wall	Concrete	0.00	NA	NA
394	Blue	D32 – A Wall	Door Frame	Metal	0.20	NA	NA
395	Yellow	D32 – A Wall	Door Frame	Metal	0.00	NA	NA
396	Blue	D32 – A Wall	Door	Metal	0.40	NA	NA
397	**Yellow**	**C33 – B Wall**	**Pipe**	**Metal**	**5.00**	**Yes**	**30 LF**
398	Light Blue	C33 – Center	Door Frame	Metal	0.00	NA	NA
399	Dark Blue	C33 – Center	Door Frame	Metal	0.00	NA	NA
400	Blue	C33 – Staircase	Door Frame	Metal	0.31	NA	NA
401	**Blue**	**C31 – Staircase**	**Door**	**Metal**	**2.06**	**No**	**50 SF**
402	White	C31 – C Wall	Column	Concrete	0.34	NA	NA
403	Blue	C31	Piping	Metal	0.49	NA	NA
404	Blue	D32 – Center	Door Frame	Metal	0.35	NA	NA
405	White	D32 – Center	Pillar	Concrete	0.00	NA	NA
406	Blue	D32 – Center	Framing	Metal	0.00	NA	NA
407	Teal	D32 – Center	Piping	TSI	0.10	NA	NA
408	Yellow	D32 – A Wall	Guarding	Metal	0.62	NA	NA
409	White	B31 – C Wall	Pipe	Metal	0.15	NA	NA
410	**Blue**	**B31 – C Wall Elevator**	**Door Frame**	**Block**	**2.42**	**Yes**	**40 LF**
411	Blue	B31 – C Wall Elevator	Door	Wood	0.00	NA	NA
412	**Blue**	**B31 – C Wall**	**Door Frame**	**Metal**	**1.00**	**No**	**29 LF**
413	**Blue**	**B31 – C Wall**	**Door Frame**	**Metal**	**1.01**	**No**	**29 LF[2]**

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
414	Blue	B31 – C Wall	Door	Metal	0.00	NA	NA
415	Red	B31 – B Wall	Fan Wall	Metal	0.32	NA	NA
416	Red	B31 – B Wall	Guard	Metal	0.05	NA	NA
417	**Blue**	**B31 – Restroom**	**Door Frame**	**Metal**	**5.00**	**NA**	**80 SF**
418	Blue	B31 – Restroom	Door	Metal	0.53	NA	NA
419	Blue	B31 – Restroom	Floor	Concrete	0.30	NA	NA
420	White	B31 – Restroom	Urinal	Porcelain	0.01	NA	NA
421	White	B31 – Restroom	Toilet Stool	Porcelain	0.00	NA	NA
422	Grey	H31 – C Wall	Door	Metal	0.33	NA	NA
423	White	H31 – Center	Ceiling	Cork	0.00	NA	NA
424	Yellow	H31 – C Wall	Guard Rail	Metal	0.00	NA	NA
425	Blue	G31 – C Wall	Door Trim	Metal	0.00	NA	NA
426	Blue	G31 – C Wall	Door	Metal	0.46	NA	NA
427	Blue	G31 – B Wall	Door	Metal	0.01	NA	NA
428	Blue	G31 – B Wall	Door Trim	Metal	0.18	NA	NA
429	White	G31 – B Wall	Door	Wood	0.00	NA	NA
430	White	G31 – B Wall	Door Trim	Metal	0.00	NA	NA
431	White	G31 – Center	Column	Concrete	0.00	NA	NA
432	**Blue**	**G31 – D Wall**	**Door Trim**	**Metal**	**4.01**	**Yes**	**40 LF**
433	Blue	G31 – D Wall	Door	Metal	0.00	NA	NA
434	**Blue**	**G31 – D Wall**	**Elevator Door Trim**	**Metal**	**1.13**	**Yes**	**50 LF**
435	Blue	G31 – D Wall	Doors	Metal	0.00	NA	NA
436	White	F31 – B Wall	Door	Metal	0.00	NA	NA
437	White	F31 – B Wall	Door Frame	Metal	0.00	NA	NA
438	White	F31 – B Wall	Wall	Concrete	0.00	NA	NA
439	Blue	F31 – D Wall	Door	Metal	0.01	NA	NA
440	Blue	F31 – D Wall	Door Frame	Metal	0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.16/1.17/1.13	NA	NA
447	White	A34 – A Wall	Door Frame	Metal	0.00	NA	NA
448	White	A34 – A Wall	I-Beam	Metal	0.00	NA	NA
449	White	A34 – A Wall	Paneling	Metal	0.00	NA	NA
450	Yellow	A34 – C Wall	Wash Station	Metal	0.34	NA	NA
451	Blue	A34 – A Wall	Door Trim	Metal	0.07	NA	NA
452	Blue	A34 – A Wall	Door	Metal	0.49	NA	NA
453	Red	A36 – A Wall	Door Frame	Metal	0.00	NA	NA
454	Blue	A32 – Center	Guard Rail	Metal	0.89	NA	NA
455	Blue	A32 – D Wall	Door Trim	Metal	0.06	NA	NA
456	Blue	A32 – D Wall	Door	Metal	0.69	NA	NA
457	White	A32 – Center	Column	Concrete	0.00	NA	NA
458	Blue	A31 – C Wall	Door	Metal	0.03	NA	NA
459	Blue	A31 – C Wall	Door Frame	Metal	0.00	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.13/1.09/1.12	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.14/1.15/1.14	NA	NA
475	Blue	Elevator Room Near BB1	Elevator Door Frame	Metal	0.07	NA	NA
476	Blue	Elevator Room Near BB1	Elevator Door	Wood	0.00	NA	NA
477	White	Elevator Room Near BB1 – C Wall	Wall	Concrete	0.00	NA	NA
478	**Blue**	**Elevator Room Near BB1 – C Wall**	**Door**	**Metal**	**2.14**	**No**	**100 LF (5 Doors)**
479	**Blue**	**Elevator Room Near BB1 – C Wall**	**Door Frame**	**Metal**	**1.32**	**No**	**20 SF (1 Door)**
480	Blue	Wall Guard – C Wall	Guard Rail	Metal	0.50	NA	NA
481	White	BB1 – Guard – A Wall	Wall	Concrete	0.00	NA	NA
482	**Blue**	**BB1 – A Wall**	**Guard Rail**	**Metal**	**2.13**	**No**	**200 LF**

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
483	White	BB1 – Center	Column	Concrete	0.00	NA	NA
484	White	CB1 – B Wall	Door Frame	Metal	0.09	NA	NA
485	Blue	CB1 – D Wall	Door Frame	Metal	0.39	NA	NA
486	**Blue**	**CB1 – D Wall**	**Door**	**Metal**	**3.32**	**Yes**	**80 LF (4 Doors)**
487	Grey	CB1 – D Wall	Door Trim	Metal	0.38	NA	NA
488	Red	CB1 – Center	Door	Wood	0.22	NA	NA
489	Orange	CB1 – Center	Piping	Metal	0.16	NA	NA
490	White	CB1 – Elevator Room – D Wall	Wall	Concrete	0.00	NA	NA
491	Green	CB1 – Elevator Room – A Wall	Door Trim	Metal	0.36	NA	NA
492	White	DB1 – C Wall	Door Trim	Metal	0.00	NA	NA
493	White	DB1 – C Wall	Door	Metal	0.00	NA	NA
494	White	DB1 – Center	Column	Concrete	0.00	NA	NA
495	Yellow	DB1 – A Wall	Bollard	Metal	0.59	NA	NA
496	White	EB1 – Center	Column	Concrete	0.00	NA	NA
497	White	EB1 – D Wall	Door Frame	Metal	0.00	NA	NA
498	White	EB1 – D Wall	Door	Metal	0.00	NA	NA
499	White	FB1 – Center	Column	Metal	0.00	NA	NA
500	**Yellow**	**FB1 – B Wall**	**Guard Rail**	**Metal**	**1.00**	**No**	**10 LF**
501	**Yellow**	**FB1 – B Wall**	**Guard Rail**	**Metal**	**1.00**	**No**	**10 LF[2]**
502	**Grey**	**FB3 – D Wall**	**Door Frame**	**Metal**	**1.00**	**No**	**20 LF**
503	Grey	FB3 – D Wall	Door Frame	Metal	0.00	NA	NA
504	Grey	FB3 – D Wall	Door	Metal	0.32	NA	NA
505	**Yellow**	**FB3 – C Wall**	**Piping**	**Metal**	**5.00**	**Yes**	**20 LF**
506	Green	FB3 – C Wall	Piping	Metal	0.66	NA	NA
507	Grey	FB3 – B Wall	Window Sash	Wood	0.26	NA	NA
508	White	GB1 – B Wall	Wall	Concrete	0.00	NA	NA
509	White	GB1 – Center	Ceiling	Concrete	0.01	NA	NA
510	Blue	GB1 – B Wall	Door Frame	Metal	0.37	NA	NA
511	Blue	GB1 – B Wall	Door	Metal	0.82	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
512	Blue	HB1 – A Wall	Door Frame	Metal	0.00	NA	NA
513	Blue	HB1 – A Wall	Door	Metal	0.03	NA	NA
514	White	HB1 – Center	Column	Concrete	0.00	NA	NA
515	Yellow	HB1 – B Wall	Guard	Metal	0.64	NA	NA
516	Blue	HB1 – B Wall	Equipment Stand	Metal	0.50	NA	NA
517	**Grey**	**HB1 – Elevator Room – D Wall**	**Door Frame**	**Metal**	**4.76**	**Yes**	**20 LF**
518	Grey	HB1 – A Wall	Wall	Wood	0.01	NA	NA
519	Blue	AB1 – D Wall	Door Frame	Metal	0.36	NA	NA
520	Blue	AB1 – D Wall	Door	Wood	0.00	NA	NA
521	White	AB1 – Center	Column	Concrete	0.48	NA	NA
522	Yellow	AB1 – D Wall	Door Frame	Metal	0.00	NA	NA
523	Blue	AB1 – A Wall	Handrail	Metal	0.28	NA	NA
524	Red	AB1 – D Wall	Door Frame	Metal	0.02	NA	NA
525	Red	AB1 – D Wall	Door	Wood	0.54	NA	NA
526	Blue	AB1 – C Wall	Door Frame	Metal	0.20	NA	NA
527	Blue	AB1 – C Wall	Door	Metal	0.02	NA	NA
528	**Yellow**	**AB1 – Center**	**Pipe**	**Metal**	**2.85**	**No**	**200 LF**
530	Blue	AB1 – Center Stairs	Knoll Post	Metal	0.00	NA	NA
531	Grey	AB1 – Center Stairs	String	Metal	0.01	NA	NA
532	Brown	AB1 – C Wall	Closet Wall	Wood	0.00	NA	NA
533	**Blue**	**AB2 – B Wall**	**Door Frame**	**Metal**	**2.09**	**Yes**	**110 LF**
534	Blue	AB2 – B Wall	Door	Wood	0.00	NA	NA
535	Blue	AB2 – Center	Guard Rail	Metal	0.00	NA	NA
536	White	AB2 – C Wall	Wall	Block	0.00	NA	NA
537	Blue	AB3 – A Wall	Door Frame	Metal	0.14	NA	NA
538	Blue	AB3 – A Wall	Door	Metal	0.02	NA	NA
539	Blue	AB3 – A Wall	Guard Rail	Metal	0.61	NA	NA
540	**Blue**	**AB4 – D Wall**	**Door Frame**	**Metal**	**1.49**	**No**	**20 LF**
541	Blue	AB4 – D Wall	Door	Wood	0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
542	Blue	AB4 – D Wall	Guard Rail	Metal	0.41	NA	NA
543	Grey	AB4 – D Wall	Tank	Concrete	0.03	NA	NA
544	Blue	AB4 – D Wall	Piping	Metal	0.00	NA	NA
545	Blue	AB1 – Restroom – C Wall	Door Frame	Metal	0.19	NA	NA
546	Blue	AB1 – Restroom – C Wall	Door	Metal	0.12	NA	NA
547	Blue	AB1 – Restroom – C Wall	Wall	Concrete	0.00	NA	NA
548	White	AB1 – Restroom – C Wall	Wall	Block	0.00	NA	NA
549	White	AB1 – Restroom – C Wall	Sink	Porcelain	0.02	NA	NA
550	White	AB1 – Restroom – Center	Ceiling	Plaster	0.00	NA	NA
551	White	AB1 – Restroom – D Wall	Window	Wood	0.04	NA	NA
552	Blue	AB1 – Restroom – D Wall	Toilet Stool	Porcelain	0.02	NA	NA
553	Blue	Lunchroom – Center	Door Trim	Wood	0.00	NA	NA
554	Light Blue	Lunchroom – Center	Wall	Drywall	0.00	NA	NA
555	Dark Blue	Lunchroom – Center	Wall	Drywall	0.00	NA	NA
556	**Light Blue**	**Lunchroom – Center**	**I Beam**	**Metal**	**3.52**	**No**	**10 LF**
557	White	Lunchroom – Center	Ceiling	Drywall	0.00	NA	NA
558	Blue	A13 – Dock	Door Frame	Metal	0.02	NA	NA
559	Blue	A13 – Dock	Door	Metal	0.00	NA	NA
560	Yellow	A13 – Dock – C Wall	Guard Rail	Metal	0.00	NA	NA
561	White	A13 – Dock – B Wall	Base Trim	Concrete	0.00	NA	NA
562	**Yellow**	**A13 – Dock – B Wall**	**Door Frame**	**Metal**	**2.34**	**Yes**	**250 LF**
563	Yellow	A13 – D Wall	Guard Rail	Metal	0.00	NA	NA
564	White	A13 – A Wall	Wall	Concrete	0.00	NA	NA
565	**Brown**	**A13 – C Wall**	**Door Frame**	**Metal**	**3.86**	**No**	**40 LF**
566	Brown	A13 – C Wall	Door	Wood	0.00	NA	NA
567	**White**	**A14 – D Wall**	**I Beam**	**Metal**	**5.00**	**No**	**150 LF**
568	**Yellow**	**A14 – C Wall**	**Post**	**Metal**	**5.00**	**No**	**370 LF**
569	**Blue**	**Elevator Room near A11**	**Door Frame**	**Metal**	**2.95**	**Yes**	**50 LF**
570	Blue	Elevator Room near A11	Door	Wood	0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
571	**Yellow**	**Elevator Room near A11**	**Guard Rail**	**Metal**	**5.00**	**Yes**	**68 LF**
572	**Blue**	**A11 – A Wall**	**Door Frame**	**Metal**	**5.00**	**Yes**	**160 LF**
573	**Blue**	**A11 – A Wall**	**Door**	**Metal**	**1.81**	**Yes**	**100 SF**
574	Grey	A11 – Center	Pipe	Metal	0.01	NA	NA
575	Yellow	A11 – A Wall	Guard Rail	Metal	0.00	NA	NA
576	**White**	**A11 – C Wall**	**Corner Guard**	**Metal**	**5.00**	**Yes**	**60 LF**
577	Red	A11 – D Wall	Pipe	Metal	0.56	NA	NA
578	**Yellow**	**A11 – D Wall**	**Pipe**	**Metal**	**2.36**	**Yes**	**40 LF**
579	Blue	A12 – B Wall	Door Frame	Metal	0.22	NA	NA
580	Blue	A12 – B Wall	Door	Metal	0.15	NA	NA
581	Black	A12 – B Wall	Ceiling	Cork	0.00	NA	NA
582	Blue	A12 – D Wall	Guard Rail	Metal	0.21	NA	NA
583	White	G11 – Center	Column	Concrete	0.00	NA	NA
584	Yellow	G11 – D Wall	Pipe	Metal	0.08	NA	NA
585	White	G11 – B Wall	Door Frame	Metal	0.29	NA	NA
586	White	G11 – B Wall	Door	Metal	0.91	NA	NA
587	**White**	**G11 – B Wall**	**Door**	**Metal**	**2.16**	**No**	**30 SF**
588	Blue	G11 – B Wall	Door Frame	Metal	0.03	NA	NA
589	Blue	G11 – B Wall	Door	Wood	0.01	NA	NA
590	White	F11 – Center	Column	Concrete	0.00	NA	NA
591	Yellow	F11 – D Wall	Pipe	Metal	0.84	NA	NA
592	Yellow	F11 – D Wall	Door Frame	Metal	0.00	NA	NA
593	**Blue**	**E11 – B Wall**	**Door Frame**	**Metal**	**2.63**	**Yes**	**300 SF**
594	Blue	E11 – B Wall	Door	Metal	0.02	NA	NA
595	Blue	E11 – Center	Pipe	Metal	0.39	NA	NA
596	Brown	E11 – A Wall	Door	Metal	0.10	NA	NA
597	Yellow	E11 – A Wall	Guard Rail	Metal	0.49	NA	NA
598	Blue	D11 – D Wall	Pipe	Metal	0.00	NA	NA
599	Yellow	D11 – Center	Guard Rail	Metal	0.65	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
600	White	D11/E11 Elevator Room	Door Frame	Metal	0.02	NA	NA
601	White	D11/E11 Elevator Room	Door	Metal	0.00	NA	NA
602	White	D11/E11 Elevator Room	Wall	Concrete	0.00	NA	NA
603	Blue	D11/E11 Elevator Room	Handrail	Metal	0.47	NA	NA
604	Yellow	D12 – B Wall	Door Trim	Metal	0.00	NA	NA
605	Yellow	D12 – B Wall	Guard Rail	Metal	0.56	NA	NA
606	Blue	D12 – D Wall	Door Frame	Metal	0.15	NA	NA
607	Blue	D12 – D Wall	Door	Metal	0.19	NA	NA
608	Blue	C11 – Elevator Room	Door	Metal	0.00	NA	NA
609	Yellow	C13 – A Wall	Wall Guard	Metal	0.29	NA	NA
610	Blue	C13 – B Wall	Door	Metal	0.84	NA	NA
611	Yellow	C13 – B Wall	Door Frame	Metal	0.33	NA	NA
612	Blue	C11 – C Wall	Door Frame	Metal	0.00	NA	NA
613	White	C11 – Dock	I Beam	Metal	0.00	NA	NA
614	Yellow	C11 – Dock	Door Frame	Wood	0.00	NA	NA
615	**Blue**	**B11 – D Wall**	**Door**	**Metal**	**5.00**	**No**	**50 SF**
616	**Blue**	**B11 – D Wall**	**Door Frame**	**Metal**	**5.00**	**No**	**50 SF**
617	Red	B11 – B Wall	Pipe	Metal	0.35	NA	NA
618	Blue	B11 – Center	Guard Rail	Metal	0.71	NA	NA
619	Grey	B11 – B Wall	Wall Guard	Metal	0.08	NA	NA
620	Blue	B11 – Elevator Room	Door	Metal	0.38	NA	NA
621	Blue	B11 – Elevator Room	Door Frame	Metal	0.00	NA	NA
622	**Blue**	**B11 – Elevator Room**	**Door Frame**	**Metal**	**5.00**	**No**	**100 SF**
623	Blue	B11 – Elevator Room	Door	Wood	0.00	NA	NA
624	Blue	B11 – Elevator Room	Wall	Brick	0.00	NA	NA
625	Yellow	B11 – Elevator Room	Bollards	Metal	0.00	NA	NA
626	Blue	H11 – B Wall	Door	Metal	0.33	NA	NA
627	Blue	H11 – B Wall	Door Frame	Metal	0.22	NA	NA
628	**Blue**	**H11 – B Wall**	**Guard Rail**	**Metal**	**1.18**	**No**	**10 LF**

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
629	White	H11 – B Wall	Wall	Concrete	0.00	NA	NA
630	**Grey**	**H11 – Elevator Room – B Wall**	**Door**	**Metal**	**1.28**	**Yes**	**15 SF**
631	White	H11 – Elevator Room – C Wall	Wall	Concrete	0.00	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.13/1.14/1.18	NA	NA
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					1.11/1.11/1.12	NA	NA
644	White	A22 – A Wall	Wall	Concrete	0.00	NA	NA
645	**Blue**	**A22 – Center**	**Guard Rail**	**Metal**	**1.00**	**No**	**200 LF**
646	**Blue**	**A22 – Center**	**Guard Rail**	**Metal**	**1.15**	**No**	**200 LF[2]**
647	Blue	A22 – A Wall	Door Frame	Metal	0.11	NA	NA
648	Red	A21 – Center	Fire Pipe	Metal	0.00	NA	NA
649	Blue	A21 – Elevator Room – D Wall	Door Frame	Metal	0.00	NA	NA
650	Blue	A21 – Elevator Room – D Wall	Door	Wood	0.00	NA	NA
651	Red	A21 – Elevator Room – B Wall	Pipe	Metal	0.10	NA	NA
652	Blue	G21 – B Wall	Door Frame	Metal	0.01	NA	NA
653	Blue	G21 – B Wall	Door	Metal	0.27	NA	NA
654	Blue	G21 – B Wall	Staircase Door Trim	Metal	0.00	NA	NA
655	White	G21 – B Wall	Elevator Door Trim	Metal	0.00	NA	NA
656	**White**	**G21 – B Wall**	**Elevator Door**	**Wood**	**1.10**	**No**	**80 SF**
657	White	G21 – A Wall	Wall Divider	Metal	0.70	NA	NA
658	White	G21 – A Wall	Wall Divider	Metal	0.07	NA	NA
659	Grey	G22 – C Wall	Door	Metal	0.47	NA	NA
660	Blue	F21 – B Wall	Door Frame	Metal	0.00	NA	NA
661	Blue	F21 – B Wall	Door	Wood	0.00	NA	NA
662	White	E21 – Elevator Room – C Wall	Door Trim	Metal	0.08	NA	NA
663	White	E21 – Elevator Room – C Wall	Door	Wood	0.00	NA	NA
664	Blue	E21 – Elevator Room – C Wall	Handrail	Metal	0.41	NA	NA
665	White	E21	Door Frame	Metal	0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
666	White	E21	Door	Wood	0.10	NA	NA
667	Black	E21 – Southwest Staircase	Handrail	Metal	0.70	NA	NA
668	**White**	**E21 – Southwest Adjust Room**	**Trim**	**Wood**	**2.45**	**No**	**50 SF**
669	Black	E21 – Southwest Adjust Room Ceiling	Pipe	Metal	0.64	NA	NA
670	Grey	C22 – Elevator Room – A Wall	Wall	Concrete	0.82	NA	NA
671	Silver	C22 – Elevator Room – Center	Pipe	Metal	0.00	NA	NA
672	**White**	**C22 – Elevator Room – Center Ceiling**	**I Beam**	**Metal**	**2.30**	**No**	**15 LF**
673	White	C22 – Elevator Room – Center Ceiling	Wall	Cork	0.23	NA	NA
674	Green	C22 – B Wall	Pipe	Metal	0.49	NA	NA
675	Beige	C22 – B Wall	Pipe	Metal	0.26	NA	NA
676	Teal	C22 – C Wall	Cabinet	Metal	0.64	NA	NA
677	Beige	C22 – Locker Room	Door	Metal	0.64	NA	NA
678	**White**	**C22 – Locker Room**	**Stool**	**Porcelain**	**5.00**	**No**	**4 Toilets**
679	White	B21 – Stair Restroom – A Wall	Wall	Concrete	0.32	NA	NA
680	Blue	B21 – Stair Restroom – A Wall	Wall	CMU	0.00	NA	NA
681	**Blue**	**B21 – Stair Restroom – A Wall**	**Door Trim**	**Metal**	**1.44**	**Yes**	**40 LF**
682	**Blue**	**B21 – Stair Restroom – A Wall**	**Door**	**Metal**	**1.28**	**Yes**	**40 SF**
683	**Blue**	**B21 – Elevator Staircase Landing**	**Door Frame**	**Metal**	**1.65**	**Yes**	**20 LF**
684	Blue	B21 – Elevator	Door Frame	Metal	0.78	NA	NA
685	Blue	B21 – Elevator	Door	Metal	0.00	NA	NA
686	Red	B21 – A Wall	Pipe	Metal	0.10	NA	NA
687	White	B21 – Center	Pipe	Metal	0.20	NA	NA
688	**Green**	**B21 – C Wall**	**Door Frame**	**Metal**	**1.00**	**Yes**	**20 LF**
689	**Green**	**B21 – C Wall**	**Door Frame**	**Metal**	**1.26**	**Yes**	**20 LF[2]**
690	**Green**	**B21 – C Wall**	**Wall Guard**	**Metal**	**2.78**	**Yes**	**120 LF**
691	Blue	C22 – Elevator Room	Door Trim	Metal	0.00	NA	NA

TABLE 2

SUMMARY OF LBP SCREENING RESULTS
FORMER RATH BUILDINGS, 1442, 1508, 1620, AND 1656 SYCAMORE STREET, WATERLOO, IOWA

XRF Screening No.[4]	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm^2)	Damaged[1]	Quantity[3]
692	White	C22 – B Wall	I Beam	Metal	0.14	NA	NA
693	Blue	B23 – B Wall	Door Frame	Metal	0.00	NA	NA
694	Blue	B23 – B Wall	Door	Metal	0.42	NA	NA
695	Blue	B23 – A Wall	Guard Rail	Metal	0.63	NA	NA
696	Green	B23 – C Wall	Valve	Metal	0.19	NA	NA

Notes:

Location in the format of letter followed by a number indicates room number—for example, B71 ("B" conveys area, "7" conveys floor number, and "1" conveys room number).

[1] This column identifies damaged LBP surfaces. If no damage is present before renovation activities, preliminary removal of chipping and peeling paint is not necessary prior to the encapsulation process.

[2] This quantity is included with another quantity to avoid a duplicate quantity of commingled materials.

[3] Quantities of non-LBP are not required.

[4] XRF reading numbers are in sequential order; skipped numbers indicate calibration and/or null readings.

CMU	Concrete masonry unit	No.	Number
LBP	Lead-based paint	SF	Square feet
LF	Linear feet	XRF	X-ray fluorescence
mg/cm^2	Milligrams per square centimeter		
NA	Not applicable		

8.0 PCB FINDINGS

The laboratory report in Appendix E conveys the analytical results from bulk samples of suspect PCB-containing caulk materials. Ten samples of caulk were collected throughout the subject property building. No PCBs were detected in any sample; therefore, no summary table is provided.

9.0 FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are based on observations during the survey and analytical results from samples collected at the subject property building:

9.1 Asbestos-Containing Material (ACM)

The survey identified the following regulated ACM:

- White pipe insulation (approximately 4,700 linear feet [LF]) throughout the building;
- Green pipe insulation (approximately 300 LF) on the 7th floor – C71, C72;
- Heater insulation (approximately 1,700 square feet [SF]) on the 5th and 7th floor;
- Black Felt-Wrapped (Foam) Pipe Insulation (approximately 1,100 LF) on the roofs, 7th floor, and C51;
- Black door caulk (approximately 280 LF) on elevator doors;
- Boiler insulation and scattered pipe debris (approximately 1,500 SF) on the 6th floor – C64, C71, C72, B56, C51, and G51;
- Transite wall panels (approximately 4,450 SF) in the 6th floor H area and E61;
- Black duct sealant (approximately 300 SF) in the 6th floor G area, A3, and C64;
- Aircell pipe insulation (approximately 550 LF) in C51, E51, G22, basement boiler room, and east abandoned bathroom;
- Asphalt shingles (approximately 11,500 SF) on the upper columns and ceiling of B55, B53, and C11;
- White tank insulation (approximately 100 SF) in G22 and CB1;
- Green 9- by 9-inch vinyl floor tile and black mastic (approximately 4,500 SF) in the C22 – lab area;
- Brown 12- by 12-inch vinyl floor tile and black mastic (approximately 120 SF) in the C22 – lab hallway;
- Silver-painted pipe insulation (approximately 200 LF) in the C22 – lab area;
- White door caulk (approximately 8 LF) on the west exterior loading dock door;
- Corrugated transite panels (approximately 2,500 SF) on the northwest office roof and southwest rail dock wall;
- Old grey caulk (approximately 30 LF) on north exterior street-level windows;
- Grey/silver roofing tar (approximately 6,000 SF) on all roofs;
- White roofing caulk (approximately 60 LF) on the A roof;
- Roofing material (approximately 12,200 SF) on the E roof; and

- White expansion joint (approximately 400 LF) on vertical seams behind metal along the north exterior wall.

In addition, fire doors and elevator equipment observed throughout the building are assumed to be ACM. These locations were not sampled because of concerns with structural damage.

All regulated ACM listed above should be removed by a licensed asbestos abatement contractor before demolition work disturbs the material. The removed waste must be transported to a disposal site approved to accept both friable and non-friable ACM. If the building is to be renovated and plans do not include disturbing any of the above ACM materials, they may remain in place.

9.2 Lead-Based Paint (LBP)

Approximately 2,194 SF and 17,804 LF of various colors of LBP were identified on a variety of substrates throughout the building—including, but not limited to, door frames, doors, posts, steel beams, piping, door trim, wall guards, elevator door frames, and elevator doors. Widespread occurrence of LBP precluded documentation of specific locations.

HUD considers LBP as paint with lead levels greater than or equal to 1.0 mg/cm^2. If the LBP surfaces are impacted during renovations or during demolition, the Toeroek Team recommends the contractor conducting the renovations comply with OSHA Lead in Construction Standard, Title 29 of *Code of Federal Regulations* (CFR), Part 1926.62. If the materials containing LBP are removed during renovation activities, a sample should be collected from the debris pile for Toxicity Characteristic Leaching Procedure (TCLP) analysis (40 CFR 261.24). Representative samples should be collected and analyzed for all eight metals specified in 40 CFR Part 261.24 (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). This would allow determination of the proper method of disposal of the materials.

9.3 Polychlorinated Biphenyls (PCBs)

Laboratory results indicate no sampled building materials contain concentrations of PCBs above 50 ppm; no PCBs were detected in the subject property building.

10.0 ASSUMPTIONS AND DEVIATIONS

The Toeroek Team inspected the interiors and exteriors of the subject property building for suspect ACM, LBP, and PCB-containing caulk. Room C32 was unable to be surveyed due to inaccessibility. Additionally, rooms D41 and E41 were deemed structurally unstable and inaccessible. Due to limitations on destructive sampling methods, additional suspect materials may be present but not detected in walls, voids, or other concealed areas. Identified suspected asbestos-containing fire doors and elevator equipment in the building were not sampled to preserve the integrity of these materials. The Toeroek Team recommends that if the fire doors and elevator equipment are to be disturbed during renovations or demolition, these materials should be sampled to determine their asbestos content. All other areas of the subject property buildings were inspected.

11.0 REFERENCES

Agency for Toxic Substance and Disease Registry (ATSDR). 2008. Asbestos: Health Effects. Accessed December 13, 2012. http://www.atsdr.cdc.gov/asbestos/asbestos/health_effects

Environmental Protection Agency, U.S. (EPA). 2016. How to Test for PCBs and Characterize Suspect Materials. Accessed July 7, 2022. https://www.epa.gov/pcbs/how-test-pcbs-and-characterize-suspect-materials

Toeroek Associates, Inc. (Toeroek). 2022. Quality Assurance Project Plan, Phase II Environmental Site Assessment, Former Rath Buildings, 1442, 1508, 1620, and 1656 Sycamore Street, Waterloo, Iowa. March 2022.

U.S. Department of Housing and Urban Development (HUD). 2012. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX A

FIGURES

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

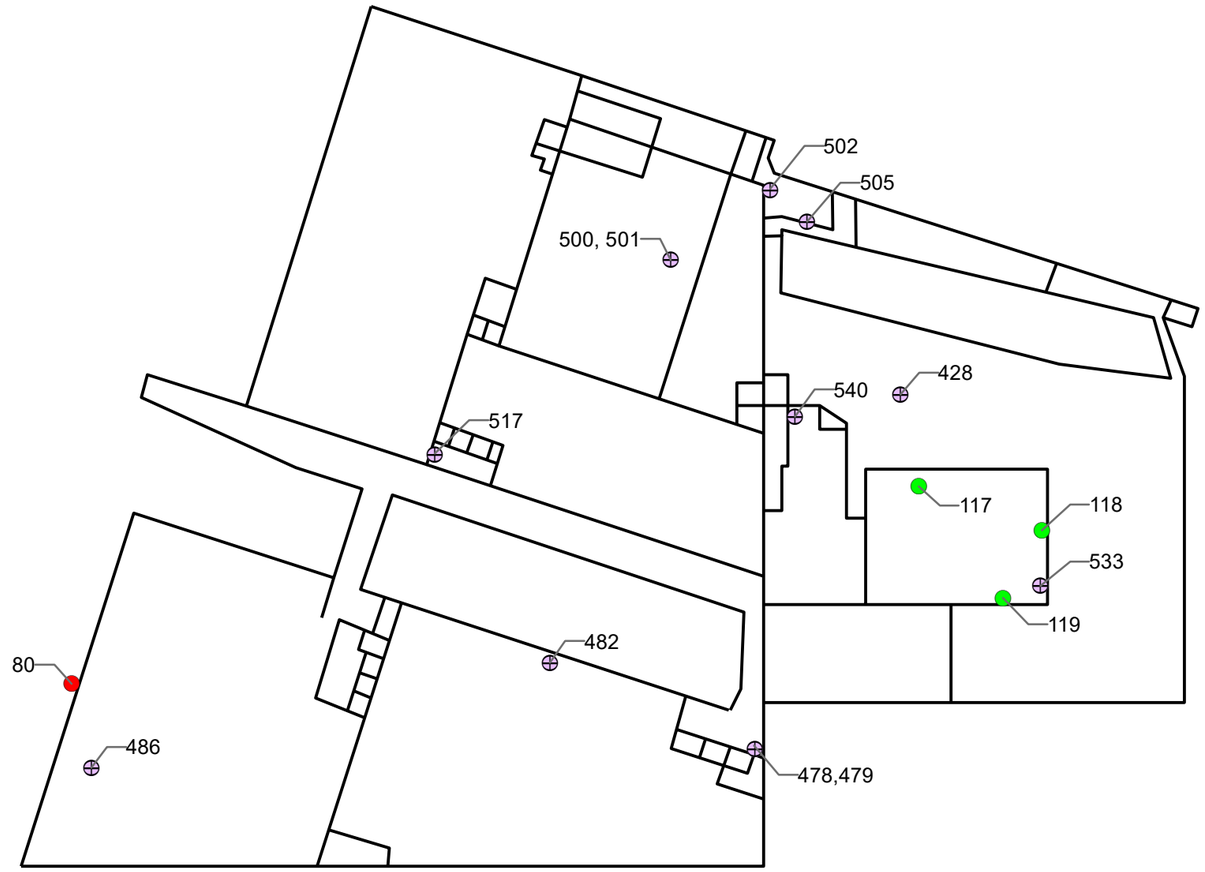
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Non-Asbestos-Containing Sample Material Location
- ⊕ Positive LBP Sample Location

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 1
Sample Location Map - Basement

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\010.05\Projects\mxd\Figure1.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

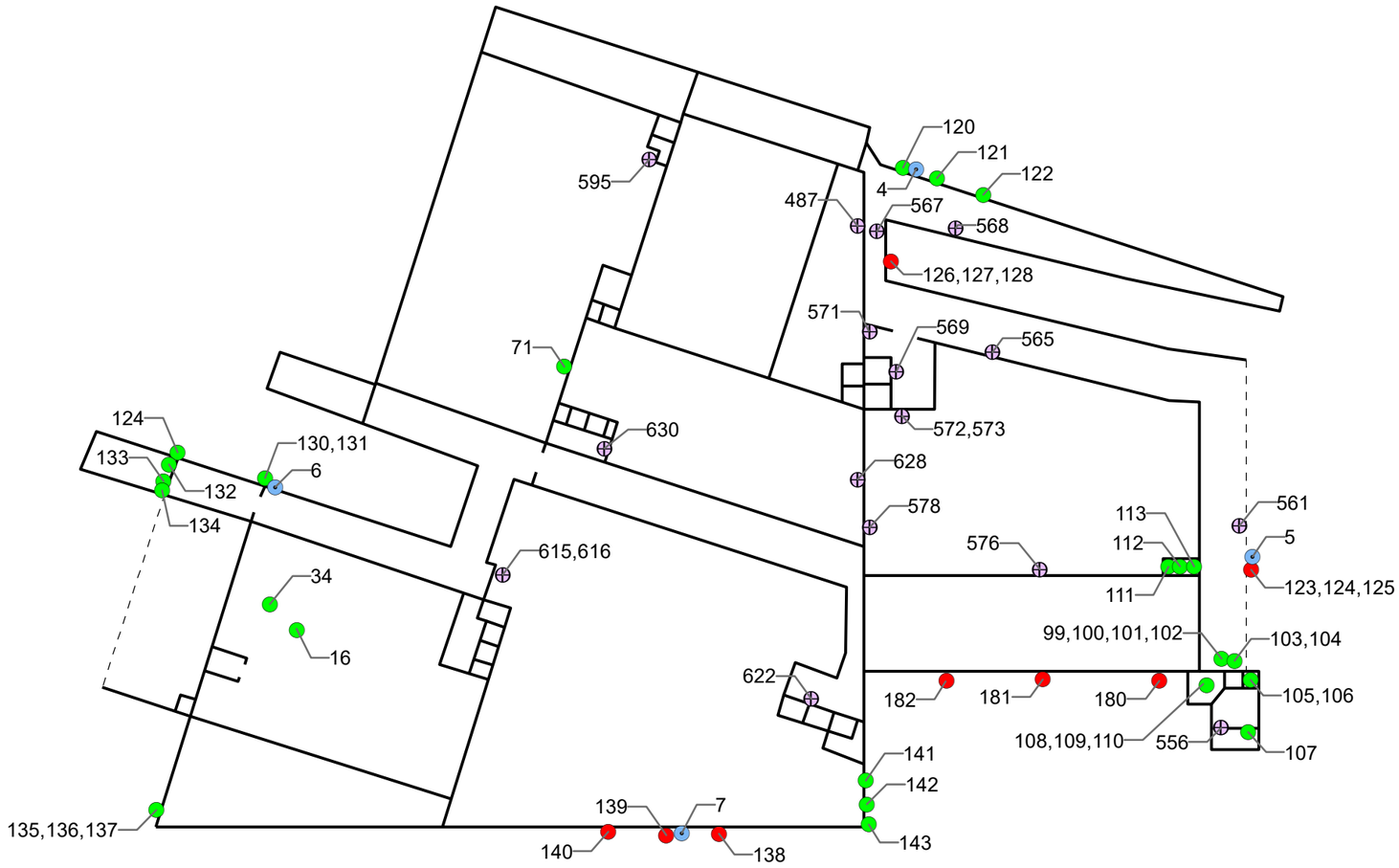
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Negative PCB Sample Location
- Non-Asbestos-Containing Sample Material Location
- Positive LBP Sample Location

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 2
Sample Location Map - 1st Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\GIS\52\10190\010.05\Projects\mxd\Figure2.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

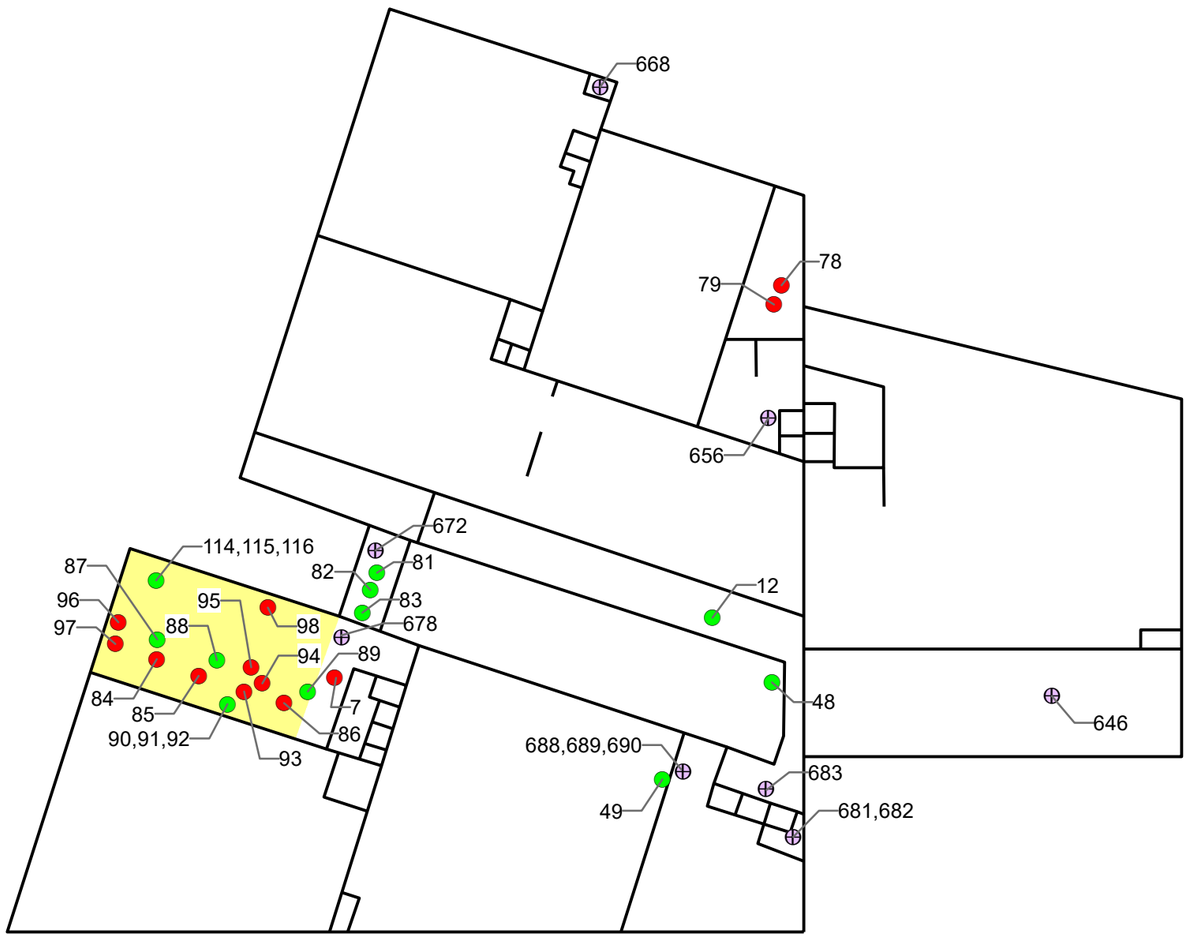
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Non-Asbestos-Containing Sample Material Location
- Positive LBP Sample Location
- Asbestos Containing Flooring

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 3
Sample Location Map - 2nd Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\010.05\Projects\mxd\Figure3.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

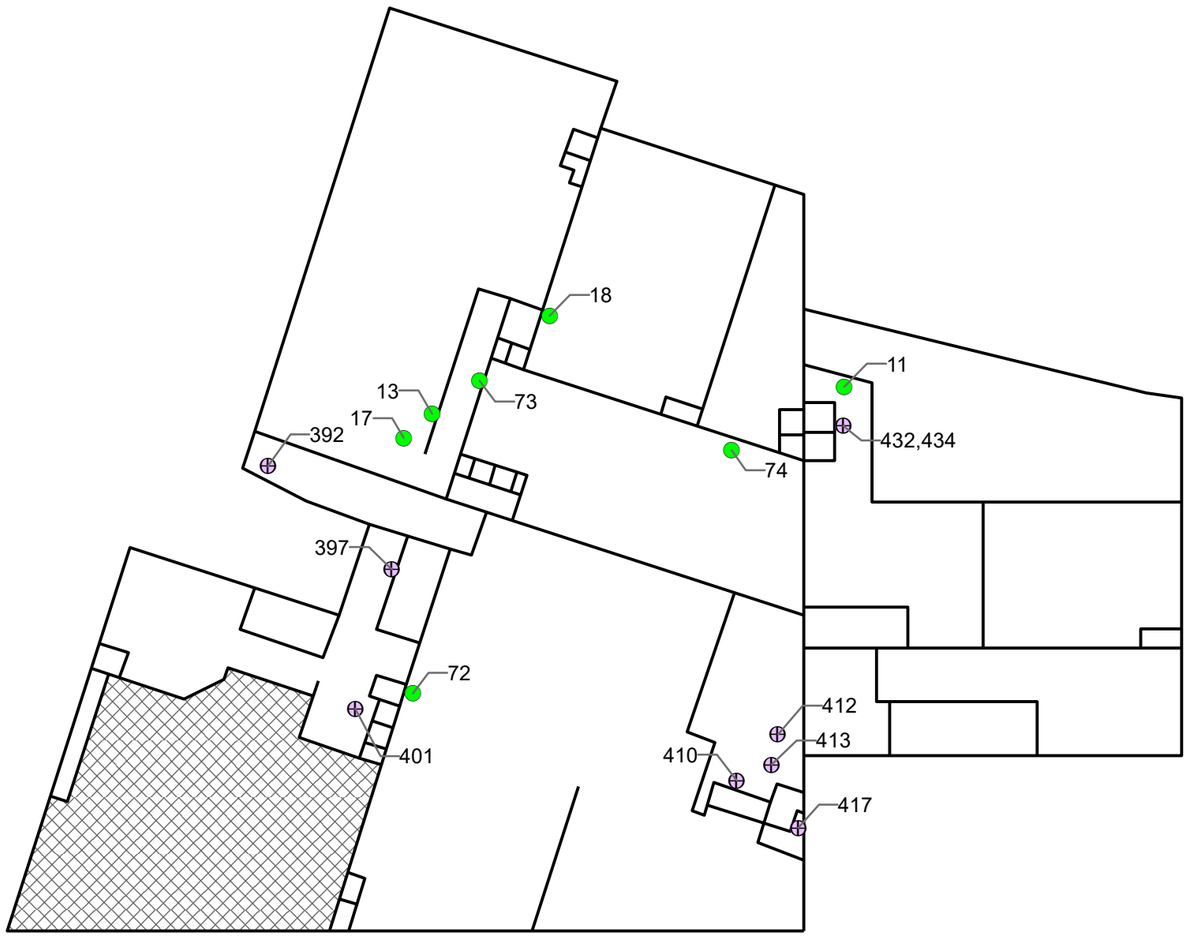
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Non-Asbestos-Containing Sample Material Location
- Positive LBP Sample Location
- Inaccessible

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 4
Sample Location Map - 3rd Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\010.05\Projects\mxd\Figure4.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

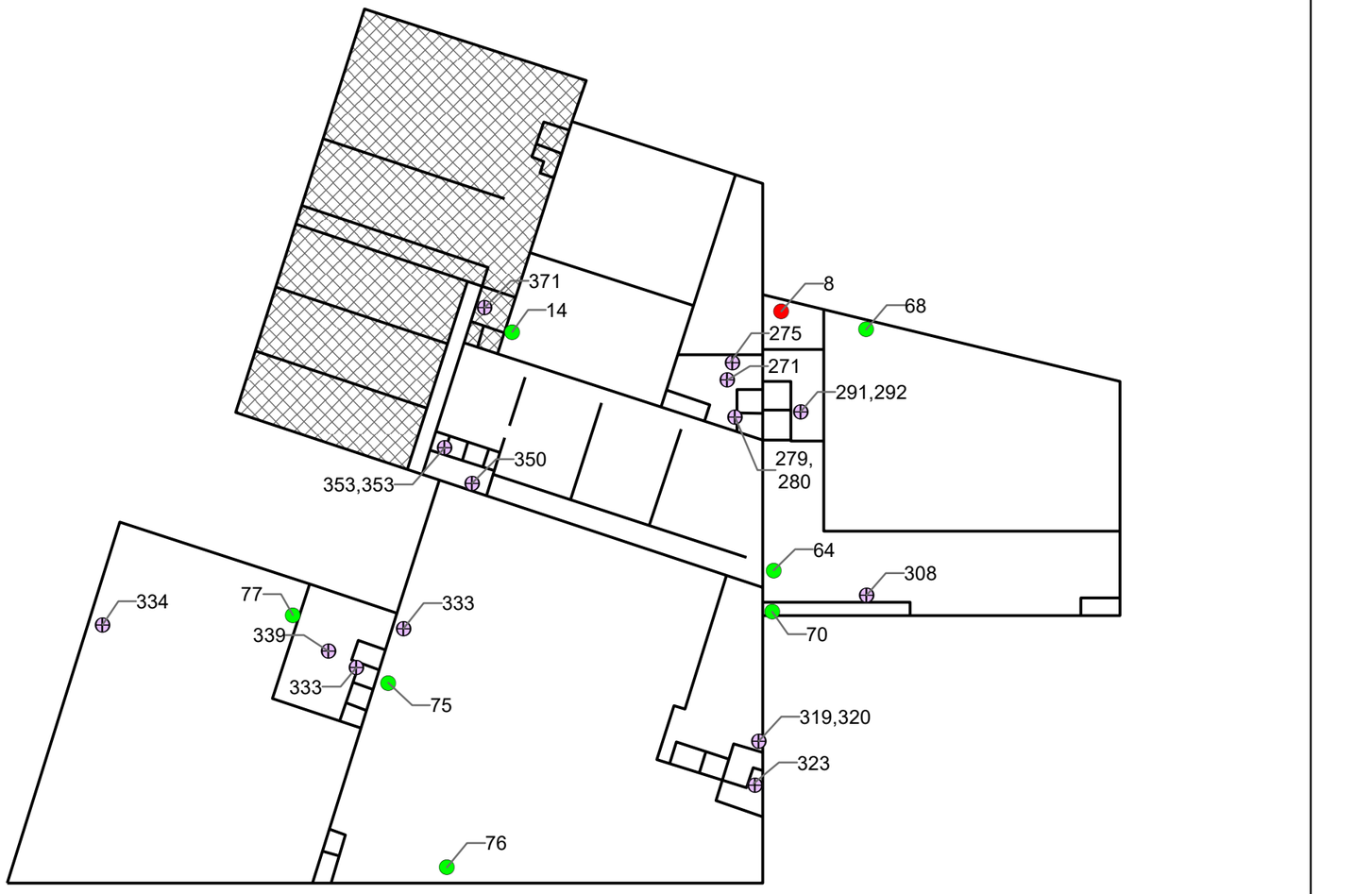
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Non-Asbestos-Containing Sample Material Location
- Positive LBP Sample Location
- Inaccessible

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 5
Sample Location Map - 4th Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\010.05\Projects\mxd\Figure5.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

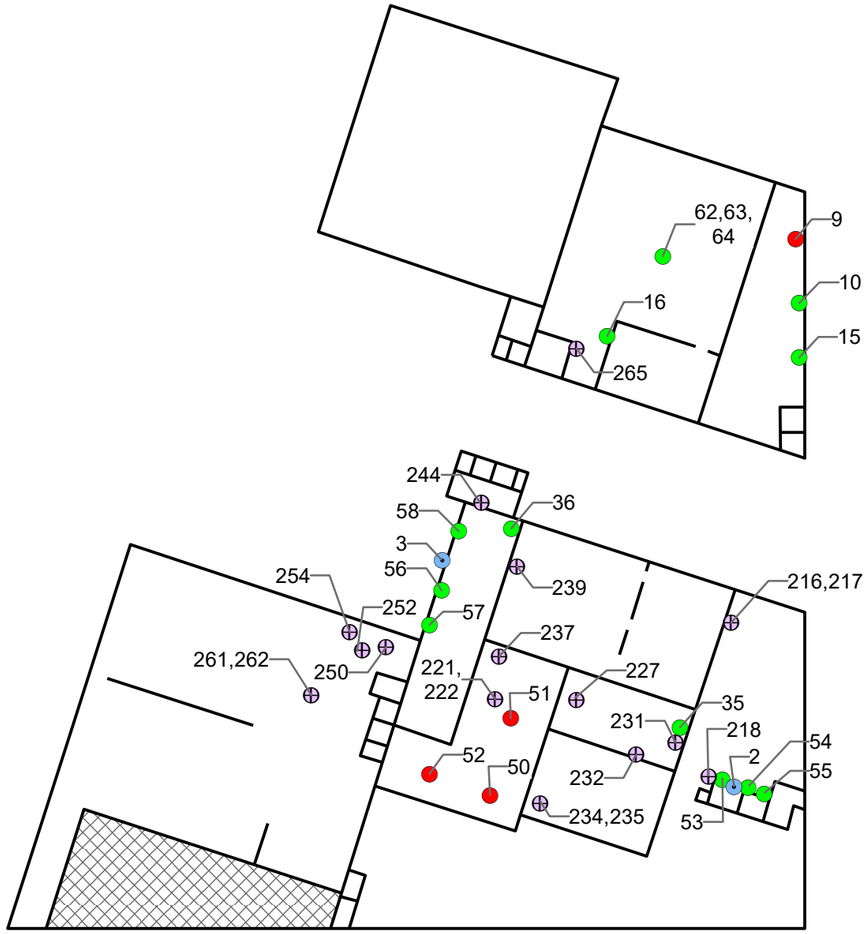
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Negative PCB Sample Location
- Non-Asbestos-Containing Sample Material Location
- Positive LBP Sample Location
- Inaccessible

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 6
Sample Location Map - 5th Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\GIS\52\10190\010.05\Projects\mxd\Figure6.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

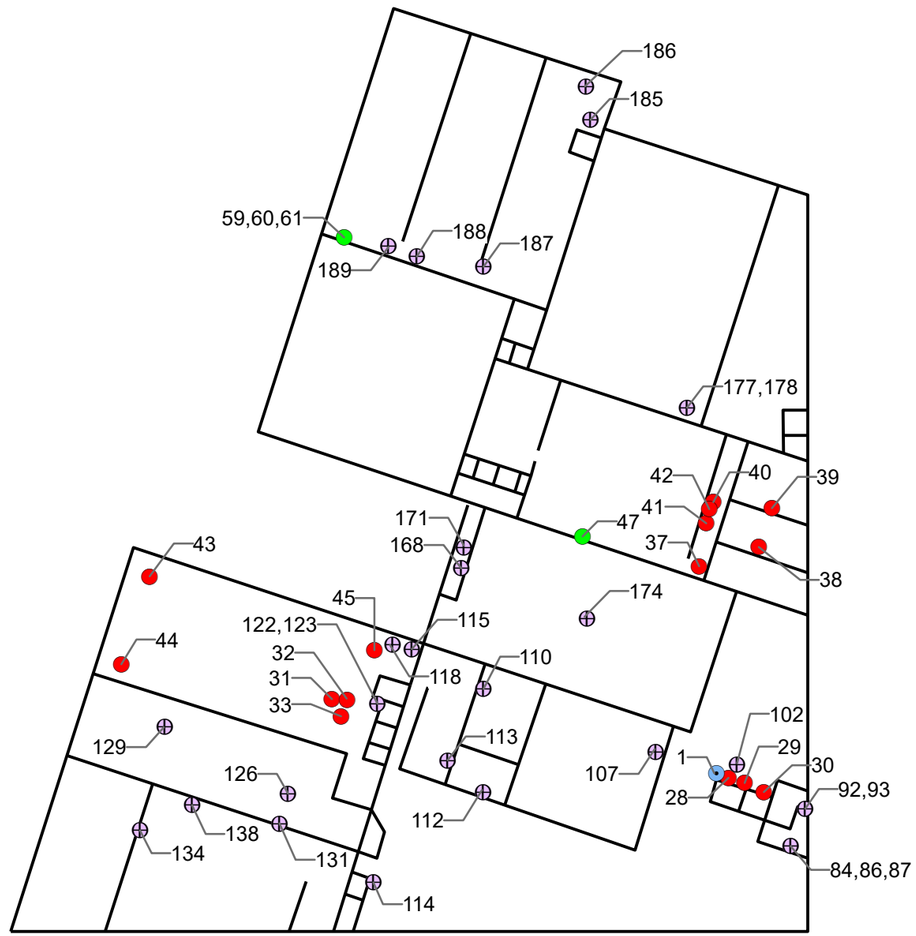
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Negative PCB Sample Location
- Non-Asbestos-Containing Sample Material Location
- Positive LBP Sample Location

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 7
Sample Location Map - 6th Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\10.05\Projects\mxd\Figure7.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

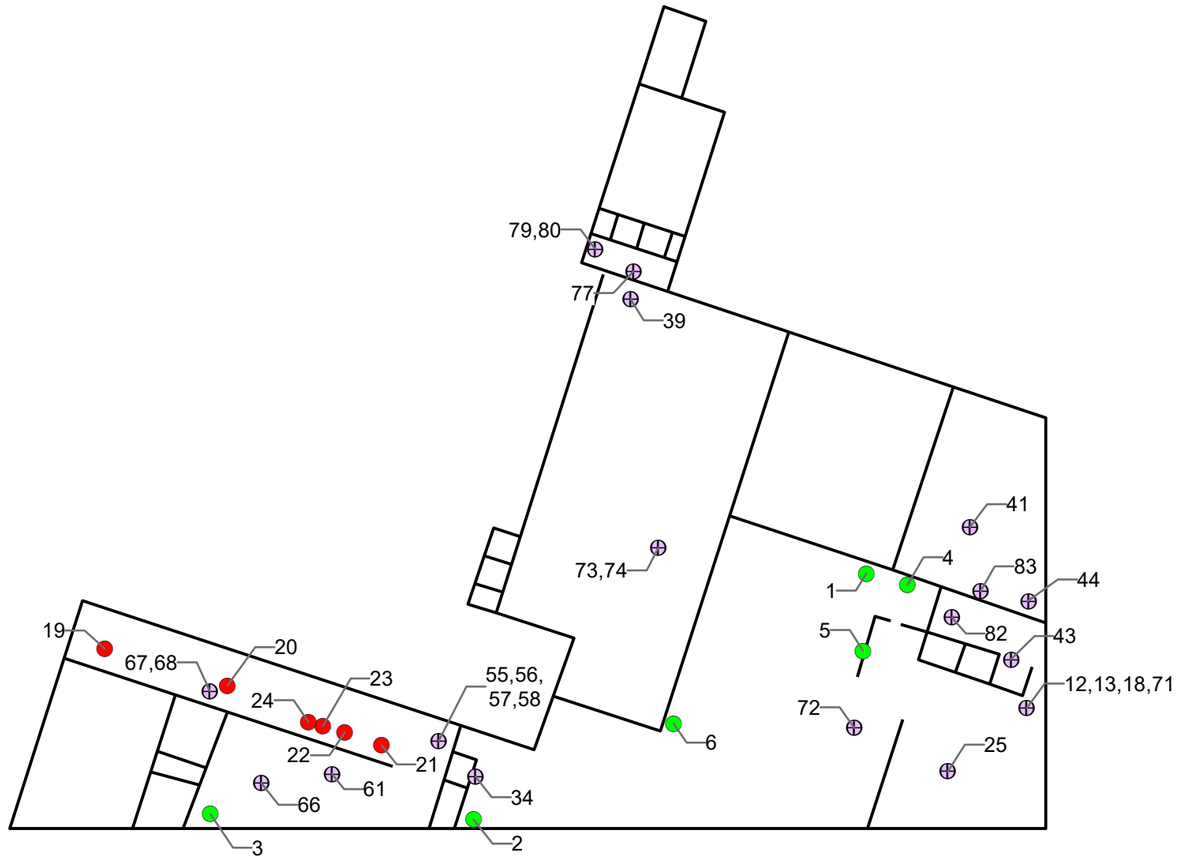
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Non-Asbestos-Containing Sample Material Location
- ⊕ Positive LBP Sample Location

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 8
Sample Location Map - 7th Floor

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\010.05\Projects\mxd\Figure8.mxd

Sample Key Table

Key	Sample No.
Asbestos	
1	RB-WG-01
2	RB-WG-02
3	RB-WG-03
4	RB-BG-01
5	RB-BG-02
6	RB-BG-03
7	RB-TSI-01
8	RB-TSI-02
9	RB-TSI-03
10	RB-TSI2-01
11	RB-TSI2-02
12	RB-TSI2-03
13	RB-PL-01
14	RB-PL-02
15	RB-PL-03
16	RB-CI-01
17	RB-CI-02
18	RB-CI-03
19	RB-TSI3-01
20	RB-TSI3-02
21	RB-TSI3-03
22	RB-INS-01
23	RB-INS-02
24	RB-INS-03
25	RB-TSI4-01
26	RB-TSI4-02
27	RB-TSI4-03
28	RB-DC-01
29	RB-DC-02
30	RB-DC-03
31	RB-BI-01
32	RB-BI-02
33	RB-BI-03
34	RB-T-01
35	RB-T-02
36	RB-T-03
37	RB-TRAN-01
38	RB-TRAN-02
39	RB-TRAN-03
40	RB-DS-01
41	RB-DS-02
42	RB-DS-03
43	RB-TSI5-01
44	RB-TSI5-02
45	RB-TSI5-03
46	RB-PL-04
47	RB-PL-05
48	RB-PL-06
49	RB-PL-07
50	RB-AS-01
51	RB-AS-02
52	RB-AS-03
53	RB-DC2-01

Sample Key Table

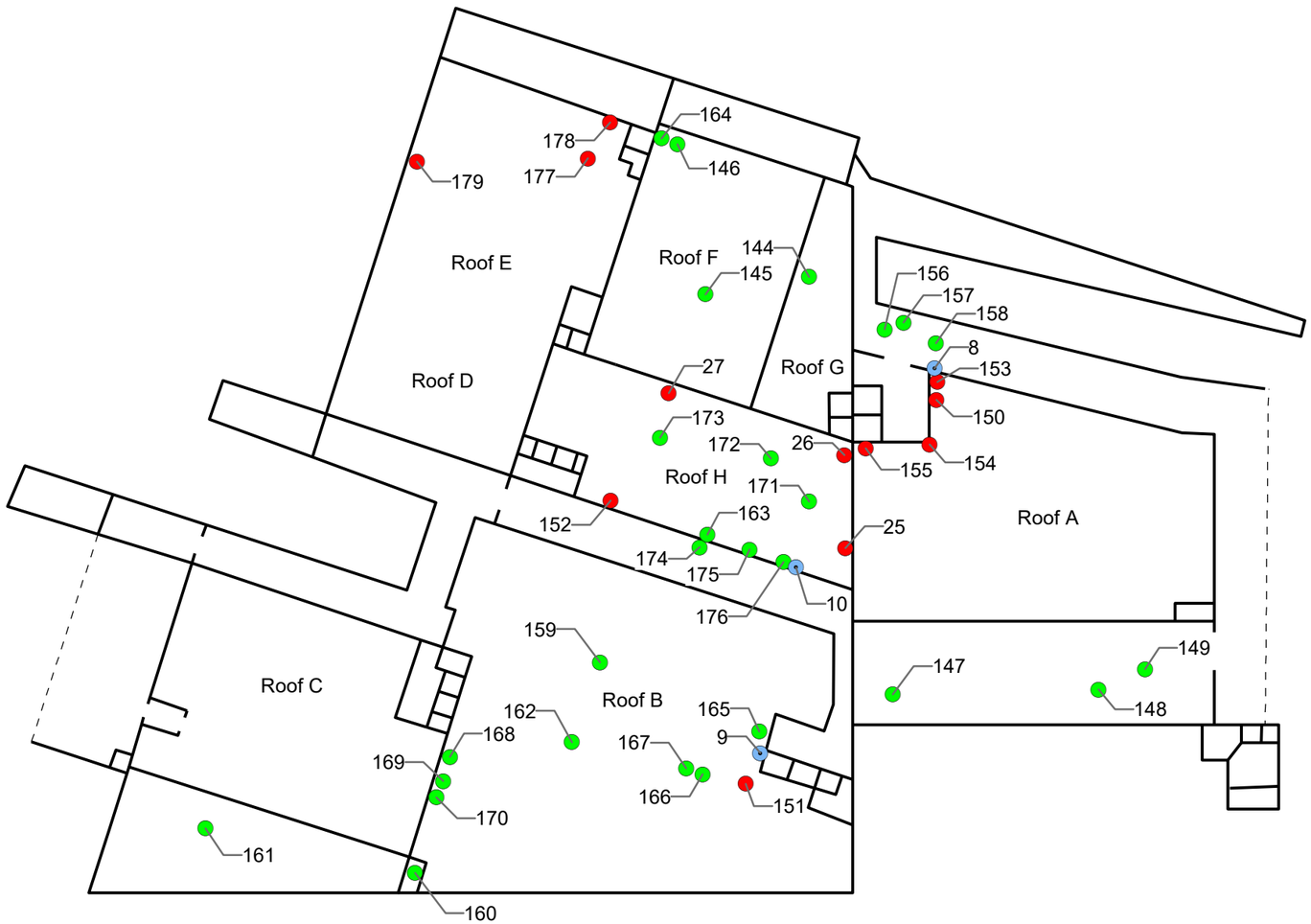
Key	Sample No.
Asbestos	
54	RB-DC2-02
55	RB-DC2-03
56	RB-WC-01
57	RB-WC-02
58	RB-WC-03
59	RB-FH-01
60	RB-FH-02
61	RB-FH-03
62	RB-PW-01
63	RB-PW-02
64	RB-PW-03
68	RB-T2-01
69	RB-T2-02
70	RB-T2-03
71	RB-FWC-01
72	RB-FWC-02
73	RB-FWC-03
74	RB-FWC-04
75	RB-FWC-05
76	RB-FWC-06
77	RB-FWC-07
78	RB-TI-01
79	RB-TI-02
80	RB-TI-03
81	RB-CFT-01
82	RB-CFT-02
83	RB-CFT-03
84	RB-VFT-01
85	RB-VFT-02
86	RB-VFT-03
87	RB-CB-01
88	RB-CB-02
89	RB-CB-03
90	RB-CT-01
91	RB-CT-02
92	RB-CT-03
93	RB-VFT2-01
94	RB-VFT2-02
95	RB-VFT2-03
96	RB-TSI6-01
97	RB-TSI6-02
98	RB-TSI6-03
99	RB-VFT3-01
100	RB-VFT3-02
101	RB-VFT3-03
102	RB-CT2-01
103	RB-CT2-02
104	RB-CT2-03
105	RB-DWJC-01
106	RB-DWJC-02
107	RB-DWJC-03
108	RB-CB2-01
109	RB-CB2-02

Sample Key Table

Key	Sample No.
Asbestos	
110	RB-CB2-03
111	RB-SF-01
112	RB-SF-02
113	RB-SF-03
114	RB-CRT-01
115	RB-CRT-02
116	RB-CRT-03
117	RB-FP-01
118	RB-FP-02
119	RB-FP-03
120	RB-C-01
121	RB-C-02
122	RB-C-03
123	RB-DC3-01
124	RB-DC3-02
125	RB-DC3-03
126	RB-TRAN2-01
127	RB-TRAN2-02
128	RB-TRAN2-03
129	RB-C2-01
130	RB-C2-02
131	RB-C2-03
132	RB-FS-01
133	RB-FS-02
134	RB-FS-03
135	RB-EJ-01
136	RB-EJ-02
137	RB-EJ-03
138	RB-WC2-01
139	RB-WC2-02
140	RB-WC2-03
141	RB-EJ2-01
142	RB-EJ2-02
143	RB-EJ2-03
144	RB-RM-01
145	RB-RM-02
146	RB-RM-03
147	RB-RM2-01
148	RB-RM2-02
149	RB-RM2-03
150	RB-RT-01
151	RB-RT-02
152	RB-RT-03
153	RB-RC-01
154	RB-RC-02
155	RB-RC-03
156	RB-RT2-01
157	RB-RT2-02
158	RB-RT2-03
159	RB-RM3-01
160	RB-RM3-02
161	RB-RM3-03
162	RB-RT3-01

Sample Key Table

Key	Sample No.
Asbestos	
163	RB-RT3-02
164	RB-RT3-03
165	RB-WC3-01
166	RB-WC3-01
167	RB-WC3-01
168	RB-AS2-01
169	RB-AS2-02
170	RB-AS2-03
171	RB-RM4-01
172	RB-RM4-02
173	RB-RM4-03
174	RB-RC2-01
175	RB-RC2-02
176	RB-RC2-03
177	RB-RM5-01
178	RB-RM5-02
179	RB-RM5-03
180	RB-EJ3-01
181	RB-EJ3-02
182	RB-EJ3-03
PCB	
1	RB-C1
2	RB-C2
3	RB-C3
4	RB-C4
5	RB-C5
6	RB-C6
7	RB-C7
8	RB-C8
9	RB-C9
10	RB-C10



Legend

- Asbestos-Containing Sample Material Location
- Negative PCB Sample Location
- Non-Asbestos-Containing Sample Material Location

N

Not to scale

Former Rath Buildings
1442, 1508, 1620, and 1656 Sycamore Street
Waterloo, Iowa

Figure 9
Sample Location Map - Roof

TETRA TECH TOEROEK ASSOCIATES, INC.

Date: 8/22/2022 Drawn By: Susmita Shrestha Project No: 103Z65210190.010.05

X:\G\65210190\010.05\Projects\mxd\Figure9.mxd

APPENDIX B

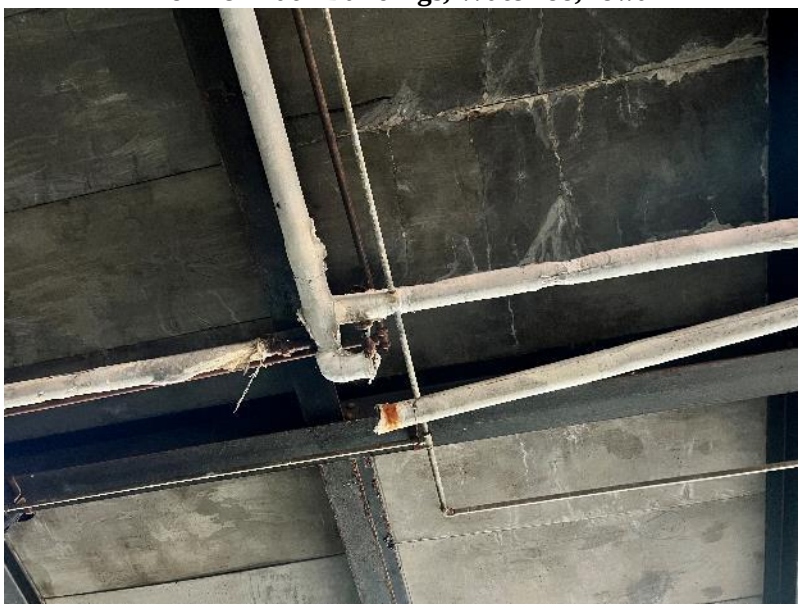
PHOTOGRAPHIC DOCUMENTATION LOG

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

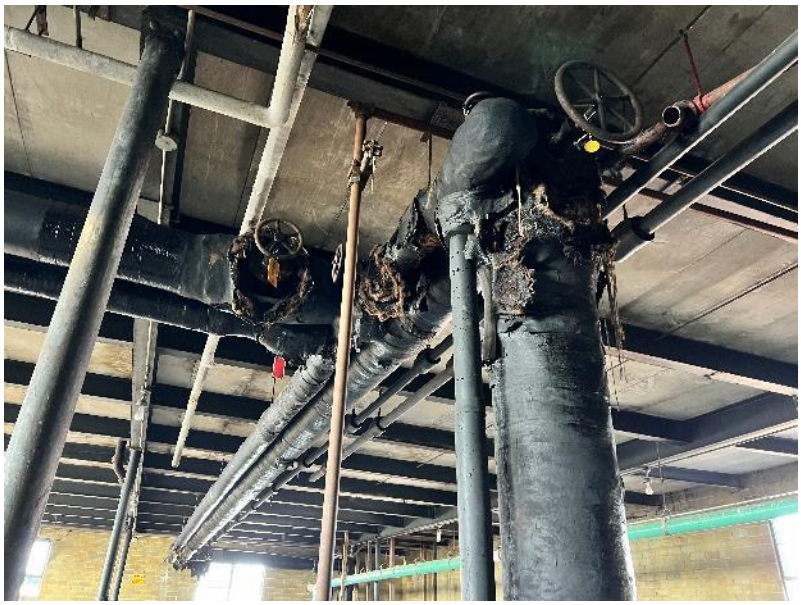
SUBTASK NO. 010.05	DESCRIPTION	This photograph shows the subject property building.	1
	CLIENT	U.S. Environmental Protection Agency (EPA)	Date
Direction: Southwest	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows white window caulk and window glazing on interior square-paned windows.	2
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa



SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing white pipe insulation throughout the building.	3
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022



SUBTASK NO. 010.05	DESCRIPTION	This photograph shows black 8”-24” pipe insulation throughout the building.	4
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing green pipe insulation on the 7th floor – C71 and C72.	5
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing heater insulation on the 5th floor heaters.	6
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows black, asbestos-containing, felt-wrapped pipe insulation on the roofs.	7
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows black asbestos-containing door caulk on elevator doors.	8
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows tar typical of that observed on walls and ceilings throughout the building.	9
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing boiler insulation (scattered pipe insulation debris) in C64, C71, C72, B56, C51, and G51.	10
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing transite wall panels on the 6th floor – H area and E61.	11
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing black duct sealant on the 6th floor – G area, A3, and C64.	12
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing aircell pipe insulation in C51, E51, G22, basement boiler room, and east abandoned bathroom.	13
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing asphalt shingles over cork insulation on the upper columns and ceiling of B55.	14
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a fire hose in E61.	15
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows black pipe wrap in F51.	16
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows freezer wall coating typical of that on the walls and ceilings of freezers throughout the building.	17
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing white tank insulation on tanks in G22 and CB1.	18
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing green 9” x 9” vinyl floor tile in the C22 – lab area.	19
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing brown 12” x 12” vinyl floor tile in the C22 – lab hallway.	20
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows silver-painted asbestos-containing insulation in the C22 – lab area.	21
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

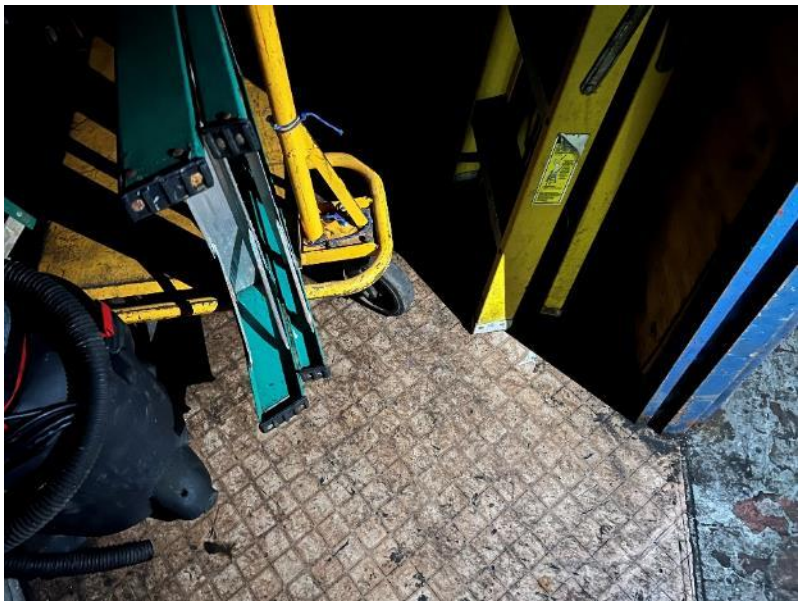
SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey 12” x 12” vinyl floor tile in the loading dock office.	22
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows white fissure 2’ x 4’ ceiling tile in the loading dock office.	23
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows drywall joint compound in the breakroom.	24
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa



SUBTASK NO. 010.05	DESCRIPTION	This photograph shows brown sheet flooring in the 1st floor closet.	25
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows black countertop in the C22 – lab area.	26
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows spray-on fireproofing in AB2.	27
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing door caulk on the west exterior loading dock door.	28
	CLIENT	EPA	Date
Direction: North	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing corrugated transite panels on the southwest rail dock wall.	29
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey expansion caulk on the exterior of C13 southeast corner.	30
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

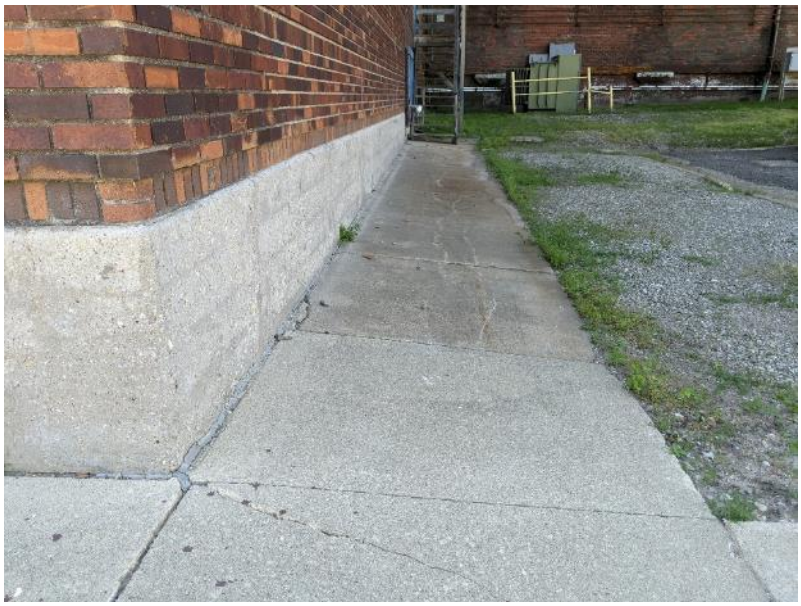
Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asphaltic floor seam on the exterior of the C13 ramp.	31
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows white expansion joint (soft) on the northeast and north center of C12.	32
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey asbestos-containing caulk on the north exterior street level windows.	33
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022



SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey expansion joint on the northwest ground perimeter.	34
	CLIENT	EPA	Date
Direction: West	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows roofing material on roofs B and C.	35
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows roofing material on roof A.	36
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey asbestos-containing roofing tar on all roofs.	37
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

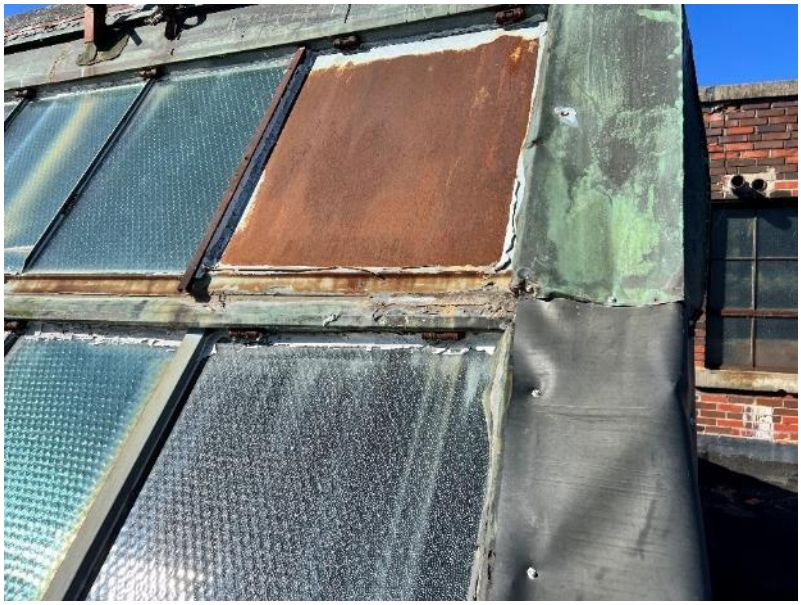
SUBTASK NO. 010.05	DESCRIPTION	This photograph shows white roofing caulk on roof A.	38
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows roofing material on roofs F and G.	39
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows black roofing tar typical of that observed on all roofs.	40
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa



SUBTASK NO. 010.05	DESCRIPTION	This photograph shows white window caulk on roof B skylight windows.	41
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asphalt shingles on roof B/C transition.	42
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows roofing material on roofs D and H.	43
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows asbestos-containing roofing material on roof E.	44
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Zach Usher	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of blue and yellow lead-based paint (LBP) on door frames throughout the facility.	45
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of blue LBP on metal posts in room B71.	46
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of white LBP on metal posts in room B73.	47
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey LBP on a metal door in room B72.	48
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey LBP on the metal door frames and elevator door in room C71.	49
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of green LBP on structural steel in rooms C72 and C71.	50
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows green LBP on pipe wrap in room C71.	51
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of grey LBP on structural steel in rooms B71 and B73.	52
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of black LBP on structural steel and posts in room B74.	53
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of grey LBP on metal door frames in room H71.	54
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows grey LBP on the metal door frames and wall dividers in room B72.	55
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of blue and yellow LBP on metal door frames on the elevator doors.	56
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of grey LBP on metal trim in rooms C63 and C64.	57
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

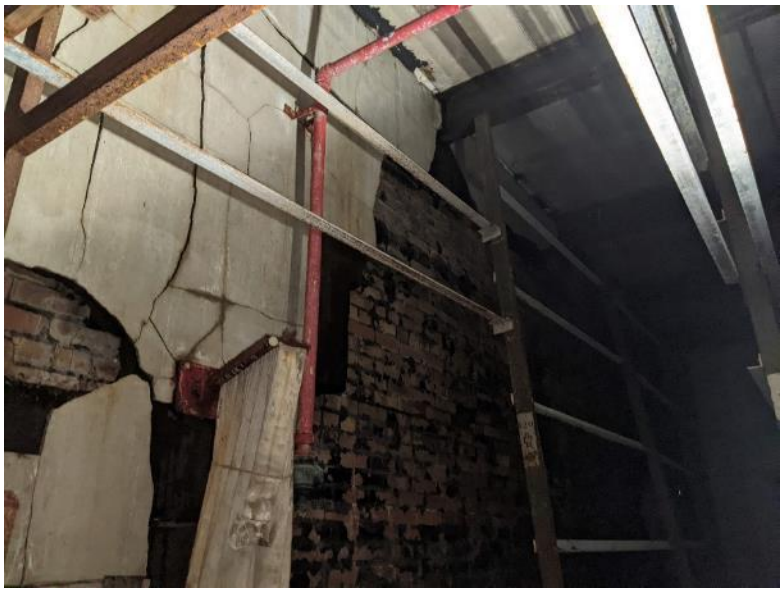
SUBTASK NO. 010.05	DESCRIPTION	This photograph shows green LBP on a metal door frame in room C64.	58
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of green LBP on walls in women's restroom C64.	59
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of white LBP on posts and grey paint on I-beams in room C63.	60
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa



SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of red LBP on fire suppression piping.	61
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of blue LBP on metal doors.	62
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of blue LBP on a metal guard in room B55.	63
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of yellow LBP on guarding around the ammonia tank in room A42.	64
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

Hazardous Materials Survey, Photographic Documentation Log
Former Rath Buildings, Waterloo, Iowa

SUBTASK NO. 010.05	DESCRIPTION	This photograph shows a representative view of yellow LBP on piping in room C33.	65
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Cory Nichols	6/16/2022

APPENDIX C

INSPECTOR CERTIFICATIONS

ZACHARY USHER

DOB: 12-17-1990

Issued: 09-23-2021

This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

December 19, 2020

Zachary Scot Usher
8151 N Denver Avenue APT 3223
Kansas City, MO 64119

Dear Zachary Scot Usher

The department has reviewed the information you submitted and determined that you have met the requirements for certification in the state of Iowa as a Lead Inspector/Risk Assessor. Your certification number is: LEAD-INSP10153.

Your certification will expire on December 18, 2023. By that date, you must renew your certification in order to perform any lead professional certification activities. To renew your certification, you will need to have completed the appropriate refresher course. Refresher courses are valid if taken within 3-years from the date that you renew.

Please keep a copy of your certification on your person or in an easily retrievable area at the work site. If you submitted your application online or with a valid email address, the certification is being provided to you electronically. You may choose to either print these documents or have them available on your phone or other electronic device for display if requested.

You can find the certification requirements and work practice standards for all lead professionals in Iowa Administrative Code 641 - Chapter 70, which is at: http://www.idph.iowa.gov/LPP under "Resources". You **must** be currently certified to perform work that requires certification.

Bureau of Environmental Health Services
Lead Professional Certification
Phone: 800-972-2026
E-mail: Lead.Bureau@idph.iowa.gov

IOWA DEPARTMENT OF PUBLIC HEALTH

Zachary Scot Usher

Lead Inspector/Risk Assessor

Certification Number: LEAD-INSP10153

Expiration Date: December 18, 2023

APPENDIX D

ACM ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY FORMS

Eurofins J3 Resources, Inc.
6110 W. 34th Street, Houston, Texas 77092
Phone: (713) 290-0221 - Fax: (713) 290-0248
J3Resources.com

Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)

Appx E Sub E 40 CFR 763 / EPA 600/R-93/116

Donnie Combs
Eurofins EMLab P&K - Houston
10900 Brittmoore Park Drive, Ste. G
Houston TX 77041

Order #: JH22138105
Project #: 2958098
Date Received: 21-Jun-2022
Date Analyzed: 23-Jun-2022
Date Reported: 12-Jul-2022

2958098 - REVISED

Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-WG-01	Window Glazing, Gray, Homogeneous	Chrysotile	<1%	Wollastonite Non-Fibrous Material	2% 98%
RB-WG-02	Window Glazing, Pink, Homogeneous	Chrysotile	<1%	Wollastonite Non-Fibrous Material	2% 98%
RB-WG-03	Window Glazing, Gray, Homogeneous	Chrysotile	<1%	Wollastonite Non-Fibrous Material	2% 98%
RB-BG-01	Block Grout, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-BG-02	Block Grout, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-BG-03	Block Grout, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-TSI-01	Insulation, White, Homogeneous	Amosite Chrysotile	20% 8%	Non-Fibrous Material	72%
RB-TSI-02	Insulation, *Not analyzed per client request				
RB-TSI-03	LAYER 1 Wrap, Gray, Homogeneous LAYER 2 Insulation, *Not analyzed per client request	None Detected		Cellulose Fiber Synthetic Fiber Non-Fibrous Material	45% 45% 10%

Revision: Remove duplicate entry sample and data, client requested - pg 23

Jovahnny Dominguez Analyst

Scott Ward, Ph.D. Lab Director

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-TSI2-01	LAYER 1 Mastic, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, Brown, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	80% 20%
RB-TSI2-02	LAYER 1 Mastic, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, Brown, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	80% 20%
RB-TSI2-03	LAYER 1 Mastic, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, Brown, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	80% 20%
RB-PL-01	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%
RB-PL-02	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%
RB-PL-03	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%
RB-CI-01	Cork, Brown, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-CI-02	Cork, Brown, Homogeneous	None Detected		Non-Fibrous Material	100%

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RB-CI-03	Cork, Brown, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-TSI3-01	Insulation, Gray, Homogeneous	Chrysotile	25%	Non-Fibrous Material	75%
RB-TSI3-02	Insulation, *Not analyzed per client request				
RB-TSI3-03	Insulation, *Not analyzed per client request				
RB-INS-01	Insulation, Gray, Homogeneous	Amosite Chrysotile	10% 10%	Mineral Wool Non-Fibrous Material	2% 78%
RB-INS-02	Insulation, *Not analyzed per client request				
RB-INS-03	Insulation, *Not analyzed per client request				
RB-TSI4-01	LAYER 1 Tar and Felt, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	50% 50%
	LAYER 2 Insulation, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-TSI4-02	LAYER 1 Tar and Felt, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	50% 50%
	LAYER 2 Tar and Felt, Black, Homogeneous	Chrysotile	30%	Non-Fibrous Material	70%
	LAYER 3 Insulation, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-TSI4-03	LAYER 1 Tar and Felt, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	50% 50%
	LAYER 2 Tar and Felt, *Not analyzed per client request				
	LAYER 3 Insulation, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-DC-01	Caulk, Brown, Homogeneous	Chrysotile	5%	Non-Fibrous Material	95%
RB-DC-02	Caulk, *Not analyzed per client request				
RB-DC-03	Caulk, *Not analyzed per client request				
RB-BI-01	Insulation, White, Homogeneous	Amosite	10%	Non-Fibrous Material	90%
RB-BI-02	Insulation, *Not analyzed per client request				
RB-BI-03	Insulation, *Not analyzed per client request				
RB-T-01	Tar, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-T-02	Tar, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-T-03	Tar, Black, Homogeneous	None Detected		Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-TRAN-01	Transite, Beige, Homogeneous	Chrysotile	15%	Non-Fibrous Material	85%
RB-TRAN-02	Transite, *Not analyzed per client request				
RB-TRAN-03	Transite, *Not analyzed per client request				
RB-DS-01	Duct Sealant, Black, Homogeneous	Chrysotile	15%	Non-Fibrous Material	85%
RB-DS-02	Duct Sealant, *Not analyzed per client request				
RB-DS-03	Duct Sealant, *Not analyzed per client request				
RB-TSI5-01	Aircell Pipe Insulation, Beige, Homogeneous	Chrysotile	20%	Cellulose Fiber Non-Fibrous Material	10% 70%
RB-TSI5-02	Aircell Pipe Insulation, *Not analyzed per client request				
RB-TSI5-03	Aircell Pipe Insulation, *Not analyzed per client request				
RB-PL-04	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%
RB-PL-05	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%
RB-PL-06	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%

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RB-PL-07	Plaster, Gray, Homogeneous	Chrysotile	<1%	Non-Fibrous Material	100%
RB-AS-01	Shingle, Black, Homogeneous	Chrysotile	10%	Cellulose Fiber Non-Fibrous Material	2% 88%
RB-AS-02	Shingle, *Not analyzed per client request				
RB-AS-03	Shingle, *Not analyzed per client request				
RB-DC2-01	Door Caulk, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	3% 97%
RB-DC2-02	Door Caulk, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	3% 97%
RB-DC2-03	Door Caulk, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	3% 97%
RB-WC-01	Caulk, White, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-WC-02	Caulk, White, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-WC-03	Caulk, White, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-FH-01	Fire Hose, Beige, Homogeneous	None Detected		Synthetic Fiber Non-Fibrous Material	95% 5%

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RB-FH-02	Fire Hose, Beige, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	95% 5%
RB-FH-03	Fire Hose, Beige, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	95% 5%
RB-PW-01	Tar Wrap, Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	15% 85%
RB-PW-02	Tar Wrap, Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	15% 85%
RB-PW-03	Tar Wrap, Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	15% 85%
RB-T2-01	Tar, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-T2-02	Tar, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-T2-03	Tar, Black, Homogeneous	None Detected	Non-Fibrous Material	100%

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RB-FWC-01	LAYER 1 Coating, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
	LAYER 3 Foam, White, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-FWC-02	LAYER 1 Coating, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
	LAYER 3 Foam, White, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-FWC-03	LAYER 1 Coating, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-FWC-04	LAYER 1 Coating, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%

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RB-FWC-05	LAYER 1 Coating, White, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-FWC-06	LAYER 1 Coating, White, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-FWC-07	LAYER 1 Coating, White, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-TI-01	Insulation, Pink, Homogeneous	Chrysotile	30%	Non-Fibrous Material	70%
RB-TI-02	Insulation, *Not analyzed per client request				
RB-TI-03	Insulation, *Not analyzed per client request				
RB-CFT-01	Grout, Gray, Homogeneous No Ceramic Tile Present	None Detected		Non-Fibrous Material	100%
RB-CFT-02	Ceramic Tile, Brown, Homogeneous	None Detected		Non-Fibrous Material	100%

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RB-CFT-03	LAYER 1 Ceramic Tile, Brown, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Grout, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-VFT-01	LAYER 1 Floor Tile, Green, Homogeneous	Chrysotile	5%	Non-Fibrous Material	95%
	LAYER 2 Mastic, Black, Homogeneous	Chrysotile	5%	Non-Fibrous Material	95%
RB-VFT-02	Flooring, *Not analyzed per client request				
RB-VFT-03	Flooring, *Not analyzed per client request				
RB-CB-01	LAYER 1 Cove Base, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Mastic, Dk. Brown, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-CB-02	LAYER 1 Cove Base, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Mastic, Dk. Brown, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-CB-03	LAYER 1 Cove Base, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Mastic, Dk. Brown, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-CT-01	Ceiling Tile, Dk. Brown, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	80% 20%

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RB-CT-02	Ceiling Tile, Dk. Brown, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	80% 20%
RB-CT-03	Ceiling Tile, Dk. Brown, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	80% 20%
RB-VFT2-01	LAYER 1 Floor Tile, Brown, Homogeneous	Chrysotile	2%	Non-Fibrous Material	98%
	LAYER 2 Mastic, Black, Homogeneous	Chrysotile	5%	Non-Fibrous Material	95%
RB-VFT2-02	Flooring, *Not analyzed per client request				
RB-VFT2-03	Flooring, *Not analyzed per client request				
RB-TSI6-01	LAYER 1 Coating, Silver, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, White, Homogeneous	Amosite Chrysotile	20% 3%	Non-Fibrous Material	77%
RB-TSI6-02	LAYER 1 Coating, Silver, Homogeneous	None Detected		Non-Fibrous Material	100%
	LAYER 2 Insulation, *Not analyzed per client request				

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RB-TSI6-03	LAYER 1 Wrap, Gray, Homogeneous	None Detected	Cellulose Fiber Synthetic Fiber Non-Fibrous Material	45% 45% 10%
	LAYER 2 Insulation, *Not analyzed per client request			
RB-VFT3-01	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Dk. Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	5% 95%
RB-VFT3-02	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Dk. Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	5% 95%
RB-VFT3-03	LAYER 1 Flooring, Gray, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Dk. Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	5% 95%
RB-CT2-01	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber Mineral Wool Non-Fibrous Material	60% 20% 20%

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RB-CT2-02	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber Mineral Wool Non-Fibrous Material	60% 20% 20%
RB-CT2-03	Ceiling Tile, White/ Gray, Homogeneous	None Detected	Cellulose Fiber Mineral Wool Non-Fibrous Material	60% 20% 20%
RB-DWJC-01	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Wallboard, Brown/ White, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% <1% 90%
RB-DWJC-02	LAYER 1 Texture, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Tape, Beige, Homogeneous	None Detected	Cellulose Fiber	100%
	LAYER 3 Joint Compound, White, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 4 Wallboard, Brown/ White, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% <1% 90%
RB-DWJC-03	Texture, White, Homogeneous No Wallboard Present	None Detected	Non-Fibrous Material	100%
RB-CB2-01	Cove Base Mastic, Beige, Homogeneous	None Detected	Non-Fibrous Material	100%

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Houston TX 77041

Order #: JH22138105
Project #: 2958098
Date Received: 21-Jun-2022
Date Analyzed: 23-Jun-2022
Date Reported: 12-Jul-2022

2958098

Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
RB-CB2-02	LAYER 1 Cove Base, Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-CB2-03	LAYER 1 Cove Base, Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
	LAYER 2 Mastic, Beige, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-SF-01	LAYER 1 Sheet Flooring, Brown/ Beige, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	5% 95%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-SF-02	LAYER 1 Sheet Flooring, Brown/ Beige, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	5% 95%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-SF-03	LAYER 1 Sheet Flooring, Brown/ Beige, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	5% 95%
	LAYER 2 Mastic, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-CRT-01	Countertop, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-CRT-02	Countertop, Black, Homogeneous	None Detected	Non-Fibrous Material	100%

Jovahnny Dominguez Analyst

Scott Ward, Ph.D. Lab Director

Eurofins J3 Resources, Inc.
6110 W. 34th Street, Houston, Texas 77092
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J3Resources.com

Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)

Appx E Sub E 40 CFR 763 / EPA 600/R-93/116

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-CRT-03	Countertop, Black, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-FP-01	Fireproofing, Gray, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-FP-02	Fireproofing, Gray, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-FP-03	Fireproofing, Gray, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-C-01	Caulk, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-C-02	Caulk, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-C-03	Caulk, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-DC3-01	Caulk, Brown, Homogeneous	Chrysotile	10%	Non-Fibrous Material	90%
RB-DC3-02	Caulk, *Not analyzed per client request				
RB-DC3-03	Caulk, *Not analyzed per client request				

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-TRAN2-01	Transite, White/ Gray, Homogeneous	Chrysotile	15%	Non-Fibrous Material	85%
RB-TRAN2-02	Transite, *Not analyzed per client request				
RB-TRAN2-03	Transite, *Not analyzed per client request				
RB-C2-01	Caulk, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-C2-02	Caulk, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-C2-03	Caulk, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-FS-01	Floor Seam, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	5% 95%
RB-FS-02	Floor Seam, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	5% 95%
RB-FS-03	Floor Seam, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	5% 95%
RB-EJ-01	Expansion Joint, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-EJ-02	Expansion Joint, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-EJ-03	Expansion Joint, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-WC2-01	Window Caulk, Black, Homogeneous	Chrysotile	15%	Non-Fibrous Material	85%
RB-WC2-02	Window Caulk, *Not analyzed per client request				
RB-WC2-03	Window Caulk, *Not analyzed per client request				
RB-EJ2-01	Expansion Joint, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-EJ2-02	Expansion Joint, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-EJ2-03	Expansion Joint, Gray, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-RM-01	LAYER 1 Mastic Wrap, Black, Homogeneous	None Detected		Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Tar, Black, Homogeneous	None Detected		Cellulose Fiber Non-Fibrous Material	10% 90%
	LAYER 3 Insulation, Yellow, Homogeneous	None Detected		Mineral Wool Non-Fibrous Material	95% 5%

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
RB-RM-02	LAYER 1 Mastic Wrap, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Tar, Black, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
	LAYER 3 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool Non-Fibrous Material	95% 5%
RB-RM-03	LAYER 1 Mastic Wrap, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Tar, Black, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	10% 90%
	LAYER 3 Insulation, Yellow, Homogeneous	None Detected	Mineral Wool Non-Fibrous Material	95% 5%
RB-RM2-01	LAYER 1 Membrane, Gray/ Beige, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	15% 85%
	LAYER 2 Foam Insulation, Gray/ Beige, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-RM2-02	LAYER 1 Membrane, Gray/ Beige, Homogeneous	None Detected		Synthetic Fiber Non-Fibrous Material	15% 85%
	LAYER 2 Foam Insulation, Gray/ Beige, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-RM2-03	LAYER 1 Membrane, Gray/ Beige, Homogeneous	None Detected		Synthetic Fiber Non-Fibrous Material	15% 85%
	LAYER 2 Foam Insulation, Gray/ Beige, Homogeneous	None Detected		Cellulose Fiber Fibrous Glass Non-Fibrous Material	10% 5% 85%
RB-RT-01	Roof Tar, Gray/ Black, Homogeneous	Chrysotile	8%	Non-Fibrous Material	92%
RB-RT-02	Roof Tar, *Not analyzed per client request				
RB-RT-03	Roof Tar, *Not analyzed per client request				
RB-RC-01	Roof Caulk, Gray, Homogeneous	Chrysotile	5%	Non-Fibrous Material	95%
RB-RC-02	Roof Caulk, *Not analyzed per client request				
RB-RC-03	Roof Caulk, *Not analyzed per client request				
RB-RT2-01	Roof Tar, Black, Homogeneous	None Detected		Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
RB-RT2-02	Roof Tar, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-RT2-03	Roof Tar, Black, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-RM3-01	LAYER 1 Roofing Tars and Felts, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Decking, Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	80% 20%
RB-RM3-02	LAYER 1 Roofing Tars and Felts, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Decking, Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	80% 20%
RB-RM3-03	LAYER 1 Roofing Tars and Felts, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Decking, Brown, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	80% 20%
RB-RT3-01	Roof Tar, Black, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	5% 95%
RB-RT3-02	Roof Tar, Black, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	5% 95%

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RB-RT3-03	Roof Tar, Black, Homogeneous	None Detected	Cellulose Fiber Non-Fibrous Material	5% 95%
RB-WC3-01	Window Caulk, White, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-WC3-02	Window Caulk, White, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-WC3-03	Window Caulk, White, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-AS2-01	LAYER 1 Shingle, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Tar Paper, Black, Homogeneous	None Detected	Cellulose Fiber	100%
RB-AS2-02	LAYER 1 Shingle, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Tar Paper, Black, Homogeneous	None Detected	Cellulose Fiber	100%
RB-AS2-03	LAYER 1 Shingle, Black, Homogeneous	None Detected	Fibrous Glass Non-Fibrous Material	15% 85%
	LAYER 2 Tar Paper, Black, Homogeneous	None Detected	Cellulose Fiber	100%

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Sample ID #	Sample Description	Asbestos Constituents	Non-Asbestos Constituents	
RB-RM4-01	LAYER 1 Roll Roofing, Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	20% 80%
	LAYER 2 Roofing Felt, Black, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	15% 15% 70%
	LAYER 3 Foam Insulation, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-RM4-02	LAYER 1 Roll Roofing, Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	20% 80%
	LAYER 2 Roofing Felt, Black, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	15% 15% 70%
	LAYER 3 Foam Insulation, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-RM4-03	LAYER 1 Roll Roofing, Black, Homogeneous	None Detected	Synthetic Fiber Non-Fibrous Material	20% 80%
	LAYER 2 Roofing Felt, Black, Homogeneous	None Detected	Cellulose Fiber Fibrous Glass Non-Fibrous Material	15% 15% 70%
	LAYER 3 Foam Insulation, Yellow, Homogeneous	None Detected	Non-Fibrous Material	100%
RB-RC2-01	Caulk, Red, Homogeneous	None Detected	Non-Fibrous Material	100%

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Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-RC2-02	Caulk, Red, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-RC2-03	Caulk, Red, Homogeneous	None Detected		Non-Fibrous Material	100%
RB-RM5-01	Roof Coating, Silver, Homogeneous	Chrysotile	10%	Non-Fibrous Material	90%
RB-RM5-02	Roof Coating, *Not analyzed per client request				
RB-RM5-03	Roof Coating, *Not analyzed per client request				
RB-EJ3-01	Expansion Joint, Gray, Homogeneous	Chrysotile	3%	Non-Fibrous Material	97%
RB-EJ3-02	Expansion Joint, *Not analyzed per client request				
RB-EJ3-03	Expansion Joint, *Not analyzed per client request				

Revision: Remove duplicate entry sample and data, client requested - pg 23

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SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 * **(866) 888-6653**

002958098

CONTACT INFORMATION

Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION

Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
*Please call Client Services for locations with Rush services

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Bulk: Asbestos Bulk PLM	Bulk: EPA Point Count (200 Point Count)	Bulk: EPA Point Count (400 Point Count)	Bulk: EPA Point Count (1000 Point Count)	Bulk: Gravimetric Point Count (400 Pt Count)	Bulk: Gravimetric Point Count (1000 Pt Count)	Rock & Soil: CARB 435 Method (400 Point Count)	Rock & Soil: CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
RB-WG-01	Window Glaze	B	STD		Stop on 1st Positive	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-BG-01	Block Grout					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TSI-01	White Pipe Insulation					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TSI2-01	Black Pipe Insulation					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe	[signature]	6/17/22 1130	[signature]	6/21/22 9:21 am
B – Bulk	T – Tape		EJ3-	SM	6/21/22 6:00pm
D – Dust	R – Rock				
SO – Soil	O – Other:				

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REQU

002958098

CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
*Please call Client Services for locations with Rush services

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-TSI2-03	Blank Pipe Insulation	B	STD		Stop on 1st Positive
-PL-01	Plaster				
-02	"				
-03	"				
-CI-01	Cork Insulation				
-02	"				
-03	"				
-TSI3-01	Green Pipe Insulation				
-02	"				
-03	"				
-INS-01	Insulation				

	PCM Air		Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-TSI2-03	☐	☐	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐
-PL-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-CI-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TSI3-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-INS-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES	
A – Air	W – Wipe
B – Bulk	T – Tape
D – Dust	R – Rock
SO – Soil	O – Other:

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
	6/17/22 1730		6/21/22 9:21am

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Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION

Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Uzler

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)	Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
ND – Next Business Day	
SD – Same Business Day Rush*	
*Please call Client Services for locations with Rush services	

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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Bulk: Asbestos Bulk PLM	Bulk: EPA Point Count (200 Point Count)	Bulk: EPA Point Count (400 Point Count)	Bulk: EPA Point Count (1000 Point Count)	Bulk: Gravimetric Point Count (400 Pt Count)	Bulk: Gravimetric Point Count (1000 Pt Count)	Rock & Soil: CARB 435 Method (400 Point Count)	Rock & Soil: CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
RB-INS-02	Insulation	B	STD		Stop on 1st Positive	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
↓ -03	↓					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TSI4-01	Black Felt Pipe Insulation					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-DC-01	Door Caulk					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-BI-01	Boiler Insulation					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe	[signature]	6/14/22 1730	[signature]	9:21am 6/21/22
B – Bulk	T – Tape				
D – Dust	R – Rock				
SO – Soil	O – Other:				

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SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 * **(866) 888-6653**

CONTACT INFORMATION

Company:	Tetra Tech - KCMO	Address: 415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions: kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742	

PROJECT INFORMATION

Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)

ND – Next Business Day

SD – Same Business Day Rush*

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ASBESTOS ANALYSIS

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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
RB-T-01	TGS	B	STD		Stop on 1st Positive	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TRAN-01	Transite	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-DS-01	Duct sealant	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TSI-01	Aircell Pipe Insulation	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	↓	↓	↓		↓	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe	[signature]	6/17/22 1730	[signature]	6/21/22 9:21 am
B – Bulk	T – Tape				
D – Dust	R – Rock				
SO – Soil	O – Other:				

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002958098

CONTACT INFORMATION

Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION

Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)

ND – Next Business Day

SD – Same Business Day Rush*

*Please call Client Services for locations with Rush services

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ANALYSIS

(Check boxes below)

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Bulk: Asbestos Bulk PLM	Bulk: EPA Point Count (200 Point Count)	Bulk: EPA Point Count (400 Point Count)	Bulk: EPA Point Count (1000 Point Count)	Bulk: Gravimetric Point Count (400 Pt Count)	Bulk: Gravimetric Point Count (1000 Pt Count)	Rock & Soil: CARB 435 Method (400 Point Count)	Rock & Soil: CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
RB-7355-03	Attic Pipe Insulation	B	STD		Stop on 1st Positive	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-PL-04	Plaster					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-05						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-06						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-07						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-AS-01	Shingles					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-DCZ-01	Door Caulk					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe				
B – Bulk	T – Tape		6/17/22 1730		6/21/22 9:21 am
D – Dust	R – Rock				
SO – Soil	O – Other:				

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CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
*Please call Client Services for locations with Rush services

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-WC-01	window Caulk	B	STD		Stop on 1st Positive
-02	"	"	"	"	"
-03	"	"	"	"	"
-FH-01	Fire Hose	"	"	"	"
-02	"	"	"	"	"
-03	"	"	"	"	"
-PW-01	Pipe Wrap	"	"	"	"
-02	"	"	"	"	"
-03	"	"	"	"	"
-T2-01	Tar	"	"	"	"
-02	"	"	"	"	"

	PCM Air		Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-WC-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-FH-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-PW-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-T2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES	
A – Air	W – Wipe
B – Bulk	T – Tape
D – Dust	R – Rock
SO – Soil	O – Other:

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
	6/17/22 1730		6/21/22 9:21 am

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SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 * **(866) 888-6653**

RQ 7 of 17

RI 002958098 S

below)

CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day
Rush*
*Please call Client Services for locations with Rush services

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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-T2-03	Tar	B	STD		Stop on 1st Positive
-FWC-01	Wall Coating				
-02					
-03					
-04					
-05					
-06					
-07					
-TI-01	Tank Insulation				
-02					
-03					

	PCM Air		Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-T2-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-FWC-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-04	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-05	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-06	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-07	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TI-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe				
B – Bulk	T – Tape		6/17/22 1730		6/21/22 9:21am
D – Dust	R – Rock				
SO – Soil	O – Other:				

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Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

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ND – Next Business Day	
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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-CFT-01	Ceramic Floor Tile	B	STD		Stop on 1st Positive
-02					
-03					
-VFT-01	Green Floor Tile				
-02					
-03					
-CB-01	Black Cove Base				
-02					
-03					
-CT-01	Ceiling Tile				
-02					

A... ANALYSIS

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Sample ID	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	Soil: CARB 435 Method (400 Point Count)	Soil: CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
RB-CFT-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-VFT-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-CB-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-CT-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	**W** – Wipe	[signature]	6/17/22 1730	[signature]	6/21/22 9:21am
B – Bulk	**T** – Tape				
D – Dust	**R** – Rock				
SO – Soil	**O** – Other:				

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002958098

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Phone:	816-412-1742		

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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	Soil: CARB 435 Method (400 Point Count)	Soil: CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
AB-CT-03	Ceiling Tile	B	STD		Stop on 1st Positive	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-VFT2-01	Brown Floor Tile					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TSI6-01	Silver Pipe Insulation					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-VFT3-01	Grey Floor Tile					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-CT2-01	Ceiling Tile					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe	[signature]	6/17/22 1730	[signature]	6/21/22 9:21am
B – Bulk	T – Tape				
D – Dust	R – Rock				
SO – Soil	O – Other:				

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SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 * **(866) 888-6653**

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002958098

CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	
PO Number:	103G65210190.010.05	Sampled By:	

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
*Please call Client Services for locations with Rush services

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-CT2-01	Ceiling Tile	B	STD		Stop on 1st Positive
-02	↓				
-03	↓				
-DWJC-01	Drywall JC				
-02	↓				
-03	↓				
-CB2-01	White Cove Base				
-02	↓				
-03	↓				
-SF-01	Sheet Flooring				
-02	↓				
-03	↓				

	PCM Air		Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-CT2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-DWJC-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-CB2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-SF-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe				
B – Bulk	T – Tape		6/17/22 1730		6/21/22 9:21am
D – Dust	R – Rock				
SO – Soil	O – Other:				

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REQ 002958098

CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
*Please call Client Services for locations with Rush services

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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-CRT-01	Countertop	B	STD		Stop on 1st Positive
-02	"	"	"	"	"
-03	"	"	"	"	"
-FP-01	Fire proofing	"	"	"	"
-02	"	"	"	"	"
-03	"	"	"	"	"
-C-01	Caulk	"	"	"	"
-02	"	"	"	"	"
-03	"	"	"	"	"
-DC-01	Door Caulk	"	"	"	"
-02	"	"	"	"	"

	PCM Air		Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-CRT-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-FP-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-C-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-DC-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES	
A – Air	W – Wipe
B – Bulk	T – Tape
D – Dust	R – Rock
SO – Soil	O – Other:

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
	6/17/22 1730		6/21/22 9:21am

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CONTACT INFORMATION

Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION

Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)	Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
ND – Next Business Day	
SD – Same Business Day Rush*	
*Please call Client Services for locations with Rush services	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	Bulk: Asbestos Bulk PLM	Bulk: EPA Point Count (200 Point Count)	Bulk: EPA Point Count (400 Point Count)	Bulk: EPA Point Count (1000 Point Count)	Bulk: Gravimetric Point Count (400 Pt Count)	Bulk: Gravimetric Point Count (1000 Pt Count)	Soil: CARB 435 Method (400 Point Count)	Soil: CARB 435 Method (1000 Point Count)	ier / uests: Lead Analysis – Flame AA		
RB-DC3-03	Door Caulk	B	STD		Stop on 1st Positive	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-TRAN2-01	Transite	|	|		|	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	|					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-C2-01	Caulk.					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	|					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-FS-01	Floor Seam					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	|					☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03						☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-EJ-01	Expansion Joint	|	|		|	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	**W** – Wipe	[signature]	6/17/22 1730	[signature]	6/21/22 9:21am
B – Bulk	**T** – Tape				
D – Dust	**R** – Rock				
SO – Soil	**O** – Other:				

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CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

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SD – Same Business Day Rush*
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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-ES-02	Expansion Joint	B	STD		Stop on 1st Positive
↓ -03	↓				
-WC2-01	Window Caulk				
-02					
-03					
-EJ2-01	Expansion Joint				
-02					
-03					
-RM-01	Roofing Material				
-02					
-03					

	PCM Air		Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-ES-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-WC2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-EJ2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RM-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe				
B – Bulk	T – Tape		6/17/22 1730		6/21/22 9:21am
D – Dust	R – Rock				
SO – Soil	O – Other:				

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CONTACT INFORMATION			
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Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-RM201	Roofing Material	B	STD		Stop on 1st Positive
-02	"	"	"		"
-03	"	"	"		"
-RT-01	Roofing Tar	"	"		"
-02	"	"	"		"
-03	"	"	"		"
-RC-01	Roofing Caulk	"	"		"
-02	"	"	"		"
-03	"	"	"		"
-RT2-01	Tar	"	"		"
-02	"	"	"		"

	PCM Air		Bulk						Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-RM201	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RT-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RC-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RT2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	W – Wipe				
B – Bulk	T – Tape		6/17/22 1730		6/21/22 9:21am
D – Dust	R – Rock				
SO – Soil	O – Other:				

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Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION

Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

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Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-RS2-03	Tar	B	STD		Stop on 1st Positive
-RM3-01	Roofing Material				
-02					
-03					
-RT3-01	Tar				
-02					
-03					
-WC3-01	window Caulk				
-02					
-03					
-AS2-01	Shingles				

	PCM Air		PLM Bulk						Rock & Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
RB-RS2-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RM3-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RT3-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-WC3-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-AS2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES	
A – Air	W – Wipe
B – Bulk	T – Tape
D – Dust	R – Rock
SO – Soil	O – Other:

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
	6/17/22 1730		6/21/22 9:21 am

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es below)

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Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	
PO Number:	1D3G6521D190.010.05	Sampled By:	

TURN AROUND TIME CODES (TAT)

- **STD** – Standard (DEFAULT)
- **ND** – Next Business Day
- **SD** – Same Business Day Rush*

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Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-AS2-02	Shingles	B	STD		Stop on 1st Positive
↓ -03	↓	↓	↓		↓
-RM4-01	Roofing Material				
-02	↓				
-03					
-RC2-01	Caulk				
-02	↓				
-03					
~~-RM5-01~~ RM5-01	Roofing Material				
-02	↓				
-03					

Sample ID	PCM Air: Fiber Count (NIOSH 7400)	PCM Air: OSHA with TWA	PLM Bulk: Asbestos Bulk PLM	PLM Bulk: EPA Point Count (200 Point Count)	PLM Bulk: EPA Point Count (400 Point Count)	PLM Bulk: EPA Point Count (1000 Point Count)	PLM Bulk: Gravimetric Point Count (400 Pt Count)	PLM Bulk: Gravimetric Point Count (1000 Pt Count)	Rock & Soil: CARB 435 Method (400 Point Count)	Rock & Soil: CARB 435 Method (1000 Point Count)	Other Requests: Lead Analysis – Flame AA	Other Requests	Other Requests
RB-AS2-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RM4-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-RC2-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
RM5-01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
-03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A – Air	**W** – Wipe	[signature]	6/17/22 1330	[signature]	6/21/22 9:21am
B – Bulk	**T** – Tape				
D – Dust	**R** – Rock				
SO – Soil	**O** – Other:				

CHAIN OF CUSTODY eurofins | EMLab P&K
www.EMLabPK.com

New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 * **(866) 871-1984**
Phoenix, AZ: 1501 West Knudsen Drive, Phoenix, AZ 85027 * **(800) 651-4802**
SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 * **(866) 888-6653**

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RE 002958098

CONTACT INFORMATION			
Company:	Tetra Tech - KCMO	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Kaitlyn Mitchell	Special Instructions:	kaitlyn.mitchell@tetratech.com
Phone:	816-412-1742		

PROJECT INFORMATION			
Project ID:	RCRA 6 - Brownfields		
Project Description:	Site 10 - Rath Buildings		
Project Zip Code:	50703	Sampling Date & Time:	6/14/22
PO Number:	103G65210190.010.05	Sampled By:	Zach Usher

TURN AROUND TIME CODES (TAT)

STD – Standard (DEFAULT)
ND – Next Business Day
SD – Same Business Day Rush*
*Please call Client Services for locations with Rush services

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
RB-ES3-01	Expansion Joint	B	STD		Stop on 1st Positive
-02	"	"	"		"
-03	"	"	"		"
		W			

	PCM Air		Bulk						Soil		Other Requests		
	Fiber Count (NIOSH 7400)	OSHA with TWA	Asbestos Bulk PLM	EPA Point Count (200 Point Count)	EPA Point Count (400 Point Count)	EPA Point Count (1000 Point Count)	Gravimetric Point Count (400 Pt Count)	Gravimetric Point Count (1000 Pt Count)	CARB 435 Method (400 Point Count)	CARB 435 Method (1000 Point Count)	Lead Analysis – Flame AA		
01	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
02	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
03	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SAMPLE TYPE CODES	
A – Air	W – Wipe
B – Bulk	T – Tape
D – Dust	R – Rock
SO – Soil	O – Other:

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
	6/17/22 1720		6/21/22 9:21 am

Eurofins J3 Resources, Inc.
6110 W. 34th Street, Houston, Texas 77092
Phone: (713) 290-0221 - Fax: (713) 290-0248
J3Resources.com

Bulk Asbestos Fiber Analysis by Polarized Light Microscopy (PLM)

EPA 600/M4-82-020; 600/R-93/116 - Point Count Method

Donnie Combs
Eurofins EMLab P&K - Houston
10900 Brittmoore Park Drive, Ste. G
Houston TX 77041

Order #: JH22138226
Project #: 2958098
Date Received: 24-Jun-2022
Date Analyzed: 29-Jun-2022
Date Reported: 29-Jun-2022

PC-JH22138105-2958098

Sample ID #	Sample Description	Asbestos Constituents		Non-Asbestos Constituents	
RB-WG-01	Window Glazing, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-WG-02	Window Glazing, Pink, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-WG-03	Window Glazing, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-PL-01	Plaster, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-PL-02	Plaster, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-PL-03	Plaster, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-PL-04	Plaster, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-PL-05	Plaster, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					
RB-PL-06	Plaster, Gray, Homogeneous Original PLM Result: Chrysotile <1%	Chrysotile	<0.25%	Non-Fibrous Material	100.00%
400 pt. POINT COUNT					

Taylor Smylie Analyst

Scott Ward, Ph.D. Lab Director

APPENDIX E

PCB ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY FORMS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 06, 2022

Kaitlyn Mitchell
Tetra Tech EMI
415 Oak
Kansas City, MO 64106

RE: Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Dear Kaitlyn Mitchell:

Enclosed are the analytical results for sample(s) received by the laboratory on June 21, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jeffrey Shopper
jeff.shopper@pacelabs.com
1(913)563-1408
Project Manager

Enclosures

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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(913)599-5665

SAMPLE SUMMARY

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60403596001	**RB-C1**	Solid	06/16/22 08:00	06/21/22 09:00
60403596002	**RB-C2**	Solid	06/16/22 08:00	06/21/22 09:00
60403596003	**RB-C3**	Solid	06/16/22 08:00	06/21/22 09:00
60403596004	**RB-C4**	Solid	06/16/22 08:00	06/21/22 09:00
60403596005	**RB-C5**	Solid	06/16/22 08:00	06/21/22 09:00
60403596006	**RB-C6**	Solid	06/16/22 08:00	06/21/22 09:00
60403596007	**RB-C7**	Solid	06/16/22 08:00	06/21/22 09:00
60403596008	**RB-C8**	Solid	06/16/22 08:00	06/21/22 09:00
60403596009	**RB-C9**	Solid	06/16/22 08:00	06/21/22 09:00
60403596010	**RB-C10**	Solid	06/16/22 08:00	06/21/22 09:00

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SAMPLE ANALYTE COUNT

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60403596001	**RB-C1**	EPA 8082	RAG	9	PASI-M
60403596002	**RB-C2**	EPA 8082	RAG	9	PASI-M
60403596003	**RB-C3**	EPA 8082	RAG	9	PASI-M
60403596004	**RB-C4**	EPA 8082	RAG	9	PASI-M
60403596005	**RB-C5**	EPA 8082	RAG	9	PASI-M
60403596006	**RB-C6**	EPA 8082	RAG	9	PASI-M
60403596007	**RB-C7**	EPA 8082	RAG	9	PASI-M
60403596008	**RB-C8**	EPA 8082	RAG	9	PASI-M
60403596009	**RB-C9**	EPA 8082	RAG	9	PASI-M
60403596010	**RB-C10**	EPA 8082	RAG	9	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C1 **Lab ID: 60403596001** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:10	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	66	%.	53-125	1	06/29/22 13:12	06/30/22 14:10	877-09-8	P1
Decachlorobiphenyl (S)	111	%.	41-125	1	06/29/22 13:12	06/30/22 14:10	2051-24-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C2 **Lab ID: 60403596002** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 14:25	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	103	%.	53-125	1	06/29/22 13:12	06/30/22 14:25	877-09-8	P1
Decachlorobiphenyl (S)	552	%.	41-125	1	06/29/22 13:12	06/30/22 14:25	2051-24-3	S3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C3 **Lab ID: 60403596003** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	194	1	06/29/22 13:12	06/30/22 14:41	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	97	%.	53-125	1	06/29/22 13:12	06/30/22 14:41	877-09-8	P1
Decachlorobiphenyl (S)	88	%.	41-125	1	06/29/22 13:12	06/30/22 14:41	2051-24-3	

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C4 **Lab ID: 60403596004** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	156	1	06/29/22 13:12	06/30/22 14:57	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	85	%.	53-125	1	06/29/22 13:12	06/30/22 14:57	877-09-8	P1
Decachlorobiphenyl (S)	76	%.	41-125	1	06/29/22 13:12	06/30/22 14:57	2051-24-3	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C5 **Lab ID: 60403596005** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	130	1	06/29/22 13:12	06/30/22 15:44	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	283	%.	53-125	1	06/29/22 13:12	06/30/22 15:44	877-09-8	S3
Decachlorobiphenyl (S)	86	%.	41-125	1	06/29/22 13:12	06/30/22 15:44	2051-24-3	P1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C6 **Lab ID: 60403596006** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	164	1	06/29/22 13:12	06/30/22 16:00	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	82	%.	53-125	1	06/29/22 13:12	06/30/22 16:00	877-09-8	P1
Decachlorobiphenyl (S)	81	%.	41-125	1	06/29/22 13:12	06/30/22 16:00	2051-24-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C7 **Lab ID: 60403596007** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	177	1	06/29/22 13:12	06/30/22 16:16	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	96	%.	53-125	1	06/29/22 13:12	06/30/22 16:16	877-09-8	P1
Decachlorobiphenyl (S)	84	%.	41-125	1	06/29/22 13:12	06/30/22 16:16	2051-24-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C8 **Lab ID: 60403596008** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	120	1	06/29/22 13:12	06/30/22 16:32	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	91	%.	53-125	1	06/29/22 13:12	06/30/22 16:32	877-09-8	P1
Decachlorobiphenyl (S)	109	%.	41-125	1	06/29/22 13:12	06/30/22 16:32	2051-24-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C9 **Lab ID: 60403596009** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	172	1	06/29/22 13:12	06/30/22 16:47	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	87	%.	53-125	1	06/29/22 13:12	06/30/22 16:47	877-09-8	
Decachlorobiphenyl (S)	91	%.	41-125	1	06/29/22 13:12	06/30/22 16:47	2051-24-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Sample: RB-C10 **Lab ID: 60403596010** Collected: 06/16/22 08:00 Received: 06/21/22 09:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3546 Pace Analytical Services - Minneapolis							
PCB-1016 (Aroclor 1016)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	163	1	06/29/22 13:12	06/30/22 17:03	11096-82-5	
Surrogates								
Tetrachloro-m-xylene (S)	71	%.	53-125	1	06/29/22 13:12	06/30/22 17:03	877-09-8	P1
Decachlorobiphenyl (S)	90	%.	41-125	1	06/29/22 13:12	06/30/22 17:03	2051-24-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

QC Batch: 825031
QC Batch Method: EPA 3546
Analysis Method: EPA 8082
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 60403596001, 60403596002, 60403596003, 60403596004, 60403596005, 60403596006, 60403596007, 60403596008, 60403596009, 60403596010

METHOD BLANK: 4370245 Matrix: Solid
Associated Lab Samples: 60403596001, 60403596002, 60403596003, 60403596004, 60403596005, 60403596006, 60403596007, 60403596008, 60403596009, 60403596010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	50.0	06/30/22 13:38	
PCB-1221 (Aroclor 1221)	ug/kg	ND	50.0	06/30/22 13:38	
PCB-1232 (Aroclor 1232)	ug/kg	ND	50.0	06/30/22 13:38	
PCB-1242 (Aroclor 1242)	ug/kg	ND	50.0	06/30/22 13:38	
PCB-1248 (Aroclor 1248)	ug/kg	ND	50.0	06/30/22 13:38	
PCB-1254 (Aroclor 1254)	ug/kg	ND	50.0	06/30/22 13:38	
PCB-1260 (Aroclor 1260)	ug/kg	ND	50.0	06/30/22 13:38	
Decachlorobiphenyl (S)	%.	119	41-125	06/30/22 13:38	
Tetrachloro-m-xylene (S)	%.	76	53-125	06/30/22 13:38	

LABORATORY CONTROL SAMPLE: 4370246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	1000	877	88	68-125	
PCB-1260 (Aroclor 1260)	ug/kg	1000	1110	111	70-125	
Decachlorobiphenyl (S)	%.			117	41-125	
Tetrachloro-m-xylene (S)	%.			77	53-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4370703 4370704

Parameter	Units	60403596004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	3110	3040	2880	2520	93	83	53-125	13	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	3110	3040	2800	2500	90	82	30-143	11	30	
Decachlorobiphenyl (S)	%.						83	82	41-125			
Tetrachloro-m-xylene (S)	%.						89	85	53-125			P1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

P1	Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RCRA BROWNFIELDS-RATH BUILDING
Pace Project No.: 60403596

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60403596001	**RB-C1**	EPA 3546	825031	EPA 8082	825360
60403596002	**RB-C2**	EPA 3546	825031	EPA 8082	825360
60403596003	**RB-C3**	EPA 3546	825031	EPA 8082	825360
60403596004	**RB-C4**	EPA 3546	825031	EPA 8082	825360
60403596005	**RB-C5**	EPA 3546	825031	EPA 8082	825360
60403596006	**RB-C6**	EPA 3546	825031	EPA 8082	825360
60403596007	**RB-C7**	EPA 3546	825031	EPA 8082	825360
60403596008	**RB-C8**	EPA 3546	825031	EPA 8082	825360
60403596009	**RB-C9**	EPA 3546	825031	EPA 8082	825360
60403596010	**RB-C10**	EPA 3546	825031	EPA 8082	825360

WO# : 60403596

60403596

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample Co		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: TetraTech Inc

Courier: FedEx ☑ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 5248 7162 6930 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☑ Seals intact: Yes ☐ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☑ ZPLC

Thermometer Used: T301 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 28.8 **Corr. Factor** -1.0 **Corrected** 27.8

Date and initials of person examining contents: LJ 6/22/22

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☑Yes ☐No ☐N/A	5 Day
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	No dates or times on samples
Samples contain multiple phases? Matrix: SL	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:**	☐Yes ☐No ☑N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☑N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State: IA	☐Yes ☑No ~~☐N/A~~	LJ 6/22
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Company Name/Address:
Tetra Tech, Inc
415 Oak Street
Kansas City, MO 64106

Billing Information:
Tetra Tech, Inc
415 Oak Street
Kansas City, MO 64106

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

12065 Lebanon Rd Mount Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report to: **Kaitlyn Mitchell**

Email To: **kaitlyn.mitchell@tetratech.com**

Project Description: **RCRA Brownfields - Rath Buildings**

City/State Collected: **IA**

Please Circle: PT MT CT ET

Phone: **816-412-1742**

Client Project # 103G65210190.010.05

Lab Project #

Collected by (print): **Zach Usher**

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ X ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: **06/28/2022**

60403596

SDG #

Table #

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	PCBs in Caulking	Remarks	Sample # (lab only)
RB-C1	Grab	OT		6/16/22		1	X		
-C2						1	X		
-C3						1	X		
-C4						1	X		
-C5						1	X		
-C6						1	X		
-C7						1	X		
-C8						1	X		
-C9						1	X		
-C10						1	X		

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	6/20/22	0715			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 27.8 °C Bottles Received:	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 621.22 Time: 0900	Hold: / Condition: NCF / OK

Client: Tetra Tech Inc

Profile # 8083 Line 8

Site: RCRA Brownsfields - Rath Buildings

Notes 5 Day

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	SL																												1			
2	SL																												1			
3	SL																												1			
4	SL																												1			
5	SL																												1			
6	SL																												1			
7	SL																												1			
8	SL																												1			
9	SL																												1			
10	SL																												1			
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60403596