



November 16, 2020

Mr. Bradley Roberts
Task Order Contracting Officer's Representative
U.S. Environmental Protection Agency, Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

**Subject: Contract No. 68HERH19D0018; Task Order (TO) No. 68E0719F0190
Pine Lawn, 6261 Natural Bridge Road, Pine Lawn, Missouri
Targeted Brownfields Assessment Hazardous Materials Survey**

Dear Mr. Roberts:

Toeroek Associates, Inc. (Toeroek) and our teaming subcontractor, Tetra Tech, Inc. (hereafter "Toeroek Team") are pleased to present the attached Targeted Brownfields Assessment Hazardous Materials Survey of the Pine Lawn Site at 6261 Natural Bridge Road in Pine Lawn, Missouri (subject property). The Toeroek Team has conducted this survey based on the findings of the Phase I ESA performed at the subject property by Terracon Consultants, Inc. in July 2019. This deliverable has been reviewed internally as part of Tech 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 Paul Kieler at 303-407-0266 or Kaitlyn Mitchell at 816-412-1742.

Sincerely,

Paul Kieler
Toeroek Team Program Manager

Kaitlyn Mitchell
Toeroek Team Project Manager

Enclosure

cc: Leeanna Balsley, EPA Region 7 (cover letter only)
Lisa Dunning, EPA Region 7
Heather Wood, Tetra Tech
Toeroek Team Project Files

**TARGETED BROWNFIELDS ASSESSMENT
HAZARDOUS MATERIALS SURVEY**

**PINE LAWN
6261 NATURAL BRIDGE ROAD, PINE LAWN, MISSOURI**



Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

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EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) tasked Toeroek Associates, Inc. (Toeroek) and its teaming subcontractor, Tetra Tech, Inc. (hereafter “Toeroek Team”), with providing technical support to the EPA Region 7 Brownfields Program under Contract 68HERH19D0018, Task Order (TO) 68E0719F0190. EPA Region 7 requested that the Toeroek Team conduct a Hazardous Materials Survey (Survey) of the building at the Pine Lawn Site at 6261 Natural Bridge Road, Pine Lawn, Missouri (subject property). The property comprises an approximately 0.08-acre parcel and includes one 1,815-square-foot commercial structure. The current property owner, the City of Pine Lawn, is interested in possibly redeveloping the subject property based on findings from the brownfields assessment, which includes the Survey and a Phase II environmental site assessment (ESA) compliant with ASTM International standards. The Phase II ESA report will be submitted under separate cover.

The Survey included an inspection of the subject property building for presence of asbestos-containing materials (ACM), quantification of lead-based paint (LBP), and sampling of caulk suspected to contain polychlorinated biphenyls (PCB). As part of the Survey, the Toeroek Team also inventoried containerized hazardous waste (HW) and other hazardous materials.

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

ACM

Regulated ACM was identified in black roofing tar around the chimney (approximately 20 square feet [SF]) and on the east, south, and west roof perimeters (approximately 210 linear feet [LF]).

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 non-friable ACM. If the building is to be renovated, the above ACM materials are not to be disturbed and may remain in place.

LBP

Approximately 300 SF of various colors of LBP on multiple substrates was identified on the exterior of the building.

The U.S. Department of Housing and Urban Development (HUD) considers LBP as paint with lead levels above 1.0 milligram per square centimeter (mg/cm²). If the LBP surfaces are impacted during renovations or during demolition, the Toeroek Team recommends that the contractor conducting the renovations comply with the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard, Title 29 of *Code of Federal Regulations* (29 CFR), Part 1926.62. If the materials containing LBP are removed during renovation activities, a sample should be collected from the debris pile for a 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 will allow determination of the proper method of disposal of these materials.

PCBs

No suspect PCB-containing building materials were identified at the subject property.

HW AND HAZARDOUS MATERIALS

HW and other hazardous materials were inventoried during the Survey. The Toeroek Team recommends proper disposal of the materials based on their characteristics prior to demolition of the subject property building.

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked Toeroek Associates, Inc. (Toeroek) and its teaming subcontractor, Tetra Tech, Inc. (hereafter “Toeroek Team”), with providing technical support to the EPA Region 7 Brownfields Program under Contract 68HERH19D0018, Task Order (TO) 68E0719F0190. EPA Region 7 requested the Toeroek Team conduct a Hazardous Materials Survey (Survey) as part of a Targeted Brownfields Assessment (TBA) of the building at the Pine Lawn Site at 6261 Natural Bridge Road in Pine Lawn, Missouri (see Appendix A, Figure 1). The subject property includes one 1,815-square-foot commercial structure built in the 1930s. The scope of the Survey included an inspection of the subject property buildings for presence of asbestos-containing materials (ACM), polychlorinated biphenyls (PCB) in caulk, and lead-based paint (LBP). Additionally, the Toeroek Team inventoried containerized hazardous waste (HW) and other hazardous materials within the subject property building. As part of this Survey, the Toeroek Team also conducted a Phase II Environmental Site Assessment (ESA), submitted under separate cover. Appendix B is a photolog of observations during the Survey.

The Toeroek Team’s Project Manager for the Survey was Ms. Kaitlyn Mitchell. The field team included Mr. Ryan Slanczka, State of Missouri-licensed asbestos and lead Inspector, and Ms. Bethany Gatz. Inspector certifications are in Appendix C. Because of limitations on destructive sampling methods, additional suspect materials may be present within walls, voids, or other concealed areas. Section 10.0 specifies assumptions and deviations regarding the Survey at the subject property. Prior to any renovations or demolition of the subject property building, further survey work may be needed to comply with all local, state, and federal requirements regulating ACM, LBP, PCBs, or HW.

The Toeroek Team conducted the Survey during September 28 through 30, 2020. The purpose of the asbestos survey was to evaluate the subject property building for 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] 2016). 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 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. The subject property building was constructed prior to 1978, and LBP was possibly used in the build-out of the structure. The LBP survey proceeded according to protocols similar to the single-family housing inspection procedures in 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.

Because portions of the subject property building could have been constructed between 1950 and 1978, PCBs may be present within the subject property building in materials, for example, caulk associated with windows, doors, and masonry columns. Due to limited sampling volume of identified caulk material, the Toeroek Team did not collect samples of material possibly containing PCBs within the building during the Survey.

As part of the Survey, the Toeroek Team completed an inventory of HW and other hazardous materials within the subject property building. The inventory included but was not limited to the following types of materials: white goods including a water heater; heating, venting, and air conditioning (HVAC) units; fluorescent lamps possibly containing mercury; fluorescent light ballasts potentially containing PCBs; copy machines; printers; fax machines; scanners; computer monitors; product containers holding potentially hazardous printing related liquids (toner, offset, concentrate, developer, etc.); and any other HW items that may have to be removed during renovation/demolition of the building. The Toeroek Team made every effort to provide a complete inventory of these items; however, given disorderly distribution of construction debris inside the building, the Toeroek Team cannot guarantee an accounting of every item.

The Toeroek Team submitted a site-specific quality assurance project plan (QAPP) in support of Survey activities to EPA on August 3, 2020; EPA approved the QAPP via email on September 11, 2020, prior to field mobilization to the subject property (Toeroek 2020). 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 or PCBs—hazardous materials may be present in voids of walls or ceilings, or other concealed areas.

Section 2.0 of this report describes the structure at the subject property. Section 3.0 specifies field and analytical protocols for the ACM survey. Section 4.0 specifies field and analytical protocols for the LBP screening. Section 5.0 presents field protocols for the HW and hazardous materials inventory. Section 6.0 presents asbestos findings. Section 7.0 describes LBP findings. Section 8.0 describes HW and hazardous materials inventory findings. Section 9.0 offers recommendations based on survey findings. Section 10.0 specifies assumptions and deviations. Section 11.0 lists sources referenced during development of this report.

2.0 SUBJECT PROPERTY BUILDING

The subject property includes one 1,815-square-foot commercial structure with a basement. The building was constructed in the 1930s (Terracon Consultants, Inc. [Terracon] 2019). The subject property building is constructed of brick, mortar, concrete, and ceramic wall tile. Interior finishes include brick, mortar, concrete, drywall, and plaster. Flooring materials include vinyl floor tile, carpet, ceramic floor tile, and concrete.

3.0 ACM FIELD SURVEY AND ANALYTICAL PROTOCOLS

The Toeroek Team made every effort to inspect all interior areas of the subject property building. Minor demolition of materials (destructive sampling) was required during the Survey effort. The inspector took care to ensure that the subject property remained unoccupied during sample collection. Collection of suspect ACM samples accorded with NESHAP as adopted by EPA and 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 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 suspect ACM were collected to ensure that each distinct layer of material was represented in the sample. A wetting agent was applied to friable surfaces prior to sample collection to reduce 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 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% asbestos were analyzed via EPA Point Count 400 (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. Sample locations are shown on Figure 2 in Appendix A. Appendix D presents 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 buildings. HUD (*Guidelines for the Evaluation and Control of LBP in Housing* [2012]) (HUD Guidelines) suggests that paint applied before 1978 could contain lead.

An XRF screening of suspected LBP was performed according to protocols similar to the single-family housing inspection procedures in the HUD Guidelines. Toeroek Team utilized an Innov-X 6000 Alpha Series analyzer to perform the LBP screening. The Innov-X 6000 Alpha Series is an XRF spectrum analyzing system for quantitative measurement of lead in paint on various substrates. Toeroek Team performed XRF screening of suspect painted surfaces with potential to 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 $1.0 \text{ mg}/\text{cm}^2$ lead by XRF testing or $1.0 \text{ mg}/\text{cm}^2$ lead by laboratory analysis is considered LBP.

The Toeroek Team performed XRF calibration checks on the Innov-X 6000 XRF spectrometer according to Thermo Scientific’s recommended protocol and HUD Guidelines. These quality control readings were used to monitor performance of the Innov-X 6000 XRF spectrometer. Calibration-check readings were taken at the beginning and end of operation from 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 samples of painted surfaces collected at the subject property. Sample locations with positive results are shown on Figure 2 in Appendix A.

5.0 HAZARDOUS WASTE AND OTHER HAZARDOUS MATERIALS INVENTORY

The Toeroek Team completed an inventory of HW and other potentially hazardous materials in the subject property building. This inventory included but was not limited to the following types of materials: white goods including a water heater; heating, venting, and air conditioning (HVAC) units; fluorescent lamps possibly containing mercury; fluorescent light ballasts potentially containing PCBs; copy machines; printers; fax machines; scanners; computer monitors; product containers holding potentially hazardous printing related liquids (toner, offset, concentrate, developer, etc.); and any other HW items that may have been present.

The Toeroek Team used an inventory field sheet and went through every room in the subject property building identifying, categorizing, and quantifying HW and hazardous materials. The Toeroek Team made every effort to provide a complete inventory of these items; however, the Toeroek Team cannot guarantee an accounting of every item. The exterior of the building was not included in this inventory (excluding air conditioning units), based on professional judgment of the assessment team. Items at the subject property that would not be affected during any renovation activities—for example, pole-mounted transformers, which may contain PCBs—were not included in the inventory. The assessment team walked the perimeter of the subject property building to identify any drums or other large containers that may contain hazardous waste; at the time of this assessment, no materials fitting this description had been identified outside the subject property building. A summary of HW and hazardous materials inventoried during the Survey is in Section 8.0 of this report.

6.0 ACM FINDINGS

PLM results from samples of suspect ACM collected at the building on the subject property are presented in the laboratory report in Appendix D and summarized in Table 1 below. Bolded results in Table 1 indicate where asbestos was detected at concentrations greater than 1 percent. Sample locations are shown on Figure 2 in Appendix A.

TABLE 1

**SUMMARY OF RESULTS FROM LABORATORY ANALYSIS FOR SUSPECT ACM
PINE LAWN, 6261 NATURAL BRIDGE ROAD, PINE LAWN, MISSOURI**

Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM ¹)	Quantity
1	6261-DWJC-01	Drywall with Joint Compound	First Floor Walls and Ceilings	NF	ND	NA
2	6261-DWJC-02					
3	6261-DWJC-03					
4	6261-PLAS-01	Plaster	First Floor Perimeter Wall – Over Brick	NF	ND	NA
5	6261-PLAS-02					
6	6261-PLAS-03					
7	6261-SC-01	Skim Coat	First Floor – Over Plaster	NF	ND	NA
8	6261-SC-02					
9	6261-SC-03					
10	6261-VFT-01	12” X 12” Square Pattern Grey Vinyl Floor Tile with Mastic	Throughout First Floor except Restrooms	NF	ND	NA
11	6261-VFT-02					
12	6261-VFT-03					
13	6261-VFT2-01	White Vinyl Floor Tile with Mastic	First Floor Restroom	NF	ND	NA
14	6261-VFT2-02					
15	6261-CM-01	Brown Carpet Mastic	First Floor Display Area	NF	ND	NA
16	6261-CM-01					
17	6261-CM-03					
18	6261-CFT-01	Black/White Ceramic Floor Tile with Bed and Grout	Exterior – First Floor South Entry	NF	ND	NA
19	6261-CFT-02					
20	6261-CWT-01	Grey/Black Ceramic Wall Tile	Exterior – South Wall	NF	ND	NA
21	6261-CWT-02					
22	6261-CM2-01	Brown Carpet Mastic	First Floor North Stairwell on Trap Door	NF	ND	NA
23	6261-CM2-02					
24	6261-RR-01	Rolled Roofing	Roof	NF	ND	NA
25	6261-RR-02					
26	6261-RR-03					

TABLE 1

**SUMMARY OF RESULTS FROM LABORATORY ANALYSIS FOR SUSPECT ACM
PINE LAWN, 6261 NATURAL BRIDGE ROAD, PINE LAWN, MISSOURI**

Figure Key	Sample ID	Material Description	Material Locations	Friable (F)/ Non-Friable (NF)	Analytical Result (% ACM ¹)	Quantity
27	6261-RF-01	Roof Flashing	Chimney and Roof Perimeter	NF	ND	NA
28	6261-RF-02					
29	6261-RF-03					
30	6261-RT-01	Roofing Tar	Chimney and Roof Perimeter	NF	4% Chrysotile	20 SF (Chimney) 210 LF (South, West, and East Roof Perimeter)
31	6261-RT-02					
32	6261-RT-03					

Notes:

Bolded result indicates detection of ACM.

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

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

“	inches	NA	Not applicable
ACM	Asbestos-containing material	ND	Not detected
AHERA	Asbestos Hazard and Emergency Response Act of 1986	SF	Square Feet
LF	Linear Feet		

7.0 LBP FINDINGS

Table 2 below summarizes screening results for LBP by use of the XRF spectrometer at the subject property building. Bolded results in Table 2 indicate where LBP was detected at concentrations greater than 1.0 mg/cm². Positive (greater than 1.0 mg/cm²) results for LBP are shown on Figure 2 in Appendix A.

TABLE 2
SUMMARY OF LBP SCREENING RESULTS
PINE LAWN, 6261 NATURAL BRIDGE ROAD, PINE LAWN, MISSOURI

XRF Screening No.	Paint Color	Location	Component	Substrate	XRF Reading (mg/cm ²)	Damaged ¹	Quantity
Calibration Blank					0.00/0.00/0.00	NA	NA
Calibration Standard					0.89/0.99/1.06	NA	NA
1	White	First Floor – Throughout	Wall	Plaster	0.00	NA	NA
2	White	First Floor – Near South Entry	Door Frame	Wood	0.03	NA	NA
3	White	First Floor – Near South Entry	Display Base	Wood	0.01	NA	NA
4	Yellow	First Floor – West Wall	Window Frame	Wood	0.05	NA	NA
5	White	First Floor – North Office	Door Frame	Wood	0.00	NA	NA
6	White	First Floor – North Office	Door	Wood	0.00	NA	NA
7	White	First Floor – Near North Stairwell	Stairwell Railing	Wood	0.01	NA	NA
8	Green	First Floor – Near North Stairwell	Trapdoor	Wood	0.03	NA	NA
9	White	Basement	East Wall	Concrete	0.15	NA	NA
10	White	Basement	I-Beam	Metal	0.13	NA	NA
11	White	Basement	Wall	Wood	0.00	NA	NA
12	White	Basement	Wall	Wood	0.11	NA	NA
13	Green	Exterior – South Perimeter	Siding	Wood	0.00	NA	NA
14	Green	Exterior – South Perimeter	Frame (former building sign)	Metal	1.32	Yes	100 SF
15	White	Exterior – South Perimeter	Soffit	Wood	>5.00	Yes	200 SF
16	Blue	Exterior – South Perimeter	Soffit Trim	Wood	0.07	NA	NA
17	Grey	Exterior – South Perimeter	Entry Gate	Metal	0.01	NA	NA
18	Red	Exterior – South Perimeter	Siding	Wood	0.00	NA	NA

Notes:

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.

mg/cm² Milligrams per square centimeter
LBP Lead-based paint
NA Not applicable

SF Square feet
XRF X-ray fluorescence

8.0 HAZARDOUS MATERIALS INVENTORY FINDINGS

The HW and hazardous materials inventory is summarized in Table 3 below. Due to large amounts of debris and solid waste throughout this building, these quantities are estimates.

TABLE 3
SUMMARY OF HAZARDOUS MATERIALS INVENTORY
PINE LAWN, 6261 NATURAL BRIDGE ROAD, PINE LAWN, MISSOURI

Type of Household Hazardous Waste	Assessed Quantity
White Goods:	
Water Heater	1
Heating, ventilation, and air conditioning (HVAC) Unit	1
Other:	
Flammable Aerosol Cans	1
Non-flammable Aerosol Cans	1
Fluorescent Tubes	12
Polychlorinated biphenyls (PCB)-containing Ballasts	6
Copy Machines, Printers, Fax Machines, Scanners	18
Televisions, Computer Monitors	17
Printing-related liquids (e.g. toner, offset solution and concentrate, developer)	Approximately 15

9.0 FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are based on observations during the Survey and analytical results from samples collected in the subject property:

9.1 ACM

Regulated ACM was identified in black roofing tar around the chimney (approximately 20 SF) and on the east, south, and west roof perimeters (approximately 210 LF).

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 non-friable ACM. If the building is to be renovated, the above ACM materials are not to be disturbed and may remain in place.

9.2 LBP

Approximately 300 SF of various colors of LBP on multiple substrates was identified on the exterior of the building.

HUD Guidelines consider LBP as paint with lead levels above 1.0 mg/cm². If the LBP surfaces are impacted during renovations or during demolition, the Toeroek Team recommends that the contractor conducting the renovations comply with the OSHA Lead in Construction Standard, Title 29 of *Code of Federal Regulations* (29 CFR), Part 1926.62. If the materials containing LBP are removed during renovation activities, a sample should be collected from the debris pile for a 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 will allow determination of the proper method of disposal of these materials.

9.3 PCB

No suspect PCB-containing building materials were identified at the subject property.

9.4 HW AND HAZARDOUS MATERIALS

HW and other hazardous materials were inventoried during the Survey. The Toeroek Team recommends proper disposal of the materials based on their characteristics prior to demolition of the subject property building.

10.0 ASSUMPTIONS AND DEVIATIONS

The entire interior and exterior of the subject property building was inspected for suspect ACM, LBP, and PCB-containing caulk. No suspect PCB-containing building materials were identified at the subject property; therefore, no samples for PCB analysis were collected. Because of limitations on destructive sampling methods, additional suspect materials may be present but not detected in walls, voids, or other inaccessible areas. All other areas of the subject property building were inspected.

11.0 REFERENCES

- Agency for Toxic Substance and Disease Registry (ATSDR). 2016. Asbestos: Health Effects. Accessed October 21, 2020. https://www.atsdr.cdc.gov/asbestos/health_effects_asbestos.html
- Terracon Consultants, Inc. (Terracon). 2019. Phase I Environmental Site Assessment: 6261 Natural Bridge Road, Pine Lawn, MO. July 11.
- Toeroek Associates, Inc. (Toeroek). 2020. Quality Assurance Project Plan, Phase II Environmental Site Assessment, Pine Lawn, 4311 and 4315 Jennings Station Road, and 6109, 6128, 6261, 6305, and 6310 Natural Bridge Road, Pine Lawn, Missouri. August 3.
- U.S. Department of Housing and Urban Development (HUD). 2012. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.
- U.S. Environmental Protection Agency (EPA). 2020. How to Test for PCBs and Characterize Suspect Materials. Accessed October 20, 2020. <https://www.epa.gov/pcbs/how-test-pcbs-and-characterize-suspect-materials>

APPENDIX A

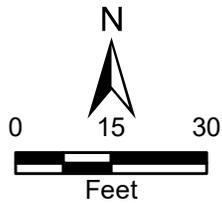
FIGURES

FIGURE 1
SITE LAYOUT MAP



Legend

 Approximate site boundary



Pine Lawn
6261 Natural Bridge Road
Pine Lawn, Missouri

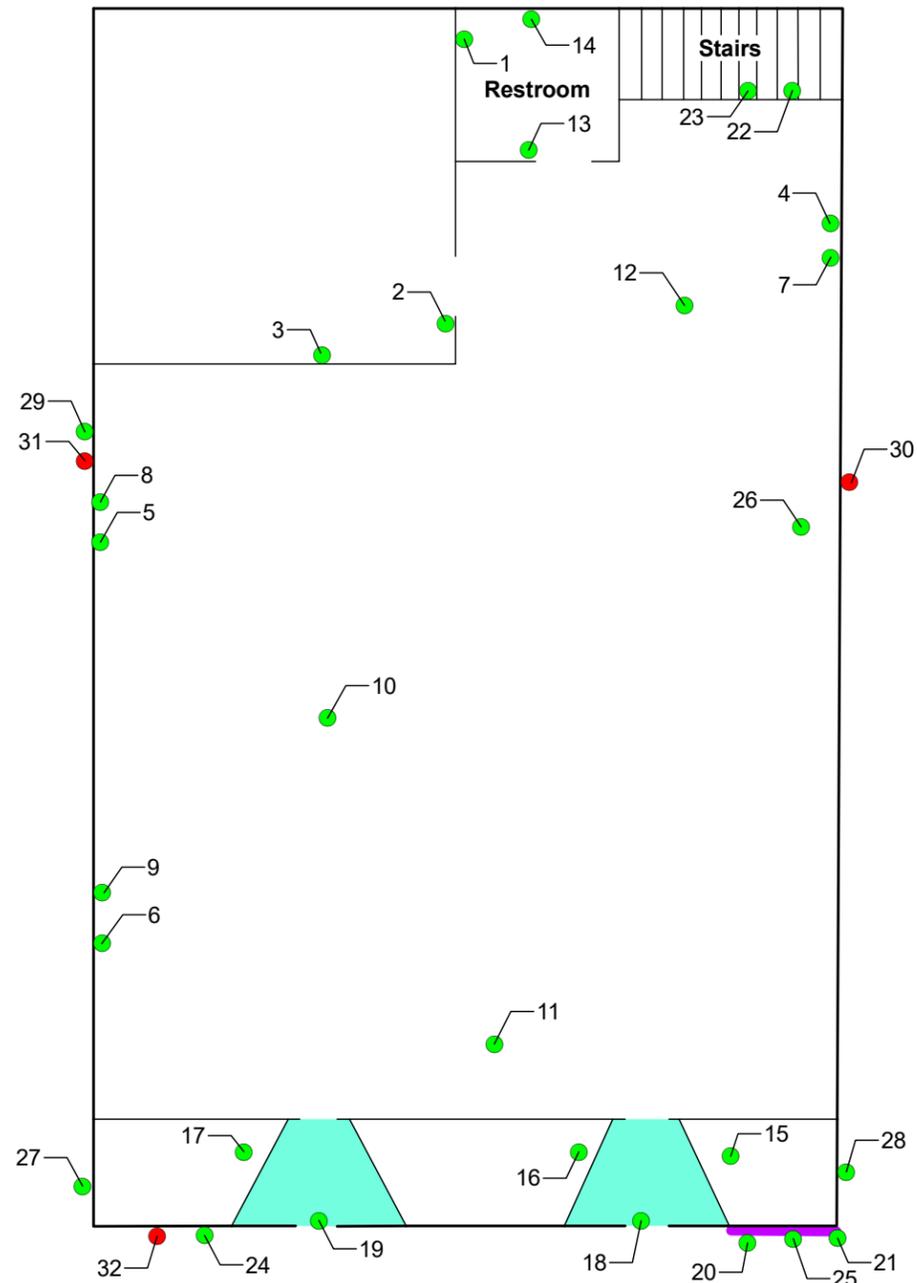
Figure 1
Site Layout Map



FIGURE 2
SAMPLE LOCATION MAP

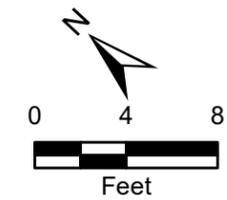
Sample Key Table

Key	Sample No.
Asbestos	
1	6261-DWJC-01
2	6261-DWJC-02
3	6261-DWJC-03
4	6261-PLAS-01
5	6261-PLAS-02
6	6261-PLAS-03
7	6261-SC-01
8	6261-SC-02
9	6261-SC-03
10	6261-VFT-01
11	6261-VFT-02
12	6261-VFT-03
13	6261-VFT2-01
14	6261-VFT2-02
15	6261-CM-01
16	6261-CM-01
17	6261-CM-03
18	6261-CFT-01
19	6261-CFT-02
20	6261-CWT-01
21	6261-CWT-02
22	6261-CM2-01
23	6261-CM2-02
24	6261-RR-01
25	6261-RR-02
26	6261-RR-03
27	6261-RF-01
28	6261-RF-02
29	6261-RF-03
30	6261-RT-01
31	6261-RT-02
32	6261-RT-03



Legend

- Asbestos-containing material sample location
- Non-asbestos-containing material sample location
- LBP (metal frame)
- LBP (wood soffit)
- LBP Lead-based paint



Pine Lawn
6261 Natural Bridge Road
Pine Lawn, Missouri

Figure 2
Sample Location Map



APPENDIX B
PHOTOGRAPHIC DOCUMENTATION

**Pine Lawn Site Hazardous Materials Survey
6261 Natural Bridge Road, Pine Lawn, Missouri**



SUBTASK NO. 02.05 Direction: Northwest	DESCRIPTION	This photograph shows the front of the building at 6261 Natural Bridge Road in Pine Lawn.	1
	CLIENT	U.S. Environmental Protection Agency (EPA)	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020



SUBTASK NO. 02.05 Direction: South	DESCRIPTION	This photograph shows the back of the building at 6261 Natural Bridge Road in Pine Lawn.	2
	CLIENT	EPA	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020

**Pine Lawn Site Hazardous Materials Survey
6261 Natural Bridge Road, Pine Lawn, Missouri**



SUBTASK NO. 02.05 Direction: NA	DESCRIPTION	This photograph shows asbestos-containing roofing tar on the perimeter of the building roof.	3
	CLIENT	EPA	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020



SUBTASK NO. 02.05 Direction: South	DESCRIPTION	This photograph shows asbestos-containing roofing tar around the chimney on the building roof.	4
	CLIENT	EPA	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020

**Pine Lawn Site Hazardous Materials Survey
6261 Natural Bridge Road, Pine Lawn, Missouri**



SUBTASK NO. 02.05	DESCRIPTION	This photograph shows green lead-based paint (LBP) on the metal sign frame and white LBP on the wood soffit at the south perimeter (front entrance) of the building.	5
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Ryan Slanczka	9/29/2020



SUBTASK NO. 02.05	DESCRIPTION	This photograph shows miscellaneous debris in the basement of the building.	6
	CLIENT	EPA	Date
Direction: NA	PHOTOGRAPHER	Ryan Slanczka	9/29/2020

**Pine Lawn Site Hazardous Materials Survey
6261 Natural Bridge Road, Pine Lawn, Missouri**

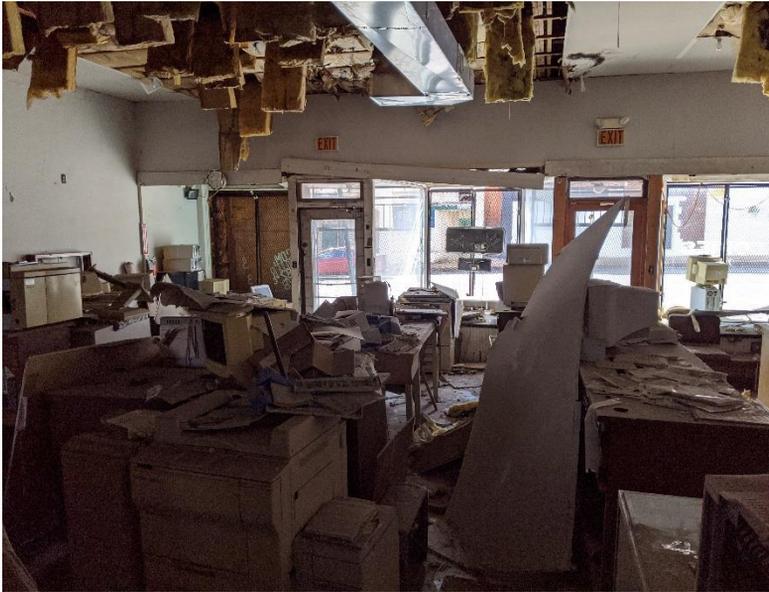


SUBTASK NO. 02.05 Direction: NA	DESCRIPTION	This photograph shows miscellaneous debris in the basement of the building.	7
	CLIENT	EPA	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020



SUBTASK NO. 02.05 Direction: NA	DESCRIPTION	This photograph shows miscellaneous debris on the first floor (main room) of the building.	8
	CLIENT	EPA	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020

**Pine Lawn Site Hazardous Materials Survey
6261 Natural Bridge Road, Pine Lawn, Missouri**



SUBTASK NO. 02.05 Direction: NA	DESCRIPTION	This photograph shows various commercial printing equipment and debris on the first floor of the building.	9
	CLIENT	EPA	Date
	PHOTOGRAPHER	Ryan Slanczka	9/29/2020

APPENDIX C
INSPECTOR CERTIFICATIONS



Missouri Department of dnr.mo.gov
NATURAL RESOURCES
Michael L. Parson, Governor Carol S. Comer, Director

January 6, 2020

Ryan J Slanczka
8151 Renner Rd Apt 9
Lenexa, KS 66219

RE: **Missouri Asbestos Occupation Certification Card**

Enclosed is your certification card for Asbestos Inspector, as issued by the Asbestos Unit of the Missouri Department of Natural Resources' Air Pollution Control Program.

Missouri Certification Number: 7011121219MOIR19454
Course Training Date: December 12, 2019
Missouri Certification Approval Date: January 07, 2020
Missouri Certification Expiration Date: January 07, 2021

Note:

- All Missouri-certified asbestos personnel must comply with the following statutes and regulations:
 - Sections 643.225 to 643.250, RSMo;
 - 10 CSR 10-6.241 *Asbestos Projects-Registration, Abatement, Notification, Inspection, Demolition, and Performance Requirements; and*
 - 10 CSR 10-6.250 *Asbestos Projects-Certification, Accreditation and Business Exemption Requirements.*
- To keep your occupation certification up-to-date, you must complete an annual refresher course and submit a renewal application each year.
- In order to be eligible to renew your certification, you must successfully complete a refresher course with a Missouri-accredited training provider within 12 months of the expiration date of your current training certificate. If you exceed this grace period, you will be required to retake a Missouri-accredited initial course in order to be eligible for Missouri certification.

To obtain a copy of the certification renewal application, or review regulations and requirements, please visit our website at <http://dnr.mo.gov/env/apcp/asbestos/index.htm>.

If you have any questions please call the Air Pollution Control Program at 573-751-4817.

AIR POLLUTION CONTROL PROGRAM

Director of Air Pollution Control Program

CERTIFICATION NUMBER:
7011121219MOIR19454

THIS CERTIFIES
Ryan J Slanczka
HAS COMPLETED THE CERTIFICATION
REQUIREMENTS FOR
Inspector

APPROVED: **01/07/2020** TRAINING DATE: **12/12/2019**
EXPIRES: **01/07/2021**

J. Ryan A. Byrnes
Director of Air Pollution Control Program



**Missouri Department of Health
and Senior Services**



Lead Occupation License - ID Badge
License Number: 170912-300005383

Lead Inspector

**Ryan
Slanczka**

Expiration Date: **09/12/2021**

APPENDIX D

ACM ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY FORMS

Report for:

Mr. Jeffrey Mitchell
Tetra Tech-KCMO
415 Oak Street
Kansas City, MO 64106

Regarding: Project: 103G65210190.02.05; Pine Lawn, 6261 Natural Bridge Rd
EML ID: 2494537

Approved by:



Approved Signatory
Amin Suliman

Dates of Analysis:
Asbestos PLM: 10-05-2020

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200728-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Tetra Tech-KCMO
 C/O: Mr. Jeffrey Mitchell
 Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
 Bridge Rd

Date of Sampling: 09-29-2020
 Date of Receipt: 10-02-2020
 Date of Report: 10-06-2020

ASBESTOS PLM REPORT

Total Samples Submitted: 32
Total Samples Analyzed: 30

Total Samples with Layer Asbestos Content > 1%: 1

Location: 6261-DWJC-01, Drywall with joint compound

Lab ID-Version‡: 11889719-1

Sample Layers	Asbestos Content
White Compound	ND
White Drywall	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 6261-DWJC-02, Drywall with joint compound

Lab ID-Version‡: 11889720-1

Sample Layers	Asbestos Content
White Compound	ND
White Drywall	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 6261-DWJC-03, Drywall with joint compound

Lab ID-Version‡: 11889721-1

Sample Layers	Asbestos Content
White Compound	ND
Pink Drywall	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 6261-PLAS-01, Plaster

Lab ID-Version‡: 11889722-1

Sample Layers	Asbestos Content
Beige Compound	ND
Gray Plaster	ND
Sample Composite Homogeneity:	Poor

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO
 C/O: Mr. Jeffrey Mitchell
 Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
 Bridge Rd

Date of Sampling: 09-29-2020
 Date of Receipt: 10-02-2020
 Date of Report: 10-06-2020

ASBESTOS PLM REPORT**Location: 6261-PLAS-02, Plaster**

Lab ID-Version‡: 11889723-1

Sample Layers	Asbestos Content
Beige Compound	ND
Gray Plaster	ND
Sample Composite Homogeneity: Poor	

Location: 6261-PLAS-03, Plaster

Lab ID-Version‡: 11889724-1

Sample Layers	Asbestos Content
Beige Compound	ND
Gray Plaster	ND
Sample Composite Homogeneity: Poor	

Location: 6261-SC-01, Skim coat

Lab ID-Version‡: 11889725-1

Sample Layers	Asbestos Content
Off-White Skim Coat	ND
Sample Composite Homogeneity: Poor	

Location: 6261-SC-02, Skim coat

Lab ID-Version‡: 11889726-1

Sample Layers	Asbestos Content
Off-White Skim Coat	ND
Sample Composite Homogeneity: Poor	

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO
 C/O: Mr. Jeffrey Mitchell
 Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
 Bridge Rd

Date of Sampling: 09-29-2020
 Date of Receipt: 10-02-2020
 Date of Report: 10-06-2020

ASBESTOS PLM REPORT

Location: 6261-SC-03, Skim coat

Lab ID-Version‡: 11889727-1

Sample Layers	Asbestos Content
Off-White Skim Coat	ND
Sample Composite Homogeneity: Poor	

Location: 6261-VFT-01, Vinyl floor tile, square pattern

Lab ID-Version‡: 11889728-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Transparent Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 6261-VFT-02, Vinyl floor tile, square pattern

Lab ID-Version‡: 11889729-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Transparent Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 6261-VFT-03, Vinyl floor tile, square pattern

Lab ID-Version‡: 11889730-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Transparent Mastic	ND
Sample Composite Homogeneity: Poor	

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO

C/O: Mr. Jeffrey Mitchell

Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
Bridge Rd

Date of Sampling: 09-29-2020

Date of Receipt: 10-02-2020

Date of Report: 10-06-2020

ASBESTOS PLM REPORT**Location: 6261-VFT2-01, White vinyl floor tile**

Lab ID-Version‡: 11889731-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Transparent Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 6261-VFT2-02, White vinyl floor tile

Lab ID-Version‡: 11889732-1

Sample Layers	Asbestos Content
Gray Floor Tile	ND
Transparent Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 6261-CM-01, Carpet mastic

Lab ID-Version‡: 11889733-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 6261-CM-02, Carpet mastic

Lab ID-Version‡: 11889734-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Sample Composite Homogeneity: Poor	

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO
 C/O: Mr. Jeffrey Mitchell
 Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
 Bridge Rd

Date of Sampling: 09-29-2020
 Date of Receipt: 10-02-2020
 Date of Report: 10-06-2020

ASBESTOS PLM REPORT

Location: 6261-CM-03, Carpet mastic

Lab ID-Version‡: 11889735-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Sample Composite Homogeneity: Poor	

Location: 6261-CFT-01, Black and white, ceramic floor tile

Lab ID-Version‡: 11889736-1

Sample Layers	Asbestos Content
Black/White Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity: Poor	

Location: 6261-CFT-02, Black and white, ceramic floor tile

Lab ID-Version‡: 11889737-1

Sample Layers	Asbestos Content
Black/White Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity: Poor	

Location: 6261-CWT-01, Ceramic wall tile

Lab ID-Version‡: 11889738-1

Sample Layers	Asbestos Content
Gray/Black Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity: Poor	

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO
 C/O: Mr. Jeffrey Mitchell
 Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
 Bridge Rd

Date of Sampling: 09-29-2020
 Date of Receipt: 10-02-2020
 Date of Report: 10-06-2020

ASBESTOS PLM REPORT**Location: 6261-CWT-02, Ceramic wall tile**

Lab ID-Version‡: 11889739-1

Sample Layers	Asbestos Content
Gray/Black Ceramic Tile	ND
Gray Grout	ND
Sample Composite Homogeneity:	Poor

Location: 6261-CM2-01, Trap door carpet mastic

Lab ID-Version‡: 11889740-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Sample Composite Homogeneity:	Poor

Location: 6261-CM2-02, Trap door carpet mastic

Lab ID-Version‡: 11889741-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Sample Composite Homogeneity:	Poor

Location: 6261-RR-01, Rolled roofing

Lab ID-Version‡: 11889742-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	25% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO
 C/O: Mr. Jeffrey Mitchell
 Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
 Bridge Rd

Date of Sampling: 09-29-2020
 Date of Receipt: 10-02-2020
 Date of Report: 10-06-2020

ASBESTOS PLM REPORT**Location: 6261-RR-02, Rolled roofing**

Lab ID-Version‡: 11889743-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	25% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 6261-RR-03, Rolled roofing

Lab ID-Version‡: 11889744-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	25% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 6261-RF-01, Roof flashing

Lab ID-Version‡: 11889745-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	25% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 6261-RF-02, Roof flashing

Lab ID-Version‡: 11889746-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	25% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Tetra Tech-KCMO
C/O: Mr. Jeffrey Mitchell
Re: 103G65210190.02.05; Pine Lawn, 6261 Natural
Bridge Rd

Date of Sampling: 09-29-2020
Date of Receipt: 10-02-2020
Date of Report: 10-06-2020

ASBESTOS PLM REPORT

Location: 6261-RF-03, Roof flashing

Lab ID-Version‡: 11889747-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	25% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 6261-RT-01, Roofing tar

Lab ID-Version‡: 11889748-1

Sample Layers	Asbestos Content
Black Roofing Tar	4% Chrysotile
Sample Composite Homogeneity:	Poor

Comments: Samples RT-02 and RT-03 were not analyzed due to prior positive series.

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



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002494537



ASBESTOS ANALYSIS

STED SERVICES (Check boxes below)

CONTACT INFORMATION

Company:	Tetra Tech, Inc.	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Jeffrey Mitchell	Special Instructions:	Stop on 1st Positive
Phone:	(816) 412-1773		

PROJECT INFORMATION

Project ID:	103G65210190.02.05	Project Description:	Pine Lawn - 6261 Natural Bridge Rd
Project Zp:	63120	Sampling Date & Time:	9/29/20 13:00
PO Number:		Sampled By:	Barthony Goltz Kyan Slonczka

TURN AROUND TIME CODES (TAT)

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
6261-DWTC-01	Drywall w/ Joint compound	B	STD	NA	Stop on 1st Positive
6261-DWTC-02		B	STD	NA	Stop on 1st Positive
6261-DWTC-03		B	STD	NA	Stop on 1st Positive
6261-PLAS-01	Plaster	B	STD	NA	Stop on 1st Positive
6261-PLAS-02		B	STD	NA	Stop on 1st Positive
6261-PLAS-03		B	STD	NA	Stop on 1st Positive
6261-SC-01	SKIN Coat	B	STD	NA	Stop on 1st Positive
6261-SC-02		B	STD	NA	Stop on 1st Positive
6261-SC-03		B	STD	NA	Stop on 1st Positive
6261-VFT-01	Vinyl Floor tile (Square pattern)	B	STD	NA	Stop on 1st Positive
6261-VFT-02		B	STD	NA	Stop on 1st Positive

PCM Air	PLM					Rock & Soil	Other Requests
	Bulk	Bulk			Soil		
Fiber Count (NIOSH 7400)							
OSHA with TWA							
EPA Method 600/R-93/116							
EPA Point Count (200 Point Count)							
EPA Point Count (400 Point Count)							
EPA Point Count (1000 Point Count)							
Gravimetric Point Count							
CARB 435 Method (Pre-crushed Sample)							
CARB 435 Method (Regular Sample)							
Lead Analysis							

<p>SAMPLE TYPE CODES</p> <p>A - Air W - Wipe B - Bulk T - Tape D - Dust R - Rock SO - Soil O - Other:</p>		<p>RELINQUISHED BY</p> <p>Buttina Stup</p>	<p>DATE & TIME</p> <p>9/30/20</p>	<p>RECEIVED BY</p> <p>[Signature]</p>	<p>DATE & TIME</p> <p>10-2-20</p>
--	--	---	--	--	--

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/services/terms.html>
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Asbestos COC, Doc. # 04071, Rev 12, Revised 12/18/15, Page 1 of 1, CA

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 94090 • (866) 888-6653

CONTACT INFORMATION

Company: Tetra Tech, Inc. Address: 415 Oak Street, Kansas City, MO 64106
Contact: Jeffrey Mitchell Special Instructions: Stop on 1st Positive
Phone: (816) 412-1773

PROJECT INFORMATION

Project ID: 103G65210190.02.05
Project Description: Pine Lawn - 6261 Natural Bridge Rd
Project Zip: 63120
Sampling Date & Time: 9/29/20
Sampled By: Bethany Cox
Ryan Skowron

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.

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
6261-VFT-03	Vinyl Floor tile (Square Pattern)	B	STD	NA	Stop on 1st Positive
6261-VFT-2-01	white vinyl floor tile	B	STD	NA	Stop on 1st Positive
6261-VFT-2-02	white vinyl floor tile	B	STD	NA	Stop on 1st Positive
6261-CM-01	carpet mastic	B	STD	NA	Stop on 1st Positive
6261-CM-02	carpet mastic	B	STD	NA	Stop on 1st Positive
6261-CM-03	carpet mastic	B	STD	NA	Stop on 1st Positive
6261-CFT-01	Grack ceramic floor tile	B	STD	NA	Stop on 1st Positive
6261-CFT-02	white ceramic floor tile	B	STD	NA	Stop on 1st Positive
6261-CFT-03	white ceramic floor tile	B	STD	NA	Stop on 1st Positive
6261-CWT-01	ceramic wall tile	B	STD	NA	Stop on 1st Positive
6261-CWT-02	ceramic wall tile	B	STD	NA	Stop on 1st Positive

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A - Air	W - Wipe	<i>Bulvan Spets</i>	<i>9/30/20</i>	<i>[Signature]</i>	<i>10-2-20</i>
B - Bulk	T - Tape				
D - Dust	R - Rock				
SO - Soil	O - Other				

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/main/services/terms.html>

ASBESTOS ANA

REQUESTED SERVICES (Check one)

PCM Air Bulk Soil

PLM

002494537



PCM Air	Bulk	Soil	Resuspension
Fiber Count (NIOSH 7400)			
OSHA with TWA			
EPA Method 600/R-93/116			
EPA Point Count (200 Point Count)			
EPA Point Count (400 Point Count)			
EPA Point Count (1000 Point Count)			
Gravimetric Point Count			
CARB 435 Method (Pre-crushed Sample)			
CARB 435 Method (Regular Sample)			
Lead Analysis			



New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 • (866) 871-1984
 Phoenix, AZ: 1501 West Krudsen Drive, Phoenix, AZ 85027 • (800) 651-4802
 SSF, CA: 6000 Shoreline Court, Suite 205, South San Francisco, CA 94080 • (966) 888-6653

CONTACT INFORMATION

Company:	Tetra Tech, Inc.	Address:	415 Oak Street, Kansas City, MO 64106
Contact:	Jeffrey Mitchell	Special Instructions:	Stop on 1st Positive
Phone:	(816) 412-1773		

PROJECT INFORMATION

Project ID:	103G65210190.02.05	Project Description:	Pine Lawn - 6261 Natural Brickyard
Project Zip:	63120	Sampling Date & Time:	9/29/20 13:00
PO Number:		Sampled By:	Bethany Katz Kavanaugh

TURN AROUND TIME CODES (TAT)

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume (Air Samples only)	Notes
6261-CM2-61	Trapdoor Carpet machine	B	STD	NA	Stop on 1st Positive
6261-CM2-02		B	STD	NA	Stop on 1st Positive
6261-RE+01	rolled roofing	B	STD	NA	Stop on 1st Positive
6261-RR-02		B	STD	NA	Stop on 1st Positive
6261-RR-03		B	STD	NA	Stop on 1st Positive
6261-RF-01	Roof flashing	B	STD	NA	Stop on 1st Positive
6261-RF-02		B	STD	NA	Stop on 1st Positive
6261-RF-03		B	STD	NA	Stop on 1st Positive
6261-RT-01	Roofing Tar	B	STD	NA	Stop on 1st Positive
6261-RT-02		B	STD	NA	Stop on 1st Positive
6261-RT-03		B	STD	NA	Stop on 1st Positive

SAMPLE TYPE CODES	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
A - Air B - Bulk D - Dust SO - Soil	W - Wipe T - Tape R - Rock O - Other:			
	Bethany Katz	9/30/20	[Signature]	10-2-20 10-2-20

ASBESTOS ANALYSIS

REQUESTED SERVICES

PCM Air
Bulk
PLM
002494537



Fiber Count (NIOSH 7400)	
OSHA with TWA	
EPA Method 600/R-93/116	X
EPA Point Count (200 Point Count)	X
EPA Point Count (400 Point Count)	X
EPA Point Count (1000 Point Count)	X
Gravimetric Point Count	X
CARB 435 Method (Pre-crushed Sample)	X
CARB 435 Method (Regular Sample)	X
Lead Analysis	X

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