



June 20, 2022
Leaaf # DOT-032

Radha Kumar
DOTD Program Specialist
Real Estate Section
Louisiana Department of Transportation & Development
1201 Capitol Access Road, Room S-337
Baton Rouge, LA 70802

RE: Asbestos Survey Report
State Project Number: H.007963
Project Name: Blackwater Bayou Bridge
11548 Blackwater Rd., Baton Rouge, LA 70714

Dear Mr. Kumar:

Attached is one (1) copy of the Asbestos Survey Report for the above referenced project. If you have any questions, please call me at (504) 342 – 2687.

Sincerely,

Leaaf Environmental, LLC

Madeline Dickson
Environmental Scientist

Attachments: Asbestos Survey Report



June 20, 2022
Sent via email: Radha.Kumar@la.gov
Leaaf # DOT-032

Radha Kumar
Louisiana Department of Transportation & Development
Real Estate Section 23
1201 Capitol Access Road
Baton Rouge, LA 70802

RE: Asbestos Survey Report
State Project Number: H.007963
Project Name: Blackwater Bayou Bridge
11548 Blackwater Rd., Baton Rouge, Louisiana 70714

Dear Ms. Kumar:

The following letter report summarizes the findings of the Asbestos Survey completed by Leaaf Environmental, LLC (Leaaf). The survey was conducted on the demolished barn on the property located at 11548 Blackwater Rd., Baton Rouge, Louisiana 70714. Refer to Appendix A for an illustration of the location of the property.

Executive Summary

The samples analyzed indicate that asbestos above the regulatory limit is present in the following building materials:

Asbestos-Containing Materials	Estimated Quantities
Transite	throughout debris pile, approximately 20 cubic yards total

Survey

The asbestos survey was completed on June 15, 2022, by Louisiana Department of Environmental Quality Certified Asbestos Inspectors Gary Brooks (CERT # AI102434) and Sadie Hunt (CERT # JI215979). Two (2) bulk samples were collected in accordance with the procedures detailed in Appendix B – Attachment 1. The sampling was documented on field forms, which can be found in Appendix B – Attachment 2. The samples were sent to Eurofins EMLab P&K, a LDEQ Certified LELAP laboratory (Ft. Lauderdale, FL, AI # 144892, CERT # 04153) for Polarized Light Microscopy (PLM) analysis. Refer to Appendix B – Attachment 3 for a copy of the laboratory reports and chain-of-custody.

Findings

The Louisiana Department of Environmental Quality defines asbestos-containing materials as having an asbestos content of 1% or greater. Based on the PLM analytical results, asbestos above the regulator limit is present in the following building materials sampled: transite panel in debris pile (20% chrysotile asbestos). The demolition contractor and/or their subcontractor will need to fill the appropriate forms with the LDEQ in accordance with the Louisiana Administrative Code, Title 33, Part III.

1	Leaaf Environmental, LLC	www.leaaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715



June 20, 2022
Sent via email: Radha.Kumar@la.gov
Leaaf # DOT-032

If there are any questions or additional information is needed, please contact me at (504) 342-2687.

Sincerely,
Leaaf Environmental, LLC

Sadie Hunt
LDEQ Certified Asbestos Inspector

Gary Brooks
LDEQ Certified Asbestos Inspector

Attachment (support documents)

Appendices

Appendix A – Property Location Map

Appendix B – Bulk Sampling Support Documentation

Attachment 1 – Sampling & Analysis Method

Attachment 2 – Field Documentation

Attachment 3 – Analytical Results and Chain of Custody

Appendix C – Sources of Information


Attachment	Leaaf Environmental, LLC	www.leaaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715

Appendix A

Property Location Map

Attachment	Leaf Environmental, LLC	www.leaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715



 Leaaf Environmental, LLC www.leaaf.com	<i>Source:</i>	<i>Property:</i>	<i>Drawing Name:</i>
	Google Earth	11548 Blackwater Rd. Baton Rouge, Louisiana 70714	Property Location Map

Attachment	Leaaf Environmental, LLC	www.leaaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715

Appendix B

Bulk Sampling Support Documentation

Attachment 1 – Sampling & Analysis Method

Attachment 2 – Field Documentation

Attachment 3 – Analytical Results and Chain of Custody

Attachment	Leaaf Environmental, LLC	www.leaaf.com
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Attachment 1

Sampling & Analysis Method

Attachment	Leaf Environmental, LLC	www.leaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715

Sampling & Analysis Method

General Procedures:

The property is walked to identify the general construction of the structure(s). Building materials are categorized into three different types: Surfacing Materials, Thermal System Insulation and Miscellaneous Material. Samples are collected and sent to a third party for PLM analysis. Once the results are received, Leaaf reviews the samples to determine if any fall between 1-5% asbestos. If so Leaaf will typically recommend that point count analysis is implemented. Results are reviewed and the samples that are found to contain asbestos >1% asbestos are identified in the report.

Regulatory Authority:

Asbestos is a known human and animal carcinogen. Asbestos exposure combined with cigarette smoking greatly increases the risk of bronchogenic carcinomas as well as alimentary tract carcinomas. In addition, long-term exposure to asbestos fibers may cause asbestosis, a fibrotic lung disease. To reduce health risk due to occupational and ambient exposures both the state and federal government regulates asbestos.

Louisiana regulates asbestos under at least the following:

- Louisiana Administrative Codes Title 33: Part III Chapter 27 (LAC 33:III.Chapter 27) Asbestos-Containing Material in Schools and State Buildings
- LAC 33:III Chapter 51 Comprehensive Toxic Air Pollution Emission Control, Subchapter M, Asbestos – Section 5151: Emission Standards for Asbestos.

Since these regulations parallel Federal regulations and in some areas are more stringent than the Federal requirements, on May 11, 1995, EPA waived all requirements of federal rule, Asbestos-Containing Materials in Schools (40 CFR 763 Subpart E) in Louisiana in lieu of the Louisiana asbestos regulations.

- Louisiana Senate Bill 583, Act 662 – LDEQ Comprehensive Plan for Disaster Clean-up and Debris Management: Recycling of Concrete Slabs from Houses Demolished Due to Natural Disasters.

U.S Occupation Safety and Health Administration (OSHA)

- Final Rules Title 29, Part 1910, Section 1001 of the Code of Federal Regulations
- Final Rules Title 29, Part 1926, Section 1101 of the Code of Federal Regulations
- Final Rules Title 29, Part 1910, Section 120 of the Code of Federal Regulations

Equipment:

Leaaf collected the samples using small tools such as knives, hammers, chisels, etc. to obtain bulk samples. Samples are place in individual sealable plastic food grade bags and labeled with a distinct sample number.

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Field Documentation:

Leaaf utilizes a Bulk Sample Summary Sheet (developed by Leaaf) to document project specific information pertaining to the collection of the bulk samples. This information includes, but is not limited to, sample number, sample location, and material description.

In addition to developing a written description of the sample location, Leaaf may also develop an approximate site field drawing, use one provided by the client and/or utilize an aerial photograph of the site to illustrate the locations where the bulk samples are collected. Any developed drawing is meant to provide a guide to the sample location and is not to be considered a legal survey or actual drawing of the property.

Upon completion of the sampling effort, Leaaf’s environmental professional completes an environmental laboratory chain-of-custody to track the handling of the samples from the field to the laboratory. The samples and the chain-of-custody are placed into a sealable plastic bag. The bagged samples are then typically placed into a shipping container (typically a FedEx package) for delivery to the laboratory.

If the survey was for a school or state building, Leaaf’s environmental professional will also complete a survey in accordance with AHERA requirements. Materials will be grouped into Homogenous Areas (HAs). Homogenous Areas are those suspect asbestos containing materials that are uniform in texture and color and appear identical in every other aspect. Each homogenous area is then sampled as follows:

	≤ 1,000 ft ²	>1,000 ft ² but ≤ 5,000 ft ²	> 5,000 ft ²
Surfacing Material	3 samples	5 samples	7 samples
Thermal System Insulation	3 random samples for each homogeneous area of TSI 1 random sample from each homogeneous patched TSI 1 random sample from each homogeneous fitting		
Miscellaneous Material	At the discretion of the sampler		

The condition of the HAs are evaluated and identified as one of the following:

- Category 1 – Damaged or significantly damaged thermal system insulation ACM
- Category 2 – Damaged friable surfacing ACM
- Category 3 – Significantly damaged friable surfacing ACM
- Category 4 – Damaged or significantly damaged friable miscellaneous ACM
- Category 5 – ACBM with potential damage
- Category 6 – ACBM with the potential for significant damage
- Category 7 – Any remaining friable ACM or friable suspect ACM
- Category X – Any non-friable non-regulated ACM

Leaaf may also identify the quantities associated with each HA.

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Laboratory Analysis:

PLM via EPA Method 600/R-93/116

The samples are sent to a laboratory that specializes in the analysis of asbestos cassettes for asbestos fibers via Polarized Light Microscopy (PLM). PLM utilizes a light microscope equipped with polarizing filters. The identification of asbestos fiber bundles is determined by the visual properties displayed when the sample is treated with various dispersion staining liquids. Identification is substantiated by the actual structure of the fiber and the effect of polarized light on the fiber. The limit of detection of asbestos by PLM is about one percent (1%) by area. In some cases the laboratory will identify various layers of materials within the sample collected, multiple analyses are run on these samples.

PLM Point Count (400 node point count <0.25%)

With the permission of the client, Leaaf will request point count analysis for samples below with a percentage between 1 to 5% asbestos. The point count analysis includes testing of bulk building materials for asbestos by performing 400 point counts (EPA 600/R-93/116). This is a detailed and more labor-intensive technique for estimating asbestos in a building material and is less subjective than a visual estimate. This methodology, which has a detection limit of 0.25%, increases the accuracy and precision of the asbestos concentration determined.

CARB 435

This analysis includes testing of rocks and soils for asbestos using the California Air Resource Board 435 method. The CARB 435 method is a specialized method used for testing asbestos content in the serpentine aggregate storage piles, on conveyer belts, and on covered surfaces such as roads, play-yards, shoulders and parking lots. The method includes crushing the sample using a mill to produce a sample size of less than 200 tyler mesh (75 microns) and then reporting the asbestos content by performing a 400 point count technique which has a detection limit of 0.25%.

Interpretation of Data:

To develop the opinions and conclusions presented in Leaaf's report, the environmental professional evaluates all of the data collected during the course of the sampling period. This data is then compared to the appropriate regulatory standards as identified in Regulatory Authority section above to determine if the site has asbestos-containing materials (ACM) greater than the regulatory limits. Conclusions are developed based on this comparison.

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Limitation of the Sampling and Analysis Method:

This report was developed and incorporates information that was obtainable within a reasonable time, cost and direction by the Client and/or Client's representative. Leaaf makes no warranties as to the conclusions or opinions made by others based on the information presented in this report. This is a comprehensive survey of the entire building(s). This survey is a Destructive survey. Note: As site construction can mask the location of suspect building materials, the demolition or renovation of an area may expose new suspect materials. If materials are exposed that have not been sampled, work in the area of the suspect material should stop until such materials can be sampled and analyzed to determine the asbestos content and whether the disturbance has created an asbestos fiber exposure issue.

Leaaf's typical Asbestos Survey does not specifically identify all locations where all asbestos can be found nor does it identify the quantities of asbestos containing materials; therefore, unless specifically stipulated in the report, any building component that has been identified as containing asbestos must be assumed to contain asbestos in all other components of similar makeup. An assumption that a material does not contain asbestos can only be rendered if that material was sampled, analyzed and found not to contain asbestos. If multiple samples were collected of a similar material, then if any one of the samples were found to contain asbestos then all similar materials should be assumed to contain asbestos unless detailed in the report. Should disturbance or renovation and/or demolition fall outside of the area surveyed in this report, the owner, contractor and/or client will need to complete an additional survey prior to disturbance of the building materials.

Prior to any disturbance of ACM or the renovation and/or demolition of any building materials the Client's contractor may be required to submit a notification form to the local state regulatory agency. In the State of Louisiana an AAC-2 form needs to be submitted to LDEQ at least 10-days prior to any renovations or demolition regardless of the asbestos content found.

This survey was not intended to determine any medical conditions; therefore, if an occupant is experiencing health related complaints or is suspected of being exposed to asbestos then an environmental health physician should be consulted.

This survey was not meant to address OSHA-based exposure issues; therefore, OSHA may require more stringent sampling protocols or asbestos content levels for the identification of asbestos and protection of workers.

This report should not be altered, copied or transfer to a third party without Leaaf's written permission. This survey was the initial phase in the process of managing asbestos. This report is a survey and is not authorized for use to develop a cost for abatement by others nor should it be considered a Scope of Work, an abatement Specification or a Management Plan.

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Attachment 2

Field Documentation

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	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

Gary Brooks

Has complied with all requirements of the Louisiana Department of Environmental Quality
and is authorized to perform the duties of

Asbestos Inspector

Accreditation No. AI102434

AI No. 102434

Date of Issuance March 10, 2022

Expiration April 1, 2023

Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a)
may result in civil and/or criminal enforcement actions by the State.


Permit Support Services Division
Office of Environmental Services

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

certifies that

Sadie C Hunt

**Has complied with all requirements of the Louisiana Department of Environmental Quality
and is authorized to perform the duties of**

Asbestos Inspector

Accreditation No. J1215979

AI No. 215979

Date of Issuance May 23, 2022

Expiration June 20, 2023

**Failure to comply with all applicable provisions of La. R.S. 2025.E. (1)(a) and La. R.S. 2025.F. (2)(a)
may result in civil and/or criminal enforcement actions by the State.**

Charles Finley

**Permit Support Services Division
Office of Environmental Services**

LOUISIANA

Attachment 3

Laboratory Report and Chain of Custody

Attachment	Leaaf Environmental, LLC	www.leaaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715

Report for:

Ms. Madeline Dickson
Leaf Environmental, LLC
2301 Whitney Ave
Gretna, LA 70056

Regarding: Project: DOT-032; 11548 Blackwater Rd., Baton Rouge, LA 70714
EML ID: 2954011

Approved by:



Approved Signatory
Balu Krishnan

Dates of Analysis:
Asbestos PLM: 06-17-2022

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 200738-0

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 and tested. 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: Leaa Environmental, LLC
C/O: Ms. Madeline Dickson
Re: DOT-032; 11548 Blackwater Rd., Baton Rouge,
LA 70714

Date of Sampling: 06-15-2022
Date of Receipt: 06-16-2022
Date of Report: 06-17-2022

ASBESTOS PLM REPORT

Total Samples Submitted:	2
Total Samples Analyzed:	2
Total Samples with Layer Asbestos Content > 1%:	2

Location: DOT-032-PLM-001, Transite Panel

Lab ID-Version‡: 14200416-1

Sample Layers	Asbestos Content
White Transite	20% Chrysotile
Sample Composite Homogeneity: Good	

Location: DOT-032-PLM-002, Transite Panel

Lab ID-Version‡: 14200417-1

Sample Layers	Asbestos Content
White Transite	20% Chrysotile
Sample Composite Homogeneity: Good	

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".



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Is hereby granting a Louisiana Environmental Laboratory Accreditation to



Eurofins EMLab P&K
6301 NW Fifth Way Ste 1410
Fort Lauderdale, Florida 33309

Agency Interest No. 144892
Activity No. ACC20210003

According to the Louisiana Administrative Code, Title 33, Part I, Subpart 3, LABORATORY ACCREDITATION, the State of Louisiana formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed in the attachment.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part I, Subpart 3 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part I. Please contact the Department of Environmental Quality, Louisiana Environmental Laboratory Accreditation Program (LELAP) to verify the laboratory's scope of accreditation and accreditation status.

Accreditation by the State of Louisiana is not an endorsement or a guarantee of validity of the data generated by the laboratory. Accreditation of the environmental laboratory does not imply that a product, process, system, or person is approved by LELAP. To be accredited initially and maintain accreditation, the laboratory agrees to participate in two single-blind, single-concentration PT studies, where available, per year for each field of testing for which it seeks accreditation or maintains accreditation as required in LAC 33:1.4711.

Cheryl Sonnier Nolan
Administrator
Public Participation and Permit Support Division

Issued Date: 24 Aug 2021

Effective on Issue Date
Expiration Date: June 30, 2022
Certificate Number: 04153



STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Eurofins EMLab P&K
AI Number: 144892
Activity No. ACC20210003
Expiration Date: June 30, 2022

Effective Date: August 24, 2021

6301 NW Fifth Way Ste 1410, Fort Lauderdale, Florida 33309

Certificate Number: 04153

Air Emissions

Analyte	Method Name	Method Code	Type	AB
100683 - Fungal - Direct Examination (Air)	EM-MY-S-1038	9424	AIHA	LA
100251 - Fungal Direct Exam	EM-MY-S-1039	9425	AIHA	LA
100251 - Fungal Direct Exam	EM-MY-S-1041	9426	AIHA	LA
100679 - Fungal Growth in Culturable Air Samples	EM-MY-S-1043	9427	AIHA	LA
100686 - Bacterial - Culturable Air Samples	EM-BT-S-1051	9430	AIHA	LA
100206 - Asbestos and Other Fibers	NIOSH 7400, Rev.3	90018001	AIHA	LA

Non Potable Water

Analyte	Method Name	Method Code	Type	AB
NONE	NONE	NONE	NONE	NONE

Solid Chemical Materials

Analyte	Method Name	Method Code	Type	AB
100095 - Asbestos in Bulk Insulation	40 CFR 763, Subpart E, Appendix E (Section 1.PLM)	2004	NVLAP	LA
100684 - Bacterial - Culturable Bulk Samples	EM-PR-S-1040	9428	AIHA	LA
100685 - Bacterial - Culturable Surface Samples	EM-PR-S-1040	9428	AIHA	LA
100674 - Fungal Growth in Culturable Bulk Samples	EM-PR-S-1040	9428	AIHA	LA
100865 - Fungal Growth in Culturable Surface Samples	EM-PR-S-1040	9428	AIHA	LA
100674 - Fungal Growth in Culturable Bulk Samples	EM-MY-S-2584	9429	AIHA	LA
100865 - Fungal Growth in Culturable Surface Samples	EM-MY-S-2584	9429	AIHA	LA
100684 - Bacterial - Culturable Bulk Samples	EM-BT-S-1050	9431	AIHA	LA
100685 - Bacterial - Culturable Surface Samples	EM-BT-S-1050	9431	AIHA	LA
100172 - Asbestos by Polarized Light Microscopy	EPA 600/R-93/116	10294583	NVLAP	LA
100791 - Asbestos in Bulk Building Materials	EPA 600/R-93/116	10294583	NVLAP	LA
100095 - Asbestos in Bulk Insulation	EPA 600/R-93/116	10294583	NVLAP	LA

Biological Tissue

Analyte	Method Name	Method Code	Type	AB
NONE	NONE	NONE	NONE	NONE

Clients and Customers are urged to verify the laboratory's current certification status with the Louisiana Environmental Laboratory Accreditation Program.

Appendix C

Sources of Information

Attachment	Leaf Environmental, LLC	www.leaf.com
	2301 Whitney Ave, Gretna, LA 70056	Phone (504) 342-2687 Fax (504) 342-2715

Sources of Information

1. Louisiana Department of Environmental Quality
 - Title 33, Part III *Section* §2701. Asbestos-Containing Materials in Schools and State Buildings Regulation. 04/14
 - Title 33, Part III *Section* §5151 Emission Standards for Asbestos. 04/14
2. NIOSH Method 9002 Issue #2 Asbestos (bulk) by PLM. NIOSH Manual of Analytical Methods (NMAM), Issue 1: 15 May 1989 - Issue 2: 15 August 1994.
3. U.S. Occupation Safety and Health Administration (OSHA)
 - Final Rules Title 29, Part 1910, Section 1001 of the Code of Federal Regulations
 - Final Rules Title 29, Part 1926, Section 1101 of the Code of Federal Regulations
 - Final Rules Title 29, Part 1910, Section 120 of the Code of Federal Regulations
4. U.S. Environmental Protection Agency (EPA)
 - Asbestos-Containing Materials in Schools, 40 CFR Part 763, Subpart E
 - Asbestos national Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subpart M

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