# Air Environmental

**P.O. Box 294**
**Santa Rosa, Ca 95402**
**707-408-2080**
CaEnvironmental@Gmail.com

**Soot Inspection Report**

**To: West Coast Fire & Water**

**From: Air Environmental**

**Date: 5-15-20**

**Address: 6593 Pentz Rd, Paradise, CA 95969**

**Date of testing: 5-14-20**

**Location(s) of testing: Rooms A3, B3, B5, C2, D1, E6, F3, G1, G2.**

Air Environmental was requested to perform a soot Inspection and to take soot tests in the area(s) stated above. (See attached report)

Based on the results of the Inspection and at the above described location on the date indicated, our visual inspection performed, and tape lifts analyzed, Air Environmental considers that soot cleaning in the attic spaces does not need to be performed. There is dust build up on the horizontal surfaces and ducting in the attic space. Since no attic ventilation was found in these buildings there has been low to no ash or soot from the fires.

If you have any questions, please give us a call.
**Joshua Leard & Nate Cowan**
Owners/Environmental Technicians

May 14th, 2020

Attention: Josh Leard

Subject: 6593 Pentz Rd., Microscopic Analysis of Soot/Char Particles for Air Environmental, ETL Job #231965

Dear Mr. Leard,

On May 14th, 2020, Environmental Testing Laboratories, Inc. (ETL) received 16 tape samples for the project location 6593 Pentz Rd., Paradise, CA 95969. The samples were received intact and sealed in separate resealable Ziploc-type plastic bags. Upon initial inspection in the laboratory, it was found that the tape samples had adhered to the inside of their respective bags. Tape samples were detached from the plastic material of the bags in order to be analyzed but this may cause distortion in representative particle distribution remaining on the tape lifts.

Under macroscopic inspection of mounted samples, particle distribution was observed as fairly even and the integrity of the tape lifts was maintained.

Soot/char particles were identified, analyzed, and quantified by polarized light microscopy (PLM) according to the recommendations and methods described in the ASTM D6602 and EPA 600/R-93/116 standard methodology.

**Environmental Testing Laboratories**

**37575 W. Huron River Drive, Romulus, MI 48174**

**(734) 955-6600 http://www.2etl.com**

Soot/char particles were observed in most of the submitted samples in varying quantities. Other constituent particles found on these samples included both cellulose and synthetic fibers, wood, fiberglass, and miscellaneous organic debris.

**Analytical Method**

Sample analysis is performed using a polarized light microscope under different magnifications (100-400x), using crossed and un-crossed polars, and reflected and transmitted light. Detection of combustion by-products is achieved through assessment of morphological characteristics and optical properties. Quantification by percentages is performed using visual area estimation of combustion by-products as compared to the total area sampled.

Under the standard analytical methods used, the Limit of Quantification (LOQ) is considered to be less than 1% particle area distribution. Any samples that are quantified as having less than 1% distribution of soot/char particles will be reported as "<1%" without additional quantification noted. A percent result of "ND" denotes None Detected and indicates that no soot/char particles were observed on the particular sample.

Low percentages of soot/char distribution on a given sample (around 3% or less) *may* indicate fairly normal conditions but interpretations of soot or combustion by-product distribution are left to the discretion of the client. Laboratory results apply only to samples submitted.

Thank you for trusting ETL with your business, it has been a pleasure partnering with you on this project. Please refer to the **Laboratory Report** section of this document for more information regarding the submitted samples. If you have any questions about any of the information contained within this report please do not hesitate to contact me at my office at (800) 864-3236 or by email at Kevin.Moss@2etl.com.

Sincerely,

Kevin R Moss

Laboratory Director

**Environmental Testing Laboratories**

**37575 W. Huron River Drive, Romulus, MI 48174**

**(734) 955-6600 http://www.2etl.com**

# ETL Laboratory Report - Soot/Char Analysis

Client: Air Environmental
P.O. Box 294
Santa Rosa, CA 95402

Project Location: 6593 Pentz Rd
Paradise, CA 95969

ETC Project #: 231965
Sample Date: 5/13/2020
Submitted Date: 5/14/2020
Analysis Date: 5/14/2020
Analyzed by: Kevin Moss

| Lab Code | Sample Code | Sample Description | Soot/Char Present (%) |
|---|---|---|---|
| 1 | S-1 | Room F3 Insulation Paper | <1% |
| 2 | S-2 | Room F3 Wood Beam | <1% |
| 3 | S-3 | Room E6 Wood Beam | 2% |
| 4 | S-4 | Room E6 Insulation Paper | <1% |
| 5 | S-5 | Room D1 Insulation Paper | <1% |
| 6 | S-6 | Room D1 Wood Beam | <1% |
| 7 | S-7 | Room C2 Wood Beam | <1% |
| 8 | S-8 | Room C2 Insulation Paper | ND |
| 9 | S-9 | Room B5 Wood Beam | <1% |
| 10 | S-10 | Room B5 Wood Siding | 5% |
| 11 | B-1 | Room B3 Wood Beam | <1% |
| 12 | B-2 | Room B3 Insulation Paper | <1% |
| 13 | B-3 | Room A3 Wood Beam | 3% |
| 14 | B-4 | Room A3 Insulation Paper | <1% |
| 15 | B-5 | Room G1 | <1% |
| 16 | B-6 | Room G2 | <1% |
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* This analysis was performed using a site-developed visual microscopic technique.

**References:**

ASTM D6602-13 (2018), Standard Practice for Sampling and Testing of Possible Carbon Black Fugitive Emissions or Other Environmental Particulate, or Both, ASTM International, West Conshohocken, PA, 2018, www.astm.org

Perkins, R. and B. Harvey. Test Method - Method for the Determination of Asbestos in Bulk Building Materials. U.S. Environmental Protection Agency, Washington, D.C., EPA/600/R-93/116.

# ASBESTOS CHAIN OF CUSTODY

Air Environmental
PO Box 294, Santa Rosa, Ca 95402
707-408-2080 - CaEnvironmental@gmail.com

**LEGAL DOCUMENT - PLEASE PRINT LEGIBLY**



| For Lab Use Only | |
|---|---|
| Lab No. | 231965 |
| Accept | Reject |

| Contact Information | | | |
|---|---|---|---|
| Company: | Air Environmental | Phone: | 707-408-2080 |
| Contact: | Josh Leard | Cell Phone: | |
| Account #: | | E-mail: | CaEnvironmental@gmail.com |
| SAMPLED BY: Name: | JL | Date: | 5-13-20 |

| Project Information | |
|---|---|
| Project Name: | |
| Project Location: | 6593 Pentz Rd Paradice, Ca 95969 |

| RELINQUISHED BY | DATE & TIME | VIA | RECEIVED BY | DATE & TIME |
|---|---|---|---|---|
| Josh Leard | 5-13-20 4pm | Fed Ex | Aubrie Noël | 5-14-2020 |
| | | | Aubrie Noël | 12:37pm |

**REQUESTED SERVICES (Please ☑ the Appropriate Boxes)**

| PLM | PCM | TEM | Soot |
|---|---|---|---|
| ☐ Bulk Analysis (EPA 600/R-93/116) | ☐ NIOSH 7400 | ☐ Air - NIOSH 7402 | ☒ Tape Lift Analysis |
| ☐ 400 Point Count | | | |

| TURNAROUND TIME | |
|---|---|
| ☐ | Rush |
| ☒ | Same Day |
| ☐ | 24 - Hour |
| ☐ | 3 - Day |
| ☐ | 5 - Day |

| No. | Sample ID | ☑ To Be Analyzed | Lab ID | Description | Volume | ☑ Stop @ 1st Pos | Comments / Notes |
|---|---|---|---|---|---|---|---|
| 1 | S-1 | ☒ | | Room F3 Insulation Paper | | ☐ | |
| 2 | S-2 | ☒ | | " " Wood Beam | | ☐ | |
| 3 | S-3 | ☒ | | Room E6 " | | ☐ | |
| 4 | S-4 | ☒ | | " " Insulation Paper | | ☐ | |
| 5 | S-5 | ☒ | | Room D1 " | | ☐ | |
| 6 | S-6 | ☒ | | " " Wood Beam | | ☐ | |
| 7 | S-7 | ☒ | | Room C2 " | | ☐ | |
| 8 | S-8 | ☒ | | " " Insulation paper | | ☐ | |
| 9 | S-9 | ☒ | | Room B5 Wood Beam | | ☐ | |
| 10 | S-10 | ☒ | | " " " Siding | | ☐ | |

# Asbestos Chain Of Custody

Air Environmental
P.O. Box 294, Santa Rosa, Ca 95402
707-408-2080



| For Lab Use Only | |
|---|---|
| Lab No. 2319165 | |
| Accept | Reject |

## Legal Document

| Project Information | | |
|---|---|---|
| Company: Air Environmental | Project Name: | Project Location: 6593 Pentz Rd |

| No. | Sample ID | ☑ To Be Analyzed | Lab ID | Description | Volume / Area | Stop @ 1st Pos | Comments / Notes |
|---|---|---|---|---|---|---|---|
| 11 | B-11 | ☒ | | Room B3 wood Beam | | ☐ | |
| 12 | B-12 | ☒ | | " B-3 Insulation paper | | ☐ | |
| 13 | B-13 | ☒ | | Room A-3 wood Beam | | ☐ | |
| 14 | B-14 | ☒ | | " A-3 Insulation paper | | ☐ | |
| 15 | B-15 | ☒ | | Room G1 | | ☐ | |
| 16 | B-16 | ☒ | | " G2 | | ☐ | |
| 17 | | ☐ | | | | ☐ | |
| 18 | | ☐ | | | | ☐ | |
| 19 | | ☐ | | | | ☐ | |
| 20 | | ☐ | | | | ☐ | |
| 21 | | ☐ | | | | ☐ | |
| 22 | | ☐ | | | | ☐ | |
| 23 | | ☐ | | | | ☐ | |
| 24 | | ☐ | | | | ☐ | |
| 25 | | ☐ | | | | ☐ | |
| 26 | | ☐ | | | | ☐ | |
| 27 | | ☐ | | | | ☐ | |
| 28 | | ☐ | | | | ☐ | |
| 29 | | ☐ | | | | ☐ | |
| 30 | | ☐ | | | | ☐ | |