

Proposed Duplex Project

Environmental
Survey
for Renovation



429 1/2 Johnson St. Sausalito, CA Date: 5-10-24

Interior Construction Materials:

Flooring: Wood strip floor at 2nd floor areas. Ceramic tile in 2nd floor rest room. Flooring is Terrazzo or concrete slab at basement areas.

Walls and Ceilings: Gypsum board and joint compounds for most rest room and basement walls / ceilings. 2nd floor has open wood ceiling framing above living space.

HVAC and Mech: Forced air furnace / HVAC distributed through fiberglass insulated sheet metal ductwork. HVAC system uses silver duct that is non detect for asbestos. Flue pipe has remnants of hard cast asbestos tape.

Miscellaneous Materials:

Building Data:

Total Bldg. Area: 1046 Sq. Ft.

Positive ACM at Site:

The hard cast flue tape is friable asbestos.

No asbestos was found in the:

Drywall / Joint Compounds, 9 x 9 floor tiles, concrete, HVAC insulation, glazing putty, or Terrazzo floor. If additional materials are found that do not match the descriptions of the samples analyzed, call for additional testing.

Abatement Specs:

Abatement is required for the flue pipe hard cast tape only. Other materials listed in the sample logs are non-asbestos.

The removal and disposal of fluorescent lamps must follow waste disposal regulations and must be recycled. All older light fixtures should be checked for possible PCB in ballasts.

Exterior Construction Materials:

Foundation: Concrete perimeter foundation, with slab on grade.

Exterior Siding: Exterior wood siding and wood trim. .

Windows: Metal frame windows, with glazing compounds at divided light window units.

Roofing: The main roof is not in the scope of work and not inspected.

General Information:

A survey and report are limited in nature, due to limited access

Call for additional site inspections for additional materials that may be uncovered in the demolition process.

Notification to the BAAQMD is required for any structural demolition, regardless of asbestos content. See full report.



Monte Deignan & Associates

CAC 93-0879

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(415) 927-9038

May 14, 2024

Mr. Ali Iqbal
City of Sausalito
Public Works
400 Litho Street
Sausalito, CA

Asbestos Survey for Proposed Duplex Vacant Dwelling 429 ½ Johnson Street Sausalito, CA

I. INTRODUCTION

This report presents our limited inspection and bulk sampling for asbestos containing materials (“ACM”) at 429 ½ Johnson Street in Sausalito, CA. The inspection was performed on May 10, 2024. The building areas inspected are the interior components at the first and second levels. The primary purpose of this inspection is to identify materials that contain asbestos that must be abated or removed prior to renovation of the structure during a proposed upgrade project. Our scope of work included an asbestos inspection consisting of visual inspection, bulk sampling, laboratory analysis, and the generation of the report findings. The inspection was performed by Mr. Monte Deignan, a Cal/OSHA certified asbestos consultant and AHERA accredited building inspector.

II. REGULATORY OVERVIEW

The following oversight agencies and regulations may affect the implementation of this project as described below:

Federal Agencies

Environmental Protection Agency (“EPA”), National Emission Standards for Hazardous Air Pollutants (“NESHAP”) Notification 40 CFR 61 Part M

- Requires notification when removal or renovation involves greater than 160 square feet or 260 linear feet of friable asbestos containing materials

State Agencies/Regulations

Bay Area Air Quality Management District (“BAAQMD”)

- Responsible for enforcement of the federal NESHAP regulations
- Requires notification for removal of all friable ACM if exceeding 100 square feet or linear feet
- Requires notification prior to demolition regardless of ACM amounts or presence

California Occupational Safety and Health Administration (“Cal/OSHA”)

- Responsible for enforcement of Federal OSHA standards
- Requires friable and non-friable ACM exceeding 100 square feet to be removed by a registered Cal/OSHA asbestos abatement contractor
- Requires that contractors be licensed by the California Contractors State License Board (“CSLB”)

AB 3713 Asbestos Notification Law (Connelley Act)

- Requires notification of tenants, employees, and co-owners about the presence and locations of ACM, and the potential health effects

Asbestos Real Estate Disclosure Law

- California state law requires the disclosure of ACM presence during real estate transactions.

III. ASBESTOS ANALYSIS PROCEDURES

Sampling Strategy

The objective of bulk sampling was to determine through laboratory analysis whether suspected materials at this site contain asbestos, and if so, what type and concentrations measured in percentages. Prior to the collection of any samples, all building materials were separated into distinct areas of homogeneity. A homogeneous area represents an area delineated by functional and visual similarity. The area may be further defined by its location within the building, or the age of the material.

After homogeneous areas were identified, a sufficient number of samples were collected for submittal to the laboratory for polarized light microscopy (“PLM”) analysis. Because asbestos containing materials have compositional variability, it is possible to obtain different results from samples taken from the same materials in the same building. Therefore, a homogeneous sampling area with at least one positive result will result in the entire area being designated as having asbestos containing material (“ACM”).

The collection of bulk samples was based on the guidelines established by the EPA for school buildings (Asbestos Hazard Emergency Response Act (“AHERA”), 40 CFR Part 763, EPA, 1987). In addition, the Asbestos in Schools Hazard Abatement Reauthorization Act (“ASHARA”) establishes

guidelines for the inspection of commercial facilities. AHERA and ASHARA guidelines were used to insure the most reliable procedures for sample collection and reporting.

Standard sampling tools and procedures were used to obtain samples from the suspected materials. The samples were bagged and submitted to the laboratory under standard chain of custody protocols. Representative sample locations were noted on the floor plans of the building and are referenced on the chain of custody form from the laboratory, Microanalytical Laboratories of Emeryville, California.

Laboratory Analysis

Laboratory analysis was based on polarized light microscopy supplemented by dispersion staining to observe asbestos mineral content. For the purposes of this survey, ACM is defined as any material containing more than 1% asbestos by weight, volume, or point count. For Cal/OSHA purposes, ACCM is defined as any material with greater than 0.1% asbestos.

IV. VISUAL SURVEY FINDINGS AND SAMPLING

On the afternoon of May 10, 2024, the inspection of the property was performed. The age of the building and the use of asbestos containing materials are usually related. Most buildings from the 1960's used many asbestos containing material (ACM) for components such as flooring, drywall, roofing, insulation, etc. The inspection was limited to the rooms or scope of work areas shown on the floor plan included with this report. Arrange for additional testing if other areas are to be disturbed or renovated.

Walls and Structural Components

The house consists of exterior and interior walls of wood frame and wood frame roof structure, on a concrete perimeter foundation. The interior walls are mostly wood paneled, with limited areas of drywall. The windows in the building are mostly metal frame / sash units, with glazing compounds on the larger multi light windows.

The ceilings at most areas are drywall or wood siding materials.

The floor plan indicates the locations and samples collected of the wall and ceiling materials.

Exterior and Roofing Components

The office exterior and roofing materials were not tested for this inspection. If the roofing is disturbed or replaced, arrange for additional inspections / sampling.

Flooring Components

The building flooring components are Terrazzo and exposed concrete for first floor areas. The second floor uses wood strip flooring. Limited areas of ceramic tile are used in the rest room areas. A small amount of 9 x 9 vinyl tile was found at the second floor bathroom.

Mechanical Systems, Utilities, etc.

This category includes the HVAC, hot water, etc. Each of these systems uses different insulation materials, which are typically suspect for containing asbestos. The building HVAC system consists of forced air furnace. And water heater in the garage. The HVAC ducts that extend through the interstitial or above ceiling spaces uses fiberglass for insulation. The ducts use a silver colored fabric duct tape at sheet metal ductwork. The flue pipes use a hard cast tape and joins and seams in the sheet metal pipes. Most of the hard cast tape is missing but about 1 square foot remains in poor condition. The hard cast tape is classified as friable.

Supplemental Environmental Concerns

The scope of this inspection and report are primarily limited to asbestos containing materials in the buildings. There are however additional concerns that should be addressed prior to and during the renovation of the buildings. The owners of the property should consider obtaining additional advice from qualified professionals regarding the presence of additional hazards. The following are examples of what may be found:

- The lighting in some areas of the building possibly use fluorescent fixtures. These lights use lamps that contain mercury. The ballasts may also contain PCB oils. The lamps shall be recycled if removed or replaced. The labels on ballasts shall be checked for the “ No PCB” label at the time of any future fixture replacement.
- Any demolition, drilling, or disturbance of the concrete slab and foundations should follow the Cal / OSHA regulations for Respirable Crystalline Silica found in 8 CCR 1532.3. Any work that generates dust from concrete must use engineering controls, work methods, and PPE to limit worker exposure.

Sampling of Building Materials

Samples were collected from twenty-three different building materials and analyzed for asbestos. Since no other suspect materials could be found, the sampling was considered complete. All of the samples were catalogued as to location, condition, and submitted for PLM analysis. The samples were hand-delivered to the laboratory using our standard chain of custody protocols on the morning of May 11, 2024

The description of the materials, locations and quantity are listed on the chain of custody forms and floor plans. The titles for the various spaces in the house were assumptions based on the apparent use of the space. Photographs were also taken to document the location and conditions of some of the materials. Copies of the floor plan and chain of custody forms are attached with this report.

V. CONCLUSIONS

Based on the visual inspection, sampling and laboratory analysis, the following results are noted:

- The hard cast tape on the HVAC flue pipes contain 60% asbestos.
- The 9 x 9 vinyl tile was non detect for asbestos.
- The HVAC duct insulation and silver duct tape do not contain asbestos.
- The drywall and joint compounds do not contain asbestos.
- The ceramic and grout tiles do not contain asbestos.
- The concrete / Terrazzo flooring does not contain asbestos.
- The concrete block/ CMU at the basement does not contain asbestos.
- The exterior glazing compound does not contain asbestos.

RECOMMENDATIONS Based on the visual inspection, sampling and laboratory analysis conducted, the following recommendations apply to the materials found on this site:

1. The hard cast tape on the flue pipes for the furnace and water heater is in poor condition and must be abated prior to demolition or disturbance. The abatement must follow Cal / OSHA 8 CCR Section 1529 regulations for friable thermal system insulation materials. Wet methods, containment, performed by qualified asbestos contractors will be required
2. The ceramic tile / grout, duct tape, concrete, 9 x 9 vinyl tile, Terrazzo flooring, drywall and joint tape compounds, and glazing compound materials were non detect at the locations sampled and no abatement regulations apply to these materials. If other materials are uncovered during the renovation project, arrange for additional inspections.
3. The fluorescent lighting tubes and bulbs must be recycled due to mercury content, in fixtures that are removed. Ballasts shall be check for possible PCB content.
4. Notification to the BAAQMD must be made for structural demolition or removal of a load bearing members. This is separate to any asbestos related notifications for abatement operations.

Any chemicals to be used on the project must be accompanied by a Safety Data Sheet ("SDS").
Compliance with this section is not required by asbestos regulations.

VI. LIMITATIONS OF LIABILITY

The work and resulting recommendations for this survey are in accordance with generally accepted building survey practices and the AHERA protocols for asbestos inspections. The report generators provide no other guarantees, either expressed or implied. Conclusions and recommendations presented in issued reports are qualitative judgments based on the prevailing regulations affecting the scope of this work at the time of the inspection of the particular building(s). The scope of work was limited to the visible and accessible parts of the building, limited sampling analysis, and data review. The client recognizes that site conditions or access may vary from those encountered at the time of the inspection, and that changing conditions may cause us to alter our recommendations. We have attempted to view as much of the building as possible, without opening hidden areas, removing existing drywall, or damaging existing property. If conditions or situations occur that expose these non-inspected areas, we will be glad to continue our inspection at that time for those locations.

This report is for the express use of the client for whom it was prepared, and is not intended for use by third parties. The authors of this report will not be responsible for interpretation or use by third parties of any of the information contained in this report. The building survey for asbestos is intended to provide an initial assessment of asbestos containing material at specific locations, and may not be valid at other locations or for other unique materials. Additional site evaluations could result in information that would lead us to revise our conclusions and recommendations. If any doubts exist, call for additional inspections or testing.

Respectfully submitted,



Monte Deignan
CAC 93-0879

Interior Construction Materials

Proposed City Housing

429 1/2 Johnson Street
Sausalito, CA

May 10, 2024
Scope of Work for
Abatement & Demolition



Photo 1

The second level ceiling is wood beams and wood planks.
The ceiling at the lower floor is mostly gypsum board and compounds.
The roof and exterior materials were not included in the survey.

The flooring in most areas is wood strip over wood framing at the second level. The basement is mostly Terrazzo or concrete slab on grade. No asbestos was detected in floor samples.

The partition walls in the building are wood framing in all areas. Most of the second level walls use wood paneling. The lower levels use gypsum board finished with joint tape compounds.
The gypsum board, joint compounds, are non detect for asbestos.

Interior Construction Materials

Proposed City Housing

429 1/2 Johnson Street
Sausalito, CA

May 10, 2024
Scope of Work for
Abatement & Demolition



The first floor main room uses Terrazzo concrete flooring as shown in Photo 2. The walls and ceilings of the lower level are gypsum board. Drywall joint tape compounds are used to finish the drywall surfaces. The shower in the bathroom uses ceramic tile and grout for the wall surfaces. The foundation at the lower level is a concrete perimeter system, with limited areas of concrete block or CMU in the garage storage area.

Based on the PLM sampling and laboratory analysis the drywall, ceramic tile, Terrazzo, concrete, and duct tape samples were non detect for asbestos content.

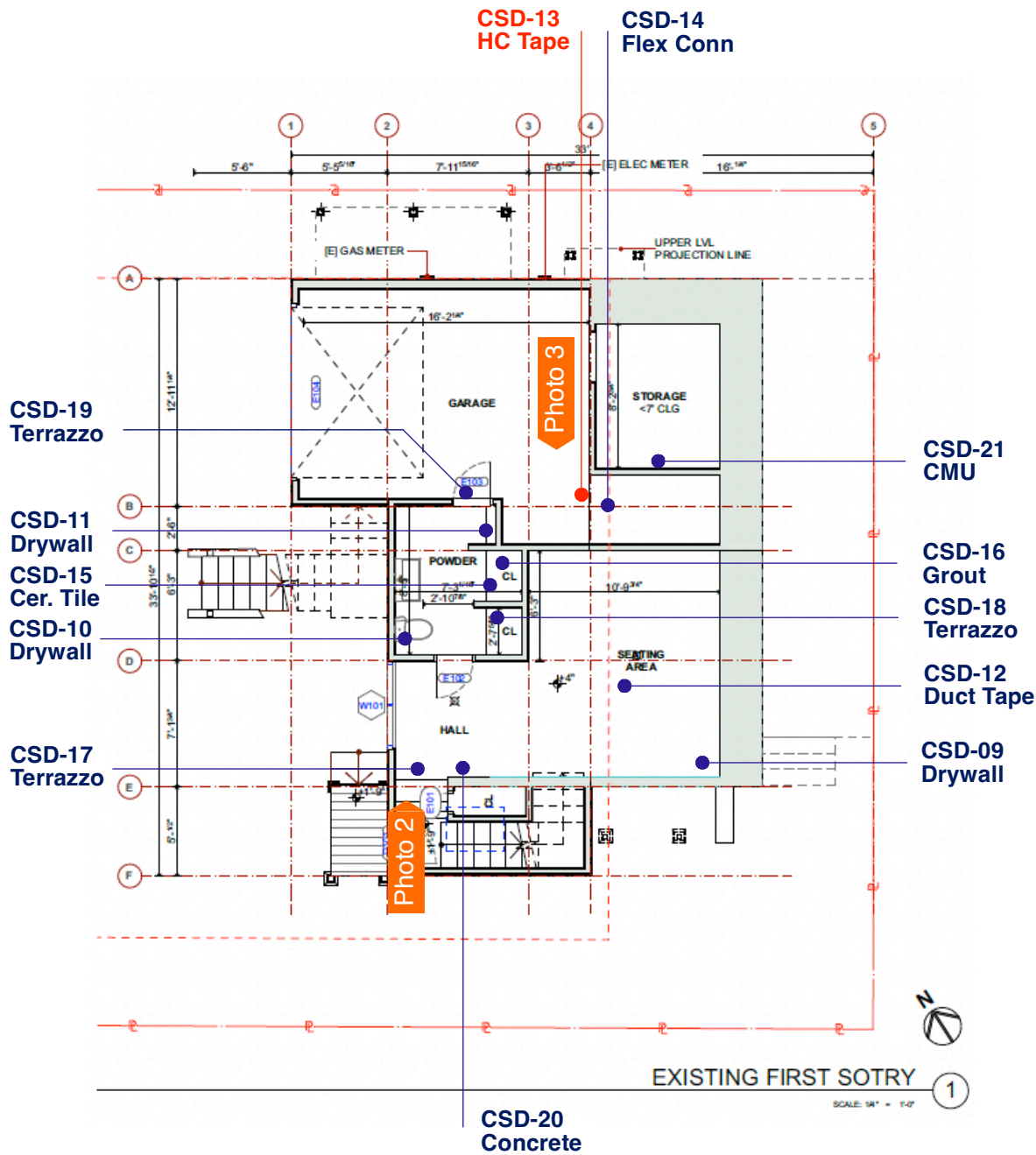
The gas fired furnace and water heater is located in the garage area of the basement. The forced air furnace uses sheet metal duct work, sealed with a silver colored duct tape at pipe seams. Fiberglass is used for insulation on the duct work in the basement / crawl space. The flue pipe for the furnace and water heater is galvanized sheet metal. A hard cast tape is used at the joint between the flue pipe sections. Much of the hard cast tape is missing, but about 1 square foot remains. The hard cast tape contains 60% asbestos and is classified as friable. The residual hard cast tape must be abated by a qualified asbestos abatement contractor prior to removal of disturbance. The red circles in Photo 3 show some of the hard cast tape locations.

Proposed Duplex

429 1/2 Johnson
Sausalito, CA

Asbestos Survey
First Floor

May 10, 2024



MDA

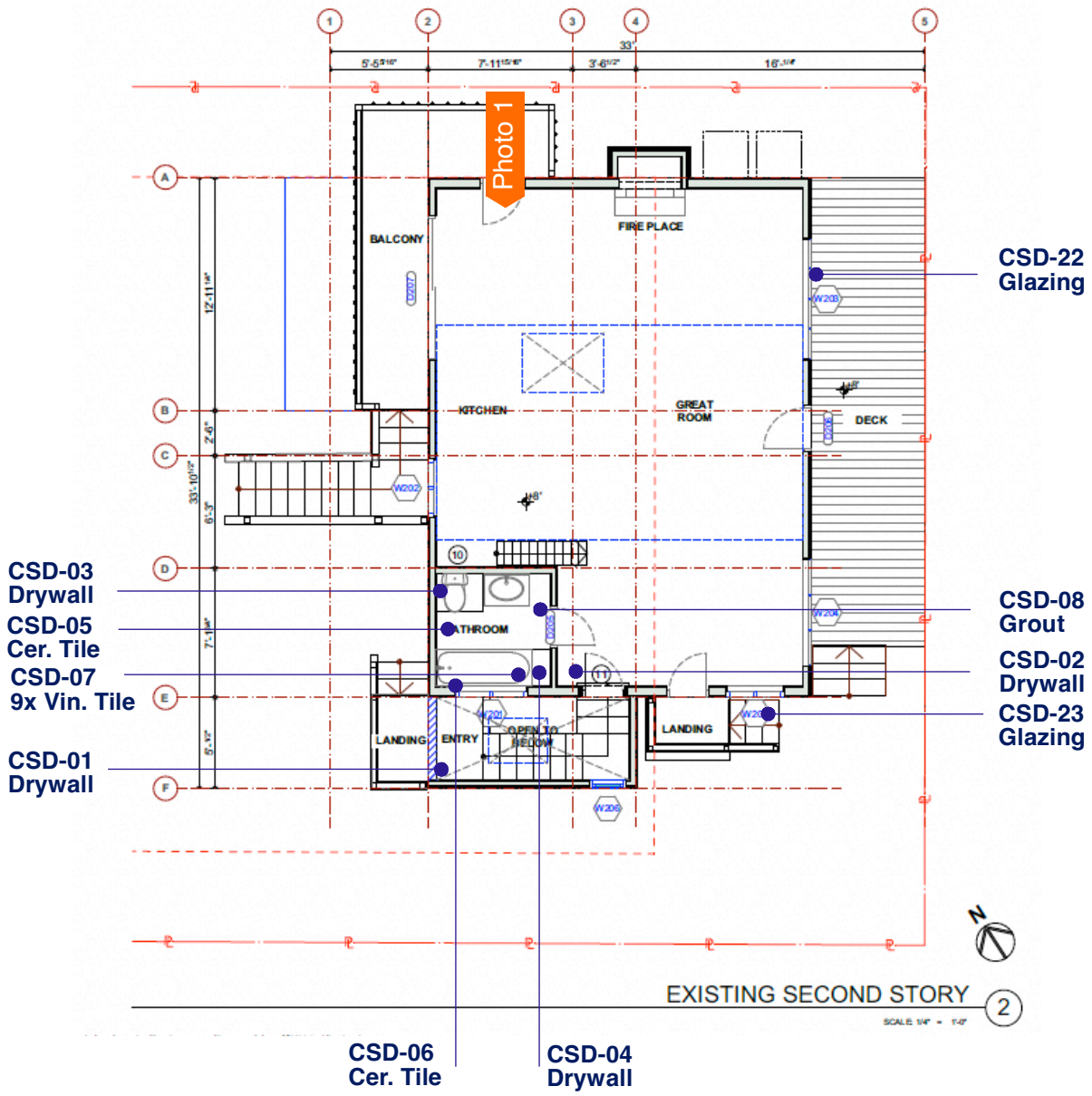
Monte Deignan & Associates
Certified Asbestos Consultants
Larkspur, CA

Proposed Duplex

429.5 Johnson
Sausalito, CA

Asbestos Survey

May 10, 2024



Legend of Materials

- Sample Site —●—
- Positive Site —●—
- Photo Site # —▶—



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Certified Asbestos Consultants
Larkspur, CA

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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Monte Deignan & Associates
P.O. Box 546
Larkspur, CA 94977

PROJECT:
429 1/2 JOHNSON STREET
SAUSALITO, CA

Micro Log In **314853**
Total Samples 23
Date Sampled 05/10/2024
Date Received 05/11/2024
Date Analyzed 05/11/2024

SAMPLE IDENTIFICATION


ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #:	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
Client #: CSD-01 Micro #: 314853-01 Analyst: AF AF DRYWALL & JOINT COMPOUND 1ST FLOOR ENTRY	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND MESH: ND	10 % CELLULOSE 3 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: CSD-02 Micro #: 314853-02 Analyst: AF DRYWALL & JOINT COMPOUND STAIRWELL @ 2ND	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND	10 % CELLULOSE NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: CSD-03 Micro #: 314853-03 Analyst: AF DRYWALL & JOINT COMPOUND REST ROOM @ 2ND	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND	10 % CELLULOSE NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: CSD-04 Micro #: 314853-04 Analyst: AF DRYWALL & JOINT COMPOUND REST ROOM @ 2ND	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND	10 % CELLULOSE NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: CSD-05 Micro #: 314853-05 Analyst: AF 3X3 CERAMIC TILE REST ROOM @ 2ND	CERAMIC TILE: ND GLUE (WHITE): ND GLUE (GRAY): ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor:


for Baojia Ke, Ph.D.

5/11/2024

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763, Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by TEM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Monte Deignan & Associates
 P.O. Box 546
 Larkspur, CA 94977

PROJECT:
429 1/2 JOHNSON STREET
SAUSALITO, CA

Micro Log In **314853**
 Total Samples 23
 Date Sampled 05/10/2024
 Date Received 05/11/2024
 Date Analyzed 05/11/2024

SAMPLE IDENTIFICATION


ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #:	CSD-06		
Micro #: 314853-06	Analyst: AF	CERAMIC TILE: ND GLUE (WHITE): ND RESIDUAL COMPOUND: ND	5 % CELLULOSE NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #:	CSD-07		
Micro #: 314853-07	Analyst: AF AF	VINYL TILE: ND MASTIC (BEIGE): ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #:	CSD-08		
Micro #: 314853-08	Analyst: AF	GROUT: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #:	CSD-09		
Micro #: 314853-09	Analyst: AF	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND	10 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #:	CSD-10		
Micro #: 314853-10	Analyst: AF	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND	10 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE), CARBONATE.

Technical Supervisor:


 Baojia Ke, Ph.D.

5/11/2024

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
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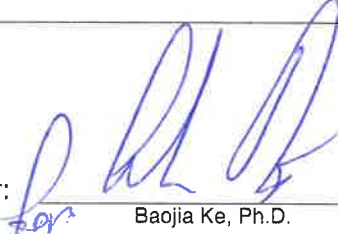
Micro Log In **314853**
 Total Samples 23
 Date Sampled 05/10/2024
 Date Received 05/11/2024
 Date Analyzed 05/11/2024

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND is Reported (No Asbestos Detected)

Client #: CSD-11		
Micro #: 314853-11 Analyst: AF DRYWALL & JOINT COMPOUND REST ROOM @ BASEMENT	DRYWALL: ND JOINT COMPOUND: ND TAPE / PAINT: ND	10 % CELLULOSE NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: CSD-12		
Micro #: 314853-12 Analyst: AF DUCT TAPE, SILVER HVAC DUCTS	DUCT TAPE: ND	55 % CELLULOSE NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: CSD-13		
Micro #: 314853-13 Analyst: AF HARD CAST TAPE, GRAY FLUE PIPES	CAST TAPE: 60% CHRYSOTILE ASBESTOS	10 % CELLULOSE NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: CSD-14		
Micro #: 314853-14 Analyst: AF FLEXIBLE CONNECTOR HVAC RETURN DUCT	CONNECTOR MATERIAL: ND	65 % SYNTHETIC FIBERS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: CSD-15		
Micro #: 314853-15 Analyst: AF 3X3 CERAMIC TILE RESTROOM @ BASEMENT	CERAMIC TILE: ND GLUE (GRAY): ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor:


 Baojia Ke, Ph.D.

5/11/2024

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" ncheterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



1084
 Monte Deignan
 Monte Deignan & Associates
 P.O. Box 546
 Larkspur, CA 94977

PROJECT:
 429 1/2 JOHNSON STREET
 SAUSALITO, CA

Micro Log In **314853**
 Total Samples 23
 Date Sampled 05/10/2024
 Date Received 05/11/2024
 Date Analyzed 05/11/2024

SAMPLE IDENTIFICATION


ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #:	CSD-16		
Micro #: 314853-16	Analyst: AF	GROUT: ND RESIDUAL CAULK: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
TILE GROUT, GRAY RESTROOM @ BASEMENT			
Client #:	CSD-17		
Micro #: 314853-17	Analyst: AF	TERRAZZO: ND CONCRETE: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
TERRAZZO FLOOR, WHITE BASEMENT			
Client #:	CSD-18		
Micro #: 314853-18	Analyst: AF	TERRAZZO: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
TERRAZZO FLOOR, WHITE RESTROOM @ BASEMENT			
Client #:	CSD-19		
Micro #: 314853-19	Analyst: AF	TERRAZZO: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
TERRAZZO FLOOR, WHITE RESTROOM @ BASEMENT			
Client #:	CSD-10		
Micro #: 314853-20	Analyst: AF	CONCRETE: ND PAINT: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
CONCRETE, GRAY BASEMENT			

Technical Supervisor:


 Baojia Ke, Ph.D.

5/11/2024

Date Reported

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 P.O. Box 546
 Larkspur, CA 94977

PROJECT:
429 1/2 JOHNSON STREET
SAUSALITO, CA

Micro Log In **314853**
 Total Samples 23
 Date Sampled 05/10/2024
 Date Received 05/11/2024
 Date Analyzed 05/11/2024

SAMPLE IDENTIFICATION

ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: CSD-11	Analyst: AF	CONCRETE: ND PAINT: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Micro #: 314853-21 CONCRETE BLOCK, CM BASEMENT			
Client #: CSD-12	Analyst: AF AF	PUTTY: ND	NFM: CARBONATE, MISC. PARTICLES
Micro #: 314853-22 GLAZING PUTTY, GRAY WINDOW @ 2ND FLR.			
Client #: CSD-13	Analyst: AF	PUTTY: ND	NFM: CARBONATE, MISC. PARTICLES
Micro #: 314853-23 GLAZING PUTTY, GRAY WINDOW @ 2ND FLR.			

Technical Supervisor:


 Baojia Ke, Ph.D.

5/11/2024

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

314853

Bulk Sample Log & Laboratory Request Form

Client # :

Log In # :

**Monte Deignan
& Associates**

P.O. Box 546
Larkspur, CA 94977

Tel (415) 927-9038

Client : City of Sausalito
400 Litho Street
City, State : Sausalito, CA
Project Site : 429 1/2 Johnson Street
Sausalito, CA

Collected By : MD

Date: 05-10-24

Analysis Requested :

PLM
TEM
Pb
Misc.

Rush
24 Hr.
3-5 Day
Other

Sample	Sample Description	Sample Location	Notes	Lab #
CSD -01	DRYWALL & JOINT COMPOUND	1ST FLOOR ENTRY		
CSD -02	DRYWALL & JOINT COMPOUND	STAIRWELL @ 2ND		
CSD -03	DRYWALL & JOINT COMPOUND	REST ROOM @ 2ND		
CSD -04	DRYWALL & JOINT COMPOUND	REST ROOM @ 2ND		
CSD -05	3x3 CERAMIC TILE	REST ROOM @ 2ND		
CSD -06	4x4 CERAMIC TILE	REST ROOM @ 2ND		
CSD -07	9x9 VINYL TILE, BROWN	REST ROOM @ 2ND		
CSD -08	FLOOR TILE GROUT, GRAY	REST ROOM @ 2ND		
CSD -09	DRYWALL & JOINT COMPOUND	BASEMENT		
CSD -10	DRYWALL & JOINT COMPOUND	REST ROOM @ BASEMENT		

Laboratory Name / Address : Microanalytical Laboratory 5900 Hollis Street Emeryville, CA 94608

Released By : Monte Deignan Transferred To: SAMPLE DROP Received By : SO
Page 1 Of 3
9:30 PM

Bulk Sample Log & Laboratory Request Form

Client # :

Log In # :

**Monte Deignan
& Associates**

P.O. Box 546
Larkspur, CA 94977

Tel (415) 927-9038

Client : City of Sausalito
400 Litho Street
City, State : Sausalito, CA
Project Site : 429 1/2 Johnson Street
Sausalito, CA

Collected By : MD

Date: 05-10-24

Analysis Requested :

PLM
TEM
Pb
Misc.

Rush
24 Hr.
3-5 Day
Other

Sample	Sample Description	Sample Location	Notes	Lab #
CSD -11	DRY WALL & JOINT COMPOUND	REST ROOM @ BASEMENT		
CSD -12	DUST TAPE, SILVER	HVAC DUCTS		
CSD -13	HARD CAST TAPE, GRAY	FLUE PIPES		
CSD -14	FLEXIBLE CONNECTOR	HVAC RETURN DUCT		
CSD -15	3X3 CERAMIC TILE	REST ROOM @ BASEMENT		
CSD -16	TILE GROUT, GRAY	REST ROOM @ BASEMENT		
CSD -17	TERRAZZO FLOOR, WHITE	BASEMENT		
CSD -18	TERRAZZO FLOOR, WHITE	REST ROOM @ BASEMENT		
CSD -19	TERRAZZO FLOOR, WHITE	REST ROOM @ BASEMENT		
CSD -20	CONCRETE, GRAY	BASEMENT		

Laboratory Name / Address : Microanalytical Laboratory 5900 Hollis Street Emeryville, CA 94608

Released By : Monte Deignan Transferred To : SAURUS DROP Received By : JD
Page 2 Of 3 9:30 PM

Bulk Sample Log & Laboratory Request Form

Client # :

Log In # :

**Monte Deignan
& Associates**

P.O. Box 546
Larkspur, CA 94977

Tel (415) 927-9038

Client : City of Sausalito
400 Litho Street
City, State : Sausalito, CA
Project Site : **429 1/2 Johnson Street**
Sausalito, CA

Collected By : MD

Date: 05-10-24

Analysis Requested :

PLM
TEM
Pb
Misc.

Rush
24 Hr.
3-5 Day
Other

Sample	Sample Description	Sample Location	Notes	Lab #
CSD -21	CONCRETE BLOCK, CMU	BASEMENT		
CSD -22	GLAZING PUTTY, GRAY	WINDOW @ 2ND FLR		
CSD -23	GLAZING PUTTY, GRAY	WINDOW @ 2ND FLR		

Laboratory Name / Address : Microanalytical Laboratory 5900 Hollis Street Emeryville, CA 94608

Released By : Monte Deignan Transferred To: SAURE DROG Received By : 30
 Page 3 Of 3
 @ 9:30 PM