HAZARDOUS BUILDING MATERIALS SURVEY AND PRELIMINARY MICROBIAL ASSESSMENT BOLINAS MARINE BIOLOGY LABORATORY 72 WHARF ROAD BOLINAS, CALIFORNIA

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October 27, 2005
Project No. 401127001

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Mr. Robert Thompson
Director of Maintenance & Operations
College of Marin
835 College Avenue
Kentfield, California 94904

Subject: Hazardous Building Materials Survey and Preliminary Microbial Assessment
Bolinas Marine Biology Laboratory
72 Wharf Road
Bolinas, California

Dear Mr. Thompson:

In accordance with your authorization to proceed, Ninyo & Moore has performed a Hazardous Building Materials Survey and Preliminary Microbial Assessment of the house, lab, and shop areas at the Bolinas Marine Biology Laboratory located at 72 Wharf Road in Bolinas, California. The attached report presents our methodology, findings, opinions, and recommendations regarding our survey.

We appreciate the opportunity to be of service to you on this important project. Should you have any questions regarding this report, please contact the undersigned at your convenience.

Sincerely,
NINYO & MOORE

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1. INTRODUCTION

In accordance with your authorization to proceed, Ninyo & Moore has performed a Hazardous Building Materials Survey (HBMS) and Preliminary Microbial Assessment (PMA) of the house, lab, and shop areas located within the Bolinas Marine Biology Laboratory (BMBL) located at 72 Wharf Road in Bolinas, California (Figure 1). This report has been prepared in accordance with generally accepted environmental science and engineering practices. The report is based upon conditions at the subject site at the time of the sampling activities and provides documentation of our findings, opinions, and recommendations.

2. PURPOSE AND SCOPE OF SERVICES

The objectives of the surveys were to identify and quantify asbestos-containing materials (ACMs) and/or lead-based paint (LBP), to quantify potential mercury-containing thermostats/switches, polychlorinated biphenyl (PCB)-containing items (e.g., light ballasts, switches, and transformers), fluorescent light tubes, and Freon™-containing refrigeration systems, and to assess any mold/biological problems that may be present within the house, lab, and shop areas at 72 Wharf Road. The Ninyo & Moore team performed the services listed below.

- Visual assessment of accessible areas within the site building to evaluate the possible presence of ACMs, LBPs, and any evidence of mold/biologicals.
- Collection of 41 building material samples and submittal of these samples to an independent, state-certified laboratory for analysis of asbestos content.
- Collection of 23 paint-chip samples and submittal of these samples to an independent, state-certified laboratory for analysis of lead content.
- Visual identification and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, air conditioning units, and Freon™-containing refrigeration systems.
- Collection of three tape samples and four air samples within the house and submittal of these microbial samples to an American Industrial Hygiene Association (AIHA)-certified Environmental Microbiology Accredited Laboratory.
- Preparation of this combined HBMS/PMA report, which presents our data and summarizes the assessed materials. This report includes a site description, laboratory testing information,

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findings, opinions, and recommendations, sample location maps, and tables summarizing the building materials assessed, miscellaneous hazardous materials identified, identified lead-paint, and the estimated quantities of identified materials.

3. SITE DESCRIPTION

The subject site consists of one approximately 3,333 square foot two-story structure (with crawl space), one approximately 1,400 square foot single-story marine laboratory (lab), one approximately 200 square foot single-story shop, and one water tank located at 72 Wharf Road in Bolinas, California. The structures are of wood frame construction with peripheral wall and post and pier foundations. The water tank appears to be constructed of concrete. The BMBL was first constructed in 1914, with a renovation to the two-story house related to seismic upgrades in approximately 1964. The finishes of the BMBL include plaster, wallboard/joint compound assemblies, wood siding, vinyl floor tiles/mastic, carpeted and/or bare floors, and Transite™ roofing/siding tiles. No elevator exists at the BMBL.

4. PHYSICAL LIMITATIONS

The only areas not accessed during the site reconnaissance were the roof and the crawl space underneath the house. No other physical limitations were encountered during the survey activities. However, since non-destructive sampling techniques were used, there is a possibility that, during building demolition/renovation activities, additional ACMs, LBPs, and/or mold may be encountered in areas that were inaccessible during our survey (e.g. interstitial wall spaces). Suspect materials encountered during demolition/renovation activities that have not been assessed previously may either be assumed to be hazardous and handled accordingly or may be sampled and analyzed to determine whether they are hazardous.

5. SURVEY ACTIVITIES AND SAMPLE COLLECTION

On June 13, and September 26, 2005, Ninyo & Moore personnel conducted limited asbestos and LBP surveys at the site building. The surveys followed U.S. Environmental Protection Agency (USEPA) guidelines, within the limitations of the scope of this assessment. The asbestos survey

was performed by a California Certified Asbestos Consultant and consisted of collecting building materials suspected to contain asbestos from the site structures. The LBP survey was conducted by a California Certified Lead Paint Inspector/Assessor and consisted of collecting paint-chip samples from the interiors and exteriors of the site structure. In addition, Ninyo & Moore performed a visual assessment and quantified miscellaneous items that may potentially present a hazard during building renovation activities. The locations from which the bulk asbestos, LBP, and microbial samples were collected are shown on Figures 2 and 3. Professional certifications are presented in Appendix C.

5.1. Asbestos Survey

A preliminary visual assessment and bulk-sampling survey of suspect ACMs was performed. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are uniform in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area of proposed renovation, except from areas that were inaccessible, or from materials that were assumed to be asbestos-containing. Samples were collected using USEPA-recommended sampling procedures. A total of 41 asbestos samples were analyzed. Additionally, the Client provided Ninyo & Moore with analytical results for two samples collected of the house exterior walls and roof, respectively. Materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

5.2. Miscellaneous Hazardous Building Material Survey

A visual assessment and quantification was performed of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, air conditioning units, and Freon™-containing refrigeration systems. Miscellaneous hazardous building materials visually identified at the site are presented in Table 2. In accordance with the scope of work, positive identification of these materials, via analytical testing, was not performed.

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No transformers or elevators were observed on site.

5.3. Paint Survey

Paint chip sampling was conducted to properly assess the painted surfaces for potential lead concentrations. The survey was conducted in general accordance with accepted environmental science and engineering practices and a total of 23 paint chip samples were analyzed. Painted surfaces that were sampled and analyzed for the presence of lead are presented in Table 3.

6. LABORATORY ANALYSES AND RESULTS

The following sections describe the laboratory analyses performed, laboratory results, and survey results regarding miscellaneous potentially-hazardous materials and equipment surveyed.

6.1. Asbestos

After collection, the ACM samples were transferred to R. J. Lee Group, Inc. (RJ Lee) for analysis. RJ Lee is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with USEPA Method 600/M4-82-020. The lower limit of reliable detection for asbestos using the PLM method is approximately one percent (1%) by volume. Materials in which no asbestos was detected are defined in the laboratory report as "ND" in the "Asbestos Detected" column. The analytical results are summarized in Table 1. Copies of the laboratory analytical report and chain-of-custody record are presented in Appendix A. The analytical results of the information provided by MCCD staff and the Ninyo & Moore survey showed that the exterior Transite™ shingles located on the exterior walls and roofs of the house and lab were composed of 15% to 60% chrysotile asbestos. Additionally, roof mastic associated with the rear lower roof of the house (5% chrysotile asbestos), beige linoleum located in the lab (30% chrysotile asbestos), mastic

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associated with cove base/baseboard in the lab (5% chrysotile asbestos), mastic associated with the water tank roof (5% chrysotile asbestos), and joint compound on wallboard in the exterior mechanical room (2% chrysotile asbestos) on the southeast side of the house were identified as ACM.

6.2. Miscellaneous Hazardous Building Materials

As indicated above, positive identification of miscellaneous hazardous building materials, via analytical testing, was not performed for this survey. Potentially hazardous miscellaneous building materials visually identified and quantified at the site are presented in Table 2.

6.3. Paint

After collection, the suspect LBP samples were transferred to RJ Lee for analysis of total lead content, in accordance with USEPA Test Method 7420. RJ Lee is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the USEPA stipulates what concentrations of lead in nonvolatile components of surface coatings or materials determine whether a material is considered to be a lead-based paint. The USEPA stipulates that materials containing an amount equal to or in excess of one milligram per square centimeter (1.0 mg/cm^2), or greater than 5,000 milligrams per kilogram (mg/kg), constitute a lead-based paint. The U.S. Department of Housing and Urban Development (HUD) guideline for designating a painted surface as lead-containing is consistent with the Department of Health Services (DHS). Paint that is chipping or peeling, or that may be removed from surfaces, and has a lead content equal to or greater than 1,000 milligrams per kilogram (mg/kg), would require handling as a California Title 22 hazardous waste. The analytical results associated with samples collected from the site are summarized in Table 3. The analytical results associated with the paint chip samples show that 18 of the 23 samples are LBP (greater than 5,000 mg/kg). Sample NMLBP-02 was reported with the highest lead concentration at 926,000 mg/kg, or 926,000 parts per million (ppm). The remaining five samples, although not LBP, still contain lead and are considered lead-containing paint (LCP). Occupational Health and Safety Administration (OSHA) regulations apply whenever

materials with any detectable amounts of lead are disturbed. Copies of the laboratory analytical report and chain-of-custody record are presented in Appendix B.

7. PRELIMINARY MICROBIAL ASSESSMENT

The following sections describe the methodology, laboratory analyses performed, laboratory results, and survey results of the preliminary microbial assessment performed at the subject site.

7.1. Moisture Measurement

A Protimeter Moisture Measurement Meter was used to measure the amount of moisture present in different areas of the structure. Moisture in materials tested is recorded as a percentage of wood moisture equivalence (WME) with less than 15% WME considered dry material, 16% to less than 20% WME potentially at risk for mold growth, and greater than 20% WME as wet material. All walls and ceilings within the house were tested and found to be dry (less than 15% WME). Dry conditions were also found in uncarpeted flooring covered with brown "battleship linoleum". However, all carpeted areas on the first floor (northeast, northwest, southeast, kitchen, and associated hallways) were found to have some wet (greater than 20% WME) and "at risk" areas (16% to 20% WME).

7.2. Tape Lift Mold Analysis

Three tape lift samples (NMM-05, NMM-06, and NMM-07) were collected from the kitchen floor (NMM-05), the shower curtain of the southwest bathroom (NMM-06), and wooden portion of the shower wall in the eastern bathroom (NMM-07). Sample NMM-05 showed very few miscellaneous spores. One colorless spore typical of *Penicillium/Aspergillus* was noted. Sample NMM-06 also showed very few miscellaneous spores present; two of the *Ochroconis* species and two of the *Cladosporium* species. Sample NMM-07 showed no miscellaneous spores present with two brown hyphae present of unknown species.

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7.3. Microbial Sampling Methodology

Air samples collected for total airborne particulates were collected using Zefon™ Air-O-Cell sampling cassettes and a high volume Gast™ sampling pump (calibrated to 15 liters of air per minute). The Air-O-Cell sampler is a particulate sampling cassette designed for the rapid collection and analysis of a wide range of airborne aerosols including mold spores (to the genus level), pollen, insect parts and skin fragments. This sampling device is useful in providing rapid analysis of airborne contaminants in indoor air quality and allergy testing. Samplers were calibrated on site immediately before use and samples drawn for a period of four minutes each for two ambient indoor air samples and two outdoor background air samples. These samples (NMM-01 through NMM-04) were collected on June 13, 2005. Sample NMM-01 was collected from the front hall of the house near the staircase; NMM-02 was collected from outside the window of the first floor northwest room; NMM-03 was collected outside the rear of the house; NMM-04 was collected from inside of the northeast room of the second floor of the house. Please see Figures 2 and 3 for the sample locations.

All collected air and tape samples were labeled with an identification number, documented on a chain of custody form, and submitted to the laboratory for analysis. Samples were submitted to Environmental Microbiological Laboratory, Inc. (EMLAB) of San Diego, California. EMLAB is an American Industrial Hygiene Association (AIHA) Environmental Microbiology Accredited Laboratory.

7.4. Exposure Guidelines and Interpretation of Results

Since there are no regulated exposure threshold levels for molds, the American Conference of Governmental Industrial Hygienists (ACGIH) and the Environmental Protection Agency (EPA) guidelines suggest that interpretation of air sampling results should be generally based on comparison of indoor and outdoor spore contents. In addition, it is common industry practice to compare outside bioaerosol concentrations and species to inside bioaerosol concentrations and species. If the indoor concentration is significantly higher than that outdoors, or if different species are present indoors and out, then indoor fungus sources (amplifiers)

are generally considered to be present. These observations are guidelines only. Variation is an inherent part of airborne spore sampling and the presence of a few different genera in small numbers should not be considered abnormal.

Analytical results associated with the indoor ambient air sampling, conducted on June 13, 2005, indicate that mold spore types and concentrations detected within the residence were higher than those in the background samples; particularly the second floor sample. Elevated spore counts of *Penicillium/Aspergillus* were found on both the first and second floors. In addition, the laboratory's statistical analysis indicates a high likelihood that the spores detected in each of the indoor samples originated from an indoor source (see the MoldSCORE result for each indoor sample in the laboratory report in Appendix C).

8. FINDINGS AND OPINIONS

The findings of these surveys are based on our visual observations, limited analysis of suspect building materials, and paint chip samples collected from the site building. The findings are presented below.

8.1. Asbestos

Based on the analytical results provided by MCCD staff and bulk samples collected during this limited survey, ACMs are located in exterior areas of the house (wallboard/joint compound in the boiler/heater room and Transite™ shingles on the exterior siding and roofs of the house and lab, roof mastic associated with the rear lower roof of the house and the roof of the water tank, beige linoleum located in the lab, and adhesive associated with cove base/baseboard in the lab). These ACMs were observed to be in good condition. The presence of ACMs in a building does not necessarily mean that the health of the occupants is endangered. If these materials are in good condition and have not been disturbed, exposures are expected to be negligible. However, when ACM deteriorates, is in damaged condition, or is disturbed, such as during renovation operations, asbestos fibers may be released, creating a potential health hazard for building occupants, maintenance personnel, and contractors.

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8.2. Miscellaneous Hazardous Building Materials

Hazardous or potentially hazardous building materials found at the site included potential PCB-containing light ballasts and fluorescent light tubes.

8.3. Paint

Based on the analytical results of paint chip samples collected during our survey, painted surfaces containing concentrations of lead greater than 1.0 mg/cm^2 or 5,000 mg/kg were identified within the house. The presence of LBPs in a building does not necessarily mean that the health of the occupants is endangered. If painted surfaces are in good condition, and are not peeling or otherwise deteriorated, exposures are expected to be negligible. However, when LBP deteriorates, is in damaged condition, or is disturbed, such as during renovation activities, lead-containing dust may be released, creating a potential health hazard for building occupants, maintenance personnel, and contractors.

When lead is present in any amount in a surface coating, Title 8 of the California Code of Regulations, Section 1532.1 requires basic protective measures for workers when they perform specific "trigger" tasks (e.g. scraping, sanding, heat gun application, manual demolition of structures, power tool cleaning, lead burning, rivet busting, abrasive blasting, welding, cutting, torch burning, etc.). These requirements are mandated regardless of the level of lead present in the material or surface coating unless a Negative Exposure Assessment reveals worker exposure to be below the established action levels.

8.4. Microbial

In comparing the analytical results of the indoor and outdoor (background) samples, elevated spore concentrations of *Penicillium/Aspergillus* were found to be present on the first and second floors of the house.

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9. RECOMMENDATIONS

Since ACMs, miscellaneous hazardous or potentially hazardous building materials, and LBPs have been identified at the subject site, the following recommendations and precautions are provided:

- The reported ACMs at the BMBL should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. These ACMs should not be disturbed. Any ACM in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb ACMs, a licensed asbestos abatement removal contractor should remove the ACMs. A California-Certified Asbestos Consultant should prepare an asbestos abatement specification document; perform abatement project planning, air monitoring; and perform oversight and reporting activities. Ninyo & Moore can provide these services for an additional fee. While Ninyo & Moore provided an estimate of the quantity of ACMs present at the BMBL (Table 1), it is the abatement contractor's responsibility to confirm ACM quantities present.

- The LBP/LCP reported at BMBL should be incorporated into a building-specific O&M Plan. This LBP/LCP should not be disturbed. Any LBP/LCP in a non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb LBP/LCP, a licensed lead abatement removal contractor should stabilize and/or remove the identified LBP. While Ninyo & Moore provided an estimate of the quantity of LBP/LCP present at BMBL (Table 2), it is the abatement contractor's responsibility to confirm LBP quantities present.

- Prior to demolition or renovation activities, potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, air conditioning units, and Freon™-containing refrigeration systems should be removed and properly recycled or disposed by a licensed contractor. While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present at BMBL, it is the abatement contractor's responsibility to confirm the quantities of items present.

- There is a possibility that additional suspect ACMs, LBP, LCP, or other miscellaneous hazardous building materials may be discovered during building renovations or demolition, because non-destructive sampling techniques were employed during this HBMS. Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during renovation: (a) samples of suspect materials should be collected for laboratory analysis, and activities that may impact the materials should cease until laboratory analytical results are reviewed; or (b) the materials should be assumed to be hazardous and handled as such.

- A comparison of indoor and outdoor (background) air samples revealed high spore counts of *Penicillium/Aspergillus* spore types on the first and second floors of the house. Further mi-

crobial testing (air, bulk/tape, and/or interstitial wall sampling) is warranted to find the source of the spores inside the house; particularly on the second floor.

10. LIMITATIONS

Ninyo & Moore's findings, opinions, and recommendations regarding environmental conditions, as presented in this report, are based on limited sampling and chemical analysis, with the exception of the inventory for miscellaneous hazardous building materials. Further assessment of potential adverse environmental impacts may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated. However, if additional suspect ACMs, miscellaneous hazardous building materials, or LBPs are encountered during renovation or demolition activities, these materials should be sampled by qualified personnel, and analyzed for content prior to further disturbance. In addition, please note that quantities of ACMs, miscellaneous hazardous building materials, and LBPs are approximate. It is the contractor's responsibility to confirm ACM, miscellaneous hazardous building materials and LBP quantities present.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of subsurface environmental, geotechnical conditions, or potential geologic hazards.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

The environmental findings, opinions, and recommendations contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration

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of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our findings, opinions, and recommendations are based on an analysis of the observed site conditions. It should be understood that the conditions of a site can change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

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Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Sample Location	Sample Description	Approximate Quantity (SF/LF/EA)	Friable Y/N	Condition	Asbestos Content
NMASB-01	**72**	**Outside Front Entrance**	**Gray Transite Tile**	**4,500**	**N/A**	**Good**	**30 % CH**
NMASB-02	72	Front Room/Library-1st Floor	Brown Flooring	N/A	N/A	N/A	ND
NMASB-03	72	Front Room/Library-1st Floor	Mastic/flooring associated with NMASB-02	N/A	N/A	N/A	ND
NMASB-04	72	2nd Floor-Southeast Room	Brown Flooring	N/A	N/A	N/A	ND
NMASB-05	72	2nd Floor-Southeast Room	Mastic/flooring associated with NMASB-04	N/A	N/A	N/A	ND
NMASB-06	72	2nd Floor-Southeast Room	Underlayment underneath NMASB-04 and NMASB-05	N/A	N/A	N/A	ND
NMASB-07	72	2nd Floor-Southeast Room	Brown Flooring/Threshold at Doorway of Room	N/A	N/A	N/A	ND
NMASB-08	72	2nd Floor-Southeast Room	Mastic Associated with NMASB-07	N/A	N/A	N/A	ND
NMASB-09	72	Ceiling of Stairway to 2nd Floor	White 12" x 12" ACT with Uniform Holes	N/A	N/A	N/A	ND
NMASB-10	72	Ceiling of Stairway to 2nd Floor	Brown Mastic Associated with NMASB-09	N/A	N/A	N/A	ND
NMASB-11	72	1st Floor	White 12" x 12" ACT with Uniform Holes	N/A	N/A	N/A	ND
NMASB-12	72	1st Floor	White 12" x 12" ACT with Uniform Holes	N/A	N/A	N/A	ND
NMASB-13	72	1st fgloor Hallway	Plaster	N/A	N/A	N/A	ND
NMASB-14	72	1st Floor Bathroom	Plaster	N/A	N/A	N/A	ND
NMASB-15	72	1st Floor-Northeast Room	Plaster	N/A	N/A	N/A	ND
NMASB-16	72	1st Floor-Southeast room	Plaster	N/A	N/A	N/A	ND
NMASB-17	72	2nd Floor-Southwest room	Plaster	N/A	N/A	N/A	ND
NMASB-18	72	2nd Floor-Southeast room	Plaster	N/A	N/A	N/A	ND
NMASB-19	72	2nd Floor-Northeast room	Plaster	N/A	N/A	N/A	ND
NMASB-20	**72**	**Boiler/Heater Room**	**Wallboard/Joint Compound**	**500**	**Y**	**Good**	**Wallboard - ND Joint Compound - 2% CH**
NMASB-21	**72**	**Boiler/Heater Room**	**Wallboard/Joint Compound**	**See NMASB-20**	**Y**	**Good**	**Wallboard - ND Joint Compound - 2% CH**

Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Sample Location	Sample Description	Approximate Quantity (SF/LF/EA)	Friable Y/N	Condition	Asbestos Content
NMASB-22	**72**	**Boiler/Heater Room**	**Wallboard/Joint Compound**	**See NMASB-20**	**Y**	**Good**	**Wallboard - ND Joint Compound - 2% CH**
NMASB-23	72	Stairs	Stair Tread	N/A	N/A	N/A	ND
NMASB-24	72	Stairs	Mastic Associated with NMASB-23	N/A	N/A	N/A	ND
NMASB-25	72	Rear Exterior Wall	Vapor Barrier/Underlayment	N/A	N/A	N/A	ND
NMASB-26	**72**	**Rear Roof (lowest)**	**Mastic**	**100 SF**			**5% CH**
NMASB-27	72	Rear Roof (lowest)	Roof Assembly	N/A	N/A	N/A	ND
NMASB-28	72	Rear Roof (canopy roof)	Roof Assembly	N/A	N/A	N/A	ND
NMASB-29	72	Marine Lab-Exterior Wall	**Transite Tile/Siding**	**see NMASB-01**	**N**	**Good**	**15% CH**
NMASB-30	72	Marine Lab-Exterior Wall	Vapor Barrier/Underlayment	N/A	N/A	N/A	ND
NMASB-31	72	Marine Lab-Rear Exterior	Window Putty	N/A	N/A	N/A	ND
NMASB-32	**72**	**Marine Lab-Interior**	**Beige Flooring/Lino**	**800 SF**	**N**	**Good**	**30% CH**
NMASB-33	72	Marine Lab-Interior	**Cove Base**	N/A	N/A	N/A	ND
NMASB-34	**72**	**Marine Lab-Interior**	**Mastic Associated with NMASB-33**	**150 LF**	**Y**	**Good**	**5% CH**
NMASB-35	72	Marine Lab	Ceiling Assembly	N/A	N/A	N/A	ND
NMASB-36	72	Marine Lab	Wall Material Assembly	N/A	N/A	N/A	ND
NMASB-37	72	Shop Roof	Roof Assembly	N/A	N/A	N/A	ND
NMASB-38	72	Water Tank Roof	Roof Assembly	N/A	N/A	N/A	ND
NMASB-39	**72**	**Water Tank Roof**	**Mastic**	**100 SF**	**N**	**Good**	**5% CH**
NMASB-40	72	Marine Lab Interior	Black Tabletop	N/A	N/A	N/A	ND
NMASB-41	72	Shop Exterior	Window Putty	N/A	N/A	N/A	ND

NOTES:

SF = Square feet

LF = Linear feet

ND = None detected

N/A = Not applicable

Non-destructive sampling techniques were utilized during this survey.

Table 2 - Hazardous Materials Survey Results Form

Location	Number of Transformers	Number of Switches	Number of Light Ballast	Number of Thermostats	Number of A/C Units	Number of Fluorescent light bulbs	Number of Exit Signs
House	0	8	24	0	0	30	0
Lab	0	2	0	0	0	0	0
Shop	0	0	0	0	0	0	0

NOTES:

A/C = Air Conditioning

A/C = Air Conditioning

Table 3 - Lead-Based Paint Survey Results

Sample I.D.	Bldg. No.	Sample Location	Building Component (e.g., door, wall, frame)	Sample Description (Color / # of Layers / Substrate)	Condition	Estimate of Surface Area	Total Lead (mg/kg)
NMLBP-01	**72**	**2nd floor-Southwest room**	**Ceiling**	**Beige-white/2/plaster**	**Intact**	**3,000**	**379,000.0**
NMLBP-02	**72**	**2nd floor-Southeast room**	**Wall**	**Beige-white/2/plaster**	**Intact**	**see NMLBP-01**	**926,000.0**
NMLBP-03	**72**	**Exterior-Front Foundation**	**Wall**	**Gray/2/concrete**	**Poor/Non-intact**	**500**	**20,600.0**
NMLBP-04	**72**	**1st Floor-Northwest Room**	**Wall**	**Beige-white/2/plaster**	**Intact**	**see NMLBP-01**	**296,000.0**
NMLBP-05	**72**	**1st floor Staircase**	**Wall**	**Gold/2/plaster**	**Intact**	**500**	**5,630.0**
NMLBP-06	**72**	**1st Floor-Northwest room**	**Window Casing**	**Gold/2/wood**	**Intact**	**100**	**50,900.0**
NMLBP-07	**72**	**1st Floor-Kitchen**	**Wall**	**White/2/plaster**	**Intact**	**500**	**33,000.0**
NMLBP-08	72	1st Floor-Kitchen	Door Casing	White/2/wood	Intact	50	3,020.0
NMLBP-09	**72**	**1st Floor-Northeast Room**	**Wall**	**Beige-white/2/plaster**	**Intact**	**see NMLBP-01**	**226,000.0**
NMLBP-10	**72**	**2nd Floor-Northeast Room**	**Wall**	**Beige-white/2/plaster**	**Intact**	**see NMLBP-01**	**29,800.0**
NMLBP-11	**72**	**1st Floor-Front Doorway**	**Door Casing**	**Green/2/wood**	**Intact**	**25**	**69,700.0**
NMLBP-12	**72**	**Rear Porch**	**Handrail**	**Beige/2/wood**	**Poor/Non-intact**	**25**	**5,520.0**
NMLBP-13	**72**	**Rear Porch**	**Flooring**	**Gray/2/wood**	**Poor/Non-intact**	**50**	**6,810.0**
NMLBP-14	72	1st Floor Hallway	Wall	Blue/2/plaster	Intact	200	2,740.0
NMLBP-15	72	1st Floor Bathroom	Flooring	Red/2/wood	Poor/Non-intact	200	1,790.0
NMLBP-16	**72**	**Rear Exterior**	**Sill**	**Beige/2/wood**	**Poor/Non-intact**	**10**	**152,000.0**
NMLBP-20	**72**	**Rear Exterior/House**	**Sill**	**Gray/2/wood**	**Intact**	**200 SF**	**6,390.0**
NMLBP-21	**72**	**Rear Exterior/Lab**	**Sill**	**White/2/wood**	**Poor/Non-intact**	**50 SF**	**214,000.0**
NMLBP-22	**72**	**Exterior/Shop**	**Door Casing**	**Green/2/wood**	**Poor/Non-intact**	**50 SF**	**118,000.0**
NMLBP-23	**72**	**Exterior/Shop**	**Door Jam**	**White/2/wood**	**Poor/Non-intact**	**25 SF**	**259,000.0**
NMLBP-24	72	Lab/Interior	Window Case	White/2/wood	**Intact**	25 SF	2,830.0
NMLBP-25	**72**	**Shop/Interior**	**Wall**	**Brown-beige/2/woo**	**Intact**	**2,000 SF**	**410,000.0**
NMLBP-26	72	Water Tank Exterior	Wall	White/2/concrete	Intact	500 SF	<263

NOTES:

Bold values indicate concentrations of lead greater than action level of 5,000 mg/kg (0.5% by weight).

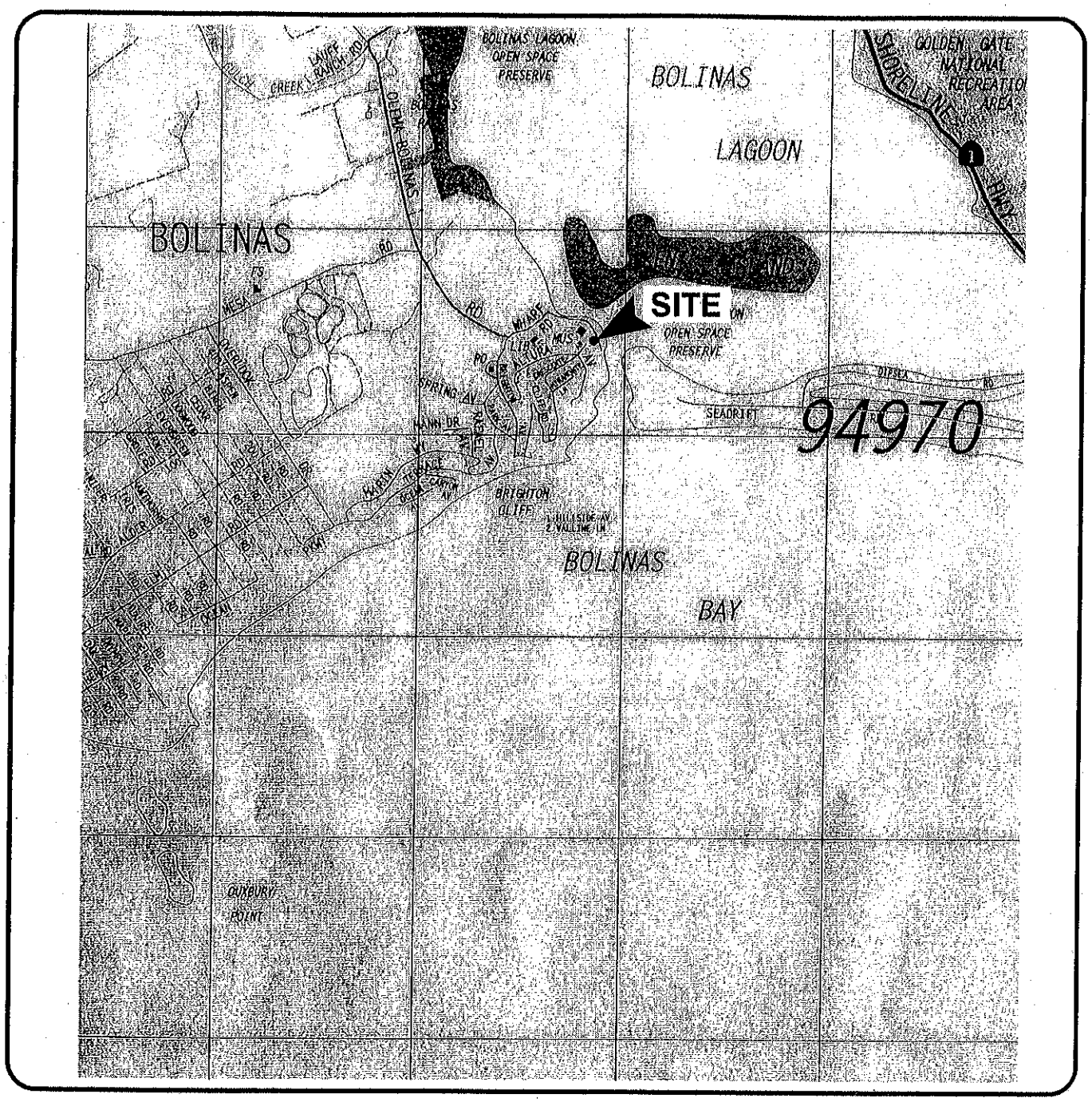
Total lead analyzed in accordance with EPA test method 6010

mg/kg = Milligrams per kilogram

SF = Square feet

LF = Linear feet

BDL = Below detection limit



REFERENCE: 2004 THOMAS GUIDE FOR MARIN COUNTY, STREET GUIDE AND DIRECTORY

NORTH

0 1900 3800

APPROXIMATE SCALE IN FEET

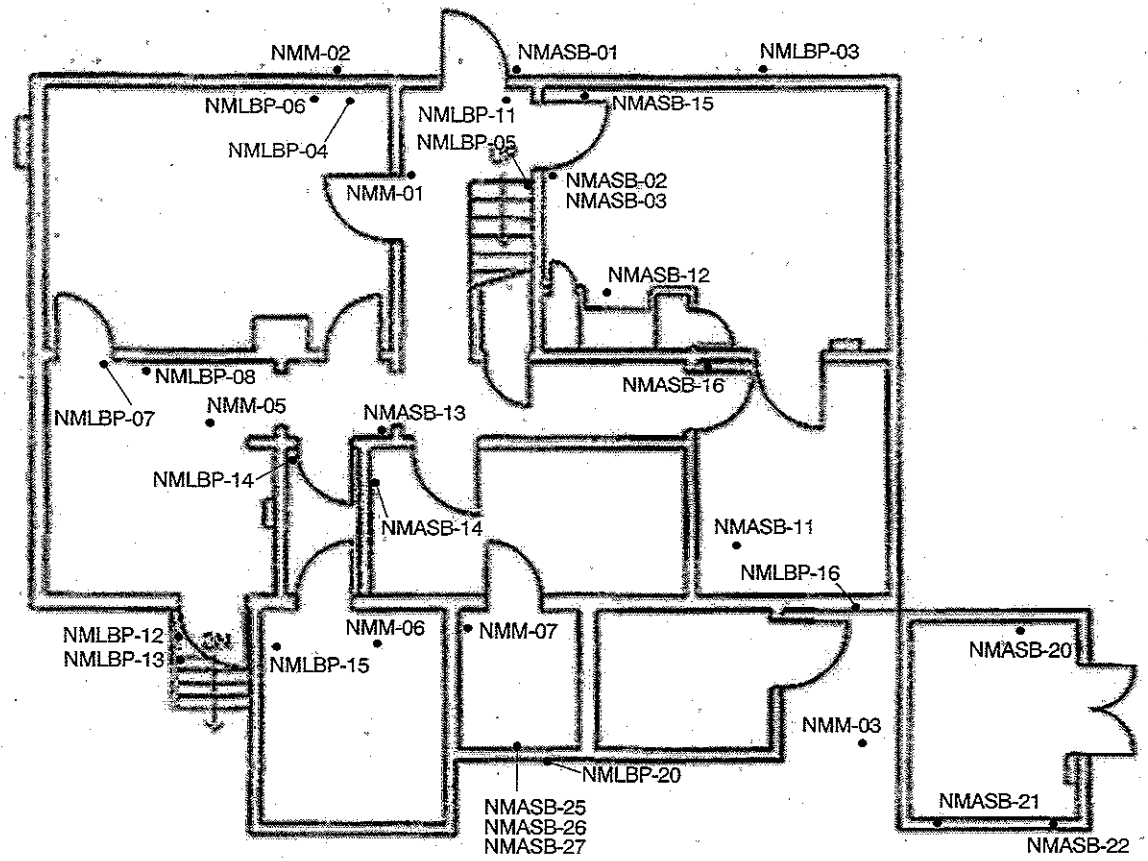
401127-A1.DWG

Ninyo & Moore

SITE LOCATION MAP

BOLINAS MARINE BIOLOGY LABORATORY
72 WHARF ROAD
BOLINAS, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401127001	10/2005	1



LEGEND

NMM-07 • APPROXIMATE LOCATION OF MOLD/MICROBIAL SAMPLE

NMASB-27 • APPROXIMATE LOCATION OF BULK MATERIAL SAMPLE

NMLBP-20 • APPROXIMATE LOCATION OF PAINT CHIP SAMPLE

N

0 8 16

APPROXIMATE SCALE IN FEET

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

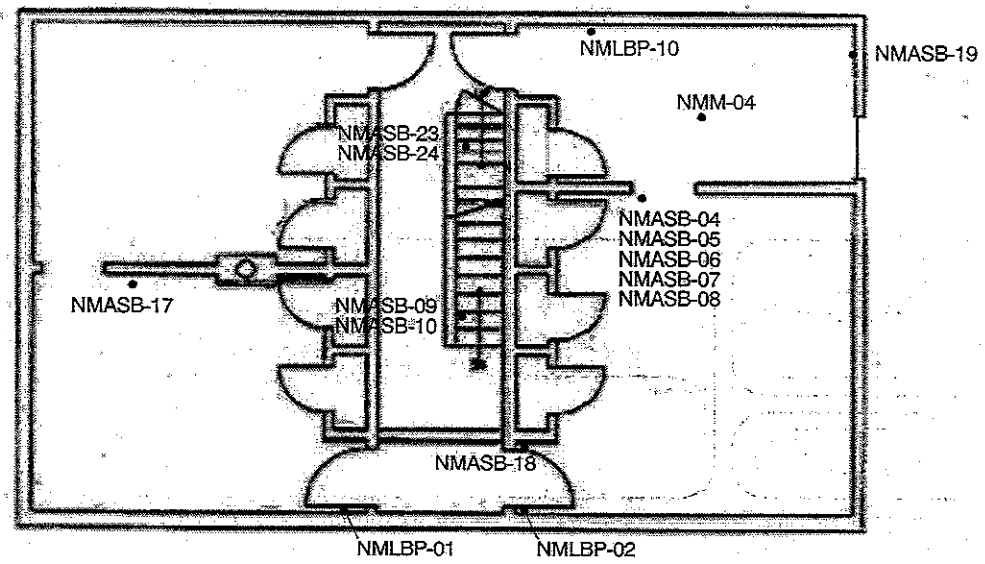
Ninyo & Moore

ASBESTOS, PAINT CHIP AND MICROBIAL SAMPLE LOCATION MAP-1ST FLOOR

BOLINAS MARINE BIOLOGY LABORATORY-HOUSE
72 WHARF ROAD
BOLINAS, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401127001	10/2005	2

401127-A6.DWG



LEGEND

NMM-04 • APPROXIMATE LOCATION OF MOLD/MICROBIAL SAMPLE

NMASB-24 • APPROXIMATE LOCATION OF BULK MATERIAL SAMPLE

NMLBP-10 • APPROXIMATE LOCATION OF PAINT CHIP SAMPLE

N

0 8 16

APPROXIMATE SCALE IN FEET

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

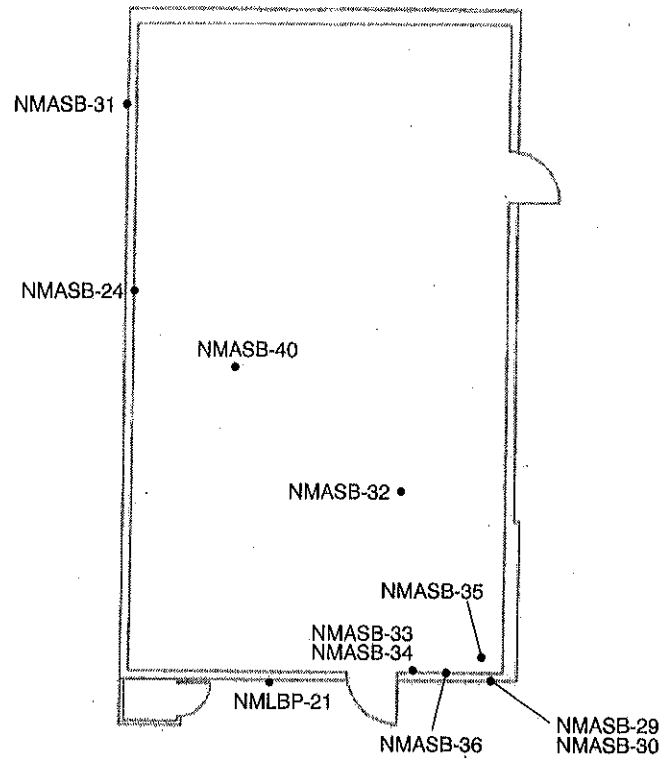
Ninyo & Moore

ASBESTOS, PAINT CHIP AND MICROBIAL SAMPLE LOCATION MAP-2ND FLOOR

BOLINAS MARINE BIOLOGY LABORATORY- HOUSE
72 WHARF ROAD
BOLINAS, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401127001	10/2005	3

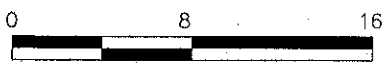
401127-A7.DWG



LEGEND

NMASB-30• APPROXIMATE LOCATION OF BULK MATERIAL SAMPLE

NMLBP-21 • APPROXIMATE LOCATION OF PAINT CHIP SAMPLE



APPROXIMATE SCALE IN FEET

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

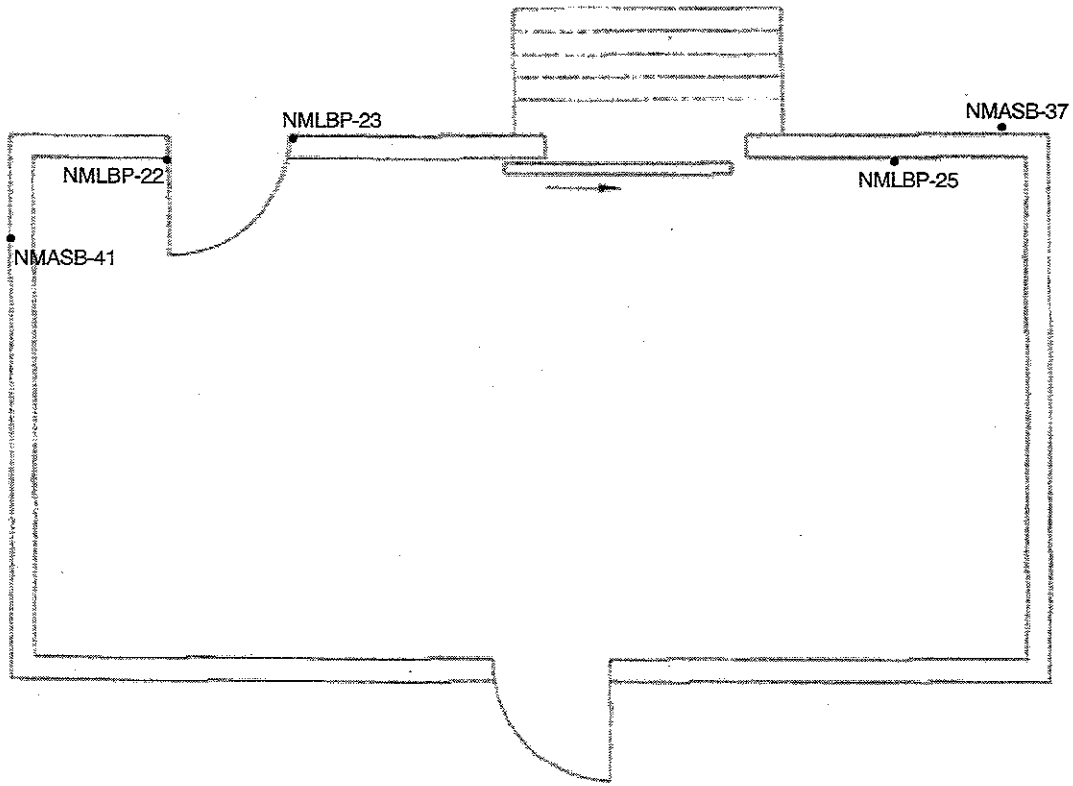
401127-A8.DWG

Ninyo & Moore

ASBESTOS, PAINT CHIP AND MICROBIAL SAMPLE LOCATION MAP

BOLINAS MARINE BIOLOGY LABORATORY-LAB
72 WHARF ROAD
BOLINAS, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401127001	10/2005	4



LEGEND

NMASB-41 • APPROXIMATE LOCATION OF BULK MATERIAL SAMPLE

NMLBP-23 • APPROXIMATE LOCATION OF PAINT CHIP SAMPLE

N

0 4 8

APPROXIMATE SCALE IN FEET

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore

ASBESTOS AND PAINT CHIP SAMPLE LOCATION MAP

BOLINAS MARINE BIOLOGY LABORATORY-SHOP
72 WHARF ROAD
BOLINAS, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401127001	10/2005	5

401127 – A9.DWG

DRAFT

APPENDIX A

ASBESTOS ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY RECORDS

RJ Lee*Group*, Inc.

530 McCormick Street, San Leandro, CA 94577
Phone: (510) 567-0480 Fax: (510) 567-0488

Laboratory Report

Ninyo & Moore
1956 Webster Street
#400
Oakland, CA 94612
Attention: Bill Larkin
Telephone: 510-633-5640

Report Date	6/16/2005
Sample Receipt Date.	6/15/2005
RJ Lee Group Job No	AOC506224
Project location	College Of Marin
Authorization/P.O. No.	401127001
Client Job No./Name	401127001

Analysis: Asbestos in Bulk Samples
Method: EPA/600/R-93/116

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2695874.HPL	NMASB-01	Yes	1	30 CH	-	70	Q, CA, B, OP, M	SY-6/16/2005
Description:	Grey transite							
2695875.HPL	NMASB-02	Yes	1	ND	40 CE	60	Q, B, OP, M	SY-6/16/2005
Description:	Brown flooring							
2695876.HPL	NMASB-03	Yes	1	ND	<1 CE	100	Q, B, OP, M	SY-6/16/2005
Description:	Brown mastic							
2695877.HPL	NMASB-04	Yes	1	ND	40 CE	60	Q, B, OP, M	SY-6/16/2005
Description:	Brown flooring							
2695878.HPL	NMASB-05	Yes	1	ND	<1 CE	100	Q, B, OP, M	SY-6/16/2005
Description:	Brown mastic							

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2695879.HPL	NMASB-06	Yes	1	ND	35 CE	65	Q, B, OP, M	SY-6/16/2005
Description:	Grey underlayment							
2695880.HPL	NMASB-07	Yes	1	ND	40 CE	60	Q, B, OP, M	SY-6/16/2005
Description:	Brown flooring							
2695881.HPL	NMASB-08	Yes	1	ND	<1 CE	100	Q, B, OP, M	SY-6/16/2005
Description:	Brown mastic							
2695882.HPL	NMASB-09	Yes	1	ND	80 CE	20	Q, B, OP, M	SY-6/16/2005
Description:	White ACT							
2695883.HPL	NMASB-10	Yes	1	ND	<1 CE	100	Q, B, OP, M	SY-6/16/2005
Description:	Brown mastic							
2695884.HPL	NMASB-11	Yes	1	ND	80 CE	20	Q, B, OP, M	SY-6/16/2005
Description:	White ACT							
2695885.HPL	NMASB-12	Yes	1	ND	80 CE	20	Q, B, OP, M	SY-6/16/2005
Description:	White ACT							
2695886.HPL	NMASB-13	No	2	ND	-	100	Q, B, OP, M	SY-6/16/2005
Description:	Calculated Composite - Whiite plaster, brown surfacing material							
Layer Information:								
	97%-White plaster	Yes		ND		100	Q, B, OP, M	
	3%-Brown surfacing material	Yes		ND		100	Q, B, OP, M	

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2695887.HPL	NMASB-14	No	2	ND	-	100	Q, B, OP, M	SY-6/16/2005
Description:	Calculated Composite - White plaster; brown surfacing material							
Layer Information:								
	99%-White plaster	Yes		ND		100	Q, B, OP, M	
	1%-Brow surfacing material	Yes		ND		100	Q, B, OP, M	
2695888.HPL	NMASB-15	No	2	ND	-	100	Q, B, OP, M	SY-6/16/2005
Description:	Calculated Composite - White plaster; brown surfacing material							
Layer Information:								
	99%-White plaster	Yes		ND		100	Q, B, OP, M	
	1%-Brown surfacing material	Yes		ND		100	Q, B, OP, M	
2695889.HPL	NMASB-16	No	3	ND	-	100	Q, B, OP, MI, M	SY-6/16/2005
Description:	Calculated Composite - White plaster; tan plaster; brown surfacing material							
Layer Information:								
	50%-Tan plaster	Yes		ND		100	Q, B, OP, MI, M	
	49%-White plaster	Yes		ND		100	Q, B, OP, M	
	1%-Brown surfacing material	Yes		ND		100	Q, B, OP, M	
2695890.HPL	NMASB-17	No	3	ND	-	100	Q, CA, B, OP, MI, M	SY-6/16/2005
Description:	Calculated Composite - White plaster; tan plaster; brown surfacing material							
Layer Information:								
	50%-Tan plaster	Yes		ND		100	Q, B, OP, MI, M	
	49%-White plaster	Yes		ND		100	Q, CA, B, OP, M	
	1%-Brown surfacing material	Yes		ND		100	Q, B, OP, M	

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2695891.HPL	NMASB-18	No	3	ND	-	100	Q, CA, B, OP, MI, M	SY-6/16/2005
Description:	Calculated Composite - White plaster; tan plaster; brown surfacing material							
Layer Information:								
	70%-White plaster	Yes		ND		100	Q, CA, B, OP, M	
	29%-Tan plaster	Yes		ND		100	Q, CA, B, OP, MI, M	
	1%-Brown surfacing material	Yes		ND		100	Q, B, OP, M	
2695892.HPL	NMASB-19	No	3	ND	-	100	Q, B, OP, MI, M	SY-6/16/2005
Description:	Calculated Composite - White plaster; tan plaster; brown surfacing material							
Layer Information:								
	20%-Tan plaster	Yes		ND		100	Q, B, OP, MI, M	
	79%-White plaster	Yes		ND		100	Q, B, OP, M	
	1%-Brown surfacing material	Yes		ND		100	Q, B, OP, M	
2695893.HPL	NMASB-20	Yes	1	2 CH	3 CE	95	Q, CA, B, OP, M	SY-6/16/2005
Description:	Grey compound; Wallboard not found							
2695894.HPL	NMASB-21							SY-6/16/2005
Description:	White wallboard; grey compound							
Layer Information:								
	98%-White wallboard	Yes		ND		100	Q, B, OP, M	
	2%-Grey compound	Yes		2 CH		98	Q, CA, B, OP, M	
2695895.HPL	NMASB-22							SY-6/16/2005
Description:	White wallboard; grey compound							
Layer Information:								
	98%-White wallboard	Yes		ND	3 CE, 2 FG	95	Q, B, OP, G, M	
	2%-Grey compound	Yes		2 CH		98	Q, CA, B, OP, M	

Authorized Signature

Stephen S. Yata, Microscopist

ASBESTOS

AM = Amosite
AC = Actinolite
AN = Anthophyllite
CH = Chrysotile
CR = Crocidolite
TR = Tremolite

NON-ASBESTOS

CE = Cellulose
MW = Mineral Wool
FG = Fibrous Glass
SF = Synthetic Fibers
H = Hair
W = Wollastonite
OF = Other Fibers

NON-FIBROUS MATERIALS

AM = Amphibole
B = Binder
CA = Carbonates
CL = Clay
F = Feldspar
G = Gypsum
HY = Hydromagnesite
M = Miscellaneous
MI = Mica
OP = Opaque
OR = Organic
P = Perlite
Q = Quartz
T = Tar
V = Vermiculite

DISCLAIMER NOTES

- "ND" indicates no asbestos was detected; the method detection limit is 1%.
- "Trace" or "<1" indicates asbestos was identified in the sample, but the concentration is less than the method quantitation limit of 1%. PLM coefficients of variance range from approximately 1.8 at the quantitation limit of 1% to 0.1 at high fiber concentrations.
- Samples are archived for three months following analysis and are then properly discarded.
- These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which these results are used or interpreted.
- This test report relates to the items tested.
- This report is not valid unless it bears the name of a NVLAP-approved signatory.
- Any reproduction of this document must be in full in order for the report to be valid.
- This report may not be used to claim product endorsement by NVLAP, any agency of the U.S. Government or any other laboratory accrediting agency.
- Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar nonfriable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as "non-asbestos-containing."
- Sample(s) for this project were analyzed at our: San Leandro, CA (NVLAP #101208-2) facility.
- If RJ Lee Group, Inc. did not collect the samples analyzed, the verifiability of the laboratory's results are limited to the reported values.

RJ Lee*Group*, Inc.

530 McCormick Street, San Leandro, CA 94577
Phone: (510) 567-0480 Fax: (510) 567-0488

Laboratory Report

Ninyo & Moore
1956 Webster Street
#400
Oakland, CA 94612
Attention: William Larkin
Telephone: 510-633-5640

RECEIVED
JUN 23 2005
NINYO AND MOORE
OAKLAND OFFICE

Report Date	6/20/2005
Sample Receipt Date.	6/20/2005
RJ Lee Group Job No	AOC506296
Project location	72 Wharf Rd.
Authorization/P.O. No.	401127001
Client Job No./Name	401127001

Analysis: Asbestos in Bulk Samples
Method: EPA/600/R-93/116

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2696469.HPL	NMASB-23	Yes	1	ND	3 CE	97	Q, T, B, OP, M	SY-6/20/2005
Description:	Black stair tread							
2696470.HPL	NMASB-24	Yes	1	ND	<1 CE	100	Q, B, OP, M	SY-6/20/2005
Description:	Brown mastic							

Authorized Signature

Stephen S. Yata, Microscopist

ASBESTOS

AM = Amosite
AC = Actinolite
AN = Anthophyllite
CH = Chrysotile
CR = Crocidolite
TR = Tremolite

NON-ASBESTOS

CE = Cellulose
MW = Mineral Wool
FG = Fibrous Glass
SF = Synthetic Fibers
H = Hair
W = Wollastonite
OF = Other Fibers

NON-FIBROUS MATERIALS

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B = Binder
CA = Carbonates
CL = Clay
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G = Gypsum
HY = Hydromagnesite
M = Miscellaneous
MI = Mica
OP = Opaque
OR = Organic
P = Perlite
Q = Quartz
T = Tar
V = Vermiculite

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- "Trace" or "<1" indicates asbestos was identified in the sample, but the concentration is less than the method quantitation limit of 1%. PLM coefficients of variance range from approximately 1.8 at the quantitation limit of 1% to 0.1 at high fiber concentrations.
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- This test report relates to the items tested.
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- Any reproduction of this document must be in full in order for the report to be valid.
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- If RJ Lee Group, Inc. did not collect the samples analyzed, the verifiability of the laboratory's results are limited to the reported values.

ASBESTOS BULK SAMPLE DATA SHEET

24-hr TAT AOC5062'24 ..... 1 of 2

Ninyo & Moore
1956 Webster Street, #400
Oakland, CA 94612
Tel: (510) 633-5640
Fax: (510) 633-5646

Project Name: College of MARIN - Bolinas
Project No.: 401127001
Project Manager: WPL
APN:
Site Address: 72 Wharf Rd, Bolinas, CA

Sampled By: WPL
Sampled By:
Sampled By:
Date Sampled: 6/13/05

Laboratory: RJLee
Tel: 567-0480
Fax:

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr)	Received By: (sign/print)	Laboratory
William P. Larkin / William P. Larkin	Ninyo&Moore	6/13/05	1700	D. Mua / SBrewer	RJLee 6/15 @ 10

LabID	Sample ID	Building Number	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	NMASB-01	72	Outside Front Entrance	Gray Transite Tile/Exterior		N	Good
	NMASB-02		Front Room/Library/1st Floor	Brown Flooring			
	NMASB-03		Front Room/Library/1st Floor	mastic/Flooring Associated with NMASB-02			
	NMASB-04		2nd Floor/Southeast Room	Brown Flooring			
	NMASB-05		2nd Floor/Southeast Room	mastic/Flooring Associated with NMASB-04			
	NMASB-06		2nd Floor/Southeast Room	underlayment underneath NMASB-04 and -05			
	NMASB-07		2nd Floor/Southeast Room	Brown Flooring/Threshold at doorway of Room			
	NMASB-08		2nd Floor/Southeast Room	mastic assoc. w/ NMASB-07			
	NMASB-09		Stairway to 2nd Floor Ceiling	White 12"x12" ACT w/ uniform holes			
	NMASB-10		" " " "	brown mastic assoc. w/ NMASB-09			
	NMASB-11		1st Floor	White 12x12 ACT w/ uniform holes			
	NMASB-12		1st Floor	" " " "			

Asbestos Sample

Received by: M. Edwards [illegible]

ASBESTOS BULK SAMPLE DATA SHEET

24-hr TAT AOC506224 2 of 2

Ninyo & Moore
1956 Webster Street, #400
Oakland, CA 94612
Tel: (510) 633-5640
Fax: (510) 633-5646

Project Name: College of Marin/BOLINAS
Project No.: 401127001
Project Manager: WPL
APN:
Site Address: 72 Wharf Rd.

Sampled By: WPL
Sampled By:
Sampled By:
Date Sampled: 6/13/05

Laboratory: RJ Lee
Tel:
Fax: 567-0480

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr)	Received By: (sign/print)	Laboratory
William P. Larkin / William P. Larkin	Ninyo&Moore	6/13/05	1700	D. Moore / Sprewer	RJ Lee 6/15@10:2

LabID	Sample ID	Building Number	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	NMASB-13	72	1st Floor Hallway	Plaster		N	GOOD
	NMASB-14		1st Floor Bathroom	Plaster			
	NMASB-15		1st Floor - Northeast Room	Plaster			
	NMASB-16		1st Floor - Southeast Room	Plaster			
	NMASB-17		2nd Floor - Southwest Room	Plaster			
	NMASB-18		2nd Floor - Southeast Room	Plaster			
	NMASB-19		2nd Floor - Northeast Room	Plaster			
	NMASB 20		Boiler/Heater Room	Wallboard/joint compound			
	NMASB-21						
	NMASB-22						

Asbestos Sampler: Recvd. Log M. Edwards [illegible]

ASBESTOS BULK SAMPLE DATA SHEET

24-hr TAT

Ninyo & Moore 1956 Webster Street, #400 Oakland, CA 94612 Tel: (510) 633-5640 Fax: (510) 633-5646	Project Name: College of Marin/Bolinas Project No.: 401127001 Project Manager: WPL APN: Site Address: 72 Wharf Road	Sampled By: WPL Sampled By: Sampled By: Date Sampled: 6/18/05	Laboratory: RJ Lee Tel: 567-0480 Fax:

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr)	Received By: (sign/print)	Laboratory
William P. Larkin / William P. Larkin	Ninyo&Moore	6/19/05	12:00 Noon	/	
/				/	

LabID	Sample ID	Building Number	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	NMASB-23	72	Stair [redacted]	Stair Tread		N	GOOD
	NMASB-24	72	Stair	mastic assoc. w/NMASB-23		N	GOOD

RJ Lee*Group*, Inc.

Laboratory Report

530 McCormick Street, San Leandro, CA 94577
Phone: (510) 567-0480 Fax: (510) 567-0481

Ninyo & Moore/Oakland
1956 Webster Street
Suite 400
Oakland, CA 94612
Attention: Mr. William Larkin
Telephone: 510-633-5640

Report Date	10/4/2005
Sample Receipt Date.	10/3/2005
RJ Lee Group Job No	AOC510001
Project location	Com/Bolinas
Authorization/P.O. No.	401135008
Client Job No./Name	401135008

Analysis: Asbestos in Bulk Samples
Method: EPA/600/R-93/116

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2712314.HPL	NMASB-25	Yes	1	ND	50 CE	50	T, CA, B, OP, M	GR-10/4/2005
Description:	Black vapor barrier							
2712315.HPL	NMASB-26	Yes	1	5 CH	-	95	T, CA, B, OP, M	GR-10/4/2005
Description:	Black mastic							
2712316.HPL	NMASB-27	Yes	1	ND	5 FG	95	Q, T, CA, B, OP, M	GR-10/4/2005
Description:	Black roofing							
2712317.HPL	NMASB-28	Yes	1	ND	5 FG	95	Q, T, CA, B, OP, G, M	GR-10/4/2005
Description:	Black roofing							
2712318.HPL	NMASB-29	Yes	1	15 CH	-	85	Q, CA, B, OP, G, MI, M	GR-10/4/2005
Description:	Grey transite							

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2712319.HPL	NMASB-30	Yes	1	ND	20 CE	80	T, CA, B, OP, M	GR-10/4/200
Description:	Black vapor barrier							
2712320.HPL	NMASB-31	Yes	1	ND	-	100	CA, B, OP, G, M	GR-10/4/2005
Description:	Grey putty							
2712321.HPL	NMASB-32	Yes	1	30 CH	20 CE	50	CA, B, OP, G, Mi, M	GR-10/4/200
Description:	Beige linoleum							
2712322.HPL	NMASB-33	Yes	1	ND	-	100	CA, B, M	GR-10/4/200
Description:	Black baseboard							
2712323.HPL	NMASB-34	Yes	1	5 CH	-	95	CA, B, OP, G, M	GR-10/4/2005
Description:	Yellow glue							
2712324.HPL	NMASB-35	Yes	1	ND	99 CE	1	M	GR-10/4/2005
Description:	Tan ceiling tile							
2712325.HPL	NMASB-36	Yes	1	ND	99 CE	1	M	GR-10/4/2005
Description:	Tan wallboard							
2712326.HPL	NMASB-37	Yes	1	ND	25 CE	75	Q, T, CA, OP, G, M	GR-10/4/2005
Description:	Black roofing							
2712327.HPL	NMASB-38	Yes	1	ND	25 CE	75	Q, T, CA, B, OP, G, M	GR-10/4/200
Description:	Black roofing							
2712328.HPL	NMASB-39	Yes	1	5 CH	-	95	T, CA, B, OP, M	GR-10/4/2005
Description:	Black mastic							

RJ Lee Group, Inc.

Client Job No./Name: 401135008

Laboratory Report (cont.

RJ Lee Group Job No: AOC51000

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
2712329.HPL	NMASB-40	Yes	1	ND	-	100	CA, OP, M	GR-10/4/200
Description:	Black table top							
2712330.HPL	NMASB-41	Yes	1	ND	-	100	CA, B, OP, M	GR-10/4/200
Description:	White putty							

ASBESTOS BULK SAMPLE DATA SHEET

Ninyo & Moore
1956 Webster Street, #400
Oakland, CA 94612
Tel: (510) 633-5640
Fax: (510) 633-5646

Project Name: Camp Pendleton
Project No.: 401135008
Project Manager: WPL
APN:
Site Address: Fr Wheat Road

Sampled By: WPL
Sampled By:
Sampled By:
Date Sampled: 9/26/05

Laboratory: R.J. Lee, Inc.
Tel:
Fax: 567-0480

CHAIN OF CUSTODY INFORMATION:

Relinquished By (signature)	Company	Date	Time	Received By (signature)	Laboratory
William P. Larkin / William P. Larkin	Ninyo&Moore	9/26/05	17:00	M Edwards / 10/3/05	9:30
					RJLG

LabID	Sample ID	Building Number	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	NMASB-25	72	Rear Exterior Wall	Vapor Barrier/Underlayment		N	Good
	-26		Rear Roof (Lowest)	Mastic		N	Good
	-27		Rear Roof (Lowest)	Roof Assembly		N	Good
	-28		Rear Roof (canopy roof)	Roof Assembly		N	Good
	-29		Marine Lab Ext. Wall	Transite Tile/Siding		N	Good
	-30		" " " "	Vapor Barrier/Underlayment		N	Good
	-31		Marine Lab/Rear Ext.	Window Putty		N	Poor
	-32		Marine Lab/Interior	Beige Flooring/Lino		N	Good
	-33		" " "	Cove Base			
	-34		" " "	mastic assoc. w/ NMASB-33			
	-35		Marine Lab	Ceiling ~~Mastic~~ Assembly		Y	Good
	-36		Marine Lab	Wall Material Assembly		Y	Good

AQC510001

ASBESTOS BULK SAMPLE DATA SHEET

24-hr TAT

Ninyo & Moore
1956 Webster Street, #400
Oakland, CA 94612
Tel: (510) 633-5640
Fax: (510) 633-5646

Project Name: Corp/SOLINAS
Project No.: 401135008
Project Manager: WPL
APN:
Site Address: 72 Wheat Road

Sampled By: WPL
Sampled By:
Sampled By:
Date Sampled: 9/26/05

Laboratory: RJ Lee
Tel:
Fax: 567-0484

CHAIN OF CUSTODY INFORMATION:

Relinquished By (signature)	Company	Date	Time	Received By (signature)	Laboratory
William P. Larkin	Ninyo&Moore	9/26/05	17:00	M. Edwards	10/3/05 RJLG

LabID	Sample ID	Building Number	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)	Condition
	NMASB-37	72	Shop Roof	Roof Assembly		N	Good
	-38		Water Tank Roof	Roof Assembly		N	Good
	-39		Water Tank Roof	Mastic		N	Good
	-40		Marine Cab. Interior	Black Table Top		N	Good
	41		Shop Exterior	Window Putty		N	Poor

DRAFT

APPENDIX B

LEAD-BASED PAINT ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY RECORDS

RJ LeeGroup, Inc.
The Materials Characterization Specialists
Monroeville, PA - San Leandro, CA - Manassas, VA - Pasco, WA - New York, NY

350 Hochberg Road Monroeville, PA 15146
Phone: (724) 325-1776 Fax: (724) 733-1799

LABORATORY REPORT

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612

Attn: William Larkin
Phone: (510) 633-5640
Fax: (510) 633-5646
Email: none

RECEIVED
JUN 23 2005
NINYO AND MOORE
OAKLAND OFFICE

RJ Lee Group Job No.: CA150620050007
Samples Received: June 15, 2005
Report Date: June 17, 2005
Client Project: College of Marin/Bolinas
Purchase Order No.: 401127001
Prep/Analysis: EPA 3050B/EPA 7420 (Solids)-PA

Client Sample ID	RJ Lee Group ID	Analyte	Matrix	Weight Percent	Parts per Million (PPM)	Reporting Limit Weight Percent	Reporting Limit Parts per Million (PPM)	Analysis Date
NMLBP-01	CA150620050007-001	Lead	Solid	37.9	379000	0.0040	40	June 17, 2005
NMLBP-02	CA150620050007-002	Lead	Solid	92.6	926000	0.0039	39	June 17, 2005
NMLBP-03	CA150620050007-003	Lead	Solid	2.06	20600	0.0040	40	June 17, 2005
NMLBP-04	CA150620050007-004	Lead	Solid	29.6	296000	0.0111	111	June 17, 2005
NMLBP-05	CA150620050007-005	Lead	Solid	0.563	5630	0.0284	284	June 17, 2005
NMLBP-06	CA150620050007-006	Lead	Solid	5.09	50900	0.0039	39	June 17, 2005
NMLBP-07	CA150620050007-007	Lead	Solid	3.30	33000	0.0381	381	June 17, 2005
NMLBP-08	CA150620050007-008	Lead	Solid	0.302	3020	0.0133	133	June 17, 2005
NMLBP-09	CA150620050007-009	Lead	Solid	22.6	226000	0.0185	185	June 17, 2005
NMLBP-10	CA150620050007-010	Lead	Solid	2.98	29800	0.0038	38	June 17, 2005
NMLBP-11	CA150620050007-011	Lead	Solid	6.97	69700	0.0107	107	June 17, 2005
NMLBP-12	CA150620050007-012	Lead	Solid	0.552	5520	0.0227	227	June 17, 2005
NMLBP-13	CA150620050007-013	Lead	Solid	0.681	6810	0.0069	69	June 17, 2005
NMLBP-14	CA150620050007-014	Lead	Solid	0.274	2740	0.0239	239	June 17, 2005
NMLBP-15	CA150620050007-015	Lead	Solid	0.179	1790	0.0260	260	June 17, 2005
NMLBP-16	CA150620050007-016	Lead	Solid	15.2	152000	0.0113	112	June 17, 2005

Analyst Comments:

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

Authorized Signature

Philip Grindle, Laboratory Supervisor

RJ LeeGroup, Inc.

The Materials Characterization Specialists

Monroeville, PA - San Leandro, CA - Manassas, VA - Pasco, WA - New York, NY

350 Hochberg Road Monroeville, PA 15146
Phone: (724) 325-1776 Fax: (724) 733-1799

LABORATORY REPORT

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612

Attn: William Larkin
Phone: (510) 633-5640
Fax: (510) 633-5646
Email: none

RJ Lee Group Job No.: CA150620050007
Samples Received: June 15, 2005
Report Date: June 17, 2005
Client Project: College of Marin/Bolinas
Purchase Order No.: 401127001
Prep/Analysis: EPA 3050B/EPA 7420 (Solids)-PA

Client Sample ID	RJ Lee Group ID	Analyte	Matrix	Weight Percent	Parts per Million (PPM)	Reporting Limit Weight Percent	Reporting Limit Parts per Million (PPM)	Analysis Date

This laboratory operates in accord with ISO 17025 guidelines, and holds limited scopes of accreditation under AIHA Lab ID 100364, NY ELAP Lab Code 101208-0, EPA Lab Code PA00162, CA ELAP Certificate 1970, PA DEP Lab ID 02-00396, VA DCLS Lab ID 00297, and LA DEQ Agency Interest 94775. This report may not be used to claim product endorsement by any laboratory accrediting agency.

Quality Control data is available upon request.

Authorized Signature

Philip Grindle, Laboratory Supervisor

LEAD BASED PAINT BULK SAMPLE DATA SHEET

24 hr TAT Due 6/16/05 Sheet 1 of 2

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
510-633-5640
510-633-5646 (fax)

Project Name: College of Marin (Kentfield)
Project No.: 401127001
Project Manager: MPL
APN:
Site Address: 72 Wharf Rd.

Sampled By: MPL
Sampled By:
Sampled By:
Date Sampled: 6/13/05

Laboratory: RJ Lee
Tel:
Fax: 567-6480

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr.)	Received By: (sign/print)	Laboratory
William P. Lankin / William P. Lankin	Ninyo&Moore	6/13/05	1700	/ 6/15/05 1pm	RJ Lee
/	RJ Lee	6/15/05	4pm	6/16/05 9:30	RJ Lee

LabID	Sample ID	Building Number	Sample Location	Building Component	Sample Description (Color / # Layers / Substrate)	Estimated Surface Area	Condition
	NMLBP-01	72	2nd Floor - Southwest Room	Ceiling	Beige-white/2/plaster		INTACT
	NMLBP-02		2nd Floor - Southeast Room	Wall	Beige-white/2/plaster		INTACT
	NMLBP-03		Ext./Front Foundation	Wall	Gray/2/concrete		POOR/Non-Intact
	NMLBP-04		1st Floor/Northwest Room	Wall	Beige-white/2/plaster		INTACT
	NMLBP-05		1st Floor Staircase	Wall	Gold/2/plaster		Intact
	NMLBP-06		1st Floor/Northwest Room	Window Casing	Gold/2/wood		Intact
	NMLBP-07		1st Floor/Kitchen	Wall	white/2/plaster		Intact
	NMLBP-08		1st Floor/Kitchen	Door Casing	white/2/wood		Intact
	NMLBP-09		1st Floor/Northeast Room	Wall	Beige-white/2/plaster		Intact
	NMLBP-10		2nd Floor/Northeast Room	Wall	Beige-white/2/wood		Intact
	NMLBP-11		1st Floor/Front Doorway	Door Casing	Green/2/wood		Intact
	NMLBP-12	V	Rear Porch	Hand Rail	Beige/2/wood		Poor/Non-Intact

LEAD BASED PAINT BULK SAMPLE DATA SHEET

24-hr TAT

Due 6/16/05

Sheet 1 of 2 of 2

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
510-633-5640
510-633-5646 (fax)

Project Name: College of Marin / Bolinas
Project No.: 401127001
Project Manager: WPL
APN:
Site Address: 72 Wharf Rd.

Sampled By: WPL
Sampled By:
Sampled By:
Date Sampled: 6/13/05

Laboratory: RJ Lee
Tel:
Fax: 567 0142 80

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr.)	Received By: (sign/print)	Laboratory
William P. Larkin / William P. Larkin	Ninyo&Moore	6/13/05	1700	[signature] 6/15/05 1pm	RJLee
[signature]	RJLee	6/15/05	4 pm	[signature] 6/16/05 9:30	RJLG

LabID	Sample ID	Building Number	Sample Location	Building Component	Sample Description (Color /# Layers /Substrate)	Estimated Surface Area	Condition
	NMLBP-13	72	Rear Porch	Flooring	Gray/2/wood		POOR/Non Intact
	NMLBP-14	72	1st Floor Hallway	Wall	Blue/2/plaster		INTACT
	NMLBP-15	↓	1st floor Bathroom	Floor	Red/2/wood		POOR/Non Intact
	NMLBP-16	↓	Rear Exterior	Sill	Beige/2/wood		POOR/Non Intact

RJ LeeGroup, Inc.
The Materials Characterization Specialists
Monroeville, PA - San Leandro, CA - Manassas, VA - Pasco, WA - New York, NY

350 Hochberg Road Monroeville, PA 15146
Phone: (724) 325-1776 Fax: (724) 733-1799

LABORATORY REPORT

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612

Attn: Mr. William Larkin
Phone: (510) 633-5640
Fax: (510) 633-5646

RJ Lee Group Job No.: CA031020050013
Samples Received: October 3, 2005
Report Date: October 4, 2005
Client Project: College of Marin/Bolinas
Purchase Order No.: 401135008
Matrix: Solid
Prep/ Analysis: EPA 3050B/EPA 7420 (Solids)-PA

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Concentration Weight Percent	Concentration Parts per Million (PPM)	Reporting Limit Weight Percent	Reporting Limit Parts per Million (PPM)	Analysis Date
NMLBP-20	CA031020050013-001	09/26/2005	Lead	0.639	6390	0.0218	218	10/04/2005
NMLBP-21	CA031020050013-002	09/26/2005	Lead	21.4	214000	0.00230	23.0	10/04/2005
NMLBP-22	CA031020050013-003	09/26/2005	Lead	11.8	118000	0.00404	40.4	10/04/2005
NMLBP-23	CA031020050013-004	09/26/2005	Lead	25.9	259000	0.00481	48.1	10/04/2005
NMLBP-24	CA031020050013-005	09/26/2005	Lead	0.283	2830	0.0124	124	10/04/2005
NMLBP-25	CA031020050013-006	09/26/2005	Lead	41.0	410000	0.00754	75.4	10/04/2005
NMLBP-26	CA031020050013-007	09/26/2005	Lead	< 0.0263	< 263	0.0263	263	10/04/2005

Analyst Comments:

Report Qualifiers:

Asterisk (*) = Value exceeds Maximum Contaminant Level
H = Holding times for preparation or analysis exceeded
N = Analyte not NELAC certified
NELAC-National Environmental Laboratory Accreditation Conference

E = Value above quantitation range
J = Analyte detected below quantitation limits
P = NELAC analyte certification pending

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted recovery limits.
R = RPD (relative percent difference) outside accepted recovery limits

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples. This laboratory operates in accord with ISO 17025 guidelines, and holds limited scopes of accreditation under AIHA Lab ID 100364, NY ELAP Lab Code 10984, EPA Lab Code PA00162, CA ELAP Certificate 1920, PA DEP Lab ID 02-00386, VA DCLS Lab ID 00297, and LA DEQ Agency Interest 94775. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.
Quality Control data is available upon request.

Authorized Signature:
Efkourgos Tordamidis, Inorganic Analysis Manager

DUE 10-4 24-hr TAT ~~STANDARD TAT~~ CA3102005013

LEAD BASED PAINT BULK SAMPLE DATA SHEET

Sheet 1 of 1

Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
510-633-5640
510-633-5646 (fax)

Project Name: College of Marin/Romberg
Project No.: 401135008
Project Manager: WPL
APN:
Site Address: 72 Wharf Road

Sampled By: WPL
Sampled By:
Sampled By:
Date Sampled: 9/26/05

Laboratory: RJ Lee, Inc.
Tel:
Fax 567-0480.

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time	Received By: (sign/print)	Laboratory
William P. Lardin / William P. Lardin	Ninyo&Moore	9/26/05	17:00	etantaga / ERNESTINE	RJ Lee
etantaga TO PA	RJ Lee	10/3	3:25	/ [illegible]	10/4/05 8:30

LabID	Sample ID	Building Number	Sample Location	Building Component	Sample Description (Color /# Layers /Substrate)	Estimated Surface Area	Condition
001	MMLBP-20	72	Rear Ext./House	Window Sill	Gray/2/Wood	200SF	Intact
	-21		Rear Ext./Lab.	Window Sill	White/2/Wood		Non-Intact
	-22		Ext./Shop	Door	Green/2/Wood		Non-Intact
	-23		Ext./Shop	Door Jam	White/2/Wood		Non-Intact
	-24		Lab/Interior	Window Case	White/2/Wood		Intact
	-25		Shop/Interior	Wall	Brown-beige/2/Wood		Intact
002	-26		Water Tank Exterior	Wall	White/2/Concrete		Intact

DRAFT

APPENDIX C

MICROBIAL ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY RECORDS

Environmental Microbiology Laboratory, Inc.
5473 Kearny Villa Road, Suite 130, San Diego, CA 92123
(858) 569-5800 Fax (858) 569-5806 www.emlab.com

Client: Ninyo & Moore
C/O: Mr. Bill Larkin
Re: College of Marin

Date of Sampling: 06-13-2005
Date of Receipt: 06-15-2005
Date of Report: 06-17-2005

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	NMM-01: 1st floor, front hall near stairs		NMM-02: 1st floor, exterior, outside front window		NMM-03: 1st floor, exterior, outside rear window		NMM-04: Interior, 2nd floor, NE room	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	682199-1		682200-1		682201-1		682202-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria					3	50	3	50
Arthrinium								
Ascospores*			10	167	57	950	4	67
Aureobasidium								
Basidiospores*	20	333	63	1,050	311	5,180	11	183
Beltrania					1	17	1	17
Bipolaris/Drechslera group							1	17
Botrytis			2	33	2	33	1	17
Chaetomium								
Cladosporium	32	533	68	1,130	124	2,070	124	2,070
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other colorless					3	50	3	50
Penicillium/Aspergillus types†	144	2,400	44	733	4	67	1,412	23,500
Pithomyces								
Rusts*			2	33	2	33	4	67
Smuts*, Periconia, Myxomycetes*			3	50	3	50	5	83
Stachybotrys								
Stemphylium					1	17		
Torula			18	300	3	50	2	33
Trichocladium							1	17
Ulocladium								
Unknown								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		3+	
Sample volume (liters)	60		60		60		60	
TOTAL SPORES/M3		3,266		3,496		8,567		26,171

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium, Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be actually higher than reported. Background debris also affects the reporting limit for some spore types. The reporting limit is dependent on spore size, background debris, sample volume, and the percentage of the trace analyzed. It is important to account for sample volumes when evaluating dust levels. The minimum reporting limit is based on a raw count of one, which the lowest count that can be detected.
‡ A "Version" greater than 1 indicates amended data.

Environmental Microbiology Laboratory, Inc.
5473 Kearny Villa Road, Suite 130, San Diego, CA 92123
(858) 569-5800 Fax (858) 569-5806 www.emlab.com

Client: Ninyo & Moore
C/O: Mr. Bill Larkin
Re: College of Marin

Date of Sampling: 06-13-2005
Date of Receipt: 06-15-2005
Date of Report: 06-17-2005

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: NMM-02, 1st floor, exterior, outside front window

Fungi Identified	Outdoor data	Typical Outdoor Data by Date† Month: June				Typical Outdoor Data by Location‡ State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	-	7	27	450	64	7	27	210	60
Bipolaris/Drechslera group	-	7	13	190	18	7	13	110	13
Chaetomium	-	7	13	80	19	7	13	110	19
Cladosporium	1,130	53	640	8,800	98	53	690	6,500	98
Curvularia	-	7	23	510	12	7	13	150	5
Nigrospora	-	7	13	270	9	7	13	240	8
Other colorless	-	7	13	110	11	7	13	120	10
Penicillium/Aspergillus types	733	40	210	2,300	91	50	210	2,600	90
Stachybotrys	-	7	13	440	5	7	13	360	5
Stemphylium	-	7	13	67	10	7	13	73	11
Torula	300	7	13	130	17	7	13	170	13
Seldom found growing indoors**									
Ascospores	167	13	160	5,600	80	13	110	1,500	76
Basidiospores	1,050	21	320	14,000	96	27	330	7,700	96
Beltrania	-	7	13	40	1	7	13	67	1
Botrytis	33	7	27	200	18	7	27	190	24
Rusts	33	7	20	250	28	7	20	270	29
Smuts, Periconia, Myxomycetes	50	12	53	970	80	9	40	450	70
TOTAL SPORES/M3	3,496								

AIHA EMPAT NO.: 102856

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

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(858) 569-5800 Fax (858) 569-5806 www.emlab.com

Client: Ninyo & Moore
C/O: Mr. Bill Larkin
Re: College of Marin

Date of Sampling: 06-13-2005
Date of Receipt: 06-15-2005
Date of Report: 06-17-2005

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: NMM-03, 1st floor, exterior, outside rear window

Fungi Identified	Outdoor data	Typical Outdoor Data by Date† Month: June				Typical Outdoor Data by Location‡ State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	50	7	27	450	64	7	27	210	60
Bipolaris/Drechslera group	-	7	13	190	18	7	13	110	13
Chaetomium	-	7	13	80	19	7	13	110	19
Cladosporium	2,070	53	640	8,800	98	53	690	6,500	98
Curvularia	-	7	23	510	12	7	13	150	5
Nigrospora	-	7	13	270	9	7	13	240	8
Other colorless	50	7	13	110	11	7	13	120	10
Penicillium/Aspergillus types	67	40	210	2,300	91	50	210	2,600	90
Stachybotrys	-	7	13	440	5	7	13	360	5
Stemphylium	17	7	13	67	10	7	13	73	11
Torula	50	7	13	130	17	7	13	170	13
Seldom found growing indoors**									
Ascospores	950	13	160	5,600	80	13	110	1,500	76
Basidiospores	5,180	21	320	14,000	96	27	330	7,700	96
Beltrania	17	7	13	40	1	7	13	67	1
Botrytis	33	7	27	200	18	7	27	190	24
Rusts	33	7	20	250	28	7	20	270	29
Smuts, Periconia, Myxomycetes	50	12	53	970	80	9	40	450	70
TOTAL SPORES/M3	8,567								

AIHA EMPAT NO.: 102856

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

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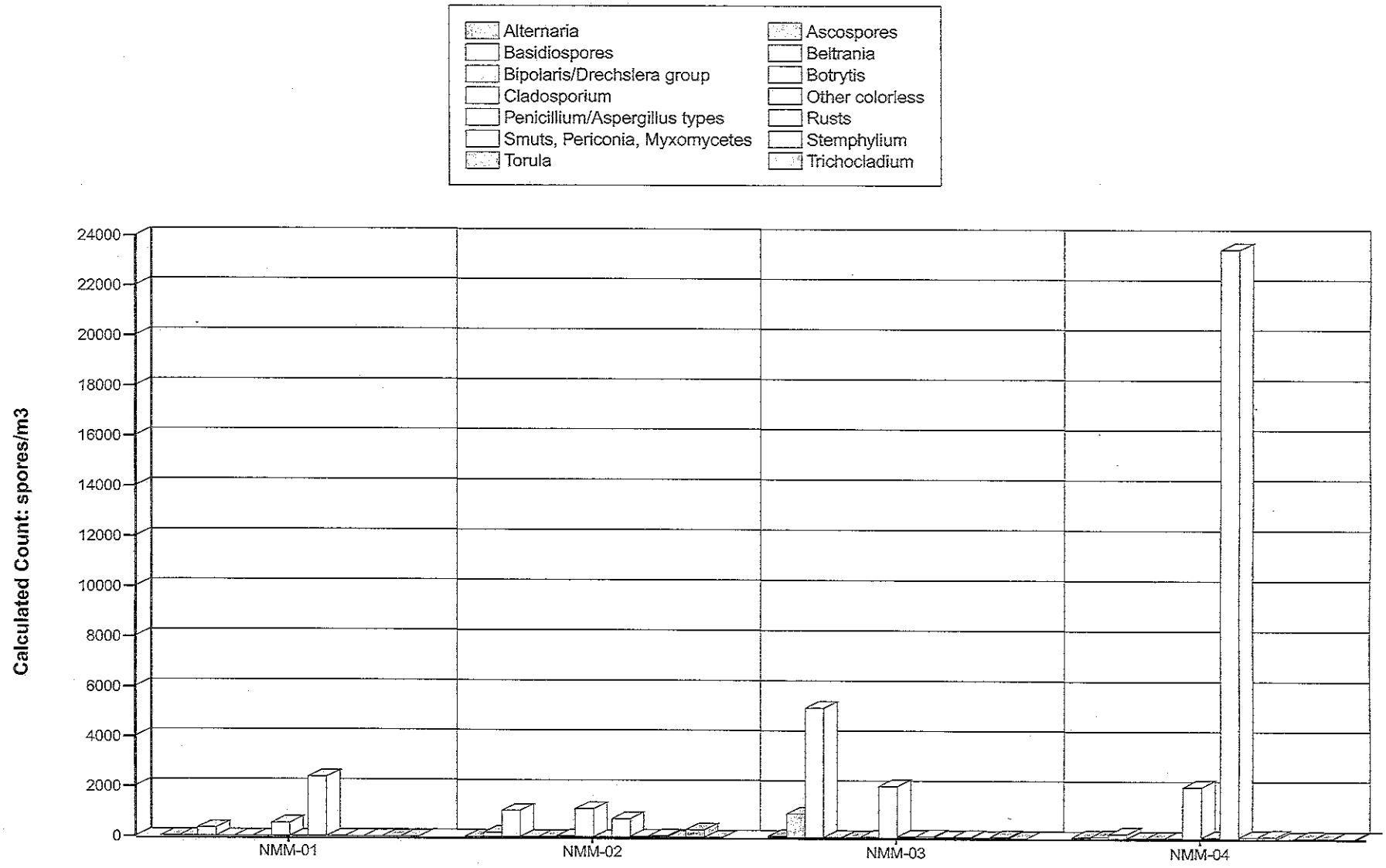
SPORE TRAP REPORT: NON-VIABLE METHODOLOGY



Comments:

Note: Graphical output may understate the importance of certain "marker" genera.

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Re: College of Marin

Date of Sampling: 06-13-2005
Date of Receipt: 06-15-2005
Date of Report: 06-17-2005

DIRECT MICROSCOPIC EXAMINATION REPORT
(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 682203-1: Tape sample NMM-05: Kitchen floor				
Heavy	Very few	1+ colorless spores typical of *Penicillium / Aspergillus*	None	Mold growth
Lab ID-Version: 682204-1: Tape sample NMM-06: Bathroom shower curtain				
Moderate	Very few	2+ *Ochroconis* species 2+ *Cladosporium* species	None	Mold growth
Lab ID-Version: 682205-1: Tape sample NMM-07: Bathroom shower wall				
Light	None	2+ brown hyphae with no associated spores, ID unknown	None	Mold growth

* Indicative of normal conditions, i.e. seen on surfaces everywhere. Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating. Distribution of spore types seen mirrors that usually seen outdoors.

† Quantities of molds seen growing are listed in the MOLD GROWTH column and are graded 1+ to 4+, with 4+ denoting the highest numbers.

†† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

‡ A "Version" greater than 1 indicates amended data.

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Date of Sampling: 06-13-2005
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MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: NMM-02: 1st floor, exterior, outside front window

Species detected	Outdoor sample spores/m3 <100 1K 10K >100K	Typical outdoor ranges (North America)	Freq. %
Ascospores	167	13 - 160 - 3,200	76
Basidiospores	1,050	27 - 370 - 12,000	94
Botrytis	33	7 - 22 - 200	17
Cladosporium	1,130	53 - 540 - 7,600	96
Penicillium/Aspergillus types	733	38 - 210 - 2,700	91
Rusts	33	7 - 14 - 290	22
Smuts, Periconia, Myxomycetes	50	7 - 40 - 680	69
Torula	300	7 - 13 - 170	11
Total	3,496		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: NMM-01: 1st floor, front hall near stairs

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 93%	dF: 1 Result: 9.3077 Critical value: 3.8415 Inside Similar: No	Result: 0.5455	dF: 8 Result: 0.8155 Critical value: 0.6190 Outside Similar: Yes	Score: 281 Result: High

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	333
Cladosporium	533
Penicillium/Aspergillus types	2,400
Total	3,266

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Date of Sampling: 06-13-2005
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MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: NMM-04: Interior, 2nd floor, NE room

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 748%	dF: 1 Result: 9.3077 Critical value: 3.8415 Inside Similar: No	Result: 0.7619	dF: 13 Result: 0.7788 Critical value: 0.4780 Outside Similar: Yes	Score: 300 Result: High

Species Detected	Spores/m3 <100 1K 10K >100K
Alternaria	50
Ascospores	67
Basidiospores	183
Beltrania	17
Bipolaris/Drechslera group	17
Botrytis	17
Cladosporium	2,070
Other colorless	50
Penicillium/Aspergillus types	23,500
Rusts	67
Smuts, Periconia, Myxomycetes	83
Torula	33
Trichocladium	17
Total	26,171

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

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MoldSTAT™: Supplementary Statistical Spore Trap Report

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source.

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APPENDIX D

CERTIFICATIONS

State of California Department of Health Services

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	07/03/2006
Project Monitor	07/03/2006

William P. Larkin ID# 5543

State of California
Division of Occupational Safety and Health

Certified Asbestos Consultant

William P Larkin

Name

Certification No. 99-2688

Expires on 12/08/06

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code