

FOR CONTRACT NO.: 11-287704

INFORMATION HANDOUT

MATERIALS INFORMATION

ASBESTOS AND LEAD-CONTAINING SURFACES SURVEY

LIMITED ASBESTOS SURVEY REPORT

ROUTE: 11-SD-5506

**ASBESTOS AND LEAD-CONTAINING
SURFACES SURVEY
KEARNY MESA MAINTENANCE STATION
LABORATORY BUILDING REMODEL
7177 OPPORTUNITY ROAD
SAN DIEGO, CALIFORNIA
TASK ORDER NO. 20, EA NO. 11-287700
CONTRACT NO. 11A1023**

PREPARED FOR:

State of California
Department of Transportation, District 11
Office of Environmental Engineering, MS-310
4050 Taylor Street
San Diego, California 92110

PREPARED BY:

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January 18, 2008
Project No. 105388020

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Mr. Joel Kloth
State of California
Department of Transportation, District 11
Office of Environmental Engineering, MS-310
4050 Taylor Street
San Diego, California 92110

Subject: Asbestos and Lead-Containing Surfaces Survey
Kearny Mesa Maintenance Station Laboratory Building Remodel
7177 Opportunity Road
San Diego, California
Task Order No. 20, EA No. 11-287700
Contract No. 11A1023

Dear Mr. Kloth:

In accordance with the State of California Department of Transportation Contract 11A1023, EA 11-287700, Task Order 20, and your authorization to proceed, Ninyo & Moore has performed an asbestos and lead-containing surfaces survey at the above-referenced site. The attached report presents our methodology, findings, conclusions, and recommendations regarding this survey.

We appreciate the opportunity to be of service to you on this important project.

Sincerely,
NINYO & MOORE



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1. INTRODUCTION

In accordance with the State of California Department of Transportation (Department) Contract 11A1023, EA 11-287700, Task Order 20, and your authorization to proceed, Ninyo & Moore has performed an asbestos and lead-containing surfaces (LCSs) survey of the Kearny Mesa Maintenance Station Laboratory Building, located at 7177 Opportunity Road, in the city of San Diego, California (hereinafter referred to as site or subject site) (Figure 1). For the purposes of this assessment, LCS refers to both lead-based paint, as defined by the California Department of Health Services (CA-DHS) and U.S. Department of Housing and Urban Development (HUD), and other potential lead-containing materials, including, but not limited to, ceramic tile and porcelain bathroom fixtures.

The survey was performed in accordance with the above-referenced contract, in general accordance with established guidelines for the assessment of asbestos-containing materials (ACMs) and LCS, and is based upon conditions of the subject site at the time of the surveying/assessment activities. Our objective and scope of work for the surveys are presented below.

2. OBJECTIVE AND SCOPE OF SERVICES

The purpose of this report is to provide information regarding the current site conditions to assist the Department in planning future renovation projects at the subject site.

The scope of work performed for the ACM and LCS surveys are identified below.

- Conducted a visual reconnaissance of the readily accessible areas of the subject buildings to identify homogeneous areas and locate suspect ACMs and LCSs;
- Developed a Site-specific Work Plan and Health and Safety Plan,
- Collected 84 suspect asbestos-containing building material bulk samples and submitted these samples to an independent laboratory for analysis of asbestos content. Six of the 84 samples collected from the roof were reported to contain less than 1% asbestos, and were further analyzed by method of Gravimetric Reduction and 1000 Point Count to verify the percentage of asbestos fibers, per Federal National Environmental Standards for Hazardous Air Pollutants (NESHAP);
- Researched interior and exterior fire doors for asbestos content,
- Prepared sample location maps showing locations from which suspect ACMs were collected;

- Photo documented suspect ACMs,
- Collected 76 x-ray fluorescence (XRF) readings of potential LCSs;
- Plotted XRF reading locations on the sample location maps;
- Inspected selected light ballasts for Polychlorinated Biphenyls (PCBs), and fluorescent light tubes for mercury,
- Prepared a report presenting our data and summarizing our conclusions and recommendations regarding ACMs and LCSs within and on the exterior of the subject building.

3. SITE DESCRIPTION

The survey encompassed the interior offices, hallways, bathrooms, janitorial rooms, server rooms, laboratory and warehouse spaces of the Kearny Mesa Maintenance Station Building, as well as the exterior utility rooms and surfaces of the building. The subject building consisted of concrete tilt-up construction of the exterior walls and interior wood-frame construction on a concrete/slab foundation. Interior wall finishes consisted of ceramic tile, concrete and drywall. Floor finishes included vinyl floor tile, and concrete, while ceiling finishes included drywall, wood, and acoustic ceiling tiles. Building exteriors were finished with painted and bare concrete, as well as areas of stucco, and the roof was wood-framed and finished with built-up roofing materials.

4. PHYSICAL LIMITATIONS

Physical limitations, such as inaccessible rooms, were not encountered during survey activities. However, since non-destructive sampling techniques were used, there is a possibility that additional suspect materials and/or surfaces may be encountered in inaccessible areas (e.g., interstitial wall and ceiling spaces) during renovation and/or demolition activities. For instance, untested thermal system insulation may be present within wall and ceiling cavities and behind plumbing and heating fixtures (e.g., sinks, boilers, and radiators). Suspect materials and/or surfaces encountered during renovation and/or demolition activities that have not been assessed either may be assumed to be asbestos and/or lead containing and handled accordingly, or may be sampled and analyzed to assess whether they are asbestos and/or lead containing.

5. SAMPLE COLLECTION

On December 6 and 7, 2007, the subject building was assessed for the presence of ACMs and LCSs. The asbestos and LCS surveys followed Environmental Protection Agency (EPA) guidelines, or industry standards, as appropriate, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1. Asbestos Survey

The Ninyo & Moore asbestos survey was performed by a California Certified Asbestos Consultant and included a preliminary visual assessment and bulk-sampling survey of suspect ACMs. 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. A total of 84 samples of materials suspected of being asbestos-containing were collected during the survey, using EPA-recommended sampling procedures. The sampling protocol is presented in Appendix A. Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 2. Building materials found to be asbestos-containing are summarized in Table 3, including the locations of the ACMs. Photographs of the building materials that were sampled are shown in Appendix C.

5.2. Lead-Containing Surfaces Survey

To test potential LCSs for future contractor safety and waste characterization, a portable NITON XL 309 XRF spectrum analyzer was utilized. The testing was conducted in general accordance with accepted environmental science and engineering practices for renovation and/or demolition projects. The testing methodology utilized is presented in Appendix B. A total of 76 XRF readings (including calibrations) were collected. Surfaces that were tested for the presence of lead are presented in the attached Table 2. The XRF testing orientation (A, B, C, and D wall orientations) utilized during the testing are provided on the attached sample location map (Figure 3). The locations of surfaces found to be lead-containing are

indicated on Figure 3. Surfaces found to contain lead concentrations in excess of 1.0 milligrams per square centimeter (mg/cm^2), which is the regulatory standard for lead in surface coatings, are summarized in Table 4, including the locations of the surfaces.

6. LABORATORY ANALYSES AND RESULTS

The following sections describe the laboratory analyses performed and results obtained from samples collected during the asbestos survey and the XRF testing results for lead.

6.1. Asbestos Analysis

After collection, the ACM samples were shipped overnight via Federal Express to LA Testing of South Pasadena, California for analysis. LA Testing 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 (PLM) with dispersion staining, in general accordance with EPA Method 600/R-93/116 July 93. Because of material layering, of the 84 samples, 98 separate PLM analyses were performed. The lower limit of reliable detection for asbestos using the PLM method is approximately 1% by weight. Materials containing asbestos in amounts less than 1% but greater than 0.1% are defined as containing <1% asbestos, and are further analyzed by a point count to find what percentage of the fibers are asbestos-containing.

Currently, the EPA and the State of California stipulate that materials containing greater than 1% asbestos constitute an ACM, and the State of California stipulates that materials containing between 0.1% and 1.0% asbestos constitute asbestos containing construction material (ACCM). Materials in which no asbestos was detected are defined in the laboratory report as “None Detected” in the “Asbestos % Type” column. Analytical results are listed in the attached Table 1. Copies of the laboratory analytical report and chain-of-custody records are presented in Appendix D.

6.2. XRF Analysis

Currently, the State of California and the EPA stipulate what concentration of lead in non-volatile components of surface coatings or materials determine whether a material is considered to be a lead-based paint. CA-DHS stipulates that materials containing an amount of lead equal to or in excess of 1 mg/cm², or more than 0.5%, by weight, constitutes a lead-based paint. Paint that is damaged (e.g., chipping or peeling) or that may easily be removed from surfaces and has a lead content equal to or greater than 1,000 milligrams per kilogram (mg/kg) requires handling as a California Title 22 hazardous waste. In addition, under California Code of Regulations, Title 8, Section 1532.1, specific worker protections are required in construction projects where any lead is present. For the purposes of this assessment, LCS refers to both lead-based paint, as defined by CA-DHS and HUD, and other potential lead-containing materials, including, but not limited to, ceramic tile and porcelain bathroom fixtures. Surfaces tested for the presence of lead are listed in Table 2. Surfaces found to contain lead concentrations in excess of 1.0 mg/cm² are summarized in Table 4, including the locations of these surfaces. A copy of DHS form 8552 "Lead Hazard Evaluation Report" for the campus is included in Appendix E.

7. FINDINGS AND OPINIONS

The findings of these surveys are based on our visual observations and analysis of select suspect building materials. Our findings are presented below.

7.1. Asbestos

Based on the analytical results of the bulk samples collected during the survey, ACMs are located within the Kearny Mesa Maintenance Station Building. Materials containing asbestos are summarized in Table 3 and include the following:

- The beige/grey, one-foot by one-foot, vinyl floor tile, located throughout the interior of the laboratory maintenance facility contained two percent Chrysotile asbestos. The black mastic associated with this floor tile contained five percent Chrysotile. These materials were non-friable and in good to fair condition at the time of survey activities.

- In Room 4-A, the black laboratory countertops, contained 10 percent Chrysotile asbestos. This material was non-friable and in good condition at the time of survey activities.
- The purple sink lining found beneath the sinks in Room 4 and Room 17 contains three percent Chrysotile asbestos. This material was non-friable and in good condition at the time of survey activities.
- The brown exterior door sealant found between the doors and exterior walls contain three percent Chrysotile asbestos. This material was non-friable and in good condition at the time of survey activities.
- Interior fire doors were not physically sampled as a result of having to notably damage each door to collect samples. Instead, eight representative doors were researched for manufacturing information. These doors were made by Cal-Wood Door, a company that is no longer in business. No information regarding asbestos-content was available.
- The exterior, metal fire doors were not physically sampled as a result of having to notably damage each door to collect samples. No manufacturing information was available.

7.2. Lead-Containing Surfaces

Based on the results of the XRF assays collected during the survey, surfaces containing concentrations of lead greater than or equal to 1.0 mg/cm² were identified in Room 4, Room 13, Room 15, Room 16, the Men's restroom, and on the exterior southwest corner of the subject building. Surfaces containing lead greater than or equal to 1.0 mg/cm² are summarized in Table 4 and include the following:

- In Room 4, a brown, metal, vertical post, located in the center of the room, exhibited a lead concentration of 12.65 mg/cm². This material was intact at the time of survey activities.
- In Room 13, the white, porcelain, deep sink located on the north wall, exhibited a lead concentration 30.44 mg/cm². In room 16, the white, porcelain, deep sink located on the northwest wall, exhibited a lead concentration 34.10 mg/cm². The sinks were intact at the time of survey activities.
- In Room 15, a brown, metal, vertical post located at the entrance, exhibited a lead concentration of 5.1 mg/cm². This material was intact at the time of survey activities.
- In Room 16, the white, metal vertical post exhibited a lead concentration of 5.1 mg/cm².

- In the Men's restroom, the white, porcelain trough sink exhibited a lead concentration 30.75 mg/cm^2 . The sink was intact at the time of survey activities.
- On the exterior, southeast corner of the subject building, the yellow, metal guard-railing exhibited a lead concentration of 1.0 mg/cm^2 . This material was intact at the time of survey activities.

The "like" materials of the aforementioned articles and components, located throughout the subject building are considered as LCM or containing LBP.

8. RECOMMENDATIONS

Since ACMs and LCSs have been documented within the subject site, the following recommendations and precautions are provided.

8.1. Asbestos

The identified ACMs should not be disturbed. Prior to renovation and/or demolition work that would disturb the identified ACMs, a licensed asbestos abatement contractor should remove/abate the ACMs. It is the contractor's responsibility to confirm ACM quantities prior to bid submittals and initiating renovation and/or demolition activities at the subject site.

Because non-destructive sampling techniques were used, it is possible that additional suspect ACMs may be found during building renovation and/or demolition. Ninyo & Moore recommends that should additional suspect materials, not sampled or assessed in this report, be uncovered during renovation and/or demolition: (a) samples of suspect materials should be collected for laboratory analysis, and all activities that may impact the materials should cease until laboratory analytical results are reviewed; or (b) the materials should be assumed to be asbestos containing and handled as such. Note that any work involving the disturbance of materials containing asbestos should be performed using appropriate work practices, and be conducted by, and under the supervision of, properly trained, experienced, and certified asbestos personnel.

8.2. Lead-Containing Surfaces

LCSs should be handled by an appropriately licensed contractor in accordance with all federal, state, and local regulations. Prior to renovation and/or demolition activities that would

disturb the documented LCSs, a licensed contractor, using DHS-certified personnel, should perform the LCS abatement in accordance with local, state, and federal regulations. It is the contractor's responsibility to confirm LCS quantities prior to bid submittals and initiating renovation and/or demolition activities at the subject site.

Because non-destructive sampling techniques were utilized, it is possible that additional suspect surfaces may be found during building renovation and/or demolition activities. Ninyo & Moore recommends that should additional suspect surfaces, not sampled or assessed in this report, be uncovered during renovation and/or demolition activities: (a) samples of suspect surfaces be collected for laboratory analysis and/or XRF testing of the suspect surfaces be conducted, and all activities that impact the suspect surfaces cease until laboratory analytical results are reviewed and/or XRF testing results become available; or (b) the surfaces should be assumed to contain concentrations of lead greater than or equal to 1.0 mg/cm² or 0.5%, by weight, and handled as such. Please note that any work involving the disturbance of LCS should be conducted using appropriate work practices, and be conducted by, and under the supervision of, properly trained, experienced, and certified personnel. In addition, disturbing surfaces containing a lead concentration below the LCS criteria, as defined by CA-DHS and HUD, (e.g., lead concentrations less than 0.1 mg/cm² or 0.5%, by weight) may trigger the California Occupational Safety and Health Administration (Cal-OSHA) lead in construction standard (e.g., Title 8, CCR Section 1532.1).

9. LIMITATIONS

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited sampling and chemical analysis. Further assessment of potential adverse environmental impacts may be accomplished by conducting a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the areas evaluated. However, if additional suspect building materials are encountered during renovation activities, these materials should be sampled by qualified personnel, and analyzed for content prior to further disturbance. In addition, please note

that quantities of impacted building materials are approximate. It is the contractor's responsibility to confirm quantities present.

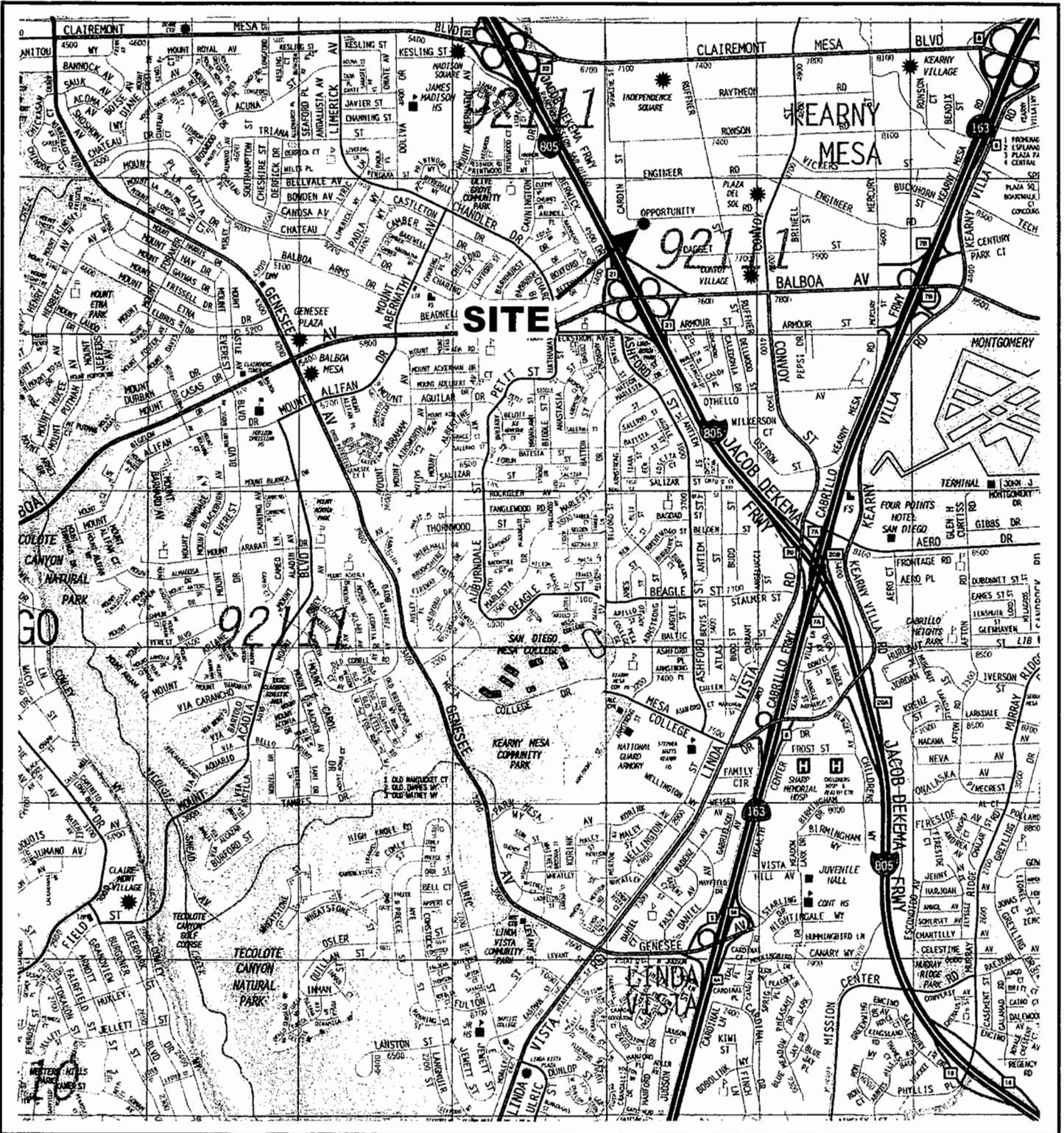
The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional 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.

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.

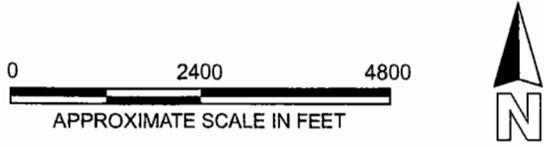
The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been 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. Please note the laboratory analytical report states "Due to the magnification limitations inherent in PLM, asbestos fibers below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testings by TEM to confirm asbestos quantities."

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.

FIGURES



REFERENCE: 2005 THOMAS GUIDE FOR SAN DIEGO COUNTY, STREET GUIDE AND DIRECTORY.

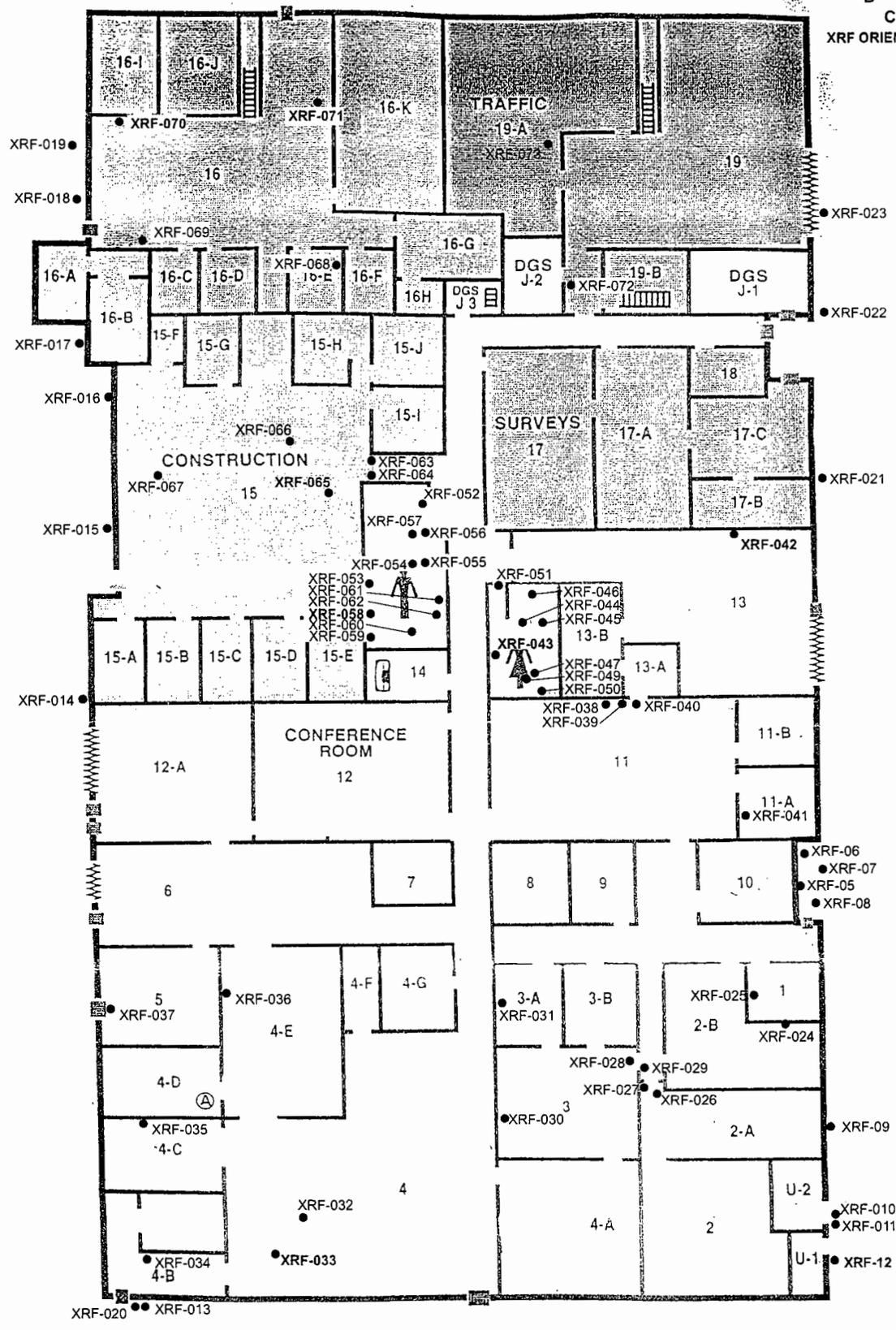


NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

		SITE LOCATION MAP		FIGURE 1	
105388020		1/08			

105388020 sim fig 1.cdr

A
D B
C
XRF ORIENTATION



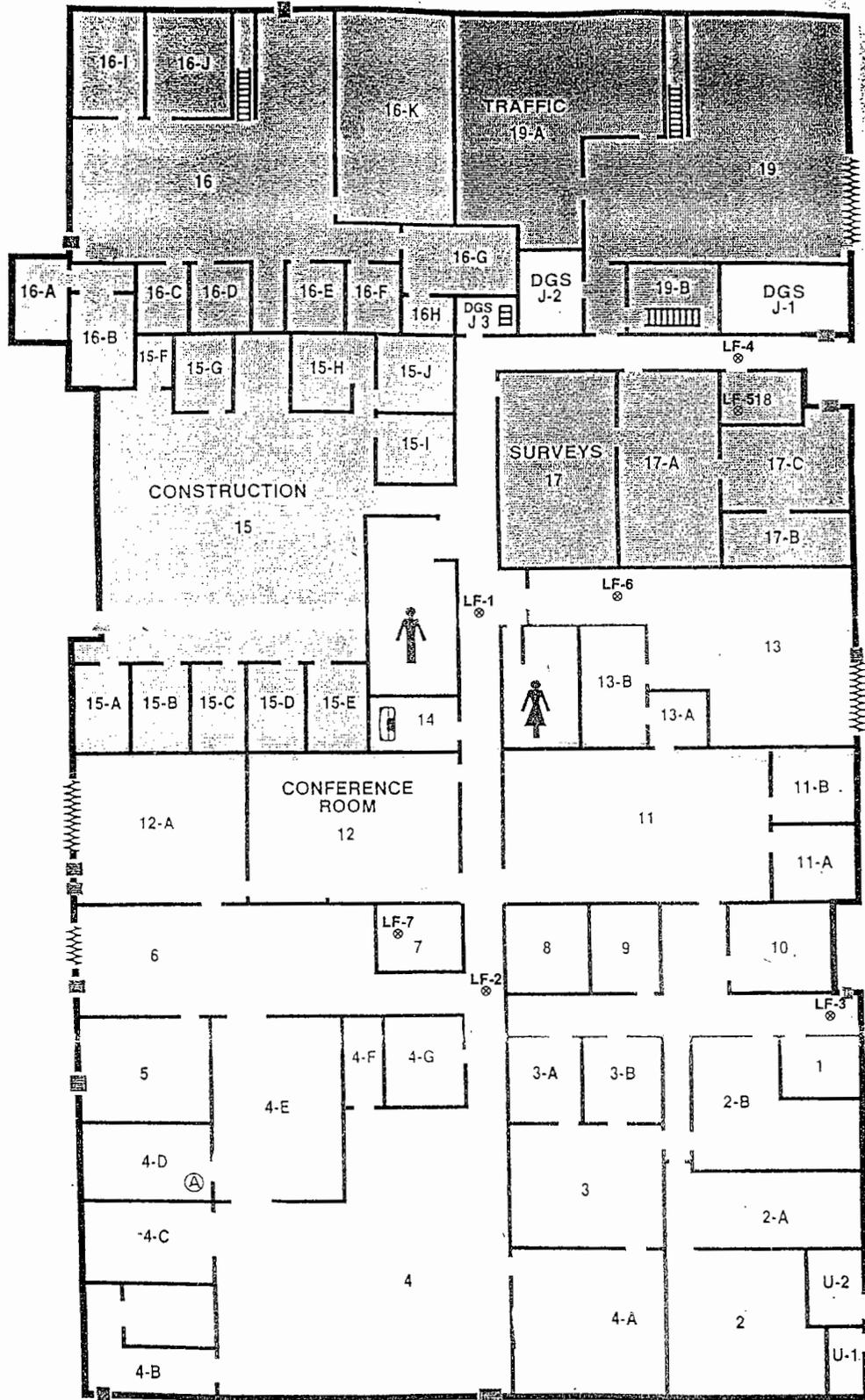
LEGEND
 ● APPROXIMATE LOCATION OF XRF SAMPLE
 BLUE TEXT INDICATED POSITIVE READING FOR LEAD
 XRF-033



APPROXIMATE SCALE
 NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore		XRF SAMPLE LOCATION MAP	FIGURE
PROJECT NO.	DATE	7177 OPPORTUNITY ROAD SAN DIEGO, CALIFORNIA	3
105388020	1/08		

105388020 xrf-fig3.dwg



LEGEND
 LF-7
 ⊗ APPROXIMATE LOCATION OF LIGHT FIXTURE



APPROXIMATE SCALE

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore		LIGHT FIXTURE LOCATION MAP	FIGURE
PROJECT NO.	DATE	7177 OPPORTUNITY ROAD SAN DIEGO, CALIFORNIA	4
105388020	1/08		

100388020.LFM.Fig4.cdr

TABLES

Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Room No.	Sample Location	Sample Description	*Approx. Quantity	Friable Y/N	Condition	Asbestos Content
ASB-001	Laboratory	Hall	Between Rooms 3-A and 3-B	1-SF Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-002	Laboratory	Hall	Above men's restroom door	1-SF Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-003	Laboratory	Hall	In front of Room 19-B	1-SF Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-004	Laboratory	18	North ceiling, near door	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-005	Laboratory	15-F	North ceiling	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-006	Laboratory	16	Ceiling, east side of Room 16	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-007	Laboratory	15-C	Ceiling, near door	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-008	Laboratory	12	Southeast ceiling	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-009	Laboratory	11	Center ceiling	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-010	Laboratory	2-A	Southwest ceiling	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures	N/A	N	Fair	ND
ASB-011	Laboratory	3-B	Ceiling, near north door	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures, new	N/A	N	Fair	ND
ASB-012	Laboratory	3-B	Ceiling, center	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures, new	N/A	N	Fair	ND
ASB-013	Laboratory	3-B	Ceiling, near south door	2-ft. x 4-ft. Acoustic Ceiling Tile, small holes with large fissures, new	N/A	N	Fair	ND
ASB-014	Laboratory	DGS2	Ceiling	1-ft. x 1-ft. Acoustic Ceiling Tile, small holes with large fissures and seams.	N/A	N	Fair	ND
ASB-015	Laboratory	DGS2	Ceiling	1-ft. x 1-ft. Acoustic Ceiling Tile, small holes with large fissures and seams.	N/A	N	Fair	ND

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Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Room No.	Sample Location	Sample Description	*Approx. Quantity	Friable Y/N	Condition	Asbestos Content
ASB-016	Laboratory	DGS2	Ceiling	1-ft. x 1-ft. Acoustic Ceiling Tile, small holes with large fissures and seams.	N/A	N	Fair	ND
ASB-017	Laboratory	DGS2	Ceiling	1-ft. x 1-ft. Acoustic Ceiling Tile, no holes or fissures	N/A	N	Fair	ND
ASB-018	Laboratory	DGS2	Ceiling	1-ft. x 1-ft. Acoustic Ceiling Tile, no holes or fissures	N/A	N	Fair	ND
ASB-019	Laboratory	DGS2	Ceiling	1-ft. x 1-ft. Acoustic Ceiling Tile, no holes or fissures	N/A	N	Fair	ND
ASB-020 T	Laboratory	18	Floor	Beige 1-ft. x 1-ft. vinyl floor tile	21,000 SF	N	Fair	2% Chrysotile
ASB-020 M	Laboratory	18	Floor	Vinyl floor tile black mastic	13,800 SF	N	Fair	5% Chrysotile
ASB-021 T	Laboratory	DGSJ3	Floor	Beige 1-ft. x 1-ft. vinyl floor tile	See ASB-020 T	N	Fair	2% Chrysotile
ASB-021 M	Laboratory	DGSJ3	Floor	Vinyl floor tile black mastic	See ASB-020 M	N	Fair	5% Chrysotile
ASB-022 T	Laboratory	15-A	Floor	1-ft. x 1-ft. vinyl floor tile	See ASB-020 T	N	Fair	2% Chrysotile
ASB-022 M	Laboratory	15-A	Floor	Vinyl floor tile black mastic	See ASB-020 M	N	Fair	5% Chrysotile
ASB-023 T	Laboratory	16-F	Floor	Beige 1-ft. x 1-ft. vinyl floor tile	N/A	N	Fair	ND
ASB-023 M	Laboratory	16-F	Floor	Vinyl floor tile yellow mastic	N/A	N	Fair	ND
ASB-024 T	Laboratory	16	Floor	Beige 1-ft. x 1-ft. vinyl floor tile	N/A	N	Fair	ND
ASB-024 M	Laboratory	16	Floor	Vinyl floor tile brown mastic	N/A	N	Fair	ND
ASB-025 T	Laboratory	7	Floor	Beige/grey 1-ft. x 1-ft. vinyl floor tile	See ASB-020 T	N	Fair	2% Chrysotile
ASB-025 M	Laboratory	7	Floor	Vinyl floor tile black mastic	See ASB-020 M	N	Fair	5% Chrysotile
ASB-026 T	Laboratory	3-A	Floor	Beige/grey 1-ft. x 1-ft. vinyl floor tile	See ASB-020 T	N	Fair	2% Chrysotile
ASB-026 M	Laboratory	3-A	Floor	Vinyl floor tile black mastic	See ASB-020 M	N	Fair	5% Chrysotile

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Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Room No.	Sample Location	Sample Description	*Approx. Quantity	Friable Y/N	Condition	Asbestos Content
ASB-027	Laboratory	19A	Floor	Yellow carpet glue	N/A	N	Good	ND
ASB-028	Laboratory	19A	Floor	Yellow carpet glue	N/A	N	Good	ND
ASB-029	Laboratory	19A	Floor	Yellow carpet glue	N/A	N	Good	ND
ASB-030	Laboratory	15	Wall, near west door	5-inch rubber basecove moulding, brown mastic	N/A	N	Good	ND
ASB-031	Laboratory	15	Wall, at Room 15-H	5-inch rubber basecove moulding, brown mastic	N/A	N	Good	ND
ASB-032	Laboratory	15	Wall, at Room 15-J	5-inch rubber basecove moulding, brown mastic	N/A	N	Good	ND
ASB-033	Laboratory	16	West wall	4-inch rubber basecove moulding white mastic	N/A	N	Good	ND
ASB-034	Laboratory	16-F	Wall, behind door	4-inch rubber basecove moulding white mastic	N/A	N	Good	ND
ASB-035	Laboratory	19	North wall, outside Room 19-A	4-inch rubber basecove moulding white mastic	N/A	N	Good	ND
ASB-036 DW	Laboratory	3-A	Wall, at light switch	Brown/white drywall	N/A	Y	Good	ND
ASB-036 JC	Laboratory	3-A	Wall, at light switch	Drywall joint compound, beige	N/A	N	Good	ND
ASB-037 DW	Laboratory	18	Wall, at light switch	Brown/white drywall	N/A	Y	Good	ND
ASB-037 JC	Laboratory	18	Wall, at light switch	Drywall joint compound, beige	N/A	N	Good	ND
ASB-038 DW	Laboratory	13	Wall in entry way	Brown/white drywall	N/A	Y	Good	ND
ASB-038 JC	Laboratory	13	Wall in entry way	Drywall joint compound, beige	N/A	N	Good	ND
ASB-039 DW	Laboratory	19-A	Wall, at light switch	Brown/white drywall	N/A	Y	Good	ND
ASB-039 JC	Laboratory	19-A	Wall, at light switch	Drywall joint compound, beige	N/A	N	Good	ND
ASB-040	Laboratory	7	Wall, at light switch	Drywall joint compound, beige	N/A	N	Good	ND
ASB-041	Laboratory	15-A	Wall, at light switch	Drywall joint compound, blue/beige	N/A	N	Good	ND
ASB-042	Laboratory	WRR	Women's restroom	Drywall joint compound, beige	N/A	N	Good	ND
ASB-043 DW	Laboratory	7	Wall	Brown/white drywall	N/A	Y	Good	ND

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Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Room No.	Sample Location	Sample Description	*Approx. Quantity	Friable Y/N	Condition	Asbestos Content
ASB-043 JC	Laboratory	7	Wall	Drywall joint compound, beige	N/A	N	Good	ND
ASB-044 DW	Laboratory	19-A	Wall, southeast corner	Brown/white drywall	N/A	Y	Good	ND
ASB-044 JC	Laboratory	19-A	Wall, southeast corner	Drywall joint compound, beige	N/A	N	Good	ND
ASB-045 DW	Laboratory	U-2	Wall behind door	Brown/white drywall	N/A	Y	Good	ND
ASB-045 JC	Laboratory	U-2	Wall behind door	Drywall joint compound, beige	N/A	N	Good	ND
ASB-046	Laboratory	4-A	Countertop on west wall	65-ft. x 4-ft. black countertop	260 SF	N	Good	10% Chrysotile
ASB-047	Laboratory	4-A	Countertop at northwest corner	65-ft. x 4-ft. black countertop	See ASB-046	N	Good	10% Chrysotile
ASB-048	Laboratory	4-A	Countertop in center of room	65-ft. x 4-ft. black countertop	See ASB-046	N	Good	10% Chrysotile
ASB-049	Laboratory	4-A	At lab hood	2-ft. x 4-ft. x 1/4-inch transite panel, beige	N/A	N	Good	ND
ASB-050	Laboratory	4-A	At lab hood	2-ft. x 4-ft. x 1/4-inch transite panel, beige	N/A	N	Good	ND
ASB-051	Laboratory	4-A	At lab hood	2-ft. x 4-ft. x 1/4-inch transite panel, beige	N/A	N	Good	ND
ASB-052	Laboratory	4	Beneath sink	Sink lining, purple	3 sinks	N	Good	3% Chrysotile
ASB-053	Laboratory	4	Beneath sink	Sink lining, purple	See ASB-052	N	Good	3% Chrysotile
ASB-054	Laboratory	17	Beneath sink	Sink lining, purple	See ASB-052	N	Good	3% Chrysotile
ASB-055	Laboratory	Exterior	Outside Room 15-A	Stucco, top layer, white	N/A	N	Good	ND
ASB-056	Laboratory	Exterior	Outside, between Rooms 10 & 11	Stucco, top layer, white	N/A	N	Good	ND
ASB-057	Laboratory	Exterior	Outside Room 10	Stucco, top layer, white	N/A	N	Good	ND
ASB-058	Laboratory	Exterior	Outside Room 15-A	Stucco, base layer, grey	N/A	N	Good	ND
ASB-059	Laboratory	Exterior	Outside, between Rooms 10 & 11	Stucco, base layer, grey	N/A	N	Good	ND
ASB-060	Laboratory	Exterior	Outside Room 10	Stucco, base layer, grey	N/A	N	Good	ND
ASB-061	Laboratory	19	Mezzanine	HVAC cloth tape	N/A	N	Good	ND
ASB-062	Laboratory	19	Mezzanine	HVAC cloth tape	N/A	N	Good	ND

Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Room No.	Sample Location	Sample Description	*Approx. Quantity	Friable Y/N	Condition	Asbestos Content
ASB-063	Laboratory	19	Mezzanine	HVAC cloth tape	N/A	N	Good	ND
ASB-064	Laboratory	Exterior	Outside Room 15	Exterior door sealant	600 LF	N	Good	3% Chrysotile
ASB-065	Laboratory	Exterior	Outside Room 6	Exterior door sealant	See ASB-064	N	Good	3% Chrysotile
ASB-066	Laboratory	Exterior	Outside Room 16-B	Exterior door sealant	See ASB-064	N	Good	3% Chrysotile
ASB-067	Laboratory	Exterior	Outside Utility Room 2	Exterior concrete panel sealant, beige/grey	N/A	N	Good	ND
ASB-068	Laboratory	Exterior	Southwest corner of Lab building	Exterior concrete panel sealant, beige/grey	N/A	N	Good	ND
ASB-069	Laboratory	Exterior	Northwest corner of Lab building	Exterior concrete panel sealant, beige/grey	N/A	N	Good	ND
ASB-070	Laboratory	Roof	Above Room 19	Beige/black roof penetration mastic	N/A	N	Good	ND
ASB-071	Laboratory	Roof	Above Room 16-I	Beige/black roof penetration mastic	N/A	N	Good	ND
ASB-072	Laboratory	Roof	Above Room 17-B	Beige roof penetration mastic	N/A	N	Good	ND
ASB-073	Laboratory	Roof	Above Utility Room 2	Beige/black roof penetration mastic	N/A	N	Good	ND
ASB-074	Laboratory	Roof	Above Room 4-B	Brown/black roof penetration mastic	N/A	N	Good	ND
ASB-075	Laboratory	Roof	Above DGSJ2	Beige/black roof penetration mastic	N/A	N	Good	PC <0.1 Chrysotile
ASB-076	Laboratory	Roof	Above Room 16	Beige/black roof penetration mastic	N/A	N	Good	PC <0.1 Chrysotile
ASB-077	Laboratory	Roof	Center of roof	Beige/black roof penetration mastic	N/A	N	Good	PC <0.1 Chrysotile
ASB-078	Laboratory	Roof	Above Room 4-B	Beige/black roof penetration mastic	N/A	N	Good	PC <0.1 Chrysotile
ASB-079	Laboratory	Roof	Southeast corner of roof	Beige/black roof penetration mastic	N/A	N	Good	PC <0.1 Chrysotile

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Table 1 - Asbestos Survey Results

Sample No.	Bldg. No.	Room No.	Sample Location	Sample Description	*Approx. Quantity	Friable Y/N	Condition	Asbestos Content
ASB-080	Laboratory	Roof	Above Room 16-B	Silver and grey roof penetration mastic	N/A	N	Good	ND
ASB-081	Laboratory	Roof	Above Room 17-A	Silver and grey roof penetration mastic	N/A	N	Good	ND
ASB-082	Laboratory	Roof	Above Room 12	Silver and grey roof penetration mastic	N/A	N	Good	ND
ASB-083	Laboratory	Roof	Above Room 2-A	Silver and grey roof penetration mastic	N/A	N	Good	ND
ASB-084	Laboratory	Roof	Above Room 4	Silver and grey roof penetration mastic	N/A	N	Good	PC <0.1 Chrysotile

NOTES:

ND = None detected

N/A = Not applicable

PC = Point Counted

* = Material quantities are approximate. It is the contractor's responsibility to confirm material quantities prior to removal.

Samples analysis by asbestos analysis of bulk materials via USEPA 600/R-93/116 method using polarized light microscopy.

Table 2 - XRF Data Sheet

Reading No.	Floor	Side	Room/ Area	Source	Component	Substrate	Condition	Color	Depth Index	Results (Pos/Neg)	Approx. Quantity* LF/SF/EA	Lead Reading (mg/cm ²)	Precision (+/- mg/cm ²)	
1	--	--	Shutter Calibration							0.0	...	--	NA	--
2	--	--	Standard Calibration 1.06 +/- 0.06 mg/cm ²							1.0	POS	--	1.15	0.08
3	--	--	Standard Calibration 1.06 +/- 0.06 mg/cm ²							1.0	POS	--	1.16	0.11
4	--	--	Standard Calibration 1.06 +/- 0.06 mg/cm ²							1.0	POS	--	1.17	0.13
5	1	B	Exterior	Wall	Wall	Stucco	Good	Beige	2.0	NEG	--	0.01	0.11	
6	1	B	Exterior	Window	Frame	Metal	Good	Brown	1.0	NEG	--	0.00	0.06	
7	1	B	Exterior	Wall	Wall	Metal	Good	White	2.6	NEG	--	0.01	0.09	
8	1	B	Exterior	Door	Door	Metal	Good	Brown	2.0	NEG	--	0.09	0.08	
9	1	B	Exterior	Wall	Wall	Concrete	Good	White	2.3	NEG	--	0.01	0.09	
10	1	B	Exterior	Door	Door	Metal	Fair	Tan	1.0	NEG	--	0.04	0.04	
11	1	B	Exterior	Door	Frame	Metal	Poor	Grey	3.3	NEG	--	0.02	0.11	
12	1	B	Exterior	Guardrail	Guardrail	Metal	Good	Yellow	1.0	POS	40 LF	1.00	0.07	
13	1	D	Exterior	Wall	Wall	Concrete	Good	White	4.9	NEG	--	0.03	0.12	
14	1	D	Exterior	Roll-Up Door	Roll-Up Door	Metal	Fair	Grey	1.0	NEG	--	0.01	0.05	
15	1	D	Exterior	Window	Frame	Metal	Good	Brown	1.0	NEG	--	0.00	0.04	
16	1	D	Exterior	Downspout	Downspout	Metal	Fair	Beige	1.2	NEG	--	0.00	0.11	
17	1	D	Exterior	Wall	Wall	Concrete	Good	Beige	1.0	NEG	--	0.00	0.07	
18	1	D	Exterior	Window	Frame	Metal	Good	Brown	5.6	NEG	--	0.02	0.07	
19	1	D	Exterior	Parking Stripe	5-Inch Wide	Asphalt	Fair	White	1.0	NEG	--	0.00	0.01	
20	1	C	Exterior	Parking Stripe	5-Inch Wide	Asphalt	Fair	White	1.0	NEG	--	0.00	0.05	
21	1	B	Exterior	Parking Stripe	5-Inch Wide	Asphalt	Fair	White	1.0	NEG	--	0.00	0.07	
22	1	B	Exterior	Pole	Pole	Metal	Fair	White	1.2	NEG	--	0.09	0.12	
23	1	B	Exterior	Pole	Pole	Metal	Fair	White	4.4	NEG	--	0.29	0.34	
24	1	C	Room 1	Wall	Wall	Drywall	Good	White	1.0	NEG	--	0.00	0.09	
25	1	D	Room 1	Baseboard	Baseboard	Wood	Good	Brown	1.0	NEG	--	0.00	0.09	
26	1	A	Room 2A	Door	Door	Wood	Good	Brown	2.5	NEG	--	0.01	0.16	
27	1	A	Room 2A	Door	Frame	Metal	Good	Brown	1.0	NEG	--	0.01	0.05	
28	1	B	Room 3	Door	Door	Wood	Good	Brown	1.0	NEG	--	0.00	0.09	
29	1	B	Room 3	Door	Frame	Metal	Good	Brown	1.0	NEG	--	0.00	0.01	
30	1	D	Room 3	Wall	Wall	Drywall	Good	White	1.0	NEG	--	0.00	0.02	
31	1	D	Room 3A	Wall	Wall	Drywall	Good	Orange	1.0	NEG	--	-0.49	0.96	

Table 2 - XRF Data Sheet

Reading No.	Floor	Side	Room/ Area	Source	Component	Substrate	Condition	Color	Depth Index	Results (Pos/Neg)	Approx. Quantity* LF/SF/EA	Lead Reading (mg/cm ²)	Precision (+/- mg/cm ²)
32	1	0	Room 4	Floor	Caution Tape	Concrete	Poor	Yellow	1.2	NEG	--	0.64	0.17
33	1	0	Room 4	Vertical Post	Vertical Post	Metal	Good	Brown	1.5	POS	1 EA	12.65	3.75
34	1	A	Room 4B	Wall	Wall	Concrete	Fair	Tan	1.0	NEG	--	-0.18	0.87
35	1	A	Room 4C	Wall	Wall	Drywall	Good	Tan	1.2	NEG	--	0.00	0.10
36	1	D	Room 4E	Wall	Wall	Drywall	Fair	Tan	1.0	NEG	--	0.00	0.07
37	1	D	Room 5	Door	Door	Metal	Good	Beige	3.7	NEG	--	0.03	0.15
38	1	A	Room 11	Wall	Wall	Drywall	Good	Yellow	1.0	NEG	--	0.00	0.06
39	1	A	Room 11	Door	Frame	Metal	Good	Beige	1.0	NEG	--	0.00	0.01
40	1	A	Room 11	Door	Door	Metal	Good	Beige	1.0	NEG	--	0.00	0.01
41	1	D	Room 11A	Wall	Wall	Drywall	Good	Yellow	1.3	NEG	--	0.00	0.10
42	1	A	Room 13	Deep sink	Deep sink	Porcelain	Good	White	1.4	POS	1 EA	30.44	11.81
43	1	D	Women's R.R	Wall	Wall	Drywall	Good	Yellow	2.5	NEG	--	0.01	0.11
44	1	A	Women's R.R	Door	Partition	Metal	Good	Yellow	1.0	NEG	--	0.79	0.13
45	1	A	Women's R.R	Wall	Partition	Metal	Good	Yellow	1.0	NEG	--	0.05	0.02
46	1	A	Women's R.R	Toilet	Toilet	Porcelain	Good	White	10.0	NEG	--	0.18	0.74
47	1	C	Women's R.R	Big Sink	Big Sink	Porcelain	Good	White	1.0	NEG	--	0.00	0.17
48	1		NULL						10.0	INCOM	--	0.11	0.42
49	1	C	Women's R.R	Small Sink	Small Sink	Porcelain	Good	White	5.0	NEG	--	0.06	0.28
50	1	A	Women's R.R	Shower Wall	Shower Wall	Ceramic tile	Good	Beige	1.0	NEG	--	0.00	0.09
51	1	A	Women's R.R	Door	Door	Wood	Good	Yellow	1.0	NEG	--	0.00	0.08
52	1	B	Men's R.R.	Door	Door	Wood	Good	Yellow	3.8	NEG	--	0.03	0.17
53	1	D	Men's R.R.	Wall	Wall	Drywall	Good	Yellow	1.0	NEG	--	0.00	0.07
54	1	B	Men's R.R.	Door	Partition	Metal	Good	Yellow	1.0	NEG	--	0.95	0.09
55	1	B	Men's R.R.	Frame	Partition	Metal	Good	Yellow	1.0	NEG	--	0.06	0.08
56	1	A	Men's R.R.	Urinal	Urinal	Porcelain	Good	White	1.0	NEG	--	0.00	0.14
57	1	A	Men's R.R.	Urinal	Mansfield	Porcelain	Good	White	10.0	NEG	--	0.13	0.57
58	1	D	Men's R.R.	Trough Sink	Trough Sink	Porcelain	Good	White	1.7	POS	2 EA	30.75	11.38
59	1	D	Men's R.R.	Big Sink	Big Sink	Porcelain	Good	White	3.0	NEG	--	0.01	0.11
60	1	A	Men's R.R.	Shower Wall	Shower Wall	Ceramic tile	Good	Beige	2.9	NEG	--	0.01	0.09
61	1	B	Men's R.R.	Toilet	Toilet	Porcelain	Good	White	6.9	NEG	--	0.03	0.13
62	1	B	Men's R.R.	Toilet	Toilet	Porcelain	Good	White	2.8	NEG	--	0.18	0.17

Table 2 - XRF Data Sheet

Reading No.	Floor	Side	Room/ Area	Source	Component	Substrate	Condition	Color	Depth Index	Results (Pos/Neg)	Approx. Quantity* LF/SF/EA	Lead Reading (mg/cm ²)	Precision (+/- mg/cm ²)
63	1	B	Room 15	Door	Frame	Metal	Good	Brown	1.0	NEG	--	0.00	0.13
64	1	B	Room 15	Door	Door	Wood	Good	Brown	1.0	NEG	--	0.00	0.08
65	1	0	Room 15	15-ft. Post	15-ft. Post	Metal	Good	Brown	1.5	POS	2 EA	5.10	1.00
66	1	0	Room 15	Conduit	Vertical Pole	Metal	Good	Beige	1.0	NEG	--	0.00	0.03
67	1	0	Room 15	Conduit	Vertical Pole	Metal	Good	Beige	1.0	NEG	--	0.00	0.06
68	1	B	Room 16E	Wall	Wall	Drywall	Good	Blue	1.0	NEG	--	0.00	0.07
69	1	C	Room 16A	Door	Door	Metal	Good	Tan	1.0	NEG	--	0.00	0.13
70	1	A	Room 16	Deep Sink	Deep Sink	Porcelain	Good	White	1.7	POS	1 EA	34.10	12.22
71	1	B	Room 16	Vertical Post	Vertical Post	Metal	Good	White	1.7	POS	1 EA	5.10	1.00
72	1	B	DGS-2	Door	Door	Wood	Good	Natural	1.0	NEG	--	0.00	0.06
73	1	D	19A	Baseboard	Baseboard	Wood	Good	Tan	1.0	NEG	--	0.00	0.08
74	--	--	Standard Calibration 1.06 +/- 0.06 mg/cm ²						1.0	POS	--	1.14	0.09
75	--	--	Standard Calibration 1.06 +/- 0.06 mg/cm ²						1.0	POS	--	1.15	0.12
76	--	--	Standard Calibration 1.06 +/- 0.06 mg/cm ²						1.0	POS	--	1.14	0.08

NOTES

POS = Positive

NEG = Negative

mg/cm² = milligrams per square centimeter

* = Material quantities are approximate. It is the contractor's responsibility to confirm material quantities prior to removal.

XRF assays were collected using a portable NITON XL 309 XRF spectrum analyzer.

DC = Drop ceiling

Table 3 - Summary of Asbestos-Containing Surfaces

Sample No.	Sample Location	Sample Description	Asbestos Content	Approximate Quantity EA/SF/LF	Photo Number
ASB-020 T	Laboratory Building, Room 18, floor	Beige 1-ft. x 1-ft. vinyl floor tile	2% Chrsotile	21,000 SF	1
ASB-020 M	Laboratory Building, Room 18, floor	Vinyl floor tile black mastic	5% Chrysotile	13,800 SF	1
ASB-021 T	Laboratory Building, Room DGSJ3, floor	Beige 1-ft. x 1-ft. vinyl floor tile	2% Chrsotile	See ASB-020 T	1
ASB-021 M	Laboratory Building, Room DGSJ3, floor	Vinyl floor tile black mastic	5% Chrysotile	See ASB-020 M	1
ASB-022 T	Laboratory Building, Room 15-A, floor	Beige 1-ft. x 1-ft. vinyl floor tile	2% Chrsotile	See ASB-020 T	1
ASB-022 M	Laboratory Building, Room 15-A, floor	Vinyl floor tile black mastic	5% Chrysotile	See ASB-020 M	1
ASB-025 T	Laboratory Building, Room 7, floor	Beige/grey 1-ft. x 1-ft. vinyl floor tile	2% Chrsotile	See ASB-020 T	1
ASB-025 M	Laboratory Building, Room 7, floor	Vinyl floor tile black mastic	5% Chrysotile	See ASB-020 M	1
ASB-026 T	Laboratory Building, Room 3-A, floor	Beige/grey 1-ft. x 1-ft. vinyl floor tile	2% Chrsotile	See ASB-020 T	1
ASB-026 M	Laboratory Building, Room 3-A, floor	Vinyl floor tile black mastic	5% Chrysotile	See ASB-020 M	1
ASB-046	Laboratory Building, Room 4-A, west wall	Black laboratory countertop	10% Chrysotile	260 SF	4
ASB-047	Laboratory Building, Room 4-A, northwest corner	Black laboratory countertop	10% Chrysotile	See ASB-046	4
ASB-048	Laboratory Building, Room 4-A, center of room	Black laboratory countertop	10% Chrysotile	See ASB-046	4
ASB-052	Laboratory Building, Room 4, beneath sink	Purple sink lining	3% Chrsotile	3 sinks	2
ASB-053	Laboratory Building, Room 4, beneath sink	Purple sink lining	3% Chrsotile	See ASB-052	2
ASB-054	Laboratory Building, Room 4, beneath sink	Purple sink lining	3% Chrsotile	See ASB-052	2
ASB-064	Laboratory Building exterior, outside Room 15	Exterior door sealant	3% Chrsotile	600 LF	9
ASB-065	Laboratory Building exterior, outside Room 6	Exterior door sealant	3% Chrsotile	See ASB-064	9
ASB-066	Laboratory Building exterior, outside Room 16-B	Exterior door sealant	3% Chrsotile	See ASB-064	9

NOTES:

SF = Square feet

LF = Linear feet

EA = Each

Material quantities are approximate. It is the contractors responsibility to confirm quantities prior to bid submittals and initiating renovation or demolition activities at the site.

Table 4 - Summary of Lead-Containing Surfaces

Reading No.	Room / Area ⁽¹⁾	Source	Component	Substrate	Color(s)	Lead Reading(s) (mg/cm ²)	Photo No.	EA/SF/LF Approximate Quantities ⁽²⁾
12	Exterior southeast corner of Laboratory Building	Guardrail	Guardrail	Metal	Yellow	1.00	13	40 LF
33 & 65	Room 4 & Room 15	Vertical Post	Vertical Post	Metal	Brown	5.10-12.65	3, 5	3 EA ⁽³⁾
42 & 70	Room 13 & Room 16	Deep Sink	Deep Sink	Porcelain	White	30.44-34.10	7	1 EA
58	Men's restroom	Sink	Trough	Porcelain	White	30.75	8	2 EA
71	Room 16	Vertical Post	Vertical Post	Metal	White	5.10	6	1 EA ⁽³⁾

NOTES:

SF = Square feet

LF = Linear feet

EA = Each

mg/cm² = milligrams per square centimeter

⁽¹⁾ = LBP locations are based upon Ninyo & Moore's visual observations during survey activities.

⁽²⁾ = Material quantities are approximate. It is the contractors responsibility to confirm quantities prior to bid submittals and initiating renovation or demolition activities at the site.

⁽³⁾ = Additional posts may be present within wall spaces or inaccessible areas.

APPENDIX A

SUSPECT ASBESTOS-CONTAINING MATERIALS SAMPLING PROTOCOL

SUSPECT ASBESTOS-CONTAINING MATERIALS SAMPLING PROTOCOL

Personal Protection Equipment

Inhalation of asbestos fibers during asbestos survey may pose a serious health hazard, the use of personal protection equipment (PPE) by building inspectors is suggested during the sampling process. Inspectors should wear a respirator with either a full- or half-face mask-type respirator and high-efficiency disposable filter cartridges. Full-face masks will also prevent eye irritation from dust, fibers, and debris released during the sampling operation. Disposable clothing should be worn during sampling, if necessary. Inspectors should utilize plastic bags to handle the disposal of drop cloths, protective clothing, wet cloths, and debris.

Sampling Equipment

Inspectors will need various tools and aids to accomplish their sampling tasks, including those listed below:

- a ladder and flashlight to access areas and to aid visibility,
- airtight, sampling containers (e.g., resealable plastic bags),
- a plastic spray mister bottle with water to spray the area to be sampled,
- plastic drop cloths to spread beneath the area to be sampled,
- a knife, linoleum cutter, screwdriver, or other tool appropriate for collecting samples,
- a caulking gun and compound for filling holes once a sample has been extracted,
- spray acrylic or adhesive to encapsulate sample extractions,
- duct tape for repairing thermal system insulation jackets,
- cloths and cleaner for decontaminating tools,
- a vacuum cleaner equipped with high efficiency particulate air (HEPA) filters, if available,
- indelible ink pen for labeling sample containers, and
- camera for photographic documentation.

Sampling Procedures

ACMs are divided into three categories: surfacing materials, thermal system insulation (TSI), and miscellaneous materials. The procedures for sampling these three types of materials are as follows:

Surfacing Materials

1. Spread a plastic drop cloth on the floor and set up other equipment, (e.g., ladder).
2. Put on protective equipment (respirator at all times when sampling friable material and protective clothing, if needed).
3. Label container with its sample identification number and fill out location and type of material sampled on a sampling data form.
4. Mark the location and sample identification number on the sample container and on the sample location map.
5. Moisten area where sample is to be collected (spray the immediate area with water).
6. Collect sample using a clean knife or other tool appropriate to cut out or scrape off a small piece of the material. Be sure to penetrate all layers of material. Be careful not to disturb adjacent material.
7. Place sample in a container and tightly seal it.
8. Wipe the exterior of the container with a wet wipe to remove any residue which may have adhered to the container it during sampling.
9. Clean tools with wet wipes and wet mop or vacuum area with a HEPA vacuum to clean all debris.
10. Fill hole with caulking compound or appropriate filler (to minimize subsequent fiber release and for appearance).
11. Repeat the above steps at each sample location. Place sample containers in plastic bags.
12. Discard protective clothing, rags, and drop cloth in a plastic bag.

Thermal System Insulation

Sampling TSI follows the same procedural sequence as laid out above. Obtain samples from exposed or damaged areas, if possible. However, random sampling will require sampling of some intact material. Sampling holes can be patched with plastic spackling, caulk, or fibrous glass.

Miscellaneous Materials

Sampling miscellaneous materials follows the same procedural sequence as laid out above, making sure that a cross section of the materials have been obtained.

Forwarding Samples to Laboratory

The samples are transferred, using standard chain-of-custody procedures, to a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP), for bulk asbestos fiber analysis. The samples are analyzed using polarized light microscopy with dispersion staining (PLM/ds) for the presence and quantification of asbestos fibers, in general accordance with either United States Environmental Protection Agency (USEPA) Method 600/M4-82-020 or USEPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM/ds method is approximately 1% by volume. California regulations now define ACMs as those materials having an asbestos content of greater than one tenth of 1% (0.1%).

APPENDIX B
XRF TESTING METHODOLOGY

XRF TESTING METHODOLOGY

To assess the painted surfaces for future contractor worker safety, x-ray fluorescence (XRF) testing technologies were utilized. The testing was conducted in general accordance with the following regulations: 1) Title 17, California Code of Regulations, Division 1, Chapter 8, Accreditation Certification, and Work Practice in Lead Related Construction, Section 36000.

After a visual assessment, accessible painted surfaces were screened for lead content with a NITON 309 XRF spectrum analyzer. XRF readings were taken using the standard paint mode. Standard paint mode measurements have no predetermined testing length, and automatically adjust to account for various types of substrates and material's densities.

In the standard paint mode, the NITON 309 XRF tests until a K-shell result is indicated as either positive or negative, compared to the threshold level based on the current precision of the test. Correction for paint matrix and substrate effects is performed automatically.

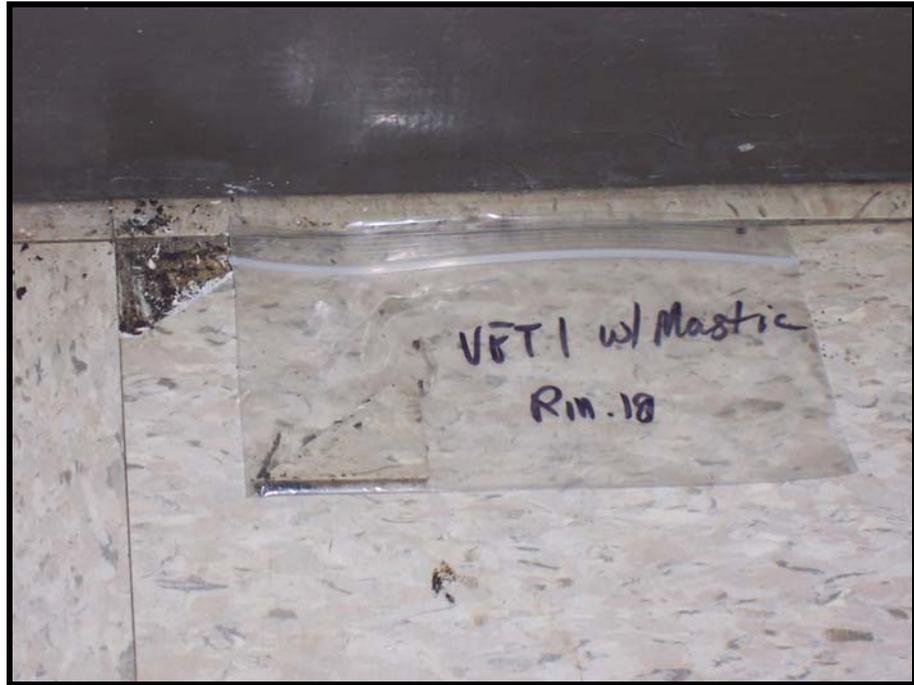
XRF readings were made on testing combinations in all room equivalents in an effort to test typical materials which are representative of the room equivalent. Testing combinations were tested non-destructively by holding the XRF against the surface being tested. At each XRF sample location the shutter is opened, and one reading was made using the standard paint testing mode. Results of each test were read from the digital display of the instrument console and recorded on the XRF Data Sheet attached as Table 2.

To ensure that the XRF equipment was working properly, various quality control tests were performed before, during, and after the on-site work. At the beginning of the work day, three start up validation measurements were made in the standard paint calibration mode, using the calibration check standard associated with the particular XRF that was used. This painted standard contains a known quantity of lead and allows the XRF operator to determine whether the instrument is functioning within acceptable tolerance ranges for accuracy and precision, as determined by the manufacturer.

In addition to the three starts up tests, calibration readings were taken on the red 1.06 mg/cm² and/or yellow 1.57 mg/cm² Standard Reference Material (SRM) paint film, developed by the National Institute of Standards and Technology (NIST). Results of each reading

were recorded on the XRF Data Sheet. This calibration check was also performed after four hours and at the end of the day. The quality control tests taken during testing at the subject property were within the acceptable performance range prescribed by the XRF equipment manufacturer. Documentation of the quality control calibration check is included in the XRF Data Sheet, Table 2.

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION



Photograph No. 1: View of the 1-square-foot, beige and grey vinyl floor tile and black mastic located throughout the interior of the Laboratory Maintenance Building.



Photograph No. 2: View of the purple sink lining found beneath the sinks in Room 4.



Photograph No. 3: View of the brown, metal vertical post located in Room 4.



Photograph No. 4: View of the black laboratory countertop found in Room 4-A.



Photograph No. 5: View of the two brown, metal posts located in Room 15 of the Laboratory Maintenance Building.



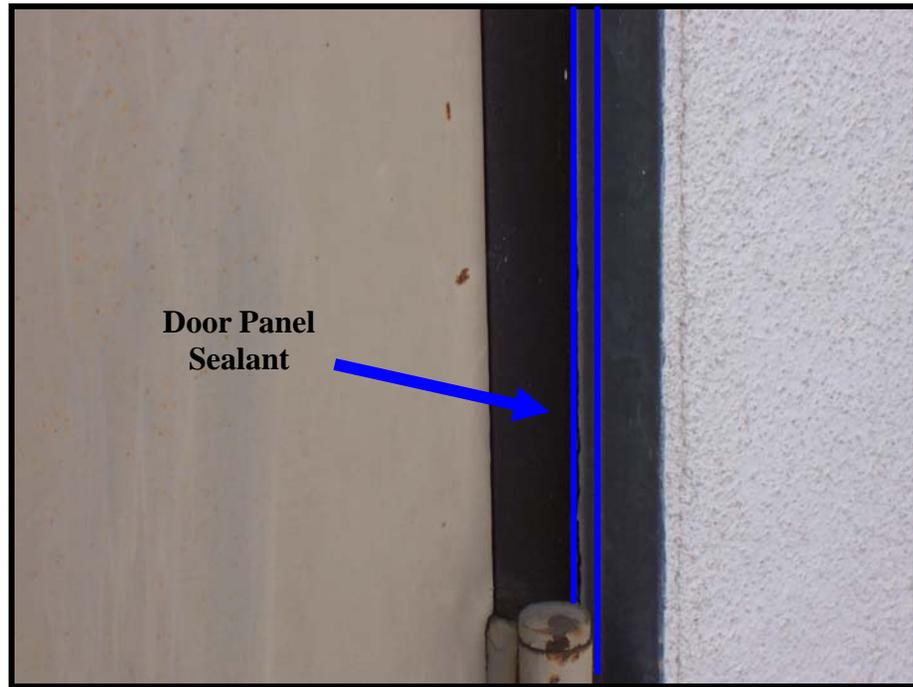
Photograph No. 6: View of the white, vertical post located in Room 16 of the Laboratory Maintenance Building.



Photograph No. 7: View of a white, porcelain deep sink found in Room 13 and Room 16.



Photograph No. 8: View of one of the two white, porcelain trough sinks located in the men's restroom.



Photograph No. 9: View of the grey, exterior door panel sealant located on the exterior doors outside Rooms 6, 15 and 16-B.



Photograph No. 10: View of the beige and black roof penetration mastic found around the roof penetrations of the Laboratory Maintenance Building.



Photograph No. 11: View of the roof penetrations and roof penetration mastic located on the northern portion of the roof of the Laboratory Maintenance Building, view looking northwest.



Photograph No. 12: View of the southern portion of the roof of the Laboratory Maintenance Building, looking southwest.



Photograph No. 13: View of the yellow, metal guardrail located on the exterior southeast corner of the Laboratory Maintenance Building, looking west.

APPENDIX D

LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY RECORDS



LA Testing

159 Pasadena Avenue, South Pasadena, CA 91030

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Attn: **Gerald Kwiat**
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5710 Ruffin Rd.
San Diego, CA 92123

Customer ID: 32NIN63
Customer PO: 105256005
Received: 12/11/07 9:00 AM
LA Testing Order: 320713812

Fax: (858) 576-9600 Phone: (858) 576-1000
Project: **Kearney Mesa Lab 105256005**

LA Testing Proj:
Analysis Date: 12/13/2007
Report Date: 12/14/2007

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-001 320713812-0001	In Hallway, Between Rooms 3- A & 3-B	White/Beige Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	None Detected
ASB-002 320713812-0002	n Hallway, Above Men's Restroom Door	White/Beige Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	None Detected
ASB-003 320713812-0003	In Hallway, In front of Rm . 19-B	White/Beige Fibrous Heterogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (other)	None Detected
ASB-004 320713812-0004	Room 18	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-005 320713812-0005	Room 15-F	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-006 320713812-0006	Room 16, Main	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-007 320713812-0007	Room 15-C	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-008 320713812-0008	Room 12	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected

Analyst(s)

Kieu-Ahn Pham Duong (60)
Lei Wu (38)

Derrick Tanner, Laboratory Manager
or other approved signatory

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Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-009 320713812-0009	Room 11, Main	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-010 320713812-0010	Room 2-A	White/Beige Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-011 320713812-0011	Room 3-B	White/Beige Fibrous Heterogeneous	50% Cellulose	10% Non-fibrous (other) 40% Perlite	None Detected
ASB-012 320713812-0012	Room 3-B	White/Beige Fibrous Heterogeneous	50% Cellulose	10% Non-fibrous (other) 40% Perlite	None Detected
ASB-013 320713812-0013	Room 3-B	White/Beige Fibrous Heterogeneous	50% Cellulose	10% Non-fibrous (other) 40% Perlite	None Detected
ASB-014 320713812-0014	Room DGS2	White/Grayish Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-015 320713812-0015	Room DGS2	White/Grayish Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected
ASB-016 320713812-0016	Room DGS2	White/Grayish Fibrous Heterogeneous	50% Cellulose 20% Min. Wool	10% Non-fibrous (other) 20% Perlite	None Detected

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Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-017 320713812-0017	Room DGS2	Beige/Brown Fibrous Heterogeneous	60% Cellulose	10% Non-fibrous (other) 30% Perlite	None Detected
ASB-018 320713812-0018	Room DGS2	Beige/Brown Fibrous Heterogeneous	60% Cellulose	10% Non-fibrous (other) 30% Perlite	None Detected
ASB-019 320713812-0019	Room DGS2	Beige/Brown Fibrous Heterogeneous	60% Cellulose	10% Non-fibrous (other) 30% Perlite	None Detected
ASB-020 T 320713812-0020	Room 18	Beige Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
ASB-020 M 320713812-0020A	Room 18	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
ASB-021 T 320713812-0021	Room DGSJ3	Beige Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
ASB-021 M 320713812-0021A	Room DGSJ3	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
ASB-022 T 320713812-0022	Room 15-A	Black Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile

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Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-022 M 320713812-0022A	Room 15-A	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
ASB-023 T 320713812-0023	Room 16-F	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-023 M 320713812-0023A	Room 16-F	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-024 T 320713812-0024	Room 16	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-024 M 320713812-0024A	Room 16	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-025 T 320713812-0025	Room 7	Beige/Gray Non-Fibrous Heterogeneous		98% Non-fibrous (other)	2% Chrysotile
ASB-025 M 320713812-0025A	Room 7	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
ASB-026 T 320713812-0026	Room 3-A	Beige/Gray Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile

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Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-026 M 320713812-0026A	Room 3-A	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
ASB-027 320713812-0027	Room 19-A	Yellow Non-Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (other)	None Detected
ASB-028 320713812-0028	Room 19-A	Yellow Non-Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (other)	None Detected
ASB-029 320713812-0029	Room 19-A	Yellow Non-Fibrous Homogeneous	2% Synthetic	98% Non-fibrous (other)	None Detected
ASB-030 320713812-0030	Room 15	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-031 320713812-0031	Room 15-H	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-032 320713812-0032	Room 15-J	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-033 320713812-0033	Room 16	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

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Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-034 320713812-0034	Room 16F	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-035 320713812-0035	Room 19	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-036 DW 320713812-0036	Room 3-A, at light switch	Brown/White Fibrous Heterogeneous	5% Cellulose 5% Glass	90% Non-fibrous (other)	None Detected
ASB-036 JC 320713812-0036A	Room 3-A, at light switch	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-037 DW 320713812-0037	Room 18, at light switch	Brown/White Fibrous Heterogeneous	5% Cellulose 2% Glass	93% Non-fibrous (other)	None Detected
ASB-037 JC 320713812-0037A	Room 18, at light switch	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-038 DW 320713812-0038	Room 13	Brown/White Fibrous Heterogeneous	5% Cellulose 2% Glass	93% Non-fibrous (other)	None Detected
ASB-038 JC 320713812-0038A	Room 13	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-039 DW 320713812-0039	Room 19-A	Brown/White Fibrous Heterogeneous	5% Cellulose 2% Glass	93% Non-fibrous (other)	None Detected
ASB-039 JC 320713812-0039A	Room 19-A	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-040 320713812-0040	Room 7, at light switch	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-041 320713812-0041	Room 15-A	Blue/Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-042 320713812-0042	Women's restroom	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-043 DW 320713812-0043	Room 7	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
ASB-043 JC 320713812-0043A	Room 7	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-044 DW 320713812-0044	Room 19-A	White/Brown Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected

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Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-044 JC 320713812-0044A	Room 19-A	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-045 DW 320713812-0045	Utility Room 2 (U-2)	White/Brown Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
ASB-045 JC 320713812-0045A	Utility Room 2 (U-2)	Beige Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-046 320713812-0046	Room 4-A	Black Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile
ASB-047 320713812-0047	Room 4-A	Black Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile
ASB-048 320713812-0048	Room 4-A	Black Fibrous Heterogeneous		90% Non-fibrous (other)	10% Chrysotile
ASB-049 320713812-0049	Room 4-A, at hood	Beige Fibrous Heterogeneous	50% Glass	50% Non-fibrous (other)	None Detected
ASB-050 320713812-0050	Room 4-A, at hood	Beige Fibrous Heterogeneous	50% Glass	50% Non-fibrous (other)	None Detected

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			% Fibrous	% Non-Fibrous	% Type
ASB-051 320713812-0051	Room 4-A, at hood	Beige Fibrous Heterogeneous	50% Glass	50% Non-fibrous (other)	None Detected
ASB-052 320713812-0052	Room 4	Purple Non-Fibrous Homogeneous		97% Non-fibrous (other)	3% Chrysotile
ASB-053 320713812-0053	Room 4	Purple Non-Fibrous Homogeneous		97% Non-fibrous (other)	3% Chrysotile
ASB-054 320713812-0054	Room 17	Purple Non-Fibrous Homogeneous		97% Non-fibrous (other)	3% Chrysotile
ASB-055 320713812-0055	Outside Room 15-A	White Non-Fibrous Homogeneous	3% Synthetic	97% Non-fibrous (other)	None Detected
ASB-056 320713812-0056	Outside, between 10 & 11-A	White Non-Fibrous Homogeneous	3% Synthetic	97% Non-fibrous (other)	None Detected
ASB-057 320713812-0057	Outside Rm. 10	White Non-Fibrous Homogeneous	3% Synthetic	97% Non-fibrous (other)	None Detected
ASB-058 320713812-0058	Outside Room 15-A	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Kieu-Ahn Pham Duong (60)
Lei Wu (38)

Derrick Tanner, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of LA Testing. LA Testing's liability is limited to the cost of analysis. LA Testing bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Samples received in good condition unless otherwise noted.
Analysis performed by LA Testing (NVLAP 200232-0)



LA Testing

159 Pasadena Avenue, South Pasadena, CA 91030

Phone: (323) 254-9960 Fax: (323) 254-9982 Email: pasadenalab@latesting.com

Attn: **Gerald Kwiat
Ninyo & Moore
5710 Ruffin Rd.
San Diego, CA 92123**

Customer ID: 32NIN63
Customer PO: 105256005
Received: 12/11/07 9:00 AM
LA Testing Order: 320713812

Fax: (858) 576-9600 Phone: (858) 576-1000
Project: **Kearney Mesa Lab 105256005**

LA Testing Proj:
Analysis Date: 12/13/2007
Report Date: 12/14/2007

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-059 320713812-0059	Outside, between 10& 11-A	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-060 320713812-0060	Outside Room 10	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-061 320713812-0061	Rm. 19, Mezzanine	Beige Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
ASB-062 320713812-0062	Rm. 19, Mezzanine	Beige Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
ASB-063 320713812-0063	Rm. 19, Mezzanine	Beige Fibrous Heterogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
ASB-064 320713812-0064	Outside Rm. 15	Brown Non-Fibrous Homogeneous	5% Synthetic	92% Non-fibrous (other)	3% Chrysotile
ASB-065 320713812-0065	Outside Rm. 6	Brown Non-Fibrous Homogeneous	5% Synthetic	92% Non-fibrous (other)	3% Chrysotile
ASB-066 320713812-0066	Outside Rm. 16-B	Brown Non-Fibrous Homogeneous	5% Synthetic	92% Non-fibrous (other)	3% Chrysotile

Analyst(s)

Kieu-Ahn Pham Duong (60)
Lei Wu (38)

Derrick Tanner, Laboratory Manager
or other approved signatory

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Customer ID: 32NIN63
Customer PO: 105256005
Received: 12/11/07 9:00 AM
LA Testing Order: 320713812

Fax: (858) 576-9600 Phone: (858) 576-1000
Project: **Kearney Mesa Lab 105256005**

LA Testing Proj:
Analysis Date: 12/13/2007
Report Date: 12/14/2007

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-067 320713812-0067	Outside Utility Room-2	Beige/Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-068 320713812-0068	Southwest Corner of LAB Bldg.	Beige/Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-069 320713812-0069	Northwest Corner of LAB Bldg.	Beige/Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
ASB-070 320713812-0070	Roof, above Rm. 19	Beige/Black Non-Fibrous Heterogeneous	2% Cellulose 5% Wollastonite	93% Non-fibrous (other)	None Detected
ASB-071 320713812-0071	Roof, above Rm. 16-l	Beige/Black Non-Fibrous Heterogeneous	2% Cellulose 5% Wollastonite	93% Non-fibrous (other)	None Detected
ASB-072 320713812-0072	Roof, above Rm 17-B	Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
ASB-073 320713812-0073	Roof, above U-2	Beige/Black Non-Fibrous Heterogeneous	2% Cellulose 5% Wollastonite	93% Non-fibrous (other)	None Detected
ASB-074 320713812-0074	Roof, above Rm. 4-B	Brown/Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Kieu-Ahn Pham Duong (60)
Lei Wu (38)

Derrick Tanner, Laboratory Manager
or other approved signatory

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San Diego, CA 92123**

Customer ID: 32NIN63
Customer PO: 105256005
Received: 12/11/07 9:00 AM
LA Testing Order: 320713812

Fax: (858) 576-9600 Phone: (858) 576-1000
Project: **Kearney Mesa Lab 105256005**

LA Testing Proj:
Analysis Date: 12/13/2007
Report Date: 12/14/2007

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-075 320713812-0075	Roof, above DGSJ2	Beige/Black Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	<1% Chrysotile
ASB-076 320713812-0076	Roof, above Rm. 16	Beige/Black Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	<1% Chrysotile
ASB-077 320713812-0077	Roof, Center	Beige/Black Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	<1% Chrysotile
ASB-078 320713812-0078	Roof, above Rm. 4- B	Beige/Black Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	<1% Chrysotile
ASB-079 320713812-0079	Roof, Southeast Corner	Beige/Black Non-Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (other)	<1% Chrysotile
ASB-080 320713812-0080	Roof, above Rm. 16-B	Silver/Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
ASB-081 320713812-0081	Roof, above Rm. 17-A	Silver/Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
ASB-082 320713812-0082	Roof, above Rm. 12	Silver/Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Kieu-Ahn Pham Duong (60)
Lei Wu (38)

Derrick Tanner, Laboratory Manager
or other approved signatory

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Ninyo & Moore
5710 Ruffin Rd.
San Diego, CA 92123**

Customer ID: 32NIN63
Customer PO: 105256005
Received: 12/11/07 9:00 AM
LA Testing Order: 320713812

Fax: (858) 576-9600 Phone: (858) 576-1000
Project: **Kearney Mesa Lab 105256005**

LA Testing Proj:
Analysis Date: 12/13/2007
Report Date: 12/14/2007

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Location	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ASB-083 320713812-0083	Roof, above Rm. 2- A	Silver/Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
ASB-084 320713812-0084	Roof, above Room 4	Silver/Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile

Report amended 12/14/07 - results corrected for sample 22t

Analyst(s)

Kieu-Ahn Pham Duong (60)
Lei Wu (38)

Derrick Tanner, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of LA Testing. LA Testing's liability is limited to the cost of analysis. LA Testing bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Samples received in good condition unless otherwise noted.

Analysis performed by LA Testing (NVLAP 200232-0)

320714080

Katie Chau

From: Gerald Kwiat [gkwiat@ninyoandmoore.com]
Sent: Tuesday, December 18, 2007 11:28 AM
To: kchau@emsl.com
Cc: John Willis
Subject: point count request letter

Kate

This note authorizes the point counting of 6 PLM samples that were part of L A Testing Order # 320713812, analysis date 12/13/07. The subject samples are: ASB-075, ASB-076, ASB-077, ASB-078, ASB-079, and ASB-084. The turn-around time (TAT) is to be 24 hours.

Gerald L. Kwiat, R.E.A., C.A.C.
Senior Project Environmental Scientist
Ninyo & Moore
Geotechnical & Environmental Sciences Consultants
5710 Ruffin Road
San Diego, California 92123
(858) 576-1000 (x1264)
(858) 576-9600 (Fax)
gkwiat@ninyoandmoore.com

Experience · Quality · Commitment



LA Testing

159 Pasadena Avenue, South Pasadena, CA 91030

Phone: (323) 254-9960 Fax: (323) 254-9982 Email: pasadenalab@latesting.com

Attn: **Gerald Kwiat**
Ninyo & Moore
5710 Ruffin Rd.
San Diego, CA 92123

Customer ID: 32NIN63
Customer PO:
Received: 12/18/07 10:45 AM
LA Testing Order: 320714080

Fax: (858) 576-9600 Phone: (858) 576-1000
Project: **Kearney Mesa Lab 105256005**

LA Testing Proj:
Analysis Date: 12/20/2007
Report Date: 12/20/2007

Polarized Light Microscopy (PLM) - Point Count Performed by EPA 600/R-93/116 Method with Gravimetric Reduction and 1000 Point Count

SAMPLE ID	LOCATION	APPEARANCE	(% Matrix		ASBESTOS		NON- ASBESTOS	NON- ASBESTOS
			Organic	Acid	% TYPES	% Fibrous		
ASB-075 320714080-0001	Roof, above DGSJ2	Tan/Black Non-Fibrous Heterogeneous	46.7	7.4	<0.1	Chrysotile		45.9 Non-fibrous (other)
ASB-076 320714080-0002	Roof, above Rm. 16	Tan/Black Non-Fibrous Heterogeneous	49.9	12.5	<0.1	Chrysotile		37.5 Non-fibrous (other)
ASB-077 320714080-0003	Roof, Center	Tan/Black Non-Fibrous Heterogeneous	31.6	18.4	<0.1	Chrysotile		49.9 Non-fibrous (other)
ASB-078 320714080-0004	Roof, above Rm. 4-B	Tan/Black Non-Fibrous Heterogeneous	70.5	10.1	<0.1	Chrysotile		19.4 Non-fibrous (other)
ASB-079 320714080-0005	Roof, Southeast Corner	Tan/Black Non-Fibrous Heterogeneous	30.6	7.0	<0.1	Chrysotile		62.4 Non-fibrous (other)
ASB-084 320714080-0006	Roof, above Room 4	Tan/Black Non-Fibrous Heterogeneous	36.8	42.4	<0.1	Chrysotile		20.8 Non-fibrous (other)

Analyst(s) _____
Rafik Vartanian, Ph.D (6)



Derrick Tanner, Laboratory Manager
or other approved signatory

Disclaimers: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. LA Testing suggests that samples reported as <0.1% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval by LA Testing. This report must not be used to claim product endorsement by NVLAP or any agency of the United States Government. LA Testing bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layer samples. LA Testing liability is limited to the cost of sample analysis. Samples received in good condition unless otherwise noted.
Analysis Performed by LA Testing, Inc. (NVLAP Air and Bulk 200232-0, State CA 2283, AZ AZ0821, TX 43369)

ASBESTOS BULK SAMPLE DATA SHEET

Ninyo & Moore 5710 Ruffin Road San Diego, CA 92123 Tel: (619) 576-1000 Fax: (619) 576-9600	Project Name:	Kearney Mesa Lab	Sampled By:	G L Kwiat' & Kiki Allen	Laboratory:	L A Testing	
	Project No.:	105256005	Date:	12-06-07 & 12-07-07	159 Pasadena Avenue		
	Project Manager:	JDW				So. Pasadena, CA 91030	
		Cal Trans				Tel: (800) 303-0047	
	7177 Opportunity Rd				Fax: (323)254-9982		

CHAIN OF CUSTODY INFORMATION:

Relinquished By (sign/print)	Company	Date	Time (24 hr)	Received By (sign/print)	Laboratory
<i>Kiki Allen</i>	Ninyo&Moore	12-10-07		<i>JG (Fex)</i>	12/11 9AM

TAT	Sample ID	Bldg #	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)
72 Hrs	ASB-001	Lab	In Hallway, Between Rooms 3-A & 3-B	ACT1-1 1-ft ² Acoustic Ceiling Tile, small holes, large fissures		
	ASB-002		In Hallway, Above Mens Restroom Door	ACT1-2		
	ASB-003		In Hallway, In front of Rm. 19-B	ACT1-3 ↓		
	ASB-004		Room 18	ACT2-1 2'x4' Acoustic Ceiling Tile, small holes, large fissures		
	ASB-005		Room 15-F	ACT2-2		
	ASB-006		Room 16, Main	ACT2-3		
	ASB-007		Room 15-C	ACT2-4		
	ASB-008		Room 12	ACT2-5		
	ASB-009		Room 11, Main	ACT2-6		
	ASB-010		Room 2-A	ACT2-7 ↓		
	ASB-011		Room 3-B	ACT3-1 white, 2'x4' Acoustic Ceiling Tile, small holes, large fissures, New		
	ASB-012		↓	ACT3-2		
	ASB-013		↓	ACT3-3 ↓		
	ASB-014		Room DGS 2	ACT4-1 1'x1' Acoustic Ceiling Tile, small holes with large fissures & seams		

ASBESTOS BULK SAMPLE DATA SHEET

320713812

Sheet 2 of 6

Ninyo & Moore 5710 Ruffin Road San Diego, CA 92123 Tel: (619) 576-1000 Fax: (619) 576-9600	Project Name:	Kearney Mesa Lab	Sampled By: G L Kwiat' & Kiki Allen	Laboratory: L A Testing
	Project No.:	105256005	Date: 12-06-07 & 12-07-07	159 Pasadena Avenue
	Project Manager:	JDW		So. Pasadena, CA 91030
		Cal Trans		Tel: (800) 303-0047
		7177 Opportunity Rd.		Fax: (323)254-9982

CHAIN OF CUSTODY INFORMATION:

Relinquished By (sign/print)	Company	Date	Time (24 hr.)	Received By (sign/print)	Laboratory
Kiki Allen, Gilin Allen	Ninyo & Moore	12-10-07			

TAT	Sample ID	Bldg #	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)
72 Hrs	ASB-015	Lab	Room DGS 2	ACT4-2, 1'x1' Acoustic Ceiling Tile, small holes with large fissures & seams		
	ASB-016		↓	↓		
	ASB-017		Room DGS 2	ACT5-1 1'x1' Acoustic Ceiling Tile, no holes or fissures		
	ASB-018		↓	ACT5-2 ↓		
	ASB-019		↓	ACT5-3 ↓		
	ASB-020		Room 18	VFT1-1 1ft ² Vinyl floor Tile, beige with grey & white spots, black mastic		
	ASB-021		HALL @ Room DGSJ3	VFT1-2 ↓		
	ASB-022		Room 15-A	VFT1-3 ↓		
	ASB-023		Room 16-F	VFT1-4 ↓		
	ASB-024		Room 16	VFT1-5 ↓	yellow Mastic	VFT 21K MASTIC? expect approx 17,800 - all black
	ASB-025		Room 7	VFT1-6 ↓	yellow Mastic	
	ASB-026		Room 3-A	VFT1-7 ↓	Black Mastic	
	ASB-027		Room 19-A	CG-1 Yellow Carpet Glue		
	ASB-028		↓	CG-2 ↓		

ASBESTOS BULK SAMPLE DATA SHEET

Ninyo & Moore 5710 Ruffin Road San Diego, CA 92123 Tel: (619) 576-1000 Fax: (619) 576-9600	Project Name:	Kearney Mesa Lab	Sampled By: G L Kwiat' & Kiki Allen	Laboratory: L A Testing
	Project No.:	105256005	Date: 12-06-07 & 12-07-07	159 Pasadena Avenue
	Project Manager:	JDW		So. Pasadena, CA 91030
		Cal Trans		Tel: (800) 303-0047
		7177 Opportunity Rd.		Fax: (323)254-9982

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr.)	Received By: (sign/print)	Laboratory
Kiki Allen <i>[Signature]</i>	Ninyo & Moore	12-10-07			

TAT	Sample ID	Bldg #	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)
72 Hrs	ASB-029	Lab	Room 19-A	C9-3, yellow Carpet Glue		
	ASB-030		Room 15	BCMM1-1 Brown Basecoat Moulding Mastic, 5-inch, rubber		
	ASB-031		Room 15-4	BCMM1-2 ↓		
	ASB-032		Room 15-5	BCMM1-3 ↓		
	ASB-033		Room 16	BCMM2-1 4-inch, Brown Basecoat Moulding Mastic, rubber		
	ASB-034		Room 16 F	BCMM2-2 ↓		
	ASB-035		Room 19	BCMM2-3 ↓		
	ASB-036		Room 3-A, at light switch	DWJC Drywall and Drywall Joint Compound		
	ASB-037		Room 18, at light switch	DWJC ↓		
	ASB-038		Room 13			
	ASB-039		Room 19-A			
	ASB-040		Room 7, at light switch	Drywall Joint Compound		
	ASB-041		Room 15-A			
	ASB-042		Women's Restroom			

ASBESTOS BULK SAMPLE DATA SHEET

320713812

Sheet 4 of 6

Ninyo & Moore 5710 Ruffin Road San Diego, CA 92123 Tel: (619) 576-1000 Fax: (619) 576-9600	Project Name:	Kearney Mesa Lab	Sampled By:	G L Kwiat' & Kiki Allen	Laboratory:	L A Testing
	Project No.:	105256005	Date:	12-06-07 & 12-07-07	159 Pasadena Avenue	
	Project Manager:	JDW			So. Pasadena, CA 91030	
		Cal Trans			Tel: (800) 303-0047	
		7177 Opportunity Rd.			Fax: (323)254-9982	

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr)	Received By: (sign/print)	Laboratory
<i>[Signature]</i>	Ninyo&Moore	12-10-07			

TAT	Sample ID	Bldg #	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)
72 Hrs	ASB-043	Lab	Room 7	Drywall		
	ASB-044		Room 19-A	↓		
	ASB-045		Utility Room 2 (U-2)	↓		
	ASB-046		Room 4-A	BCT1-1 Black Counter Top 65' x 3' = 195 + ⁵⁵ x 3 = 165 =	360	
	ASB-047		↓	BCT1-2		
	ASB-048		↓	BCT1-3		
	ASB-049		Room 4-A, at hood	TPI-1, 2' x 4' x 1/4" Transite panel		
	ASB-050		↓	TPI-2,		
	ASB-051		↓	TPI-3,		
	ASB-052	Room 4		SSSL1-1 Sink lining		
	ASB-053	↓		SSSL1-2		
	ASB-054	Room 17		SSSL4-3		
	ASB-055	Outside Room 15-A		WTST1-1 White Stucco		
	ASB-056	Outside, between 10 E, 11A		WTST1-2		

ASBESTOS BULK SAMPLE DATA SHEET

320713812

Sheet 5 of 6

Ninyo & Moore 5710 Ruffin Road San Diego, CA 92123 Tel: (619) 576-1000 Fax: (619) 576-9600	Project Name:	Kearney Mesa Lab	Sampled By:	G L Kwiat' & Kiki Allen	Laboratory:	L A Testing
	Project No.:	105256005	Date:	12-06-07 & 12-07-07	159 Pasadena Avenue	
	Project Manager:	JDW			So. Pasadena, CA 91030	
		Cal Trans			Tel: (800) 303-0047	
		7177 Opportunity Rd.			Fax: (323)254-9982	

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr.)	Received By: (sign/print)	Laboratory
<i>Kiki Allen</i>	Ninyo&Moore	12-10-07			

TAT	Sample ID	Bldg #	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)
72 Hrs	ASB-057	Lab	Outside Rm. 10	WTSTI-3 White Stucco		
	ASB-058		Outside Room 15-A	GBSTI-1 Grey Base Stucco		
	ASB-059		Outside, between 10 & 11-A	GBSTI-2 ↓		
	ASB-060		Outside Room 10	GBSTI-3 ↓		
	ASB-061		Rm. 19, Mezzanine	HVAC PDTI-1 Beige HVAC Tape Cloth		
	ASB-062		↓	HVAC PDTI-2 ↓		
	ASB-063		↓	HVAC PDTI-3 ↓		
	ASB-064		Outside Rm. 15	EDSI-1 EXTERIOR DOOR SEALANT	360 L'	
	ASB-065		Outside Rm. 6	EDSI-2 ↓		
	ASB-066		Outside Rm. 16-B	EDSI-3 ↓		
	ASB-067		Outside Utility Room - 2	ECPS-1 Exterior Concrete Panel Sealant		
	ASB-068		Southwest Corner of Lab Bldg.	ECPS-2 ↓		
	ASB-069		Northwest Corner of Lab Bldg.	ECPS-3 ↓		
	ASB-070		Roof, above Rm. 19	WRMI-01 White Roof Penetration Mastic		

ASBESTOS BULK SAMPLE DATA SHEET

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	Project No.:	105256005	Date:	12-06-07 & 12-07-07	159 Pasadena Avenue		
	Project Manager:	JDW				So. Pasadena, CA 91030	
		Cal Trans				Tel: (800) 303-0047	
		7177 Opportunity Rd.				Fax: (323)254-9982	

CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time (24 hr)	Received By: (sign/print)	Laboratory
<i>Kiki Allen</i>	Ninyo&Moore	12-10-07			

TAT	Sample ID	Bldg #	Sample Location	Sample Description	Quantity (SF/LF/EA)	Friable (Y/N)
72 Hrs	ASB-071	Lab	Roof, above Rm. 16-I	WRPM-02 White Roof Penetration Mastic		
	ASB-072		Roof, above Rm 17-B	WRPM-03		
	ASB-073		Roof, above U-2	WRPM-04		
	ASB-074		Roof, above Rm. 4-B	WRPM-05		
<1%	ASB-075		Roof, above DGSJ2	WGBRPM-01 White & Grey, Black Roof Penetration Mastic		
<1%	ASB-076		Roof, above Rm. 16	WGBRPM-02		
<1%	ASB-077		Roof, Center	WGBRPM-03		
<1%	ASB-078		Roof, above Rm. 4-B	WGBRPM-04		
<1%	ASB-079		Roof, Southeast Corner	WGBRPM-05		
	ASB-080		Roof, above Rm. 16-B	HVACGDT-001		
	ASB-081		Roof, above Rm. 17-A	HVACGDT-002		
	ASB-082		Roof, above Rm. 2	HVACGDT-003		
	ASB-083		Roof, above Rm. 2-A	HVACGDT-004		
<1%	ASB-084		Roof, above Room 4	HVACGDT-005		

PT CT: TA #24

APPENDIX E

DHS FORM 8552 - LEAD HAZARD EVALUATION REPORT

LEAD HAZARD EVALUATION REPORT

Section 1—Date of Lead Hazard Evaluation 12-07-'07

Section 2—Type of Lead Hazard Evaluation (Check one box only)

 Lead inspection Risk assessment Clearance inspection Other (specify) _____

Section 3—Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)] <u>7177 OPPORTUNITY Rd.</u>	City <u>SAN DIEGO</u>	County <u>SAN DIEGO</u>	ZIP code <u>92111</u>
Construction date (year) of structure	Type of structure (check one box only) <input type="checkbox"/> Single family dwelling <input type="checkbox"/> Multi-unit building <input type="checkbox"/> Child-occupied facility <input checked="" type="checkbox"/> Other (specify) <u>Offices AND Laboratories bldg.</u>		

Section 4—Owner of Structure (If business/agency, list contact person)

Name <u>MR. JOEL KLOTH</u> <u>DEPT. OF TRANSPORTATION DIST II</u> <u>OFFICE OF ENVIRONMENTAL ENGINEERING</u>	Telephone number <u>(858) 616-6622</u>		
Address [number, street, apartment (if applicable)] <u>2829 JUAN ST. MS-46</u>	City <u>SAN DIEGO</u>	State <u>CAL</u>	ZIP code <u>92110</u>

Section 5—Results of Lead Hazard Evaluation (Check one box only)

 No lead-based paint detected.

A lead inspection was conducted following the procedures outlined in Title 17, California Code of Regulations, Division 1, Chapter 8. No lead-based paint was detected during this lead inspection. This structure is found to be lead-based paint free.

 No lead hazards detected.

Lead hazard evaluation was conducted following the procedures outlined in Title 17, California Code of Regulations, Division 1, Chapter 8. No lead hazards were detected.

 Lead-based paint and/or lead hazards detected.

Lead hazard evaluation was conducted following the procedures outlined in Title 17, California Code of Regulations, Division 1, Chapter 8. Lead-based paint and/or lead hazards were detected.

Section 6—Individual Conducting Lead Hazard Evaluation

Name <u>GERALD L. KWIAT</u>	Telephone number <u>(858) 576-1000</u>		
Address [number, street, apartment (if applicable)] <u>5710 RUFFIN Rd.</u>	City <u>SAN DIEGO</u>	State <u>CA</u>	ZIP code <u>92123</u>
Brand name and serial number of any portable x-ray fluorescence (XRF) instrument used (if applicable) <u>NITON XL309 XRF SPECTRUM ANALYZER #V403NR4861</u>			
DHS certification number <u>Lead VA, LPM #44</u>	Signature <u>Gerald L. Kwiat</u>	Date <u>12-19-'07</u>	

Section 7—Attachments

- A foundation diagram or sketch of the structure indicating the specific locations of each lead hazard or presence of lead-based paint;
- Each testing method, device, and sampling procedure used;
- All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed to:
Department of Health Services
Childhood Lead Poisoning Prevention Branch
Reports
1645 Clay Street, No. 1004 850 MARINA BAY PKWY.
OAKLAND, CA 94612 RICHMOND, CA 94804-540
FAX (510) 622-5002

**LIMITED ASBESTOS SURVEY REPORT
KEARNY MESA MAINTENANCE STATION
LABORATORY BUILDING REMODEL
7177 OPPORTUNITY ROAD
SAN DIEGO, CALIFORNIA**

**CALTRANS DISTRICT 11, EA 11-287701
CONTRACT NO. 11A1996
TASK ORDER NO. 5**

December 5, 2012

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**Only the client or its designated representatives may use this document and
only for the specific project for which this report was prepared.**

A Report Prepared for:

Mr. Joel Kloth, PG, Department Task Order Manager
State of California Department of Transportation
Environmental Division, MS 242
4050 Taylor Street
San Diego, California 92110

**LIMITED ASBESTOS SURVEY REPORT
KEARNY MESA MAINTENANCE STATION
LABORATORY BUILDING REMODEL
7177 OPPORTUNITY ROAD
SAN DIEGO, CALIFORNIA
CALTRANS DISTRICT 11, EA 11-287701
CONTRACT NO. 11A1996
TASK ORDER NO. 5**

Kleinfelder Project No. 130585

Prepared by:



Richard H. Stevenson
Certified Asbestos Consultant No. 06-3992

Reviewed By:



Margaret R. Carroll
Project Professional

KLEINFELDER WEST, INC.
5015 Shoreham Place
San Diego, California 92122
858-320-2000

December 5, 2012

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APPENDICES

- Appendix A Plate 1 – Site Vicinity Map
- Plate 2 – Sample Location Map
- Appendix B Table 1 – Summary of Asbestos Survey Results
- Appendix C Photographs
- Appendix D Analytical Data Report and Chain-of-Custody Form

1 INTRODUCTION AND BUILDING DESCRIPTION

1.1 INTRODUCTION

This report presents the results of the limited asbestos survey conducted on November 9, 2012 to assess the presence, quantities, and conditions of asbestos-containing materials (ACM) associated with water piping and heating, cooling, and air conditioning (HVAC) system equipment present at the Kearny Mesa Maintenance Station Laboratory Building located at 7177 Opportunity Road in San Diego, California, (site, Plate 1, Appendix A). The limited asbestos survey was performed pursuant to the Scope of Services in Task Order Number (No.) 5 of Contract No. 11A1996, and in accordance with Kleinfelder's *Work Plan to Conduct Asbestos Survey* dated November 2, 2012. The State of California Department of Transportation (Caltrans) intends to remodel the site building. The survey is considered "limited" because only insulation materials associated with water piping and HVAC system equipment within the site building were assessed as part of the survey.

1.2 BUILDING DESCRIPTION

The site building is a one-story structure occupying a footprint of approximately 26,400 square feet. The site building consists of concrete tilt-up exterior walls and interior wood-frame construction on a concrete slab foundation. Insulation materials on water piping and HVAC system equipment were observed to primarily consist of fiberglass wrapped with either cloth, plastic, or foil.

1.3 PHYSICAL LIMITATIONS

The survey only included collection of samples of suspect asbestos-containing insulation materials on water piping and HVAC system equipment. Suspect ACM, which have not been observed/reported as part of this survey, may be encountered during future building renovation activities. If suspect ACM are encountered, they should be assumed to be hazardous until an appropriate assessment of the material confirms whether special handling and/or waste disposal is necessary.

2 ASBESTOS SURVEY

2.1 ASBESTOS SURVEY METHODS

On November 9, 2012, Kleinfelder personnel conducted a visual survey and collected representative bulk samples of insulation materials on water piping and HVAC system equipment suspected to be ACM. Mr. Richard Stevenson, a California Division of Occupational Safety and Health (DOSH, also known as Cal/OSHA) Certified Asbestos Consultant (CAC) (No. 06-3992) performed the survey. The survey was completed consistent with federal Asbestos Hazard Emergency Response Act (AHERA) methods (40 Code of Federal Regulations [CFR] Part 763) as a guideline.

Bulk samples were collected using hand tools such as utility knives or putty knives. Approximately 1 to 2 square inches of material were collected for each sample. Each sample was placed in a 2-ounce plastic “Whirl-Pak” sample bag, and labeled with a unique sample identification number directly on the sample bag.

The bulk samples collected during the survey were delivered to Forensic Analytical in Rancho Dominguez, California, a United States Environmental Protection Agency (USEPA) and California State-certified laboratory and National Voluntary Laboratory Accreditation Program (NVLAP) participant for analysis by Polarized Light Microscopy (PLM). A sample location map (Plate 2), indicating the locations of samples collected, is provided in Appendix A. A summary of samples collected, sample locations, asbestos content, condition, friability, and area estimates are summarized in Table 1, Appendix B. Photographs of water piping and HVAC system equipment insulation materials are provided in Appendix C. A copy of the analytical laboratory report and chain-of-custody form is included in Appendix D.

2.2 ASBESTOS SURVEY RESULTS

Kleinfelder collected a total of 12 representative insulation material samples during the asbestos survey at the Site. Based on our observations and evaluation review of the laboratory analytical report, asbestos was not detected by the laboratory in the bulk samples submitted for analysis.

2.3 REGULATORY OVERVIEW FOR ASBESTOS

Regulatory oversight for the management, removal, and disposal of ACM is provided by a variety of Federal, State, and local agencies.

The three primary regulations enforced by regulatory agencies that govern various activities (e.g., inspection, assessment, abatement, etc.) relating to ACM include the following: AHERA, National Emission Standards for Hazardous Air Pollutants (NESHAP), and the Asbestos Construction Safety Standard (as codified in Federal Occupational Safety and Health Administration [OSHA] and Cal/OSHA regulations). USEPA regulations concerning the identification, handling, management, and abatement of ACM (as defined in the AHERA and NESHAP) are implemented locally by the San Diego Air Pollution Control District (SDAPCD). Both Cal/OSHA and Federal OSHA regulate asbestos as a worker health and safety issue. In addition, the transportation and disposal of asbestos-containing wastes are overseen by the California EPA Department of Toxic Substances Control (DTSC). The Federal OSHA, USEPA, DTSC, and SDAPCD define ACM as material containing greater than 1 percent (%) asbestos.

The following is a brief description of the three major regulations relating to ACM.

Asbestos Hazard Emergency Response Act

AHERA (40 CFR Part 763), as implemented by the USEPA, primarily pertains to the assessment and management of ACM in Kindergarten (K) through grade 12, non-profit schools. However, many of the procedures, training requirements, and certifications defined by AHERA have become the industry standard for most other facilities. For this survey, AHERA protocols were generally utilized in the identification, assessment, and sampling of building materials suspected of containing asbestos.

National Emission Standard for Hazardous Air Pollutants

NESHAP (40 CFR Part 61) is an asbestos standard that protects the general public from asbestos exposure due to renovation or demolition activities. NESHAP requires surveying for suspect materials (as defined above), notifying of intent to renovate or demolish, removal of regulated ACM (RACM) prior to renovation or demolition, and proper management of asbestos containing wastes. A RACM is defined by NESHAP as follows:

- Any friable ACM,
- A Category I non-friable ACM (such as floor tiles, mastics, and asphalt roofing products) that has become friable or will be subject to sanding, grinding, cutting, or abrading during renovation or demolition activities, or
- A Category II non-friable ACM (all other non-friable ACMs) that has a high probability of becoming friable during demolition or renovation activities.

NESHAP requires that demolition activities be conducted with no visible emissions using wet methods. It should be noted that while NESHAP regulates renovation and demolition activities, it does not protect individual workers conducting asbestos abatement.

Asbestos Standard for the Construction Industry

The Asbestos Standard for the Construction Industry (Federal OSHA, 29 CFR 1926.1101 and Cal/OSHA California Code of Regulations [CCR] Title 8, Section 1529) regulates asbestos exposure in the work place. This includes both persons working in a building containing ACM and asbestos abatement workers/contractors. For abatement workers and contractors, the Asbestos Standard for Construction (i.e., the Construction Standard) regulates the following:

- Protection of workers and the public during removal of ACM,
- Medical surveillance requirements for workers,
- Detailed requirements for how ACMs are to be removed, and
- Training requirements for abatement personnel.

3 CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

Based upon the limited survey and evaluation of the laboratory analysis results, asbestos was not detected in bulk samples collected from insulation materials associated with water piping or HVAC system equipment.

3.2 RECOMMENDATIONS

Based upon the limited survey and evaluation of the laboratory analysis results, asbestos was not found to be present in the insulation materials on water piping and HVAC system equipment that were sampled. Therefore, Kleinfelder has no recommendations for the handling, removal, or disposal of these materials at this time. However, suspect ACM which have not been observed or reported as part of this survey may be encountered during future building renovation activities. If suspect ACM are encountered, they should be assumed to be hazardous until an appropriate assessment of the material confirms whether special handling and/or waste disposal is necessary.

4 LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by Caltrans District 11 and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two years from the date of the report.

The work performed was based on project information provided by Caltrans District 11. If Caltrans District 11 does not retain Kleinfelder to review any plans and specifications, including any revisions or modifications to the plans and specifications, Kleinfelder assumes no responsibility for the suitability of our recommendations. In addition, if there are any changes in the field to the plans and specifications, Caltrans District 11 must obtain written approval from Kleinfelder's engineer that such changes do not affect our recommendations. Failure to do so will vitiate Kleinfelder's recommendations.

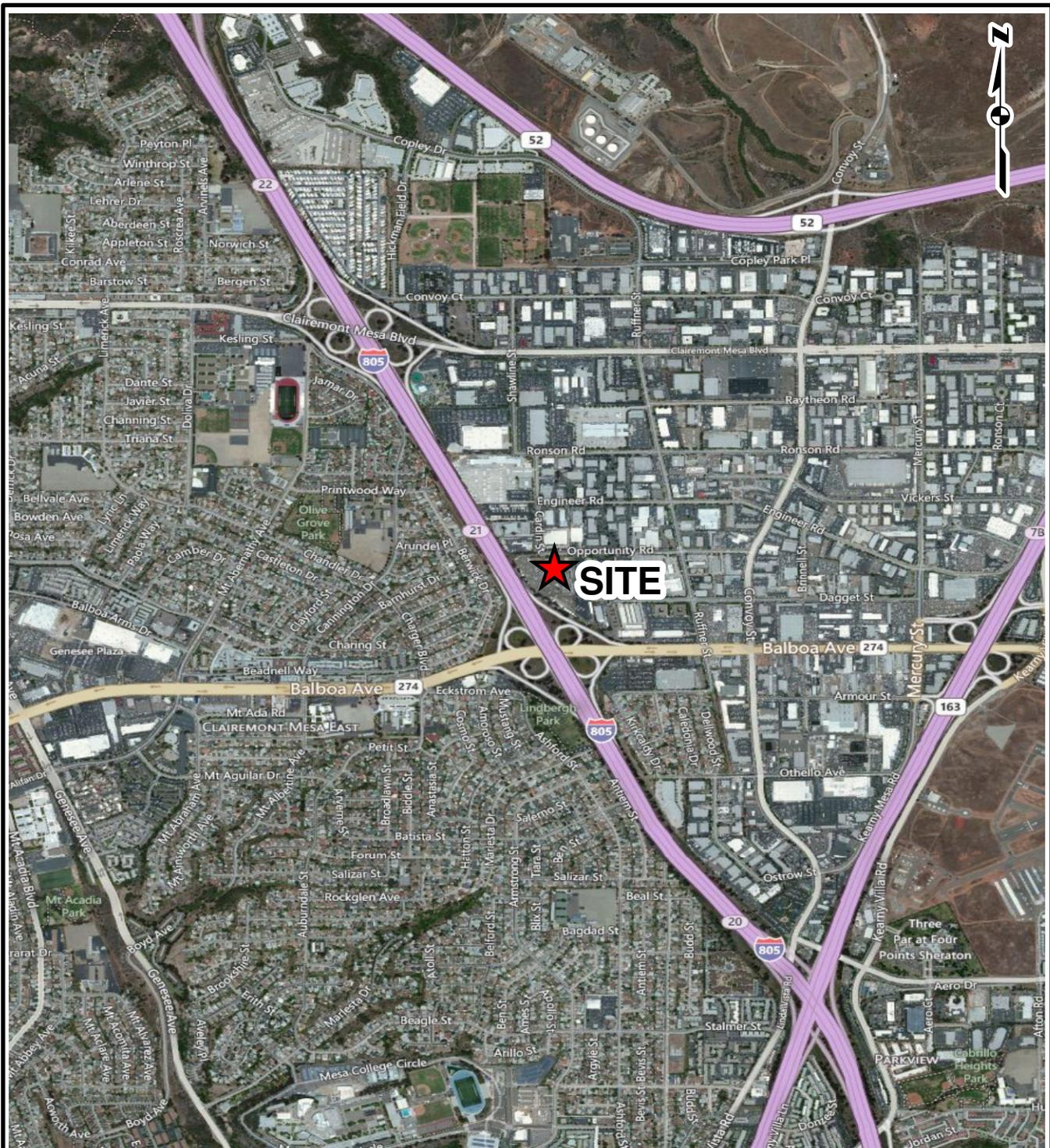
Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the site conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more-detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including field tests, should be performed to reduce uncertainties. Acceptance of this report will indicate that Caltrans District 11 has

reviewed the document and determined that it does not need or want a greater level of service than provided.

During the course of the performance of Kleinfelder's services, hazardous materials may have been discovered. Kleinfelder assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury that results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials. Nothing contained in this report should be construed or interpreted as requiring Kleinfelder to assume the status of an owner, operator, or generator, or person who arranges for disposal, transport, storage, or treatment of hazardous materials within the meaning of any governmental statute, regulation or order. Caltrans District 11 is solely responsible for directing notification of all governmental agencies, and the public at large, of the existence, release, treatment, or disposal of any hazardous materials observed at the project site, either before or during performance of Kleinfelder's services. Caltrans District 11 is responsible for directing all arrangements to lawfully store, treat, recycle, dispose, or otherwise handle hazardous materials, including samples resulting from Kleinfelder's services.

APPENDIX A

Plates



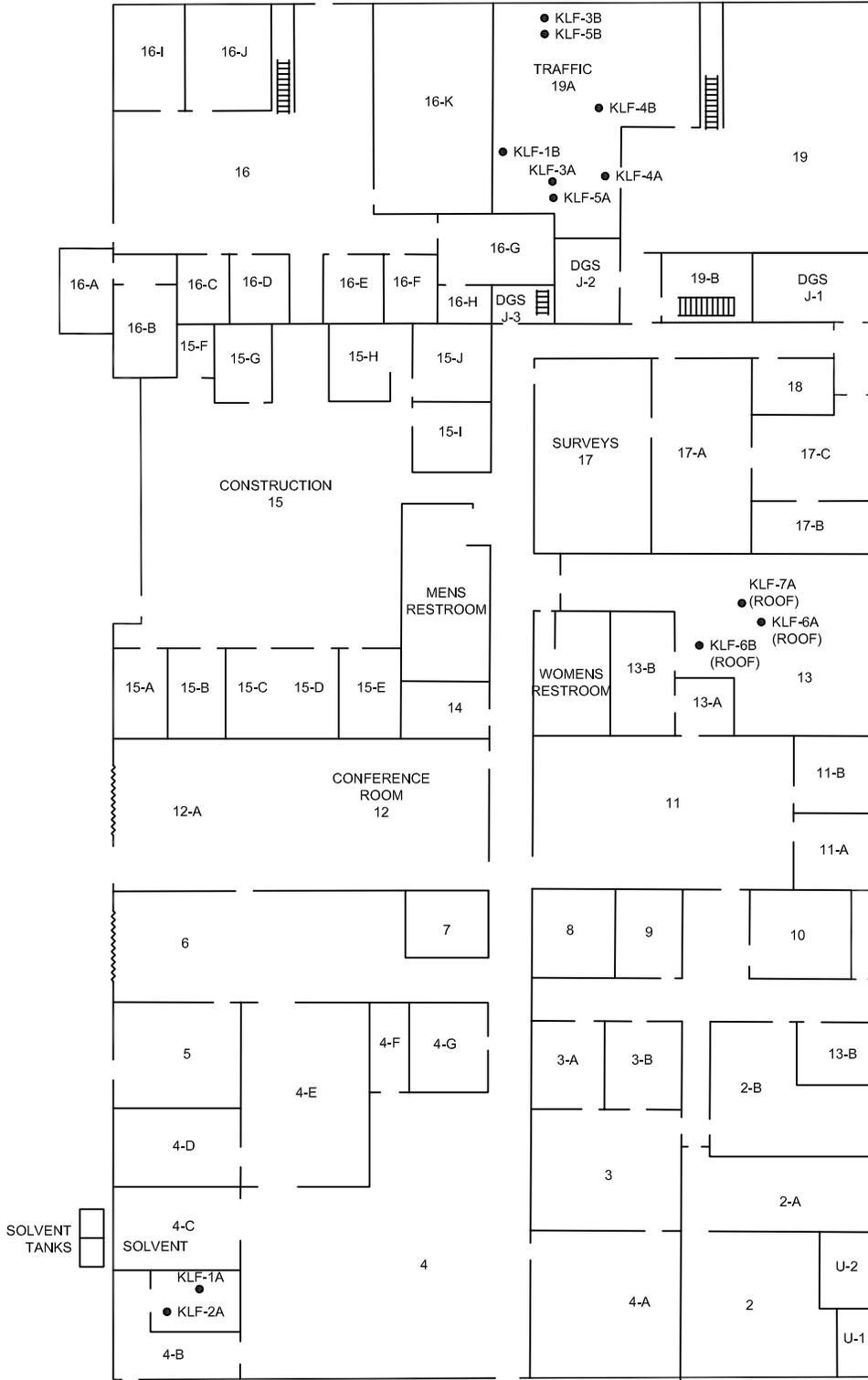
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AERIAL SOURCE:
 ESRI ONLINE MAPS, Microsoft product
 screen shot reprinted with permission
 from Microsoft Corporation. BING MAPS.



	PROJECT NO. 130585	Site Vicinity Map	PLATE
	DRAWN: 11/30/12		1
	DRAWN BY: JP		
	CHECKED BY: MC	KEARNY MESA MAINTENANCE STATION LABORATORY BUILDING REMODEL CALTRANS DISTRICT 11, EA 11-287701 SAN DIEGO, CALIFORNIA	
FILE NAME: Site_Map.MXD			

ATTACHED IMAGES: Bldg Layout.jpg
 ATTACHED XREFS: ALBUQUERQUE, NM
 CAD FILE: U:\P\Dan\Irvine, Ca Projects\130585\ LAYOUT: Layout1
 PLOTTED: 30 Nov 2012, 11:48am, pdan



LEGEND

- KLF-1A SAMPLE IDENTIFICATION AND APPROXIMATE LOCATION OF BULK SAMPLE
- ☐ ROOF ACCESS
- ~~~~~ ROLL-UP DOORS



NOT TO SCALE

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ATTACHED IMAGES: Bldg Layout.jpg
 ATTACHED XREFS: ALBUQUERQUE, NM

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DRAWN BY:	PD
CHECKED BY:	RS
FILE NAME:	130585_SP.dwg

SAMPLE LOCATION MAP
KEARNY MESA MAINTENANCE STATION LABORATORY BUILDING REMODEL CALTRANS DISTRICT 11, EA 11-287701 SAN DIEGO, CALIFORNIA

PLATE
2

APPENDIX B

Table

TABLE 1
Summary of Asbestos Survey Results
Kearny Mesa Maintenance Station-Laboratory Building Remodel
7177 Opportunity Road
San Diego, California

Sample Number	Sample Description	Sample Location	Sample Layer Description	Asbestos Content	Condition/Friability	Amount of Material
KLF-1A	1-inch hot water pipe run insulation	Room 4B	Yellow fibrous material/Tan fibrous material with foil	ND/ND	NA	NA
KLF-1B	1-inch hot water pipe run insulation	Room 19 mezzanine	Yellow fibrous material/Tan fibrous material with foil	ND/ND	NA	NA
KLF-2A	1-inch hot water pipe elbow insulation	Room 4B	Yellow fibrous material/Off-white non-fibrous material	ND/ND	NA	NA
KLF-3A	HVAC duct insulation	Room 19 mezzanine	Yellow fibrous material/Tan fibrous material with foil	ND/ND	NA	NA
KLF-3B	HVAC duct insulation	Room 19 mezzanine	Yellow fibrous material/Tan fibrous material with foil	ND/ND	NA	NA
KLF-4A	Insulation on 2-inch pipe at pipe hanger	Room 19 mezzanine	Yellow semi-fibrous material	ND	NA	NA
KLF-4B	Insulation on 2-inch pipe at pipe hanger	Room 19 mezzanine	Yellow semi-fibrous material	ND	NA	NA
KLF-5A	HVAC duct tape	Room 19 mezzanine	Beige woven material with coating	ND	NA	NA
KLF-5B	HVAC duct tape	Room 19 mezzanine	Beige woven material with coating	ND	NA	NA
KLF-6A	Air conditioner duct sealant	Roof-mounted air conditioning unit	Silver non-fibrous material/Beige non-fibrous material/Tan non-fibrous material	ND/ND/ND	NA	NA
KLF-6B	Air conditioner duct sealant	Roof-mounted air conditioning unit	Silver non-fibrous material/Beige non-fibrous material/Tan non-fibrous material	ND/ND/ND	NA	NA
KLF-7A	Air conditioner vibration cloth	Roof-mounted air conditioning unit	Black semi-fibrous material	ND	NA	NA
Notes: ND = None detected NA = Not applicable HVAC = Heating, cooling, and air conditioning system						

APPENDIX C

Photographs

PHOTO 1



VIEW OF
TYPICAL INSULATION ON WATER PIPING

PHOTO 2



VIEW OF
TYPICAL INSULATION ON HVAC DUCTS

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PHOTO LOG
KEARNY MESA MAINTENANCE STATION LABORATORY BUILDING REMODEL CALTRANS DISTRICT 11, EA 11-287701 SAN DIEGO, CALIFORNIA

APPENDIX
C-1

PHOTO 3



VIEW OF
 INSULATION ON WATER PIPES
 (SAMPLE KLF-1B)

PHOTO 4



VIEW OF
 INSULATION MATERIALS AND DUCT TAPE ON HVAC DUCT
 (SAMPLES KLF-3A AND KLF-5A)

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PHOTO LOG
KEARNY MESA MAINTENANCE STATION LABORATORY BUILDING REMODEL CALTRANS DISTRICT 11, EA 11-287701 SAN DIEGO, CALIFORNIA

APPENDIX C-2

PHOTO 5



VIEW OF SECTION OF PIPE INSULATION AT WATER PIPE HANGER (SAMPLE KLF-4A)

PHOTO 6



VIEW OF DUCT SEALANT AND VIBRATION CLOTH ON ROOF-MOUNTED AIR CONDITIONING UNIT (SAMPLES KLF-6B AND KLF-7A)

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APPENDIX C-3

APPENDIX D

Analytical Data Reports and Chain-of-Custody Forms



Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Kleinfelder, Inc.
Rich Stevenson
2 Ada
Suite 250
Irvine, CA 92618

Client ID: 6640
Report Number: B170345
Date Received: 11/12/12
Date Analyzed: 11/13/12
Date Printed: 11/14/12
First Reported: 11/14/12

Job ID/Site: 130585; Kearney Mesa Laboratory, 7717 Opportunity Road, San Diego, CA

FALI Job ID: 6640

Date(s) Collected: 11/09/2012

Total Samples Submitted: 12

Total Samples Analyzed: 12

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
KLF-1A	50767148						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material with Foil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (7 %)	Fibrous Glass (90 %)						
KLF-1B	50767149						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material with Foil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (7 %)	Fibrous Glass (90 %)						
KLF-2A	50767150						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Fibrous Glass (90 %)							
KLF-3A	50767151						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material with Foil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (7 %)	Fibrous Glass (90 %)						
KLF-3B	50767152						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material with Foil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (7 %)	Fibrous Glass (90 %)						
KLF-4A	50767153						
Layer: Yellow Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							
KLF-4B	50767154						
Layer: Yellow Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							

Client Name: Kleinfelder, Inc.

Report Number: B170345

Date Printed: 11/14/12

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
KLF-5A	50767155						
Layer: Beige Woven Material with Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (80 %)							
KLF-5B	50767156						
Layer: Beige Woven Material with Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (80 %)							
KLF-6A	50767157						
Layer: Silver Non-Fibrous Material			ND				
Layer: Beige Non-Fibrous Material			ND				
Layer: Tan Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
KLF-6B	50767158						
Layer: Silver Non-Fibrous Material			ND				
Layer: Beige Non-Fibrous Material			ND				
Layer: Tan Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
KLF-7A	50767159						
Layer: Black Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (30 %)							



Steven Takahashi, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Client Name & Address: Kleinfelder 2 Ada, Suite 250 Irvine, CA 92618		PO / Job#: 130585	Date: 11/9/12
Contact: Rich Stevenson		Turn Around Time: <input type="checkbox"/> Same Day / <input type="checkbox"/> 1Day / <input checked="" type="checkbox"/> 2Day / <input type="checkbox"/> 3Day / <input type="checkbox"/> 4Day / <input type="checkbox"/> 5Day	
Phone: (949) 727-4466 Fax: (949) 727-9242		<input type="checkbox"/> PCM: <input type="checkbox"/> NIOSH 7400A / <input type="checkbox"/> NIOSH 7400B <input type="checkbox"/> Rotometer	
E-mail: rhstevenson@kleinfelder.com		<input checked="" type="checkbox"/> PLM: <input checked="" type="checkbox"/> Standard / <input type="checkbox"/> Point Count 400 / 1000 / <input type="checkbox"/> CARB 435	
Site: Kearny Mesa Laboratory		<input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402	
Site Location: 7717 Opportunity Road, San Diego, CA		<input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chatfield	
Comments: See attached data sheet or sample descriptions		<input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Weight %	
Report Via: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> E-Mail <input type="checkbox"/> Verbal		<input type="checkbox"/> TEM Microvac: <input type="checkbox"/> Qual(+/-) / <input type="checkbox"/> D5755(str/area) / <input type="checkbox"/> D5756(str/mass)	
Matrix:		<input type="checkbox"/> IAQ Particle Identification (PLM LAB) <input type="checkbox"/> PLM Opaques/Soot	
Analytes:		<input type="checkbox"/> Particle Identification (TEM LAB) <input type="checkbox"/> Special Project	
Metals Analysis: Method:			

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
		See attached data sheet for sample descriptions	A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				

Sampled By: Rich Stevenson		Date: 11/9/12	Time:
Shipped Via: <input checked="" type="checkbox"/> Fed Ex <input type="checkbox"/> DHL <input type="checkbox"/> UPS <input type="checkbox"/> US Mail <input type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other:			
Relinquished By: <i>[Signature]</i>	Relinquished By:	Relinquished By:	
Date / Time: 11/9/12 15:00	Date / Time:	Date / Time:	
Received By: <i>[Signature]</i> F/E	Received By:	Received By:	
Date / Time: 11/12/12 10:30a	Date / Time:	Date / Time:	
Condition Acceptable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	

ASBESTOS BULK SAMPLE DATA SHEET

Kleinfelder, Inc. 2 Ada, Suite 250 Irvine, CA 92618 Tel: (949)727-4466 Fax: (949)727-9242	Project Name : East County Bus Maintenance <small>KEARNY MESA LABORATORY</small> Project No.: 130585 Project Manager: Mark Peabody Site Address: 7177 Opportunity Road San Diego, California	Sampled By: Rich Stevenson Sampled By: Sampled By: Date Sampled: 11/9/12	Laboratory: Forensic Analytical Rancho Dominguez, CA
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CHAIN OF CUSTODY INFORMATION:

Relinquished By: (sign/print)	Company	Date	Time(24 hr.)	Received By: (sign/print)	Laboratory
<i>Rich Stevenson</i>	Kleinfelder	11/9/12	15:00	<i>J. Carrillo</i> J. Carrillo	FAU 10:30 AM F/E

Sample ID	Building Number	Room Number	Sample Location	Sample Description	Quantity (SF/LF/E)	Friable (Y/N)	Condition
KLF-1A			Room 4B	1" Hot water pipe insulation - Run			
KLF-1B			Room 19 Mezzanine	↓			
~~~~~							
KLF-2A			Room 4B	1" Hot water pipe insulation - Elbow			
~~~~~							
KLF-3A			Room 19 Mezzanine	HVAC Insulation			
KLF-3B			↓	↓			
KLF-4A			Room 19 Mezzanine	Insulation on 2" Pipe at pipe hanger			
KLF-4B			↓	↓			
KLF-5A			Room 19 Mezzanine	HVAC Duct Tape (Beneath Insulation)			
KLF-5B			↓	↓			
KLF-6A			Roof - AC unit	AC Duct Sealant			
KLF-6B			↓	↓			
KLF-7A			↓	AC Vibration cloth			
~~~~~							