January 26, 1999

Ms. Sue Shaffer Greystone Homes 920 Hillview Court, Suite 280 Milpitas, CA 95035

Re:

Meek Orchard Tract Environmental Services

Berry and Orchard Avenues, Hayward, California

Project No.: M174-EC

Dear Ms. Shaffer:

This letter presents the results of the asbestos and lead based paint survey conducted at the above referenced site on Wednesday, December 30, 1998. The purpose of the investigation was to ascertain the presence of asbestos containing materials and lead based paint on the subject site.

The environmental inspection consisted of a visual inspection of the buildings and grounds as well as collection and analysis of 85 samples for asbestos and 3 for total lead. The investigation was conducted by Gary Riley, Harza; and Don Diel, Acumen Industrial Hygiene. The results of the asbestos and lead based paint survey, performed by Don Diel, Acumen Industrial Hygiene, are enclosed as an appendix to this letter. A Non-destructive Asbestos and Radon Survey, dated August 1, 1997, was performed by McLaren Hart for the property at 103 Orchard Avenue in Hayward, California. This report has been reviewed by Mr. Connor of Acumen Industrial Hygiene, and a brief summary of it is included in their report.

If you have any questions regarding this visual environmental inspection or the results presented in the enclosed asbestos survey, please contact me.

Sincerely,

# Harza Engineering Company

Christophe RP Collet Staff Geologist Mark C. Litzau Manager, Environmental Services

ML:ch\encl.
Copies: Addressee (3)



#### **ACUMEN**

#### INDUSTRIAL HYGIENE INC

1175 FOLSOM STREET SAN FRANCISCO CA 94103 TEL 415 252 0778 FAX 415 252 1411

January 21. 1999

Mr. Christophe R. P. Collet Harza, Inc. 425 Roland Way Oakland, CA 94621

> RE: Asbestos/Lead Investigation Meek Orchard Property Hayward, CA Project No HZ 9839

Dear Mr. Collet:

The purpose of this report is to present and discuss the findings of an asbestos and lead investigation we conducted at the above referenced facility. The scope of this investigation was to the presence and location of asbestos and lead containing materials that could impact the proposed demolition of the buildings on site. Mr. Donald A. Diel conducted this investigation on December 30, 1998.

## **Description of Investigation**

This inspection consisted of a walkthrough of the buildings on the property to identify and sample suspect asbestos containing materials (ACM) and suspect lead containing materials, primarily deteriorated paints. As building roofs were not accessible, they were excluded from this investigation

We collected one or more bulk sample of each type of suspect ACM noted for a total of 85 samples of 43 different suspect ACMs during this inspection. During this investigation, we also collected 3 samples of deteriorated paint for lead content analysis. The reason for this is that current Cal-EPA guidelines require that deteriorated paints be characterized for waste disposal if they are to be removed as part of building renovation and or demolition. If these materials meet Cal-EPA definitions of hazardous waste, they must be removed and disposed of separately from other construction debris.

The asbestos and lead samples were submitted to MicroAnalytical Laboratories of Emeryville, CA. This laboratory is accredited by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NVLAP) for selected test methods for asbestos. This laboratory also holds certification from the American Industrial Hygiene Association (AIHA) and participates in the Environmental Lead Laboratory Accreditation Program (ELLAP). The laboratory reports are shown in Appendix A.

The asbestos samples collected were analyzed by polarized light microscopy (PLM). This method identifies the type(s) of asbestos present in the sample and its corresponding percent

concentrations(s). The reliable limit of detection of this method is 1% asbestos. The lead samples were analyzed by flame absorption spectrophotometry (FAA) in accordance with EPA methods.

## Asbestos Related Findings and Discussion

This facility contained six buildings located at 148, 147, 136 & 112 Berry Road and 103 Orchard Avenue. McLarenHart, of Alameda, CA completed an asbestos survey of the latter facility inAugust 1997 for which reason we did not inspect it. This report includes a review of McLaren Harts's investigation. The following sections describe the findings for each building

#### 112 Berry Road

112 Berry Road contains five buildings on the property. Four are large open steel framed metal sided and roofed warehouse type buildings with small offices within them. The fifth building is a standard wood framed, wood siding with composition shingle roof on concrete slab structure. Composition shingles are generally not considered suspect ACM. These buildings are identified as Buildings 1 through 5 in this report. Building 1 is the large warehouse building on the southwest part of the property and Building 5 is the wood framed office building on the southeast part of the property.

#### **Building 1**

This is a warehouse about 75 feet wide by 240 feet in length. The interior is open except for the office area. The framing is steel column and beam covered with metal siding and roofing. The floor is the concrete foundation slab. There are no suspect materials in the main area of the warehouse. The electric water heater is insulated with fiberglass. Electric heaters provide heat in the building.

The office area is a 70' x 15' rectangle in the southeast corner of the building. The construction is wood framing covered with sheetrock. There are two offices, a break room and two bathrooms on the ground level. There is also a small office on the second floor. The offices have an off white linoleum the backing of which contains 50% asbestos (Samples HZ9839-54, 55). The ceilings are covered with a sprayed on acoustic finish that showed trace (<1%) amounts of asbestos material (Samples HZ9839-56, 57). The linoleum in both restrooms does not contain asbestos (Samples HZ9839-50, 51, 52, 53).

### **Building 2**

Building 2 is located at the north end of the property. This large ( $100' \times 240'$ ) warehouse is used for storage of business and personal items in various wood sided stalls. It contains no suspect materials.

## **Building 3**

This is a warehouse structure similar to Building 1 but smaller (75'x 90'). There is a small office area built with wood framing and wood siding. Floor tile was noted but not sampled as the key to the building was unavailable at the time of inspection. The floor tile is assumed contain asbestos.

#### **Building 4**

This building is similar to Building 3, only smaller. There is a small (14'x18') office in the northeast corner of the building. This office is carpeted over the concrete slab. Under the carpet there are remnants of paper backing typically associated with linoleum flooring. This residue contains 35% chrysotile asbestos (Samples HZ9839-62, 63). The office ceiling was a drop ceiling system made of vinyl covered, fiberglass 2x4' ceiling tile that was not considered suspect

### **Building 5**

Building 5 is a single story, wood frame with wood siding, pitched roof with composition shingle on concrete slab structure. Composition shingles are generally not considered suspect ACM. The interior framing is covered with sheetrock. Samples of the wall systems showed that the joint compound was a 2% asbestos material but that the overall composite value of the wall system was less than one percent (Samples HZ9839-70, 71). There are two types of ceiling materials: acoustic sprayed on texturing and 9x9" ceiling tile. The latter showed trace (< 1%) amounts of asbestos (Samples HZ9839-72, 73), whereas the former does not contain detectable levels of asbestos (Samples HZ9839-66, 67).

The flooring is consists three different floor tiles, all of which contain more than 1% asbestos either in the tile or its associated mastic. The red 9x9" floor tile, which contains 10% asbestos (Samples HZ9839-58, 59). The tan 9x9" floor tile which contains 5% asbestos (Samples HZ9839-60, 61). The white 12x12" floor tile has no asbestos but its associated mastic contains 12% asbestos (Samples HZ9839-68, 69),

The building contains an electric fiberglass insulated water heater. The building is heated with wall heaters and a ducted heater system. The duct seam tape contains 35% asbestos plenum (Samples HZ9839-64, 65). The vent flue from the heater unit is assumed to be made of asbestos cement.

### 136 Berry Road

136 Berry Road contains a single story wood framed, wood siding, with composition shingle roof residence built on a concrete slab. Composition shingles are generally not considered suspect ACM. There is a detached garage separate from the house. The garage is wood framed, and has wood siding and a composition shingle pitched roof. The garage is also built on a concrete slab. The water heater in the room off the kitchen is insulated with fiberglass. There was no evidence of insulated water lines. Heat is supplied from a single wall heater with no associated suspect materials.

The window glazing on the main house does not contain asbestos (Samples HZ9839-80, 81). The interior wall system also does not contain detectable levels of asbestos. The same was also found for the 9x9" ceiling tile (Samples HZ9839-74, 75). The 12x12" floor tile in the kitchen flooring contains 2% asbestos, but its associated mastic and leveling compound does not (Samples HZ9839-78, 79). The a 9x9" red floor tile in living room and the two bedrooms is contains 15% chrysotile asbestos, but its associated mastic does not (Samples HZ9839-76, 77). The bathroom linoleum in the bathroom also does not contain asbestos.

#### 147 Berry Road

147 Berry Road contains a nursery facility used for the production of flowering plants. There are six greenhouse structures, a small office building, a seedling house and a large soil shed. The greenhouses and seedling house are wood framed structures built on concrete slabs. The sides are glass in wood framed with the roofing a semi opaque corrugated fiberglass over wood frames. The green houses are heated with ceiling mounted electric heaters. The window glazing did not to contain detectable quantities of asbestos (Samples HZ9839-41, 42). Greenhouses 2 and 5 contain corrugated concrete like siding around their bases. This material contains 40 % chrysotile asbestos (Samples HZ9839-49). These concrete/asbestos panels were each approximately 10 feet long and 3/8ths of an inch thick.

The soil shed is a large structure (approximately 80' x 100' x 20') open on the interior except for some small wood framed, wood sided rooms used for pesticide and tool storage. Except the roll roofing material, the soil shed did not contain suspect asbestos containing materials. Note that the roll roofing is asphalt encapsulated.

There is a small (16' x 10') wood framed, wood sided structure used as an office and bathroom between greenhouses 1 and 8. This building contained three suspect ACMs: surface texturing, wall system, and floor tile. The wall surface (Samples HZ9839-43, 44) contains trace (<1%) amounts of asbestos. The wallboard did not contain asbestos but the joint compound contains trace quantities (Samples HZ9839-45, 46). The overall asbestos content of the wall system is less than 1%. The 12x12" off white floor contains 2% asbestos while the mastic does not contain detectable quantities of asbestos (Samples HZ9839-47, 48).

148 Berry Road

148 Berry Road contains a two story residence at the front of the property and four poultry houses on the rear of the property. The poultry houses are wood framed, wood sided and roofed structures with no suspect asbestos containing materials.

The residence is a wood framed, wood sided structure on a concrete slab. The roof is pitched and is covered with composition shingles that were not considered suspect The electric water heater is on the back porch and is insulated with fiberglass. There was no evidence of insulation on the water distribution system. Wall mounted electrical heaters in the residence are not associated with any suspect ACM. No suspect materials were seen in either the attic or in the walls and ceilings.

The interior walls and ceilings consist of either sheetrock or plywood. The joint compound and tape from the living room contain 3% chrysotile asbestos (Samples HZ9839-09, 10). The ceiling texture on the plywood on the second floor bedroom consists of 2% asbestos (Samples HZ9839-11, 12). The wall texturing in the second floor bathroom does not contain detectable amounts of asbestos (Samples HZ9839-07, 08). The living room and den wall samples showed inconsistent results. One living room sample has a composite asbestos content of less than one percent, whereas another contains 2% asbestos (Samples HZ9839-31, 32). Similar results were seen in the den (Samples HZ9839-35, 36). The variability in these findings does not permit a ready determination of whether the wall system contains more than 1% asbestos. This is of some consequence because if it does, BAAQMD regulations would require its removal before demolition. Furthermore, since it would be classified as friable, it would also need to be disposed of as a hazardous waste. If the wall system porved to contain less than 1% asbestos, it would not require separate removal but would need to be handled in a manner consistent with Cal-OSHA regulations. The asbestos content can only be determined through additional sampling unless it is assumed to contain more than 1% asbestos.

On the ground floor, the living room floor has been carpeted over two different colors of 12x12" floor tile and mastic. Samples of the tan floor tile and its associated mastic (Sample HZ9839-05, 06) showed that neither the floor tile nor the mastic contained detectable quantities of asbestos. The layer off white floor tile underneath contains trace levels of chrysotile asbestos, whereas the mastic contains no detectable asbestos (Samples HZ9839-29, 30). The kitchen also contains two layers of floor tile under a layer of linoleum. The bottom layer 9x9" dark red floor tile contains 10% asbestos but the mastic does not (Samples HZ9839-33, 34). The middle layer, a 9x9" white floor tile contains trace amounts of asbestos in the tile but none detectable in the

mastic (Sample HZ9839-17, 18). The top layer, a linoleum also has no detectable asbestos in either the linoleum, its backing or associated mastic (Samples HZ9839-01, 02). The carpet covers a layer of 12x12" green floor tile which did not contain detectable asbestos as was the case for its mastic (Samples HZ9839-25, 26). The 12x12" brown floor tile and its mastic on the back porch (Samples HZ9839-15, 16) also does not contain detectable levels of asbestos.

Neither the red 9x9" floor tile at the top of the stairs nor its associated mastic contain detectable asbestos (Samples HZ9839-37, 38). The hall next to the second floor bathroom has two layers of floor tile. The top layer was a 9x9" tan tile which contains 2% asbestos (Samples HZ9839-19, 20), while its associated mastic contains none detectable. The green 12x12" green floor tile underneath also does not contain asbestos (Samples HZ9839-23, 24). The second floor bathroom contains linoleum laid over the 12x12" green floor tile which extends into the bathroom from the hall. The linoleum is not an asbestos containing material (Samples HZ9839-03, 04). The small closet in the main bedroom contains a multi-colored linoleum on the floor which is also a non asbestos containing material (Sampless HZ9839-21, 22). The room next to the main bedroom contains linoleum with layers of materials under it. These materials did not contain detectable levels of asbestos (Samples HZ9839-13, 14).

The moisture barrier paper under the exterior siding did not contain detectable amounts of asbestos (Sample HZ9839-39). The same is true of the moisture barrier paper under the roof(Sample HZ9839-40).

#### 103 Orchard Avenue

McLaren Hart conducted a survey of this property and reported their findings in August 1997. A summary of their results is described in the summary of findings section of this report. Review of McLaren Hart's report indicates that their investigation was limited to an asbestos and radon survey. As required, a Cal-OSHA certified asbestos consultant inspected the property and submitted bulk samples to an accredited laboratory for analysis.

McLaren Hart's report summary makes reference to potential asbestos containing materials (ACCMs) without describing them. The summary also recommends a comprehensive survey of the building before demolition. It is possible that these statements may be liability limiting language because it would be unusual for an investigator with access to the building not to sample other obvious accessible suspect ACMs (e.g. floor tile, inustation etc.). McLaren Hart's report does not include a detailed enough building description to allow an opinion as to whether there are additional suspect materials in the building. Consequently, it would be advisable to reinspect the building mainly to verify there exist no additional suspect ACMs that may need to be removed before building demolition.

### Summary of Findings

Tables 1 and 2 summarize the asbestos related findings for the Berry Road properties. Table 1 reports asbestos containing materials while Table 2 lists materials which were sampled and found not to contain detectable amounts of asbestos.

#### Friable ACMs

The following friable materials are present in the Meek Orchard property:

### 112 Berry Road

- Seam tape on heater plenum and ducts (Sample HZ9839-64). This material also contained 35% asbestos. There are about 25 linear feet of this material. This material is in Building 5.
- The off white linoleum in the offices of Building 1 (Sample HZ9839-54) has 50% chrysotile asbestos in the backing paper. There are about 650 square feet of this material.
- The remnants of linoleum backing paper on the floor under the carpet in the office of Building 4 (Sample HZ9839-62) contain 35% asbestos. It was not possible to accurately quantify this material.

### 136 Berry Road

No friable asbestos containing materials were found in this building.

#### 147 Berry Road

No friable asbestos containing materials were found in this building.

#### 148 Berry Road

- Ceiling texture on plywood in the main bedroom on the second floor (Sample HZ9839-11) contains 2% asbestos. There are about 220 square feet of this material.
- Unless further sampling shows otherwise, the wall systems in this residence should be considered a regulated material. There are approximately 3,500 square feet of this material.

#### 103 Orchard

McLaren Hart's 1997 survey of the facility reported no friable materials in this facility.

#### Non Friable ACMs

The following non friable ACMs have been found in the Meek Orchard property:

#### 112 Berry Road

### Building 3

• 12x12" floor tile /mastic in the office area was not sampled but is assumed to be an ACM. There are approximately 250 square feet of this material.

#### Building 5

- 9x9" red floor tile (Sample HZ 9839-58) contains 10% asbestos. There are about 990 square feet of this tile.
- 9x9" tan floor tile (Sample HZ9839-60) contains 5% asbestos. There are approximately 670 square feet of this material.

- 12x12"off white floor tile (Sample HZ9839-68) did not show detectable levels of asbestos, but its associated mastic showed to contain 12% chrysotile asbestos.
   There are about 200 square feet of this building where this occurs.
- Concrete asbestos flue venting the heater (assumed positive). 5" in diameter, approximately 6 feet long.

### 136 Berry Road

- 9x9" floor tile under the carpet in the living room and in the bedrooms (Sample HZ9839-76) contains 15% asbestos. There are approximately 420 square feet of this material.
- 12x12" off white floor tile in the kitchen (Sample HZ9839-78). There are approximately 96 square feet of this material.

#### 147 Berry Road

- 12x12" off white floor tile in the small office building (Sample HZ9839-47) has 2% asbestos. There are approximately 50 square feet.
- The concrete/asbestos siding (Sample HZ9839-49) is a40% asbestos material.
   There are approximately 650 linear feet of these siding panels around the base of two of the greenhouses.

# 148 Berry Road

- 9x9" dark red floor tile in the kitchen (Sample HZ9839-33) has 10% asbestos
  content. There are approximately 80 square feet of this material. There is a layer
  of non-ACM floor tile and a layer of non-ACM linoleum over the top of this
  material.
- 9x9" tan floor tile on the second floor (Sample HZ9839-19). There are approximately 60 square feet of this material.

### 103 Orchard

McLaren Hart's 1997 survey of the facility reported approximately 18,000 square feet of roofing materials on the roof of the building.

#### Trace ACMs

Six suspect materials were found to contain trace amounts of asbestos. This means that their samples contained insufficient amounts of asbestos to allow accurate quantification. BAAQMD does not regulate trace ACMs since they contain less than 1% asbestos. However, work that disturbs trace ACMs is subject to Cal-OSHA regulations because they cover all materials that contain more than 0.1% asbestos. Cal-OSHA defines materials that contain between 0.1% and 1.0% asbestos as asbestos containing construction materials (ACCM). Handling such materials requires employers to be registered by Cal-OSHA as an asbestos contractor, and requires appropriate protective work practices and equipment.

The trace ACMs found in the Meek Orchard property are as follows.

#### 112 Berry Road

- Wall systems (Samples HZ9839-70, 71) in Building 5.
- Acoustic ceiling material (Samples HZ9839-72, 73) in Building 5.

## 147 Berry Road

- Surface texturing on the walls (Samples HZ9839-43, 44) in the office/bathroom building.
- Wall systems (Samples HZ9839-45, 46) in the office/bathroom building.

#### 148 Berry Road

- 12x12" white floor tile (Samples HZ9839-17, 18) in the kitchen.
- 12x12" off white floor tile (Samples HZ9839-29, 30) in the living room.

#### 103 Orchard

McLaren Hart's 1997 survey of the facility reported approximately 17,500 square feet of wall system in various locations in the building.

### Regulated ACMs

The Bay Area Air Quality Management District (BAAQMD) regulates air emissions from building renovation and demolition projects. This agency requires that materials with an asbestos content greater than 1.0% be removed before building demolition if they are either friable or the work will damage or otherwise render them friable. Essentially, the regulated ACMs in the building are the friable and non friable materials listed above except possibly for roofing materials. If it contains more than 1% asbestos, he latter may not be considered a RACM since a 1990 EPA clarification (Federal Register 55, 48406 et seq. ) indicated that the removal of asphalt based asbestos roofing products with hand tools is not considered as rendering roofing materials friable. Thus normal building demolition would not require the removal of this material beforehand.

The estimated cost to remove friable and non friable materials (assuming it occurs during a single project) is about \$ 20,000. Note that the costs for wall systems removal at 148 Berry Road alone are \$6,000. This estimate excludes any roof related removal. This excludes any consultant fees which for a project of this nature would run between \$ 1,500 and \$ 3,500 depending upon the level of involvement.

Non Asbestos Containing Materials.

Table 2 describes materials sampled and tested in this investigation and found not to contain detectable amounts of asbestos

## Lead Related Findings

Compliance with Cal-EPA hazardous waste regulations requires that either loose or deteriorated paints be properly characterized for disposal prior to or in conjunction with renovation so that they can be handled in accordance with hazardous waste regulations.

Table 3 shows the lead sample results for the Berry Street properties. As explained above, McLaren Hart's 1997 survey of the building at 103 Orchard Avenue did not address lead related issues.

Painted surfaces are generally in good condition throughout except for two locations. One is the white paint on the greenhouses at 147 Berry Road. The other is the yellow exterior paint on Building 5 at 112 Berry Road. Deteriorated paints that contain more than 1,000 parts per million (ppm) total threshold limit concentration of lead would be classified as a hazardous waste. Consequently, the estimated 200 square feet of deteriorated yellow wall paint at 112 Berry would need to be removed and disposed of separately (as hazardous waste) during building

demolition. Deteriorated white paint on the greenhouses at 147 Berry (lead content of 394 ppm) would not be considered a hazardous waste based on total lead content. However, because it contains more than 50 ppm lead, this paint should be sampled and analyzed to determine leachable lead content (TCLP analysis) before ruling it out as a hazardous waste. The cost for sampling and analysis of this material is about \$ 300. The red primer paint (294 ppm) on the steel support structures at 112 Berry Road is intact and in good condition. Should any renovations or demolitions require that these columns or beams be hot cut, then the lead must be removed prior or appropriate respiratory protection be used.

Most surfaces are coated with intact paint that contains lead. Although no lead related action is required to comply with Cal-EPA regulations for the demolition of surfaces coated with intact lead containing paint, Cal-OSHA regulations would require a demolition contractor to comply with the requirements of Cal-OSHA's lead in construction standard (8CCR1532.1). According to these regulations, a contractor would need to develop and implement a lead compliance plan, conduct employee exposure assessment to determine appropriate protective measures, provide employee training on the hazards of lead related work, provide adequate hand washing facilities and ensure their use. The written compliance plan would essentially acknowledge the presence of lead and would describe procedures to minimize airborne lead exposures (i.e. use dust control, clean up debris daily with a HEPA vacuum, and use good personal hygiene procedures, etc.). These issues are commonplace since these Cal-OSHA rules have been in effect since 1992 and since the lead containing paints are commonly found.

#### Recommendations

The findings of this investigation warrant the following actions:

- 1. Notify building occupants and employees of the presence of ACM as required under California Health & Safety Code 259359.7 (Connelly Bill) and by Cal-OSHA regulations. This could be a summary of this report with an explanatory note that the materials in occupied areas are generally in good condition, have low fiber release potential and should not be disturbed without the proper precautions. It is also advisable to notify any contractors or other appropriate personnel who may damage ACMs that improper handling may result in exposure to asbestos, and that any work on these materials is subject to Cal-OSHA rules. These notifications should be made in writing.
- Consider investigation of roofing materials on the soil shed at 147 Berry Road to verify it does not contain regulated ACMs.
- 3. Re-inspect 103 Orchard Avenue to verify that there are no ACMs other than as reported in McLaren Hart's survey, and to evaluate potential lead paint issues.
- 4. Obtain access to Building 3, 112 Berry Road to determine whether the floor tile in it contains asbestos and to see if it contains any other suspect ACMs.
- 5. Consider additional investigation of the wall system in 148 Berry Road. This may limit the amount of wall system that would need to be removed to meet BAAQMD requirements prior to demolition.
- 6. Remove all identified regulated ACMs. This work should be conducted by a licensed and registered asbestos abatement contractor. The estimated total cost associated with this work is \$ 20,000 excluding roofing materials Asbestos consultant related costs would run between \$ 1,500 and \$ 3,500 for a project of this type.

- 7. Remove loose and deteriorated paints. The estimated cost for this work is about \$ 1,000. This would not include the white paint, which may not meet hazardous waste criteria based on extractable lead content. An expenditure of \$ 300 to determine its waste classification may some economy if it turns out not to meet Cal-EPA hazardous waste criteria.
- 8. Notify potential contractors of the suspected presence of lead containing paints in the building. Disturbance of these materials requires compliance with Cal-OSHA's lead in construction regulations. Note that the presence of lead containing paints would need to be disclosed should the property be sold.

The estimated cost for recommendations 2 to 5 above would be about \$ 700 if these activities took place within one site visit.

#### Conclusion

This investigation found a number of asbestos containing materials that would be classified as regulated asbestos containing materials. These require removal prior to demolition. The cost for this work would be about \$ 20,000. This excludes costs associated with additional materials in buildings not fully characterized for asbestos content. Note that it is that further investigation in 147 Berry may limit the amount of wallboard that is regulated with ensuant cost savings.

Also found during this investigation was a small amount of deteriorated lead containing paint which needs to be removed separately from other materials before demolition. The cost for this removal is about \$1,000. This cost may increase if the deteriorated white paint in147 Berry fails the TCLP test required to establish whether or not it is a hazardous waste. The presence of lead in paints also has some consequence for demolition inasmuch as it will require compliance with Cal-OSHA lead in construction regulations. This should not be a significant issue because these rules are not new and because lead based paint is commonplace.

Please call if you have any questions or comments regarding this report. Thank you for the opportunity to be of service.

Sincerely,

Acumen Industrial Hygiene, Inc.

Michael Connor, CIH, CSP

Principal

Table 3

# Paint Sample Results 112, 136, 147, 148 Berry Road Hayward, CA

# December 1998

Material	Location	Results	Sample
White wall paint	Greenhouse 1 (147 Berry)	394	HZ9839-A
Yellow exterior paint	Building 5 (112 Berry)	2,170	HZ9839-B
Red primer	Steel column-Building 3 (112 Berry)	294	HZ9839-C

All results reported in milligrams per kilogram (or parts per million –ppm- by weight). Current HUD guidelines define a lead based paint as containing more than 0.5% lead by weight (or 5,000 ppm).

Table 2

Non Asbestos Containing Materials

# 112, 136, 147, 148 Berry Road Hayward, CA

# December 1998

Facility	Material	Location	Sample
112 Berry	9x9" ceiling tile	Building 5	HZ9839-66, 67
	Acoustic ceiling material	Offices-Building 1	HZ9839-56, 57
	Linoleum	Men's bathroom-Building 1	HZ9839-50, 51
	Linoleum	Women's bathroom-Building 2	HZ9839-52, 53
136 Berry	9x9" ceiling tile	Living room	HZ9839-74, 75
4	Linoleum	Bathroom	HZ9839-84, 85
	Wall systems	Throughout	HZ9839-82, 83
	Window glazing putty	Windows	HZ9839-80, 81
147 Berry	12x12" brown floor tile	Rear porch	HZ9839-15, 16
	12x12" green floor tile	2nd floor hall	HZ9839-23, 24
	12x12" green floor tile	1st floor den	HZ9839-25, 26
	12x12" tan floor tile	Living room	HZ9839-05, 06
	12x12" white/green floor tile	2nd floor bathroom	HZ9839-28, 29
	9x9" red floor tile	Stair landing	HZ9839-37, 38
	Window glazing putty	Greenhouse #1	HZ9839-41, 42
148 Berry	Linoleum	Kitchen	HZ9839-01, 02
	Linoleum	2nd floor bathroom	HZ9839-03, 04
	Moisture barrier paper	Exterior wall-den	HZ9839-39
	Moisture barrier paper	Exterior wall-roof	HZ9839-40
	Multi-colored linoleum	2nd floor closet	HZ9839-21, 22
	Tan linoleum	Bedroom #2	HZ9839-13, 14
	Wall texture	2nd floor bathroom	HZ9839-07, 08

All samples analyzed by polarized light microscopy and reported as not containing detectable amounts of asbestos.

Table 1

Asbestos Containing Materials
112, 136, 147, 148 Berry Road
Hayward, CA
December, 1998

Facility	Material	Location	Result <sup>1</sup>	Sample	F <sup>2</sup> ?	Est. Quant <sup>3</sup> .
112 Berry	12x12" white floor tile	Building 5	Tile: ND Mastic: 12% C	HZ9839-68	N	200 sf
	9x9" red floor tile	Building 5	10% C:	HZ9839-58	N	990 sf
	9x9" tan floor tile	Building 5	5% C	HZ9839-60	N	670 sf
	Duct seam tape	Heater Building 5	35% C	HZ9839-64	Y	25 lf
	Heater flue	Building 5	Assumed	Assumed	N	6 lf
	Linoleum with design	Offices-Building 1	50% C	HZ9839-54	Y	650 sf
	Linoleumdebris under carpet	Office-Building 4	35% C	HZ9839-62	Y	NQ
136 Berry	9x9" red floor tile	Living room/bedrooms	Tile:15% C Mastic: ND	HZ9839-76	N	420 sf
	12x12" off white floor tile	Kitchen	Tile: 2% C Mastic: ND	HZ9839-78	N	96 sf
147 Berry	12x12" off white floor tile	Office/bathroom Building	Tile: 2% C Mastic: ND	HZ9839-47	N	50sf
	Base siding	Greenhouses 2 & 5	40% C	HZ9839-49	N	1,500 sf
148 Berry	9x9" Red floor tile under lino	Kitchen	Tile: 10% C Mastic: ND Lino: ND	HZ9839-33	N	80 sf
	9x9" tan floor tile	2nd floor hall	Tile: 2% C Mastic: ND	HZ9839-19	N	60 sf
	Ceiling texture	Ceiling of main bedroom	2% C	HZ9839-11	Y	220 sf
	Wall system <sup>4</sup>	Throughout	2% C	HZ9839-32	N	3,500 sf

<sup>1.</sup> Results report percent chrysotile (% C) asbestos as determined by polarized light microscopy (PLM). Materials indicated as <1% are materials found to contain asbestos in insufficient amount for accurate quantification of asbestos content.

F? indicates whether material is considered friable.

<sup>3.</sup> Est. Quant. indicates estimated quantity of material. If represents linear feet, sf square feet and NQ not quantified.

<sup>4.</sup> See text for additional information

# Appendix A

Laboratory Reports

Asbestos Inspection 112, 136, 147, 148 Berry Road Hayward, CA

December 1998

Acumen Project HZ9839

Conducted for:

Mr. Christophe R.P. Collet HARZA, Inc. 425 Roland Way Oakland, CA 94621

1092

Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

148 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99

Date Analyzed 1/14/99 Total Samples

73

Micro Log In

63819

:	SAMPLE INFORMATION	ASBESTOS MIN	IERALS TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: HZ9839-01 Micro: 63819-01 Analyst: OD LINOLEUM - KITCHEN		LINOLEUM: ND BACKING: ND MASTIC: ND	Descriptions	25 % CELLULOSE 5 % FIBROUS GLASS	SYNTHETIC MATERIAL CARBONATE
Client: Micro: 63819-02	•	See LINOLEUM: ND BACKING: ND MASTIC: ND	Descriptions	25 % CELLULOSE 5 % FIBROUS GLASS	SYNTHETIC MATERIAL CARBONATE
Client: 63819-03	•	See	Descriptions	35 % CELLULOSE 5 % FIBROUS GLASS	SYNTHETIC MATERIAL CARBONATE
Client: Micro: 63819-04 LINOLEUM, 2/F BAT		See LINGLEUM: ND BACKING: ND	Descriptions	35 % CELLULOSE 5 % FIBROUS GLASS	SYNTHETIC MATERIAL CARBONATE
Client: Micro: 63819-05 12"X 12" TAN FT/ MA LIVING ROOM	<u>-</u>	TILE: ND MASTIC: ND	Descriptions	2 % CELLULOSE	SYNTHETIC MATERIAL CARBONATE ROCK FRAGMENTS

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-finable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart: drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complex; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed (re-analysis is within acceptance limitis;) B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorsement by NIST Micro Analytical Laboratories, Inc.

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**Total Samples** 73

Micro Log In 63819

Client: HZ9839-06 Micro: 63819-06 Analyst: OD 12"X 12" TAN FT/ MASTIC LIVING ROOM		ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA  SYNTHETIC MATERIAL CARBONATE ROCK FRAGMENTS
		See Descriptions TILE: ND MASTIC: ND	2 % CELLULOSE	
l	HZ9839-07 63819-07 Analyst: OD MO EXTURE 2/F BATHROOM	ND		CARBONATE PAINT
				QC Result*: A
l	HZ9839-08 63819-08 Analyst: OD EXTURE 2/F BATHROOM	ND	20 % CELLULOSE	CARBONATE PAINT
	HZ9839-09 63819-09 Analyst: OD COMPOUND/ TAPE ROOM	See Descriptions  JOINT COMPOUND: 3% CHRYSOTILE PAINT & SKIM COAT: ND	30 % CELLULOSE	SYNTHETIC MATERIAL CARBONATE BINDER
	HZ9839-10 63819-10 Analyst: COMPOUND/TAPE ROOM	NOT ANALYZED (PRIOR POSITIVE)	,1	

Technical Supervisor:

Fov Baojia Ke, Ph. D.

Hivares 114/99

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diarneter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying mosture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complex; if so, it is noted in his report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The Cal-OSHA definition of asbestos or ontent at this level cannot be done by PLM, and requires TEM er-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed for multiple result resolutions. NIST / NVLAP Accreditation (Buk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorsement by NIST or any agency of the U.S. Government. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. Micro Analytical Laboratories, Inc.

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SAMPLE INFORMATION		ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client:	HZ9839-11	2 % CHRYSOTILE		BINDER
	63819-11 Analyst: HD TEXT ON PLYWOOD DM #1			CARBONATE MICA PAINT
Client:	HZ9839-12	]		
Micro:	63819-12 Analyst:	1		
CEILING BEDROO	TEXT ON PLYWOOD OM #1	NOT ANALYZED (PRIOR POSITIVE)		
Client:	HZ9839-13	See Descriptions	30 % CELLULOSE	BINDER
Micro:	63819-13 Analyst: HD	1	25 % SYNTHETIC FIBERS	SYNTHETIC MATERIAL ROCK FRAGMENTS
TAN LIN BEDRO		TAN LINOLEUM: ND BLACK BACKING: ND BROWN BACKING: ND BEIGE TEXTURE: ND TAN & RED MATERIAL: ND		OPAQUES TAR
Client:	HZ9839-14	See Descriptions	35 % CELLULOSE	BINDER
Micro:	63819-14 Analyst: HD	1	15 % SYNTHETIC FIBERS	SYNTHETIC MATERIAL
TAN LIN BEDROO		TAN LINOLEUM: ND BLACK BACKING: ND BROWN BACKING: ND BEIGE TEXTURE: ND TAN & RED MATERIAL: ND		ROCK FRAGMENTS OPAQUES TAR
Client:	HZ9839-15	See Descriptions		BINDER
	63819-15 Analyst: HD MO	]		CARBONATE SYNTHETIC MATERIAL
12" X 12 REAR P	I" BROWN FT/ MASTIC ORCH	TILE: ND MASTIC: ND		

Technical Supervisor:

Fov Baojia Ke, Ph. D.

WHILL 114/99

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated, other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 11% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately, asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to heterogeneous samples are analyzed separately, asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to heterogeneous samples are analyzed separately, asbestos percentages on multilayered samples are applicable only to (CQC Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos de

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SAMPLE INFORMATION		ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client:	HZ9839-16	See Descriptions		BINDER
Micro:	63819-16 Analyst: HD	7		CARBONATE
12" X 12 REAR P	" BROWN FT/ MASTIC ORCH	TILE: ND MASTIC: ND		SYNTHETIC MATERIAL
Client:	HZ9839-17	See Descriptions	2 % CELLULOSE	BINDER
Micro:	63819-17 Analyst: HD	1	<1 % SYNTHETIC FIBERS	CARBONATE SYNTHETIC MATERIAL
9" X 9" \ K!TCHE	WHITE FT/ MASTIC N	TILE: <1% CHRYSOTILE MASTIC: ND		ROCK FRAGMENTS TAR
Client:	HZ9839-18	See Descriptions	2 % CELLULOSE	BINDER
Micro:	63819-18 Analyst: HD MO	7	<1 % SYNTHETIC FIBERS	CARBONATE SYNTHETIC MATERIAL
9" X 9" \ KITCHE	WHITE FT/ MASTIC N	TILE: <1% CHRYSOTILE MASTIC: ND		ROCK FRAGMENTS TAR  OC Result*: A
Client:	HZ9839-19	See Descriptions	<1 % SYNTHETIC FIBERS	BINDER
Micro:	63819-19 Analyst: HD			CARBONATE
9" X 9" 7 2/ F HAL	TAN FT/ MASTIC	TILE: 2% CHRYSOTILE MASTIC: ND		SYNTHETIC MATERIAL ROCK FRAGMENTS
Client:	HZ9839-20	See Descriptions	2 % SYNTHETIC FIBERS	BINDER
Micro:	63819-20 Analyst: HD	]		SYNTHETIC MATERIAL ROCK FRAGMENTS
9" X 9" <sup>-</sup> 2/ F HAI	TAN FT/ MASTIC L	TILE: NOT ANALYZED (PRIOR POSIT MASTIC: ND	IVE)	HOOK PRACTIVENTS
				<u> </u>

Technical Supervisor:\_

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, shing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in tab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP

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SAMPLE INFORMATION		ASBESTOS MIN			BESTOS FIBERS Y TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA	
Client:	HZ983	9-21	See	Descriptions	15 %	CELLULOSE	TAR
Micro: 638		Analyst: OD		·	15 %	SYNTHETIC FIBERS	SYNTHETIC MATERIAL CARBONATE
2/F			LINOLEUM: ND BACKING & MAS	TIC: ND			·
Client:	HZ983	9-22	See	Descriptions	15 %	CELLULOSE	TAR
Micro: 638	19-22	Analyst: OD		·	15 %	SYNTHETIC FIBERS	SYNTHETIC MATERIAL CARBONATE
MULTI-COLC 2/F	RED LINO		LINOLEUM: ND BACKING & MAS	TIC: ND			CARBUNATE
Client:	HZ983	9-23	See	Descriptions			CARBONATE
Micro: 638	19-23	Analyst: OD	7	•		-	SYNTHETIC MATERIAL
	EEN FT/ MASTIC INDER TILE )		TILE: ND MASTIC: ND				
Client:	HZ983	9-24	See	Descriptions			CARBONATE
Micro: 638	19-24	Analyst: OD		·			SYNTHETIC MATERIAL
	EEN FT/ MASTIC INDER TILE )		TILE: ND MASTIC: ND				
Client:	HZ983	9-25	See	Descriptions	2 %	CELLULOSE	CARBONATE
Micro: 638		Analyst: OD					SYNTHETIC MATERIAL
12" X 12" GR DEN 1/ F	EEN FT/ MASTIC		TILE: ND MASTIC: ND				
	<del></del>		<u> </u>	14.4.4	17 1	2 2	

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complex; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 19% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately, asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to heterogeneous wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorsement by NIST or any

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Micro Log In 63819

SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE		NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: HZ9839-26 Micro: 63819-26 Analyst: OD 12" X 12" GREEN FT/ MASTIC DEN 1/ F	See Descriptions TILE: ND MASTIC: ND	30 % CELLULOSE	CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-27 Micro: 63819-27 Analyst: OD 12" X 12" WHITE/ GREEN FT/ MASTIC BATH/ HALL 2/ F	See Descriptions Tile: ND MASTIC: ND		CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-28  Micro: 63819-28 Analyst: OD  12" X 12" WHITE/ GREEN FT/ MASTIC BATH/ HALL 2/ F	See Descriptions TILE: ND MASTIC: ND		CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-29  Micro: 63819-29 Analyst: OD MC 12" X 12" OFF-WHITE FT/ MASTIC LIVING ROOM	See Descriptions TILE: <1% CHRYSOTILE MASTIC: ND		CARBONATE SYNTHETIC MATERIAL  QC Result*: A
Client: HZ9839-30  Micro: 63819-30 Analyst: OD  12" X 12" OFF-WHITE FT/ MASTIC LIVING ROOM	See Descriptions TILE: <1% CHRYSOTILE MASTIC: ND		CARBONATE SYNTHETIC MATERIAL

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 19% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to heterogeneous wallboard, joint com

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Micro Log In 63819

SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: HZ9839-31 Micro: 63819-31 Analyst: HD MO WALL SYSTEM LIVING ROOM	< 1 % CHRYSOTILE  DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE PAINT: ND	5 % CELLULOSE	BINDER GYPSUM CARBONATE SYNTHETIC MATERIAL  QC Result*: C
Client: HZ9839-32 Micro: 63819-32 Analyst: MO WALL SYSTEM LIVING ROOM	2 % CHRYSOTILE  DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE PAINT: ND	10 % CELLULOSE	BINDER GYPSUM CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-33 Micro: 63819-33 Analyst; HD 9" X 9" DARK RED FT/ MASTIC KITCHEN	See Descriptions TILE: 10% CHRYSOTILE MASTIC: ND		BINDER QUARTZ SYNTHETIC MATERIAL
Client: HZ9839-34 Micro: 63819-34 Analyst: 9" X 9" DARK RED FT/ MASTIC KITCHEN	NOT ANALYZED (PRIOR POSITIVE)		
Client: HZ9839-35 Micro: 63819-35 Analyst: HD WALL SYSTEM DEN	DRYWALL: ND BEIGE JOINT COMPOUND: 4% CHRYSOTILE WALL COMPOSITE: <1% CHRYSOTIL PAINT: ND; WHITE TEXTURE: ND	10 % CELLULOSE	BINDER GYPSUM CARBONATE SYNTHETIC MATERIAL

Technical Supervisor: ///

Fev Baojia Ke, Ph. D.

1/14/99

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SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: HZ9839-36 Micro: 63819-36 Analyst: MO WALL SYSTEM DEN	See Descriptions  DRYWALL: ND BEIGE JOINT COMPOUND: 4% CHRYSOTILE WALL COMPOSITE: 2% CHRYSOTILE PAINT: ND; WHITE TEXTURE: ND	10 % CELLULOSE	BINDER GYPSUM CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-37 Micro: 63819-37 Analyst: RB 9* X 9" RED FT/ MASTIC STAIR LANDING	See Descriptions TILE: ND BACKING: ND	20 % CELLULOSE	TAR QUARTZ CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-38 Micro: 63819-38 Analyst: RB 9" X 9" RED FT/ MASTIC STAIR LANDING	See Descriptions Tile: ND BACKING: ND MASTIC: ND	20 % CELLULOSE	TAR QUARTZ CARBONATE SYNTHETIC MATERIAL
Client: HZ9839-39 Micro: 63819-39 Analyst: RB MOISTURE BARRIER - EXT. WALL DEN	ND	35 % CELLULOSE 5 % FIBROUS GLASS	TAR
Client: HZ9839-40 Micro: 63819-40 Analyst: RB MOISTURE BARRIER - EXT. WALL ATTIC	ND	35 % CELLULOSE	TAR

Technical Supervisor:

Baojia Ke, Ph. D.

MW 1/14/99

Analysis method: Potarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotptate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLA

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SAMPLE INFORMATION		MPLE INFORMATION ASBESTOS MINERALS QUANTITY TYPE		NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: HZ9839-41		ND		CARBONATE
Micro: WINDOV WAREHO				BINDER SYNTHETIC MATERIAL
Client:	HZ9839-42	ND		CARBONATE
Micro: WINDOV WAREHO				BINDER SYNTHETIC MATERIAL
Client:	HZ9839-43	<1 % CHRYSOTILE		CARBONATE
	63819-43 Analyst: YG MO E TEXTURE			PAINT
				QC Result*: A
Client:	HZ9839-44	<1 % CHRYSOTILE		CARBONATE
	63819-44 Analyst: YG E TEXTURE			PAINT
Client:	HZ9839-45	<1 % CHRYSOTILE	20 % CELLULOSE	GYPSUM
Micro: WALL S OFFICE	63819-45 Analyst: YG YSTEM	DRYWALL: ND JOINT COMPOUND & PAINT: <1% CHRYSOTIL	E	CARBONATE PAINT

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to tayered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1666a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditati Micro Analytical Laboratories, Inc.

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

147 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99

Date Analyzed 1/14/99

**Total Samples** 

Micro Log In 63819

:	SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: Micro: 63819-46 WALL SYSTEM OFFICE	HZ9839-46 Analyst: RB	< 1 % CHRYSOTILE DRYWALL: ND JOINT COMPOUND: <1% CHRYSOTIL	20 % CELLULOSE	GYPSUM CARBONATE OPAQUES
Client: Micro: 63819-47 12" X 12" FT/ MASTIC	•	See Descriptions Tile: 2% CHRYSOTILE MASTIC: ND		CARBONATE SYNTHETIC MATERIAL BINDER
Client: Micro: 63819-48 12" X 12" FT/ MASTIC	/	See Descriptions  FLOOR TILE: NOT ANALYZED (PRIOR POSITIVE) MASTIC: NOT ENOUGH MATERIAL FOR ANALYSIS		
Client:   Micro: 63819-49 C/ A SIDING GREENHOUSE #5	HZ9839-49 Analyst: RB	40 % CHRYSOTILE		CARBONATE SYNTHETIC MATERIAL

Technical Supervisor:

Fav Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): ginority, the bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A att materials confirmed effer multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be reproduct endorsement by NIST or any agency of the U.S. Government. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc. This rep Micro Analytical Laboratories, Inc.

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

112 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99 Date Analyzed 1/14/99

**Total Samples** 73

Micro Log In 63819

	SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client:	HZ9839-50	See Description	s 35 % CELLULOSE	SYNTHETIC MATERIAL
Micro: 6	63819-50 Analyst: RB		5 % FIBROUS GLASS	CARBONATE BINDER
LINOLEU MEN'S B <i>I</i> BUILDING	ATHROOM	VINYL LAYER: ND BACKING: ND		BINDER
Client:	HZ9839-51	See Description		SYNTHETIC MATERIAL
Micro: 6	33819-51 Analyst: RB		5 % FIBROUS GLASS	CARBONATE BINDER
LINOLEU MEN'S B <i>I</i> BUILDING	ATHROOM	VINYL LAYER: ND BACKING: ND		BINDER
Client:	HZ9839-52	See Description	s 15 % CELLULOSE	CARBONATE
Micro: 6	33819-52 Analyst: YG	i ·	5 % FIBROUS GLASS	BINDER
LINOLEU: WOMEN': BLDG #1	S BATHROOM	LINOLEUM: ND BACKING: ND MASTIC: ND		SYNTHETIC MATERIAL
Client:	HZ9839-53	See Description	s 15 % CELLULOSE	CARBONATE
Micro: 6	3819-53 Analyst: YG		5 % FIBROUS GLASS	BINDER
LINOLEU WOMEN'S BLDG #1	S BATHROOM	LINOLEUM: ND BACKING: ND MASTIC: ND		SYNTHETIC MATERIAL
Client:	HZ9839-54	See Description	s 5 % CELLULOSE	OPAQUES
Micro: 6	33819-54 Analyst: YG	<u> </u>		BINDER SYNTHETIC MATERIAL
	ITE LINOLÉUM W/ DESIGN · BLDG. #1	LINOLEUM: ND BACKING: 50% CHRYSOTILE		SHALLSHOMMICHIAL
311102			1	

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor titles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscoellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotptate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(4), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. \*Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed acceptance limits); B = no asbestos detected

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

112 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99

1/14/99 Date Analyzed

Total Samples 73

Micro Log In 63819

	SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client:	HZ9839-55			
Micro: 63819-	55 Analyst:	7		
OFF-WHITE LINO OFFICE - BLDG. 4	DLEUM W/ DESIGN	NOT ANALYZED (PRIOR POSITIVE)		
Client:	HZ9839-56	ND		ROCK FRAGMENTS
Micro: 63819- ACOUSTIC CELL OFFICE - BLDG #	NG MATERIAL			CARBONATE BINDER SYNTHETIC MATERIAL
Client:	HZ9839-57	ND		ROCK FRAGMENTS
Micro: 63819- ACOUSTIC CEILI OFFICE - BLDG #	NG MATERIAL			CARBONATE BINDER SYNTHETIC MATERIAL
Client:	HZ9839-58	See Descriptions		CARBONATE
Micro: 63819-	58 Analyst: YG			BINDER
9" X 9" RED FT/ M BLDG #5	<del>-</del>	TILE: 10% CHRYSOTILE MASTIC: ND		SYNTHETIC MATERIAL TAR
Client:	HZ9839-59	See Descriptions		TAR .
Micro: 63819-	59 Anatyst: YG			
9" X 9" RED FT/ N BLDG #5	MASTIC	TILE: NOT ANALYZED (PRIOR POSITI MASTIC: ND	VE)	

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed differ multiple result resolutions. NIST / NVLAP Accredit Micro Analytical Laboratories, Inc.

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

112 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99

Date Analyzed 1/14/99

Total Samples 73

Micro Log In 63819

SAMPLE INFORMATION	ASBESTOS MINERALS NON ASBEST QUANTITY TYPE QUANTITY	TOS FIBERS NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: HZ9839-60 Micro: 63819-60 Analyst: YG 9" X9" TAN FT/ MASTIC BLDG #5	See Descriptions TILE: 5% CHRYSOTILE MASTIC: ND	CARBONATE BINDER SYNTHETIC MATERIAL TAR
Client: HZ9839-61 Micro: 63819-61 Analyst: YG 9" X9" TAN FT/ MASTIC BLDG #5	See Descriptions  Tile: NOT ANALYZED (PRIOR POSITIVE) MASTIC: ND	TAR
Client: HZ9839-62 Micro: 63819-62 Analyst: RB LINOLEUM BACKING PAPER OFFICE - BLDG #4	35 % CHRYSOTILE	SYNTHETIC MATERIAL BINDER QUARTZ
Client: HZ9839-63 Micro: 63819-63 Analyst: LINOLEUM BACKING PAPER OFFICE - BLDG #4	NOT ANALYZED (PRIOR POSITIVE)	
Client: HZ9839-64 Micro: 63819-64 Analyst: RB DUCT SEAM TAPE BLDG, 5	35 % CHRYSOTILE 5 % CI	ELLULOSE BINDER
	10.1.1.2	

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993 ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tites, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscetlaneous particles are present in most samples. Preparation (all samples): grinding, milling, teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-contaming construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis, includial layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A eal materials confirmed affer materials confirmed affer multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorsement by NIST o

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

112 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99

Date Analyzed 1/14/99

**Total Samples** 73

Micro Log In 63819

	SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: 63819 Micro: 63819 DUCT SEAM TA BLDG. 5		NOT ANALYZED (PRIOR POSITIVE)		
Client: Micro: 63819 9" X 9" CEILING BLDG 5	<del>-</del>	See Descriptions CEILING TILE: ND PAINT: ND MASTIC: ND	40 % CELLULOSE	OPAQUES SYNTHETIC MATERIAL BINDER
Client: Micro: 63819 9" X 9" CEILING BLDG 5	•	See Descriptions CEILING TILE: ND PAINT: ND MASTIC: ND	40 % CELLULOSE	OPAQUES SYNTHETIC MATERIAL BINDER
Client:   Micro: 63819 12" X 12" WHITE BLDG, 5	,	See Descriptions TILE: ND MASTIC: 12% CHRYSOTILE		QUARTZ TAR CARBONATE
Client: Micro: 63819 12" X 12" WHITE BLDG. 5		NOT ANALYZED (PRIOR POSITIVE)		

Technical Supervisor:

For Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellareous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotpiate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1868a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorsem

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

112 BERRY ROAD HAYWARD, CA PROJECT NO. HZ9839 Date Sampled 12/30/98

Date Received 1/4/99

Date Analyzed 1/14/99

73 Total Samples

Micro Log In 63819

	SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client:	HZ9839-70	<1 % CHRYSOTILE	20 % CELLULOSE	GYPSUM
	63819-70 Analyst: RB YSTEMS	DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE	<1 % FIBROUS GLASS	CARBONATE OPAQUES
Client:	HZ9839-71	<1 % CHRYSOTILE	20 % CELLULOSE	GYPSUM
	63819-71 Analyst: RB YSTEMS	DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTIL!	=	CARBONATE OPAQUES
Client:	HZ9839-72	<1 % CHRYSOTILE		CARBONATE
	63819-72 Analyst: YG MO TIC CEILING MATERIAL			ROCK FRAGMENTS BINDER SYNTHETIC MATERIAL  QC Result*: C
Client:	HZ9839-73	<1 % CHRYSOTILE		CARBONATE
	63819-73 Analyst: YG MO TIC CEILING MATERIAL			ROCK FRAGMENTS BINDER SYNTHETIC MATERIAL
				QC Result*: C

Technical Supervisor:

fov Baojia Ke, Ph. D.

1/14/99

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor files, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing on the terrogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are analyzed separately; asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorsement by

ob Site: 148 /3	PARRY ST L	aboratory:	MICROA	VACYTICAL	
Location: HAY	WARD, CA T	urnaround Ti	me: 24h	••	
Sample Date: 12/	30/98		·		
Sample Number	Location/Description	Analysis	Volume (liters)	Method	
429839-01	LINOLEUM - KITCHEN	PLM		/	
.02	et a	/			
.03	LINDIGUM, 2/F BATHROOM				
-04					
-05	12X 12" TAN FT/MAGTIC-LIGHTE	en			
-06	çe L1 E1				
-07	WALL TEXTURE 2/F BATHRO	1 .			
-08	es is es				
- 09	JOINET COMPOUND/THE - LIVING	Ru			
V -10		1	/		
Please sign this for	n below acknowledging sample r Please fax results to (415) 252-14	eceipt and re	turn executed	form with	j

Sent via FedEx airbill number:

ACUMEN

Industrial Hygiene, 1175 Folsom Street San Francisco, CA 94 (415) 252-0778 (415) 252-1411	_	Project No. (	429839	?
Job Site: 148 6	BERRY RD L	aboratory: /	UICROAN	ALYTICAL
Location: #44	WARD, CA T	urnaround Ti	ime: 24 h	
Sample Date:	- /30 /98			
Sample Number		Analysis	Volume (liters)	Method
HZ9839-11	CELINGTOXT ON PLYWOOD - BEDRIM H !	PLM		
. 12	u u 1)			
-/3	TAN LINDLAVM - BEDAM#2			
- 14	er to the			
-15	12×12" BRWD FT MASTIC -REAK PORCH	?		
1 1		1		
- 17	94X9" WHT. FT/MARIC-KIT			
- 18				
- 19	9'k9" TAN FT/MOTZ -2/F HALL	4		
V -20		V		
laboratory reports	m below acknowledging sample r. Please fax results to (415) 252-14	11		-
Other Instructions	ANALYZE TOA POSITI	UC, IN	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
FAX COPY	OF RESULTS TO	: 510	-595-08	369
Date sent: Jan	05- RESULTS TO Red 3 1999 Da	ceived by: te received	1/3/99 14	1555
Sant win KadEv air	hill number			

ACUMEN

Industrial Hygiene, Inc. 1175 Folsom Street

San Francisco, CA 94103 63819	Project No. HZ 9839
(415) 252-1411	• •
	· Laboratory: MICADAWALTICAL
Location: HAWGARD, CA	Turnaround Time: 29 km
Sample Date: 12/38/98	
Sample Number Location/Description	Analysis Volume Method (liters)
HZ9839- 21 MULTI-COLORED LIND - 21	PLM
1 . 22	
12×12" GRU FT/METZ-24	5
1 1 . )	
24 INXIZ CREEN FITHIST 25 DEN IF	2
26 "	
· 27 BATH HALL 2/F	2
1	
28 12" X12" OFF WHT FT/MST	
Please sign this form below acknowledging san laboratory reports. Please fax results to (415) 2	52-1411
Other Instructions: ANALYZE TO A P	DOSITUS, THEN STOP.
FAX GOPY OF REBULTS TO :	1-510-595-0869
Zanala Kal	Received by: od
Date sent: /3/99	Date received 1/3/99 14:55
Sent via FedEx airbill number:	

Project No. HZ9839

ACUMEN

(415) 252-0778 (415) 252-1411

Industrial Hygiene, Inc. 1175 Folsom Street

San Francisco, CA 94103

Job Site: /48	BERRY B	_aboratory: ,	Microan	alytical
Location: Hay			ime: 24	
Sample Date:		•	•	•
Sample Number	Location/Description	Analysis	Volume (liters)	Method
HZ9889-31	WALL SYSTEM - LIJING P	RM		
/ 32	// (1	1 /		
33	PX9" DRK RD FT/ME- KI	7		
- 34				
35	WALL SYSTEM - DEA			
- 36	٠٠ ٧٠ لو		j	
-37	9×9" RED FT/MASTE - STAIR			
- 38	w 1,			
-39				
V -40	MOISTURE BARRIER-EXT. WA	u V		
Please sign this for laboratory reports.	m below acknowledging sample: Please fax results to (415) 252-14	4.4		•
Other Instructions:	ANALYZE TO A POS EXCEPT - ANALYZE	E BOTH	146N # 39 \$	370P! '#40
FAX COPY	10: 510-595-C	869	•	
Date sent: 1/3	Re D	ceived by: ¿	od 1/3/99	14. 50
Sent via FedEx air			1/9/11	* * * * * * * * * * * * * * * * * * * *

Project No. HZ 9839

Job Site: 147	WARD, CA	Turnaround T		rlyfical p
Sample Date:	2/30/98	•		
Sample Number	Location/Description	Analysis	Volume (liters)	Method
HZ 9839-41	WILDOW PUTTY-WAREHOUSE	# PLM		
-42	K K H			
- 43	SURFACE TOXTURE -OFAC	E \	·	
-44	(			
-45	WALL SYSTEM LOFFIC	£ .	(.	
-46				
-47	12×12" FT/MSTC - OFFICE	ر ا		
-48	pr in in			
V -49	C/A SIDING GRNASE#	5		

Other Instructions:

Date received 1/3/99

14:55

1-510-595 0869

Sent via FedEx airbill number:

laboratory reports. Please fax results to (415) 252-1411

ACUMEN

(415) 252-0778 (415) 252-1411

Industrial Hygiene, Inc. 1175 Folsom Street

San Francisco, CA 94103

Industrial Hygiene, 1175 Folsom Street San Francisco, CA 94 (415) 252-0778 (415) 252-1411		Project No.	HZ 9839	7
Job Site: //2	BORRY B	Laboratory:	MICROAWA	LY MEAL
Location: HAYU		Turnaround T		•
· ·	2/30 /98			•
Sample Number		Analysis	Volume (liters)	Method
HZ9839-50	LINDLEWM - MEIU'S BATHRI BUILDING # 1	PLM		
/ - 51	11 11 11	1		
- 52	LINDLEUM - WOMEN'S BATHRO	om (		
- 53	11			
-54	OFF.WAT.LIND WIDESIGN OFFICE - BLDG. # 1		(.	
- 55				
- 56	ACOUSTIC CEILING MATER OFFICE - BLDG # 1	n4.		
-57				
-58	9'X9" RED FT/MSTC BLOG	#5		
V -59	li a i			
laboratory reports.	m below acknowledging sample. Please fax results to (415) 252-1	[417		
Other Instructions:	ALYZE EACH GROUP TO	A POSITI	UE, 146	-N 210N!
FAX COPY	70: 1-510-595-	0869		
Date sent: 1/3		Received by: _ Date received	od 1/3/99	14:55
Sent via FedEv air	hill mushou			

**ACUMEN** 

Industrial Hygiene, Inc. 1175 Folsom Street

(415) 2	incisco, CA 94 52-0778 52-1411	63819	F	roject No.	HZ 983	9	
Job Site	: 112 %	BERRY RO.	· · La	boratory: /	MICROA	aux y Tracks	
Location	on: HAY	WARD, CA	Tu	ırnaround Ti	me: 24	1	
Sample	e Date: 12	1/30/98		4	·	·	
Samp	le Number	Location/Description		Analysis	Volume (liters)	Method	
HZ98	39 - 60	9X9" TAN FT/METE BLE	X6#5	PLM			
	-61	٠, ,,	١				
	. 62	CFFICE - BLDG #	9002 4				
	- 63	<u>.</u>	LI				
	.64	DUCT SEMAN TAPE, BL	D6.5				
	-65	71 (1					
	- 66	9×9 COLUMB TILE/MISTE		1			
	- 67	u u					
	- 68	LIXIZ" WHT. FT/METC BLDG.	5				
V	-69	1		1			
Please labora		m below acknowledging san . Please fax results to (415) 2					/
	HUALY Instructions	26 EACH GROUP	PO /	A 1651TI	105, 11	BN STOP!	/
FI	AY COP	'y 70: 510-5	795	-0869	9 .		
Sent b	y Sonale	l siel	Rec	eived by:	od .		
Date	sent: 1/3	198	Dat	e received	1/3/99	14:55	
Sent v	via FedEx air	bill number:					

Job Site: 1/2 BERN RD. Laboratory: MICRO APUNCY TICAC  Location: HANNARD, CA Turnaround Time: 94 L.  Sample Date: 12/30/48  Sample Number Location/Description Analysis Volume (liters)  HZ 9839-70 WALL SYSTEMS - BLDG. 5 PLM  - 71  - 72  - RCOUL STIC LESIUNG MATERIAL  BLDG. 5  V - 73  11  11  Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ANALYZE CACH CACHE BA A RESIDIES, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: Longith Local  Bar received 1/2/97 14:55	Industrial Hygiene, 1175 Folsom Street San Francisco, CA 9 (415) 252-0778 (415) 252-1411		Project No.	HZ <b>48</b> 3	9
Turnaround Time: 94 h.  Sample Date: 12/30/98  Sample Number Location/Description Analysis Volume (liters)  HZ 9839-70 WALL SYSTEMS-BLDG. 5 PLM  -71 ""  ACOU STIC CERCING MARRAY  172 BLDG. 5  V-73 ""  Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ALALYZO CACH CACHO TO A POSITION, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: Longled NeO Received by: od	Job Site: //2	BERRY RD.	· Laboratory:	MICRO Ar	uncytreac
Sample Date: 12/30/98  Sample Number Location/Description Analysis Volume (liters)  HZ 9839-70 WALL SYSTEMS-BLDG. 5 PLM  -71  -72 RECOUSTIC CERCING MATERIAL  BLDG. 5  V-73 LL 'I 'I  Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ANALYZO CACH CARLIN TO A POSITION, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: Long Market Volume Method (liters)  Received by: Od.			Turnaround Ti	ime: 24 h	<u>/</u> .
Sample Number Location/Description Analysis Volume (liters)  HZ 9837-70 WALL SYSTEMS-BLDG. 5 PLM  -71	Sample Date:	/30/98		·	
Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  Analyzo Cach Cach Pa A POSITIVE, THEN STOP! Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: Received by: od.	ļ.	——————————————————————————————————————	Analysis		Method
Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ANALYZE GACH GROWD TO A POSITIVE, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: Analal Nac Received by: od	HZ 9839-70	WALL SYSTEMS - BLDG.	5 PLM		
Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ANALYZE GACH GROWN TO A RESITIVE, THEN STOP!  Other Instructions:  FAX CCPY TO: 510-595-0869  Sent by: Loweld 160 Received by: od	-71	,			
Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ANALYZE CACH CAOUN TO A POSITIVE, THEN STOP!  Other Instructions:  FAX CCFY TO: 510-595-0869  Sent by: Longial Jaco Received by: od	- 72	į	PSPAC.		
Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411  ANALYZE GACH GROWN TO A ROSITIVE, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: Longled Received by: od	- 73		"		
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Industry reports. Please fax results to (415) 252-1411  ANALYZE GACH GROUP TO A POSITIVE, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: forula for the control of t					
Industry reports. Please fax results to (415) 252-1411  ANALYZE GACH GROUP TO A POSITIVE, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: forula for the control of t					
Industry reports. Please fax results to (415) 252-1411  ANALYZE GACH GROUP TO A POSITIVE, THEN STOP!  Other Instructions:  FAX COPY TO: 510-595-0869  Sent by: forula factor Received by: od					
Sent by: foundal Laco Received by: od	Taboratory reports	Please fax results to (A1E) as	2 4 4 4 4		
Sent by: Received by: od	Other Instructions:	ZO GHCH GADUN	you gost	1100 , 1190	~ -1-F !
Miles Net	FAX COF	y 70: 510-50	75-0869	· ·	
	Man	198 NOCO			1:55

Sent via FedEx airbill number:

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

PROJECT NO. HZ9839 136 BERRY ROAD HAYWARD, CA

Date Sampled 1/5/99

Date Received 1/5/99

Date Analyzed 1/5/99

**Total Samples** 

Micro Log In 63859

	SAMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client:	HZ9839-74 859-01 Analyst: BK NG TILE - LIVING ROOM	See Descriptions CEILING TILE: ND SKIM COAT AND PAINT: ND	75 % CELLULOSE	PAINT SYNTHETIC MATERIAL BINDER
Client: Micro: 63/ 9"X9" CEILI	HZ9839-75 859-02 Analyst: BK NG TILE - LIVING ROOM	See Descriptions CEILING TILE: ND SKIM COAT AND PAINT: ND	75 % CELLULOSE	PAINT SYNTHETIC MATERIAL BINDER
Client: 636 Micro: 636 9"X9" RED I	HZ9839-76 859-03 Analyst: BK FT / MASTIC - LIVING ROOM	See Descriptions TILE: 15% CHRYSOTILE MASTIC: ND	2 % CELLULOSE	CARBONATE OPAQUES TAR SYNTHETIC MATERIAL
	H Z 9 8 3 9 - 7 7 859-04 Analyst: BK MO FT / MASTIC - LIVING ROOM	See Descriptions  MASTIC: ND TILE: NOT ANALYZED (PRIOR POSITIVE)		TAR SYNTHETIC MATERIAL  QC Result*: C
Client: Micro: 63: 12"X12" OF	HZ9839-78 859-05 Analyst: BK F WHITE - FT MASTIC - KITCHEN	See Descriptions TILE: 2% CHRYSOTILE CLEAR MASTIC: ND BLACK MATERIAL: ND LEVELING COMPOUND: ND	5 % CELLULOSE	CARBONATE SYNTHETIC MATERIAL TAR OPAQUES

Technical Supervisor:

1/5/99

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993, ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling, teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos containt at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of nidividual layers. Composite asbestos percentages on multilayered samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A = all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials con

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Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

PROJECT NO. HZ9839 136 BERRY ROAD HAYWARD, CA

Date Sampled 1/5/99

Date Received 1/5/99

Date Analyzed 1/5/99

**Total Samples** 

Micro Log In 63859

s	AMPLE INFORMATION	ASBESTOS MINERALS QUANTITY TYPE	NON ASBESTOS FIBERS QUANTITY TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: 63859-06 Micro: 63859-06 12"X12" OFF WHITE -	HZ9839-79 Analyst: BK FT MASTIC - KITCHEN	See Descriptions  YELLOW MASTIC: ND BLACK MATERIAL: ND LEVELING COMPOUND: ND TILE: NOT ANALYZED (PRIOR POSITIVE)	15 % CELLULOSE	TAR SYNTHETIC MATERIAL CLAY
Client: Micro: 63859-07	HZ9839-80 Analyst: YG	ND		BINDER CARBONATE SYNTHETIC MATERIAL
Client: Micro: 63859-08 WINDOW PUTTY	HZ9839-81 Analyst: ÝG	ND		BINDER CARBONATE SYNTHETIC MATERIAL
Client: Micro: 63859-09	HZ9839-82 Analyst: YG	N D  JOINT COMPOUND AND PAINT: ND SHEETROCK: ND	20 % CELLULOSE	CARBONATE GYPSUM PAINT
Client: Micro: 63859-10 WALL SYSTEMS	HZ9839-83 Analyst: YG	JOINT COMPOUND AND PAINT: ND SHEETROCK: ND	10 % CELLULOSE	CARBONATE GYPSUM PAINT

Technical Supervisor:

Fov Baojia Ke, Ph. D.

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor files, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation timits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261.24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos content at this level cannot be done by PLM, and requires TEM e-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to tayered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed (re-analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1866a Fibrous Glass); C = all materials confirmed after multiple result resolutions. NIST / NVLAP Accreditation (Bulk Asbestos) Lab Code: #101872-0. This report must not be used to claim product endorseme Micro Analytical Laboratories, Inc.

1092

Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103

PROJECT:

PROJECT NO. HZ9839 136 BERRY ROAD HAYWARD, CA

Date Sampled 1/5/99

Date Received 1/5/99

Date Analyzed 1/5/99

**Total Samples** 

Micro Log In 63859

	SA	MPLE INFORMATION	ASBESTOS MIN	NERALS TYPE	NON A		OS FIBERS TYPE	NON FIBROUS MATERIALS / ADDITIONAL LAB DATA
Client: Micro: LINOLE	63859-11 UM	HZ9839-84 Analyst: YG	LINOLEUM: ND BACKING: ND MASTIC: ND	Descriptions	15 % 5 %	~	LULOSE ROUS GLASS	CARBONATE BINDER SYNTHETIC MATERIAL
Client: Micro: LINOLE	63859-12 UM	HZ9839-85 Analyst: YG	See LINOLEUM: ND BACKING: ND MASTIC: ND	Descriptions	15 % 5 %		LULOSE ROUS GLASS	CARBONATE BINDER SYNTHETIC MATERIAL

Technical Supervisor:

Fer Baojia Ke, Ph. D.

1/5/99

Analysis method: Polarized Light Microscopy (PLM), EPA/600/R-93/116, 1993. ND: None detected by PLM. Units: area percent. Weight percent cannot be determined by PLM visual estimation or by point counting. Asbestos fibers with diameter less than approximately 0.25 micrometers cannot be detected by PLM. The absence of asbestos in dust samples (wipe or microvacuum), and in some non-friable materials, including floor tiles, cannot be conclusively established by PLM, and should be independently confirmed by Transmission Electron Microscopy (TEM). Only dominant non-fibrous materials are indicated; other miscellaneous particles are present in most samples. Preparation (all samples): grinding, milling; teasing bundles apart; drying moisture, if present, by hotplate heating. Acid dissolution, ashing, or other techniques may be applied to some complicated samples; if so, it is noted in the report. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. The detection limit is material dependent. The lower and upper quantitation limits of PLM are 1% and 100%, respectively. The MCL (Maximum Contaminant Level), per CCR Title 22, Sec. 66261 24(a)(2)(A), is 1.0% asbestos. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos content at this level cannot be done by PLM, and requires TEM re-analysis. Individual layers of heterogeneous samples are analyzed separately; asbestos percentages are reported for individual layers. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials). Labo ratory sample descriptions may differ from descriptions given by the client. "Quality Control (QC) Codes: A all materials confirmed affect." Analysis is within acceptance limits); B = no asbestos detected in lab blank (NIST SRM 1868a Fibrous Glass); C = all materials confirmed affect. This report must not be used to cla

ACUMEN Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103 (415) 252-0778 (415) 252-1411

Project No. H29839

Job Site:

136 BERRY Rs.

·· Laboratory: MICROANACYDICAL

Location:

HAYWARD CA.

Turnaround Time: 24/

Sample Date: 12/30/98

•	Sam	ple Number		tion/Desc	_	Anal	ysis	Volume (liters)	Method
01	HZ	1839-74	9×9"C6	LING T	NE - Room	P	LM		
02		1 - 75	u	4	43				
03		~ 76	9"K9" RD	PIL	HATTLE 16 NOOM				
04		- 77	٤١	4.	t <sub>s</sub>				
05		-78	/2×12 "	ef wht	- FT/MSTC			·	
06		- 79	v -	н	, \		\.		
07		-80	MIND	ous p	UTTY		, \		
08		-81	**		11				
09		-82	WALL	SYSTEN	ms				
LO	V	. 83	, i	`					

Please sign this form below acknowledging sample receipf and return executed form with laboratory reports. Please fax results to (415) 252-1411

Other Instructions:

FAX GOPY TO : 1-510 5	95 0869	9
Sent by: Acual Local Date sent: 1/5/20	Received by:	18Mly
Date sent: 1/5/99	Date received	115199(2) 4pm

Sent via FedEx airbill number:

**ACUMEN** Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103 (415) 252-0778 (415) 252-1411

Project No. HZ 9839

Job Site:

136 BERRY RD

· · Laboratory: MICADANALYTICAC

11

Location: HAYWARD, CA

Turnaround Time: 24 h.

Sample Date: 12/30/98

Sample Number	Location/Description	Analysis	Volume (liters)	Method
HZ 9839-84L	INCLEUM	PLM		
-85				
		,		

Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Please fax results to (415) 252-1411

ANALYZE TO A POSITIVE, THEN STOP.

Other Instructions:

	795-0869 mil
Sent by: Suell Col	Received by: 8/1/104
Date sent: 1/5/99	Date received 1/5/99 D 4pm

Sent via FedEx airbill number:

# MICRO ANALYTICAL LABORATORIES, INC. FLAME AA - LEAD IN PAINT - EPA SOP (1991)

1092 Acumen Industrial Hygiene, Inc. 1175 Folsom Street San Francisco, CA 94103 PROJECT:
PROJECT NO. HZ 9839
112 & 147 BERRY RD
HAYWARD, CA

Micro Log In 63820

Total Samples 3

Date Sampled 12/30/98

Date Received 1/3/99

Date Analyzed 1/3/99

	Lead Conc	Detection Limit	
Sample ID	Weight Percent	mg/kg (ppm)	(mg/kg)
Client: HZ9839-A Lab: 63820-01 147 BERRY - GRN HSE #1 WHITE PAINT	0.04%	394	46
Client: HZ9839-B  Lab: 63820-02  112 BERRY - BLDG, 5 YELLOW EXT. PAINT	0.22%	2,170	50
Client: HZ9839-C Lab: 63820-03 112 BERRY - BLDG. 3 RED PRIMER - STRUCTURAL STEEL	0.03%	294	39

Technical	Supervisor:	7. Rux	/4/99	Analvst:	НС	
	, -	Farid Ramezan				

AIHA ELLAP Accredited Laboratory, ID #11150. Samples are analyzed by Flame Atomic Absorption Spectrometry in accordance with EPA's "Standard Operating Procedures for Lead in Paint by Hotplate- or Microwave-based Acid digestions and Atomic Absorption or Inductively Coupled Plasma Emission Spectrometry" (1991), EPA/600/8-91/213, NTIS Document No. PB92-114172. Samples are prepared by hotplate digestion with nitric acid and hydrogen peroxide, and analyzed by Flame AA. This report must not be reproduced except in full, with the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable.

(415) 252-1411 Ioh Site: 110 &	w- 0 1		al	1
		Laboratory: /		•
Location: HAY	in con	Turnaround Ti	ime: 29	ha.
Sample Date: /2	180/98			
Sample Number	Location/Description	Analysis	Volume (liters)	Method
HZ 9839- A	147 BEREY - GRNHSE# 1 WHITE PAINT	PL		AA
( - p	MHITE PAINT  112 BERRY - BLOG. 5	/		1
	112 BERRY - BLACE 3		<del></del>	
W-C	RED PRINER-STRUCTURAL STO	Z V		V
			2	
<u> </u>			,	
Please sign this for laboratory reports.	n below acknowledging sample : Please fax results to (415) 252-14	receipt and rel	urn execute	d form with
Other Instructions:				
PAX C	199 70: 510 - Re	595-08	369	
Sent by:	H (3) Re	ceived by:	Juson 7	Ham

# ASBESTOS/LEAD INVESTIGATION MEEK ORCHARD PROPERTY