



ADDENDUM NUMBER ONE ISSUED: 10-23-2014

FOR: ITB # 12-2014 – HOUSE DEMOLITION PROJECT

This Addendum modifies the Bid Document(s) for Work only to the extent indicated herein. All other areas not specifically mentioned or affected by this Addendum shall remain in full force. This Addendum shall be added as a part of the Original Bid Document.

Please acknowledge by inserting Addendum(s) in space provided in the Bid Document and any signature(s) required to be submitted with the bid document. Failure to do so may subject bidder to disqualification.

BIDDERS NOTE: IT IS THE RESPONSIBILITY OF ALL PROPOSED BIDDERS TO:

- 1. OBTAIN BID DOCUMENTS AND ANY ADDENDUM ISSUED, FROM ONE OF THE FOLLOWING;
 - A. PLAN CENTERS LISTED IN BID DOCUMENT (IF SHOWN)
 - B. CONTACT PROJECT MANAGER LISTED ON THE BIDDING DOCUMENT.
 - C. DOWN LOAD FROM THE WEB SITE WHERE THE BID DOCUMENT WAS OBTAINED
- 2. BIDDERS WHO OBTAIN BID DOCUMENTS FROM PLAN CENTERS WILL NOT BE SHOWN ON THE CITY'S PLAN HOLDERS LIST.
- 3. TO BE ADDED, BIDDERS MUST CONTACT THE PROJECT MANAGER LISTED ON BID DOCUMENTS.
- 4. THE CITY TAKES NO RESPONSIBILITY FOR BIDDER(S) NOT SHOWN ON PLAN HOLDERS LIST.
- 5. BIDDERS MAY BE REJECTED FOR FAILURE TO FOLLOW INSTRUCTION'S WITHIN THE BIDDING DOCUMENTS, OR ANY ADDENDUM ISSUED. THE CITY TAKES NO RESPONSIBILITY FOR FAILURE OF BIDDERS TO OBTAIN ANY ISSUED ADDENDUM.

CHANGES TO THE BID DOCUMENTS

The following relates to additions, deletions, clarification and replacement of language contained in the referenced bid documents.

Reference:

DELETIONS:

DELETE: ATTACHMENT 'B', Specifications – Site Demolition

**DELETE: Contractor's Prequalification Requirements noted in:
SECTION 00 11 16 ADVERTISEMENT, ITB Page 4.**

ADDITIONS:

ADD: ATTACHMENT 'B.1' Technical Specifications, Revised 10-22-2014

ADD: Attachment 'C' – Asbestos and Lead Surveys

Pre-Demolition Asbestos and Limited Lead Survey, 623, 633 and 645 SE 9th Avenue, Hillsboro, OR 97123. Prepared by: PBS Engineering and Environmental, September 2014.

Pre-Demolition Asbestos and Lead Survey Report, 152 NE 5th Avenue, Hillsboro OR, 97124 Prepared by: PBS Engineering and Environmental, October 2014.

ADD THE FOLLOWING NOTES AND CLARIFICATIONS:

1. There are no Contractor Prequalification requirements for this ITB.
2. The following two houses have full basements (623 SE 9th Ave & 152 NE 5th Ave).
3. The City will obtain and pay for required Building Permits.
4. Public and private utilities (Except for Sanitary Sewer) will be disconnected by City prior to demolition.
5. Do not close or obstruct roadways or sidewalks without right-of-way permit.
6. Before starting demolition: Contractor shall call for underground utilities locates and verify that all public and private utilities are disconnected per IBC, IFC, and Clean Water Services requirements. Cut and cap sanitary sewer laterals as needed.
7. The houses at 152 NE 5th Ave. & 623 SE 9th Ave. have basements below ground floor.
8. The irrigation box and irrigation pipes near the sidewalk at 645 SE 9th Ave. shall remain in place.

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THIS ADDENDUM NEEDS TO SIGNED AND RETURNED WITH THE BID DOCUMENTS. IT SHALL ALSO BE RECOGNIZED IN THE ADDENDA OF THE BID DOCUMENT. FAILURE TO RETURN THIS DOCUMENT MAY BE GROUNDS FOR NON-COMPLIANCE AND BID REJECTION.

=====

END OF ADDENDUM NO. ONE

Please note that all addenda are to be acknowledged in the Proposal signature sheet, signed and included in the proposal.

Bidder signature: _____

Company Name: _____

This Addendum constitutes a NON-MATERIAL CHANGE to the bid; it does NOT require a signature and bidders are NOT REQUIRED to return a copy with their bid response.

TECHNICAL SPECIFICATIONS

Revised 10-22-2014

SECTION 024113 – SITE DEMOLITION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section describes demolition of items specified herein and shown on the drawings.

1.2 DEFINITIONS

- A. Demolish: Completely remove and legally dispose of debris off City property.
- B. Pavement Removal: Asphalt and Portland cement concrete pavement, curbs, and walkways excavated full depth.

1.3 WORK ITEMS

- A. The work includes but is not limited to, demolition of the following:
 - 1. Slabs:
 - a. Concrete building slabs.
 - b. Concrete steps and porches.
 - 2. Footings:
 - a. Concrete or block building footings and foundations.
 - b. Retaining walls.
 - 3. Pavement:
 - a. Asphaltic or Portland-Cement concrete surfacing and any associated base material.
 - b. Driveways, parking areas, walkways, etc.
 - c. Aggregate surfacing.
 - 4. Cellar: Concrete basements together with footing, foundation walls and floor slabs.
 - 5. Debris shall include but is not limited to:
 - a. Concrete, asphalt, stone, brick, tile, etc.
 - b. Building wood, glass, tar paper, metal, cloth, paper, etc.
 - c. Boxes, crates, barrels, fencing, etc.
 - d. Be responsible for removing material dumped within the work areas during the time of the contract.
 - 6. Buildings include:
 - a. Houses, sheds, etc.
 - b. Footings, slabs, fireplaces, etc., for the buildings.
 - 7. Materials or structures called out by word description on the drawings or in the specifications shall be included as work items.

ATTACHMENT B .1

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION

3.1 GENERAL

- A. Demolish and remove all work items within area in the manner specified.
- B. Stones and/or concrete rubble 6 inches or larger shall be disposed of off property.

3.2 ENVIRONMENTAL CONSIDERATIONS

A. Reference Standards:

FR 1926 – U.S. Occupational Safety and Health Standards; current edition. On-site personnel must comply with OR-OSHA standards for construction sites (e.g. personal protective equipment must be worn on site).

NFPA 241 – Standard for Safeguarding Construction, Alteration and Demolition Operations.

B. Asbestos Abatement:

All houses have been surveyed for asbestos and lead (see Addendum # 1 - Attachment 'C'). Before demolition starts, asbestos materials will be abated and removed by the City per the recommendations of the asbestos/lead surveys.

C. Lead-Based Paint:

Refer to Addendum # 1 - Attachment 'C'

The consumer product safety commission limit for lead in consumer paint products is 0.000009 percent or 90 parts per million (ppm) or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as that which contains 0.5 percent or 5,000 ppm. Under OSHA, any concentration of lead in paint that may become airborne during construction work operations triggers requirements in the OSHA Lead in Construction Standard 29 CFR 1926.62 to protect employees impacting the paint.

Oregon OSHA adopted the federal OSHA Lead in Construction Standard (29 CFR 1926.62) in November 1993 under Oregon Administrative Rule (OAR) 437 Division 3 1926.62. The OR-OSHA standard outlines worker exposure limits, personal protection requirements and employer responsibility for exposure assessment, training, housekeeping, and recordkeeping. OSHA's lead standard applies to all work where employees may be exposed to lead in construction, alteration, or repair activities. This includes demolition and/or renovation of structures where lead-containing materials are present. In April 2010, The EPA enacted 40 CFR Part 745.82 Lead Renovation, Repair and Painting Program. These regulations apply when renovation, repair and painting activities disturb lead-based paint (concentrations above 5,000 ppm)

- D. Nuisance Dust Control:
 - 1. Demolition debris that contains dust or other material that could become airborne or create a nuisance shall either be removed from the work site daily, or shall be covered and secured with tarps or sheeting until removed from the site.
 - 2. Apply a water mist, or other means approved by the City, on debris to control or mitigate airborne dust or airborne nuisances, unless the material will become friable (i.e., crumble easily) or will dissolve in water. Friable material and material that may dissolve in water shall be securely covered with tarps or sheeting.
 - 3. Demolition debris that becomes friable when wetted or will dissolve in water shall be stored only on impervious surfaces, field-installed ground sheeting, or other barriers.

- E. Demolition Debris:
 - 1. The Contractor shall manage demolition material as hazardous waste or solid waste in accordance with these specifications.
 - 2. Unless specifically identified in the contract documents or approved by the City, no demolition debris shall be placed as fill material or otherwise disposed of on City property.
 - 3. The Contractor shall use applicable special demolition techniques, material handling, and disposal requirements for demolition of items containing lead-based paint.
 - 4. The Contractor shall minimize the volume of accumulated demolition debris.

3.3 BUILDING DEMOLITION AND/OR REMOVAL WITHIN THE WORK AREA

- A. The work area is defined as the area within the property lines.
- B. Remove buildings by demolition. Debris resulting from demolition of buildings shall be immediately removed from property.
- C. Underground Structures:
 - 1. Remove cellar and concrete tank walls and floors.
- D. Remove metal septic and fuel tanks, if present. Backfill with ¾" minus crushed aggregate and compact.
- E. Cap and seal sewer, drainage, and water lines at a minimum of 2 feet below adjacent ground level.
- F. Brush may be removed to facilitate removal of buildings.

3.4 MISCELLANEOUS DEMOLITION AND/OR REMOVAL WITHIN THE WORK AREA

- A. Work items include slabs, footings, pavement, cellars, debris, and materials or structures other than buildings called out by the work description on the drawings.
- B. Underground Structures: Comply with Article 3.3 above.
- C. Trees may be removed as necessary for the completion of the specified work. Approval by City is required before removal of any tree. If a tree must be removed, its stump must also be removed. No extra payment will be made for tree removal.

ATTACHMENT B . 1

- D. Blasting will not be permitted.

3.5 REMOVAL AND PLUGGING OF ABANDONED PIPES, CULVERTS, AND MISCELLANEOUS STRUCTURES

- A. Abandoned pipes or portions of other exposed items shall be removed a minimum of 2 feet back of face of slope or 2 feet below subgrade.
- B. Cap or plug the ends of partially removed pipes, culverts, and miscellaneous structures with concrete to produce a watertight seal.
- C. Contact the City for direction if unidentified utilities are uncovered during the work.
- D. Dispose of removed pipes, culverts, and miscellaneous structures off City property.

3.6 PAVEMENT REMOVAL

- A. Remove pavement to the limits shown on the drawings. Replace pavement removed beyond the limits without City's approval as directed and at no added cost to the City.
- B. Cut pavement by methods approved by the City, except at those locations shown on the drawings which specifically designate saw cutting.
- C. Dispose of pavement removed off City property.

3.7 SITE RESTORATION

- A. Clear and scarify the surface of the work area to achieve a smooth and bare earth surface free of heavy growth of vegetation and cut natural growth and/or foreign material. Such surface may be obtained by dragging blade or bucket from demolition equipment over the work area.
- B. Standing brush and trees may be left in the work area at the Contractor's option.
- C. Grade-fill material and borrow sites in a manner to avoid causing interference with existing drainage patterns and to avoid water ponding.
- D. Fill shall be made with existing earth from the site and compacted to the extent that it will support rubber-tired construction equipment.
- E. Engineered fill shall be placed and compacted in basement voids. Fill material shall be approved by geo-Tech Engineer prior to placement. Placement and compaction specifications shall be provided and compaction shall be tested by a Geo-Tech Engineer at the City's expense.

3.8 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from the work site and dispose of them off City property in accordance with local, state, and federal laws and regulations.
 - 1. Do not allow demolished materials to accumulate on-site.

ATTACHMENT B .1

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Do not burn demolished materials.

C. See Section 017419, Construction Waste Recycling, for recycling requirements.

3.9 CLEANING

A. Clean adjacent sidewalks and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

END OF SECTION 024113

SECTION 017419 - **CONSTRUCTION WASTE RECYCLING**

PART 4 - GENERAL

4.1 DESCRIPTION

A. This section describes recycling goals for construction and demolition work on City property.

B. The Contractor shall salvage, reuse, recycle, compost, mulch, or use for energy recovery as many construction, demolition, and yard waste materials as is feasible and cost-effective. The Contractor shall coordinate all salvaging and recycling operations.

C. Unless specified elsewhere in this contract, salvaged and/or recycled material shall be removed from City property in accordance with local, state, and federal regulations.

4.2 PROJECT-SPECIFIC RECYCLING

A. Items to be recycled on this project may include, but are not limited to:

1. Concrete.
2. Asphalt.
3. Metals (ferrous and non-ferrous).
4. Land-clearing debris.
5. Wood.
6. Corrugated cardboard.
7. Plastics.
8. Electronics and electrical components.

4.3 RELATED WORK SPECIFIED ELSEWHERE

ATTACHMENT B .1

- A. Section 024113, Site Demolition
- B. Section 024119, Selective Interior Demolition
- C. Section 312000, Site Clearing and Earthwork

4.4 SUBMITTALS

- 1. Copies of receipts, weight slips, bills of lading, etc. for recycled or reused materials.

4.5 QUALITY ASSURANCE

- A. Comply with applicable regulations pertaining to collection, management, hauling, and disposal of waste or recyclable materials.
- B. Use facilities properly permitted by appropriate jurisdictions.

4.6 RECYCLING PROCESSORS AND FACILITIES

- A. Contact Metro (503-234-3000) for a comprehensive list of recyclable materials and recycling facilities in the Portland area.

PART 5 - PRODUCTS

Not Used.

PART 6 - EXECUTION

6.1 GENERAL

- A. Provide handling, containers, storage, signage, transportation, and other items as required to facilitate the recycling process during the duration of the work.
- B. Train employees, subcontractors, and suppliers on proper recycling procedures, as appropriate for the work.
- C. Conduct recycling operations to ensure minimum interference with roads, streets, walkways, and other adjacent occupied and used facilities.
- D. Do not sell or distribute recycled or salvaged items to the public from City property.

ATTACHMENT B .1

6.2 ON-SITE MATERIALS SORTING

- A. Coordinate with recycling and salvage vendors to determine if materials targeted for recycling will be source-separated or co-mingled on site. Space or other site-specific factors shall be considered.
- B. Separate recyclables from non-recyclable waste materials, trash, and debris.

END OF SECTION 017419

SECTION 024119 – **SELECTIVE INTERIOR DEMOLITION**

PART 7 - GENERAL

7.1 DESCRIPTION

- A. This section describes the following:
 - 1. Demolition and removal of selected interior portions of building or structure.
 - 2. Salvage of existing items to be reused.
- B. Site-specific items shall be recovered/salvaged prior to demolition by Habitat for Humanity (Contact: Stan Seals, Habitat for Humanity/Restore, 503 535-9141).
- C. Contractor shall be responsible for coordination of recovery/salvage schedule and on-site work by Habitat for Humanity staff. Items to be salvaged:
 - 1. 623 SE 9th Ave:
Vinyl Windows / Wood Fencing / Kitchen Cabinets / Interior Doors / Interior Trim / Stair Rails & Ballisters / Closet Doors / Light Fixtures / Ext. Doors / Fir Flooring. / Landscaping Items / Plumbing Fixtures
 - 2. 633 SE 9th Ave:
Wood Fencing / Wood Sash Windows / Ext. Doors / Interior Doors / Light Fixtures / Kitchen Cabinets / Plumbing Fixtures / Fir Flooring.
 - 3. 645 SE 9th Ave:
Kitchen Cabinets / Interior Doors / Ext. Doors / Plumbing Fixtures / Wood Sash Windows / Light Fixtures / Fir Flooring
 - 4. 152 NE 5th Ave:
Wood Sash Windows / Exterior Doors / Int. Doors / Plumbing Fixtures / Oak Flooring. / Saloon Doors / Light Fixtures / Int. Trim.

7.2 REFERENCES

- A. ANSI: American National Standards Institute

ATTACHMENT B .1

1. ANSI/ A10.6-2006: Safety Requirements for Demolition Operations

B. NFPA: National Fire Protection Association

1. NFPA 241-00: Standard for Safeguarding Construction, Alteration, and Demolition Operations

7.3 SUBMITTALS

A. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.

7.4 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI A10.6 and NFPA 241.

7.5 PROJECT CONDITIONS

A. Hazardous Materials: It is not expected that hazardous materials will be encountered in the work.

1. Hazardous materials will be removed by the City before start of the work.

2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify the City. The City will remove hazardous materials under a separate contract.

B. Storage or sale of removed items or materials on-site is not permitted.

PART 8 - PRODUCTS

Not Used.

PART 9 - EXECUTION

9.1 EXAMINATION

A. Verify that utilities have been disconnected and capped.

B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

9.2 GENERAL SELECTIVE DEMOLITION

A. Use methods required to complete the work within limitations of governing regulations and as follows:

ATTACHMENT B .1

1. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
2. Dispose of demolished items and materials promptly. Comply with requirements in Division 1 regarding solid waste management and construction waste management.

9.3 DISPOSAL OF DEMOLISHED MATERIALS

- A. Except for items or materials indicated to be recycled, reused, salvaged, or reinstalled, remove demolished materials from project site and legally dispose of them in an EPA-approved landfill.
 1. Do not allow demolished materials to accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

9.4 CLEANING

- A. Clean adjacent d improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 026100 – REMOVAL AND DISPOSAL OF CONTAMINATED SOILS

PART 10 - GENERAL

10.1 DESCRIPTION

- A. This section describes excavation and disposal of soil contaminated with petroleum and other products.
- B. If the Contractor encounters suspected contaminated soil in the work area beyond that mentioned in the contract documents, the Contractor shall immediately stop all work in the area of the suspected contamination and notify the City. The City will characterize contaminated soil, obtain profile for disposal, and determine the location of disposal.

10.2 SUBMITTALS

- A. Submit copies of all receipts for processing contaminated soil at the disposal facility.

ATTACHMENT B .1

10.3 DISPOSAL DOCUMENTATION

- A. The City will prepare all documentation required for characterization and disposal of contaminated soil at the disposal facility.

10.4 DEFINITIONS

- A. Contaminated Soil: Soil that produces a fuel or chemical odor, produces an oil sheen on the surface of water, has staining, contains debris or other visible indicators, or soil designated by the City as contaminated.

PART 11 - PRODUCTS

11.1 PLASTIC SHEETING

- A. Minimum 6 mil polyethylene sheeting.

PART 12 - EXECUTION

12.1 GENERAL

- A. The City will provide field and laboratory evaluation of materials suspected of being contaminated.
- B. Notify the City 48 hours before excavating in an area of known or suspected contamination.
- C. The City will designate which materials are contaminated and which are suitable for use in the work.
- D. The City will determine the disposition of all materials.
- E. The Contractor shall assist the City in collecting soil samples from excavator buckets or by briefly stopping work to allow observations or samples to be collected.

12.2 EXCAVATION AND STOCKPILING

- A. All contaminated excavated material is the property of the City and will be handled per direction by the City.
- B. Excavation to remove material determined by the City to be contaminated shall be performed as described in Section 312300, Trenching, Backfilling, and Compacting, and shall be made to the depth and extent as determined by the City. Where necessary, backfill excavations with appropriate material as directed by the City.

ATTACHMENT B.1

- C. Provide adequate containment of and protection from contaminated material, suited to the type of contamination. Follow all federal, state, and local requirements in excavating, loading, transporting, and otherwise handling or working around contaminated material. The Contractor shall be responsible for meeting all regulatory requirements.
- D. Contaminated stockpiles shall meet the requirements of Section 312000, Site Clearing and Earthwork.
- E. Place contaminated soil in a stockpile separate from clean materials.
- F. Stockpile contaminated soil on pavement or on plastic sheeting. The perimeter of the plastic sheeting shall be elevated to prevent overland stormwater flow from contacting the contaminated soil. Pavement may substitute for the plastic sheeting if there is a method for preventing stormwater flow into the stockpile (i.e., a curb on the uphill side of the stockpile).
- G. Cover contaminated soil stockpile with plastic sheeting when the stockpile is not actively involved in construction. Secure the plastic covering to ensure it stays in place and that stormwater runoff from the cover does not pond on the cover or contact the contaminated soil.
- H. As directed by the City, contaminated stockpiles shall remain in place for a minimum of 48 hours to allow for complete chemical analysis.

12.3 DISPOSAL

- A. The City will characterize contaminated soil and obtain the profile for disposal.
- B. Contaminated soil shall be disposed of by the Contractor at a location determined by the City. Follow all federal, state, and local requirements and regulations in excavating, loading, transporting, disposing of, and otherwise handling the contaminated soil.
 - 1. Haul contaminated soil to the Hillsboro Landfill located in Hillsboro, Oregon.
 - 2. Notify the City 72 hours before the initial haul to the designated disposal facility.
 - 3. Notify the City 48 hours before each subsequent haul to the designated disposal facility.

END OF SECTION 026100

SECTION 312000 – SITE CLEARING AND EARTHWORK

PART 13 - GENERAL

13.1 DESCRIPTION

- A. This section describes site clearing, excavation, stockpiling, embankment, grading, riprap, subgrade preparation, and construction of the subbase.

ATTACHMENT B.1

- B. If the Contractor encounters suspected contaminated soil in the work area beyond that mentioned in the contract documents, the Contractor shall immediately stop all work in the area of the suspected contamination and notify the City. Contaminated soil is soil that produces fuel or chemical odors, produces an oil sheen on the surface of water, has staining, contains debris or other visible indicators, or soil designated by the City as contaminated. The City will characterize contaminated soil, obtain profile for disposal, and determine the location of disposal.

13.2 REFERENCES

- A. AASHTO: American Association of State Highway and Transportation Officials
 - 1. AASHTO T180: Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop
- B. ASTM: American Society for Testing and Materials
 - 1. ASTM D2922: Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
- C. ODOT: Oregon Department of Transportation – 2002 Standard Specifications
 - 1. ODOT Section 00390.11: Riprap Requirements
 - 2. ODOT Section 00390: Riprap Protection
 - 3. ODOT Section 02630: Base Aggregate

13.3 DEFINITIONS

- A. Clearing and Grubbing: Trees, stumps, brush, roots larger than one inch in diameter, other vegetation, and debris removed.
- B. Common Excavation: Material, regardless of condition, excavated from the work area that is not classified elsewhere.
- C. Stripping: Grass, sod, and other types of vegetation removed.
- D. Unsuitable Excavation:
 - 1. Material excavated from the site determined not usable as subgrade fill or topsoil.
 - 2. Material that does not meet the requirements specified below for suitable material.
 - 3. Material that is contaminated or otherwise determined by the City to be unsuitable for reuse as fill on City property.
 - 4. Debris or material containing excessive amounts of debris.

ATTACHMENT B .1

PART 14 - PRODUCTS

14.1 SUITABLE MATERIAL

- A. Borrow:
 - 1. Sand: Columbia River dredged sand obtained from the designated borrow site.
 - 2. ¾" minus crushed aggregate.
 - 3. Topsoil: Material obtained from the designated topsoil borrow site.

PART 15 - EXECUTION

15.1 GENERAL

- A. The right is reserved to make minor adjustments or revisions in line or grades, if found necessary as the work progresses.
- B. Suspend earthwork when satisfactory results cannot be obtained because of rain, freezing weather, or other unsatisfactory conditions.
- C. Drag, blade, or slope the grade to provide proper surface drainage. Install temporary drains and drainage ditches to intercept or divert surface water which may affect the prosecution or condition of the work.
- D. Route hauling equipment around or away from areas of soft or yielding subgrade.
- E. Furnish and maintain earth-moving equipment in satisfactory condition and operate such equipment as necessary to control uniform density, section, and smoothness of grade.
- F. Promptly remove soil or other foreign materials that fall on pavements.

15.2 STOCKPILING

- A. If the consistency or texture of excavated soil changes such that it no longer meets suitable material requirements, segregate excavated unsuitable material from suitable material. Unsuitable material shall be hauled offsite and disposed at a City-approved disposal site.
- B. Placement of Stockpile Material:
 - 1. Stockpile Location:
 - a. Place stockpiled materials only in a location designated by the City.
 - b. Ensure that no part of a stockpile is placed such that it impacts storm drains, catch basins, streams, wetlands, or other storm water infrastructure or surface water features.
 - 2. Segregation:

ATTACHMENT B .1

C. Stockpile Grading:

1. Drag, blade, or slope the grade to provide proper surface drainage that does not allow ponding to occur anywhere on or adjacent to a stockpile.

15.3 CLEARING AND GRUBBING

- A. Remove clearing and grubbing materials to a depth of 6 inches below original ground.
- B. Completely remove stumps and roots larger than 1 inch in diameter.
- C. Dispose of clearing and grubbing materials off City property.
- D. Limit the total cleared and grubbed area excavations, and other disturbance, to only those areas necessary for the orderly flow of work.

15.4 STRIPPING

- A. Strip approximately 3 inches of sod and topsoil from designated areas.
- B. Dispose of stripping off City property.

15.5 EXCAVATION

- A. Excavate to the depth, lines, and grades shown on the drawings or as otherwise specified.
- B. Dispose of sod and excess common excavation off City property.
- C. Backfill with borrow.
- D. Backfill with approved common excavation. Use borrow only after available common excavation has been used.

15.6 REMOVAL AND PLUGGING OF ABANDONED PIPES, CULVERTS, AND MISCELLANEOUS STRUCTURES

- A. See Section 312300, Trenching, Backfilling, and Compacting.

15.7 SITE GRADING

- A. Using common excavation materials, shape, trim, finish, and compact surface areas to conform to the lines, grades, and cross-sections shown on the drawings or as designated by the City.
- B. Place and compact engineered fill in basement voids. The City will engage a Geo-Technical Engineer to specify and approve fill material, to provide compaction specifications and for special testing.

ATTACHMENT B .1

Contractor shall coordinate special testing with Geo-Tech Engineer. Geo-Tech Engineering services will be paid by City.

- C. Grade surfaces to drain.
- D. Eliminate wheel ruts by re-grading.
- E. Compact the top 12 inches to 92 percent of maximum density as determined by AASHTO T-180.
- F. The finished surface of site grading areas shall not be more than 0.08 foot from specified grade.

15.8 SUBGRADE PREPARATION

- A. Maintain top of sub-grade in a free-draining condition.

END OF SECTION 312000



Pre-Demolition Asbestos and Limited Lead Survey

623, 633, and 645 SE 9th Avenue
Hillsboro, OR 97123

Prepared for:

City of Hillsboro



General Information	1.1
Inspection Summary	1.2
Sample Inventories	2.1
Laboratory Data	Not Numbered
AHERA Certificates	Not Numbered

September 2014

Project No.: 23562.000 Phase No.: 0001 Task No.: 002

4412 SW Corbett Avenue, Portland, OR 97239
503.248.1939 Main
866.727.0140 Fax
888.248.1939 Toll-Free

www.pbsenv.com

GENERAL INFORMATION

BUILDING DATA

623, 633, and 645 SE 9th Avenue
Hillsboro, OR 97123

CLIENT DATA

City of Hillsboro
Public Works Engineering Operations
Hillsboro, OR 97123

SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed a pre-demolition asbestos and lead survey of accessible building areas in three residences in the City of Hillsboro, Oregon, in accordance with Occupational Safety and Health Administration (OSHA) in 29 Code of Federal Regulation (CFR) 1910.1001 and compiled a report with the following information:

- The type, location, and approximate quantity of suspect asbestos-containing materials
- Bulk sampling of selected suspect building materials
- Lead paint sampling
- Inspection summary
- Laboratory analytical data of bulk material sampled

PBS endeavored to locate all the suspect asbestos-containing materials in the three residential buildings; however, suspect asbestos-containing materials may be present and concealed within wall, ceiling, or floor spaces. If suspect materials are uncovered during demolition activities that are not identified in this report, testing should be performed prior to impact.

PBS has conducted a physical inspection of the residential buildings, compiled this report consistent with the survey scope, and certifies that the information is correct and accurate within the standards of professional quality and contractual obligations.

Imad Abouzaki
Project Manager/Prime Inspector
Accreditation # IR-14-0425A



Signature

9/30/14

Date



INSPECTION SUMMARY

DATES	SURVEYED BY	ACTIVITY
9/19/2014	Imad Abouzaki	Asbestos/Lead Survey

PBS has investigated accessible areas inside of the building(s) to locate suspect asbestos-containing materials (ACM). Suspect materials may be present in concealed areas (e.g., behind walls and under carpet). The findings are listed below.

ASBESTOS MATERIALS

The following materials either tested positive, or, based on the experience of PBS field personnel, were not tested and should be considered asbestos-containing. Materials that had mixed results are considered positive. Materials not sampled may contain asbestos and should be tested to verify asbestos content prior to impact through demolition, renovation, etc.

(+) Tested Positive, (M) Mixed Results, (P) Presumed Positive, (T) Previously Tested Positive.

<u>Result</u>	<u>Material (type)</u>	<u>Location</u>	<u>Approx. Quantity</u>
(+)	Textured Ceiling Material	645 SE 9th; hallway ceiling	25 SF
(+)	Mastic	645 SE 9th; on fire place mantle	10 LF
(+)	Sheet Floor Covering	645 SE 9th; kitchen, bottom layer, beneath a layer of non-asbestos-containing sheet floor covering	250 SF
(+)	Sink Undercoating	645 SE 9th; kitchen	2 EA
(+)	Textured Ceiling Material	633 SE 9th; living room ceiling	200 SF
(+)	Sheet Floor Covering	633 SE 9th; kitchen, beneath layers of non-asbestos-containing sheet floor covering and wood underlayment.	125 SF
(+)	Window Glazing Compound	633 SE 9th; on the exterior of three windows	50 LF
(+)	Cement Asbestos Board	623 SE 9th; exterior siding	1,200 SF
(+)	Sheet Floor Covering	623 SE 9th; bathroom, beneath ceramic tile, concrete board, and wood underlayment	60 SF
(+)	Spray-on Ceiling	623 SE 9th; kitchen ceiling	125 SF
(+)	Textured Ceiling Material	623 SE 9th; throughout the living room, and two bedrooms	500 SF

INSPECTION SUMMARY**MATERIALS WHICH TESTED NEGATIVE FOR ASBESTOS**

The following materials tested negative based on ASHARA sampling minimums and testing by NVLAP participating laboratories. Although no asbestos was detected, it is possible that further sampling could indicate asbestos content. It may be prudent to test prior to impact through demolition, renovation, etc.

<u>Material (type)</u>	<u>Location</u>
Composition Shingles	645, 633, and 623 SE 9th Avenue
Wall and Ceiling Plaster	645, 633, and 623 SE 9th Avenue
Caulk	645, 633, and 623 SE 9th Avenue, windows
Gypsum Wallboard/Joint Compound	645, 633, and 623 SE 9th Avenue
Blown-in Insulation	645, 633, and 623 SE 9th Avenue
Vapor Barrier	645, 633, and 623 SE 9th Avenue, beneath exterior siding
Built-up Roofing	645 SE 9th Avenue
Sheet Floor Covering	645 SE 9th Avenue, bathroom and laundry room
Ceramic Tile Grout	645 SE 9th Avenue, bathroom
Stapled-on Ceiling Tile	645 SE 9th Avenue, master bedroom
Covebase/Mastic	645 SE 9th Avenue, kitchen
Electrical Wire Insulation	645 SE 9th Avenue, kitchen
Leveling Compound	633 SE 9th Avenue, kitchen floor
Sheet Floor Covering	633 SE 9th Avenue, bathroom and laundry room
Duct Felt Wrap	633 SE 9th Avenue, hallway, around heat register
Sheet Floor Covering	623 SE 9th Avenue, kitchen, entry way and first floor hallway

INSPECTION SUMMARY

BACKGROUND

In September 2014, PBS performed a pre-demolition asbestos and lead building materials survey of three residential properties located at 623, 633, and 645 SE 9th Avenue in Hillsboro, Oregon.

The purpose of the survey was to identify asbestos-containing building materials, lead paint and other hazardous building materials that may be impacted by the planned demolition of the structure.

This survey is compiled to satisfy the requirements to perform an asbestos inspection prior to any renovation or demolition activities Occupational Safety and Health Administration (OSHA) hazard communication requirements.

ASBESTOS SUMMARY

Samples were collected of all accessible suspect asbestos-containing materials. Samples were submitted under chain of custody to Lab/Cor Portland, Inc., of Portland, Oregon, for polarized light microscopy (PLM) asbestos analysis.

645 SE 9th Avenue

The following materials were found to contain asbestos at the 645 SE 9th Avenue residential structure:

- Asbestos-containing textured ceiling materials exist on plaster substrate in the hallway. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing mastic exists on brick substrate on the living room fireplace mantle. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing sheet floor covering exists in the kitchen concealed beneath a layer of non-asbestos-containing sheet floor covering. This material is intact and in good condition but should be removed prior to any demolition activities.

Asbestos-containing undercoating was identified around the bottom of the two kitchen sinks. This material is intact and in good condition but should be removed prior to any demolition activities.

633 SE 9th Avenue

The following materials were found to contain asbestos at the 633 SE 9th Avenue residential structure:

- Asbestos-containing textured ceiling materials exist on plaster substrate in the living room. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing sheet floor covering exists in the kitchen. This material is concealed beneath multiple layers of non-asbestos-containing sheet floor covering and wood underlayment. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing window glazing compound is located on the exterior of three windows. This material is intact and in good condition but should be removed prior to any demolition activities.

623 SE 9th Avenue

The following materials were found to contain asbestos at the 623 SE 9th Avenue residential structure:

- Asbestos-containing siding exists on the exterior of the building. This material is intact and in good condition but should be removed prior to any demolition activities.

INSPECTION SUMMARY

- Asbestos-containing sheet floor covering exists in the bathroom concealed beneath ceramic tile, cement board, and wood underlayment. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing textured materials exist on dry wall in part of the kitchen and throughout the laundry room. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing textured ceiling materials exist on plaster substrate throughout the living room and the two bedrooms. This material is intact and in good condition but should be removed prior to any demolition activities.

PBS performed destructive investigation in wet wall cavities and found no suspect asbestos-containing materials.

Refer to the Bulk Sample Inventory and the Materials Which Tested Negative section of this report for greater detail of the negative samples collected.

Asbestos Regulatory Issues

The State of Oregon Department of Environmental Quality (DEQ) and Environmental Protection Agency (EPA) regulations require proper removal and handling of asbestos-containing materials by licensed and certified asbestos abatement contractors prior to the renovation or demolition of buildings. In addition, Oregon OSHA has specific requirements when workers may encounter or disturb ACM or when ACM is removed.

In 1994, Oregon-OSHA adopted federal regulations governing asbestos, (29 CFR Part 1926, 1101), OSHA requires building owners to perform "due diligence" in identifying and communicating information about installed building materials in order to prevent workers from unknowingly or improperly disturbing asbestos-containing materials (ACM) or presumed asbestos containing materials (PACM). Hazard communication, training, personal protection, work practices, exposure monitoring, and recordkeeping are all major components of the regulation.

Documents of reference for the removal of asbestos-containing materials include:

1. Oregon Occupational Safety and Health Administration (OAR-437, 1926.1101 asbestos)
2. Department of Environmental Quality (OAR-340, Division 248)

INSPECTION SUMMARY

LEAD-PAINT SUMMARY

A total of six representative paint-chip samples were collected from the interior and exterior of the buildings. Laboratory analysis of these samples produced results ranging from less than 93.8 (<93.8) parts per million (ppm) to 72,400 parts per million (ppm).

Please refer to the Lead Sample Inventory for specific building components sampled, sample locations, and analytical results.

Lead-Based Paint Regulatory Issues

The consumer product safety commission limit for lead in consumer paint products is 0.000009 percent or 90 parts per million (ppm) or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as that which contains 0.5 percent or 5,000 ppm. Under OSHA, any concentration of lead in paint that may become airborne during construction work operations triggers requirements in the OSHA Lead in Construction Standard 29 CFR 1926.62 to protect employees impacting the paint.

Oregon OSHA adopted the federal OSHA Lead in Construction Standard (29 CFR 1926.62) in November 1993 under Oregon Administrative Rule (OAR) 437 Division 3 1926.62. The OR-OSHA standard outlines worker exposure limits, personal protection requirements and employer responsibility for exposure assessment, training, housekeeping, and recordkeeping. OSHA's lead standard applies to all work where employees may be exposed to lead in construction, alteration, or repair activities. This includes demolition and/or renovation of structures where lead-containing materials are present.

In April 2010, The EPA enacted 40 CFR Part 745.82 Lead Renovation, Repair and Painting Program. These regulations apply when:

- Renovation, repair, and painting accrue in schools and child-occupied facilities built before 1978
- Children under 6 years of age occupy a building or part of a building for more than 6 hours a week
- Renovation, repair and painting activities disturb lead-based paint (concentrations above 5,000 ppm)

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0101	Mastic	645 SE Ninth Avenue; roof, joint of lean-to roof and main building, black roofing compound		Lab Cor
		Layer: Layer 1	Description: rocky fibrous tar, black	Analysis: No Asbestos Detected
23562.000-0102	Composition Shingles	645 SE Ninth Avenue; roof of lean-to, roofing material		Lab Cor
		Layer: Layer 1	Description: rocky fibrous tar, black	Analysis: No Asbestos Detected
		Layer 2	textured fibrous tar, black	No Asbestos Detected
		Layer 3	granular tar, black	No Asbestos Detected
23562.000-0103	Built-up Roofing	645 SE Ninth Avenue; main roof, west gable, built-up roofing material		Lab Cor
		Layer: Layer 1	Description: rocky fibrous tar, black	Analysis: No Asbestos Detected
		Layer 2	rocky fibrous tar, black	No Asbestos Detected
		Layer 3	fibrous tar, black	No Asbestos Detected
23562.000-0104	Wall and Ceiling Plaster	645 SE Ninth Avenue; ceiling-hallway near bathroom, ceiling plaster on wood		Lab Cor
		Layer: Layer 1	Description: textured paint, white with hard compact powder, off-white	Analysis: 2% Chrysotile
		Layer 2	granular compact powder, gray	No Asbestos Detected
23562.000-0105	Sheet Floor Covering	645 SE Ninth Avenue; bathroom floor, white sheet vinyl/mastic on particle board		Lab Cor
		Layer: Layer 1	Description: vinyl sheet, off-white	Analysis: No Asbestos Detected
		Layer 2	fibrous backing, gray with mastic, tan	No Asbestos Detected
		Layer 3	compressed fibers, brown	No Asbestos Detected
23562.000-0106	Ceramic Tile/Grout	645 SE Ninth Avenue; bathroom splash guard around sink, grout/mastic on wallboard		Lab Cor
		Layer: Layer 1	Description: ceramic tile, off-white	Analysis: No Asbestos Detected
		Layer 2	mastic, tan with paper backing	No Asbestos Detected
		Layer 3	compact chalky material with paper, white	No Asbestos Detected
		Layer 4	fine compact powder, off-white	No Asbestos Detected

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0107	Caulk	645 SE Ninth Avenue; exterior of window south side, gray window putty		Lab Cor
		Layer: Layer 1	Description: putty, off-white with powder, white	Analysis: No Asbestos Detected
23562.000-0108	Stair Surface	645 SE Ninth Avenue; front porch stair, non-skid surfacing		Lab Cor
		Layer: Layer 1	Description: granular material with putty, gray	Analysis: No Asbestos Detected
23562.000-0109	Wall and Ceiling Plaster	645 SE Ninth Avenue; master bedroom wall, plaster on lathe wall system		Lab Cor
		Layer: Layer 1	Description: textured paint, beige with fine compact powder, off-white	Analysis: No Asbestos Detected
		Layer 2	granular compact powder, light green/white	No Asbestos Detected
		Layer 3	granular compact powder, gray	No Asbestos Detected
23562.000-0110	Ceiling Tile	645 SE Ninth Avenue; master bedroom ceiling, 12"x12" stapled-on ceiling tile		Lab Cor
		Layer: Layer 1	Description: compressed fibers, brown with paint, white	Analysis: No Asbestos Detected
23562.000-0111	Wallpaper	645 SE Ninth Avenue; master bedroom under stapled-on ceiling tile, gold wallpaper on wood		Lab Cor
		Layer: Layer 1	Description: thick paper sheet, brown	Analysis: No Asbestos Detected
		Layer 2	fibrous backing, gray/green	No Asbestos Detected
23562.000-0112	Mastic	645 SE Ninth Avenue; living room, under wood fireplace mantle, black mastic		Lab Cor
		Layer: Layer 1	Description: mastic, black with granular material, red	Analysis: 8% Chrysotile
23562.000-0113	Covebase/Mastic	645 SE Ninth Avenue; kitchen, near water heater, 4" tan covebase/mastic		Lab Cor
		Layer: Layer 1	Description: rubbery material, white	Analysis: No Asbestos Detected
		Layer 2	mastic, brown	No Asbestos Detected
		Layer 3	granular compact powder, gray with mastic, white	No Asbestos Detected

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0114	Gypsum Wallboard/Joint Compound	645 SE Ninth Avenue; kitchen, wall under kitchen sink, white gypsum joint material		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	paint, white with fine compact powder, white	No Asbestos Detected	
	Layer 2	hard compact powder, white	No Asbestos Detected	
	Layer 3	compact chalky material with paper, white	No Asbestos Detected	
23562.000-0115	Sheet Floor Covering	645 SE Ninth Avenue; kitchen floor near water heater, beige sheet vinyl/mastic, Layer #1		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	vinyl sheet, off-white	No Asbestos Detected	
	Layer 2	fibrous backing, gray with mastic, white	No Asbestos Detected	
	Layer 3	vinyl tile, brown with mastic, white	No Asbestos Detected	
23562.000-0116	Sheet Floor Covering	645 SE Ninth Avenue; kitchen floor near water heater, red linoleum/felt/mastic, Layer #2		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	vinyl sheet, red	<1% Chrysotile	
	Layer 2	fibrous backing, black with coating, brown	No Asbestos Detected	
	Layer 3	fine compact powder, off-white	No Asbestos Detected	
23562.000-0117	Sheet Floor Covering	645 SE Ninth Avenue; laundry room floor, gray faux pebble sheet vinyl, yellow mastic		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	vinyl sheet, gray	No Asbestos Detected	
	Layer 2	fibrous backing, gray with mastic, white	No Asbestos Detected	
	Layer 3	fine compact powder, off-white	No Asbestos Detected	
23562.000-0118	Wall and Ceiling Plaster	645 SE Ninth Avenue; living room, white ceiling		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 2	granular compact powder, gray	No Asbestos Detected	
23562.000-0119	Wall and Ceiling Plaster	645 SE Ninth Avenue; master bedroom, white ceiling		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	textured paint, white with fine compact powder, off-white	No Asbestos Detected	
	Layer 2	granular compact powder, gray	No Asbestos Detected	

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>	
23562.000-0120	Electrical Insulation	645 SE Ninth Avenue; kitchen, electrical conduit insulation		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	woven fibers, brown		No Asbestos Detected
		Layer 2	loose particulate, brown	No Asbestos Detected	
23562.000-0121	Composition Shingles	645 SE Ninth Avenue; roof, east, roofing		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
23562.000-0122	Blown-in Insulation	645 SE Ninth Avenue; attic space, blown-in insulation		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	compressed fibrous material, gray	No Asbestos Detected	
23562.000-0123	Vapor Barrier	645 SE Ninth Avenue; garage, beneath exterior siding		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	fibrous backing, black	No Asbestos Detected	
23562.000-0124	Caulk	645 SE Ninth Avenue; exterior, north exterior siding caulking		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	putty, white		No Asbestos Detected
		Layer 2	putty, red		No Asbestos Detected
		Layer 3	putty, gray		No Asbestos Detected
		Layer 4	fine compact powder, off-white	No Asbestos Detected	
23562.000-0201	Putty Wrap	633 SE Ninth Avenue; east window, exterior window putty		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	hard compact powder, off-white	No Asbestos Detected	
23562.000-0202	Composition Shingles	633 SE Ninth Avenue; roof over garage, roofing material		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	rocky fibrous tar, black		No Asbestos Detected
		Layer 2	rocky fibrous tar, black		No Asbestos Detected
		Layer 3	fibrous tar, black	No Asbestos Detected	
23562.000-0203	Leveling Compound	633 SE Ninth Avenue; kitchen floor, around refrigerator water connection, gray leveling compound material		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	cementitious material, gray		No Asbestos Detected
		Layer 2	paper with tar, black	No Asbestos Detected	

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0204	Sheet Floor Covering	633 SE Ninth Avenue; back laundry room, sheet vinyl and black paper on wood		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	vinyl sheet, off-white	No Asbestos Detected
		Layer 2	fibrous backing, black with coating, off-white	No Asbestos Detected
		Layer 3	fibrous backing, black	No Asbestos Detected
23562.000-0205	Gypsum Wallboard/Joint Compound	633 SE Ninth Avenue; front bedroom, white gypsum with joint material		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	paint, white with paper backing	No Asbestos Detected
		Layer 2	compact chalky material with paper, white	No Asbestos Detected
23562.000-0206	Sheet Floor Covering	633 SE Ninth Avenue; bathroom, sheet vinyl/mastic on wood		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	vinyl sheet, off-white/blue	No Asbestos Detected
		Layer 2	fibrous backing, gray with mastic	No Asbestos Detected
		Layer 3	compact chalky material with paper, white	No Asbestos Detected
23562.000-0207	Duct Felt Tape	633 SE Ninth Avenue; front hallway, heat register, gray duct tape		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	woven material with coating, white	No Asbestos Detected
23562.000-0208	Wall and Ceiling Plaster	633 SE Ninth Avenue; living room ceiling, plaster/textured ceiling material		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	textured paint, white with fine compact powder, off-white	<1% Chrysotile
		Layer 2	granular compact powder, gray	No Asbestos Detected
23562.000-0209	Sheet Floor Covering (1)	633 SE Ninth Avenue; kitchen floor, Layer #1, gray sheet vinyl/mastic		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	vinyl sheet, gray	No Asbestos Detected
		Layer 2	fibrous backing, gray	No Asbestos Detected
		Layer 3	compressed fibers, brown	No Asbestos Detected

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0210	Sheet Floor Covering (2)	633 SE Ninth Avenue; kitchen floor, Layer #2, sheet vinyl/mastic on black paper on tongue-in-groove wood		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	paper sheet, brown	No Asbestos Detected
		Layer 2	vinyl sheet, off-white/tan	No Asbestos Detected
		Layer 3	fibrous backing, gray	35% Chrysotile
		Layer 4	fine compact powder, dark gray	<1% Chrysotile
		Layer 5	vinyl sheet, brown	No Asbestos Detected
		Layer 6	vinyl sheet, green	No Asbestos Detected
		Layer 7	fibrous backing, black	No Asbestos Detected
23562.000-0211	Window Glazing Compound	633 SE Ninth Avenue; garage, south side window, window glazing compound		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	hard compact powder, gray with paint, white	<1% Chrysotile
23562.000-0212	Wall and Ceiling Plaster	633 SE Ninth Avenue; east bedroom, wall and ceiling plaster		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	textured paint, white with hard compact powder, off-white	No Asbestos Detected
		Layer 2	granular compact powder, gray	No Asbestos Detected
23562.000-0213	Composition Shingles	633 SE Ninth Avenue; south roof, exterior roof		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	fibrous tar, black with rocky material, dark brown	No Asbestos Detected
		Layer 2	fibrous tar, black with rocky material, white	No Asbestos Detected
23562.000-0214	Composition Shingles	633 SE Ninth Avenue; south roof, exterior roof		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	fibrous tar, black with rocky material, white	No Asbestos Detected
		Layer 2	fibrous tar, black with rocky material, dark brown	No Asbestos Detected
23562.000-0215	Blown-in Insulation	633 SE Ninth Avenue; attic, blown-in insulation		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	compressed fibrous material, dark gray	No Asbestos Detected

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0216	Gypsum Wallboard/Joint Compound	633 SE Ninth Avenue; kitchen, gypsum wallboard with joint compound		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	textured paint, white with fine compact powder, white	No Asbestos Detected	
	Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23562.000-0301	Sheet Floor Covering	623 SE Ninth Avenue; first floor, hallway, multi-colored linoleum		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	brittle vinyl sheet, off-white	No Asbestos Detected	
	Layer 2	fibrous backing, black	No Asbestos Detected	
	Layer 3	mastic, brown	No Asbestos Detected	
	Layer 4	fibrous backing, tan	No Asbestos Detected	
23562.000-0302	Cement Asbestos Board	623 SE Ninth Avenue; exterior, blue painted siding		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	fibrous cement, gray with paint, blue	12% Chrysotile	
23562.000-0303	Sheet Floor Covering	623 SE Ninth Avenue; bathroom, green sheet floor covering under tile		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	vinyl sheet, green	No Asbestos Detected	
	Layer 2	fibrous backing, gray	35% Chrysotile	
	Layer 3	hard compact powder, off-white	No Asbestos Detected	
23562.000-0304	Sheet Floor Covering	623 SE Ninth Avenue; kitchen, beige sheet floor covering under laminate floor		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	vinyl sheet, tan/off-white	No Asbestos Detected	
	Layer 2	fibrous backing, gray with mastic, yellow	No Asbestos Detected	
23562.000-0305	Sheet Floor Covering	623 SE Ninth Avenue; entryway around laminated wood, tan linoleum		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	fibrous backing, dark gray with mastic, gray	No Asbestos Detected	
	Layer 2	mastic, brown	No Asbestos Detected	

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0306	Gypsum Wallboard/Joint Compound	623 SE Ninth Avenue; upstairs bedroom, gypsum wallboard with joint compound		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	paint, purple	No Asbestos Detected	
	Layer 2	fine compact powder, off-white with paper backing	No Asbestos Detected	
23562.000-0307	Blown-in Insulation	623 SE Ninth Avenue; upstairs attic area, gray blown-in insulation		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	fibrous material, brown	No Asbestos Detected	
23562.000-0308	Gypsum Wallboard/Joint Compound	623 SE Ninth Avenue; kitchen, gypsum wallboard with joint compound		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	textured paint, orange with fine compact powder, off-white	No Asbestos Detected	
	Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23562.000-0309	Spray-on Ceiling	623 SE Ninth Avenue; kitchen/laundry room, popcorn ceiling texture		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	fine compact powder with foam, off-white	8% Chrysotile	
23562.000-0310	Spray-on Ceiling	623 SE Ninth Avenue; kitchen/laundry room, popcorn ceiling texture		Lab Cor
	Layer:	Description:	Analysis:	
	Comments:	Sample archived; not analyzed.		
23562.000-0311	Wall and Ceiling Plaster	623 SE Ninth Avenue; basement stairs, gray plaster		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	granular compact powder, white	No Asbestos Detected	
23562.000-0312	Wall and Ceiling Plaster	623 SE Ninth Avenue; living room ceiling, textured ceiling material		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	textured paint, white with fine compact powder, off-white	12% Chrysotile	
	Layer 2	granular compact powder, gray	No Asbestos Detected	

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
23562.000-0313	Wall and Ceiling Plaster	623 SE Ninth Avenue; south bedroom, textured ceiling material		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	paint, white with fine compact powder, off-white	2% Chrysotile
		Layer 2	granular compact powder, gray	No Asbestos Detected
23562.000-0314	Roofing	623 SE Ninth Avenue; east roof, shingled roofing		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rocky fibrous tar, black/brown	No Asbestos Detected
		Layer 2	rocky fibrous tar, black/gray	No Asbestos Detected
23562.000-0315	Roofing	623 SE Ninth Avenue; east roof, shingled roofing		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rocky fibrous tar, black	No Asbestos Detected
		Layer 2	rocky tar, black	No Asbestos Detected
23562.000-0316	Caulk	623 SE Ninth Avenue; exterior east window, window caulking		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rubbery material, white with paint, blue	No Asbestos Detected

LEAD SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB23562.000-1301	Paint	<96.3 ppm	623 SE Ninth Avenue; garage interior, siding, wood, gray, good condition	R.J. Lee Group

LEAD SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB23562.000-1201	Paint	72,400 ppm	633 SE Ninth Avenue; south exterior, siding, wood, gray, good condition	R.J. Lee Group
LB23562.000-1202	Paint	1,970 ppm	633 SE Ninth Avenue; interior front room, window sill, wood, white, good condition	R.J. Lee Group
LB23562.000-1203	Paint	564 ppm	633 SE Ninth Avenue; exterior trim, east, siding, cement asbestos, white, good condition	R.J. Lee Group

LEAD SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB23562.000-1101	Paint	<93.8 ppm	645 SE Ninth Avenue; garage ceiling, wood, gray, poor condition	R.J. Lee Group
LB23562.000-1102	Paint	22500 ppm	645 SE Ninth Avenue; exterior, siding, wood, gray good condition	R.J. Lee Group



Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 142160R01
Report Date: 09/11/2014

Job Number: 142160

P.O. No: n/a

Project Name:

Project Number: 23562.000 Phase 0001

Project Notes:

Client Sample ID: 23562.000-0101	Sample ID: S1	Date Analyzed: 09/11/2014
Client Sample Description:		Analyst: Ryan Brown
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Homogeneous		
rocky fibrous tar, black	100 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
	- 25 % - - -	75 %

Client Sample ID: 23562.000-0102	Sample ID: S2	Date Analyzed: 09/11/2014
Client Sample Description:		Analyst: Ryan Brown
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Layer 01		
rocky fibrous tar, black	75 % - - -	NAD
Layer 02		
textured fibrous tar, black	15 % - - -	NAD
Layer 03		
granular tar, black	10 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
Layer 01	- - - 15 % -	85 %
Layer 02	12 % - - 3 % -	85 %
Layer 03	8 % - - - -	92 %

Client Sample ID: 23562.000-0103	Sample ID: S3	Date Analyzed: 09/11/2014
Client Sample Description:		Analyst: Ryan Brown
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Layer 01		
rocky fibrous tar, black	40 % - - -	NAD
Layer 02		
rocky fibrous tar, black	40 % - - -	NAD
Layer 03		
fibrous tar, black	20 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
Layer 01	10 % - - - -	90 %
Layer 02	8 % - - - -	92 %
Layer 03	- 25 % - - -	75 %





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BULK SAMPLE ASBESTOS ANALYSIS

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Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 142160

Report Number: 142160R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0104	Sample ID: S4	Date Analyzed: 09/11/2014
Client Sample Description:		Analyst: Ryan Brown
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Layer 01 textured paint, white with hard compact powder, off-white	85 % 2 % - -	2 %
Layer 02 granular compact powder, gray	15 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
Layer 01	- - - - -	98 %
Layer 02	- - - - -	100 %

Client Sample ID: 23562.000-0105	Sample ID: S5	Date Analyzed: 09/11/2014
Client Sample Description:		Analyst: Ryan Brown
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Layer 01 vinyl sheet, off-white	25 % - - -	NAD
Layer 02 fibrous backing, gray with mastic, tan	25 % - - -	NAD
Layer 03 compressed fibers, brown	50 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
Layer 01	- - - - -	100 %
Layer 02	- 75 % - - -	25 %
Layer 03	- 100 % - - -	0 %

Client Sample ID: 23562.000-0106	Sample ID: S6	Date Analyzed: 09/11/2014
Client Sample Description:		Analyst: Ryan Brown
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Layer 01 ceramic tile, off-white	62 % - - -	NAD
Layer 02 mastic, tan with paper backing	5 % - - -	NAD
Layer 03 compact chalky material with paper, white	30 % - - -	NAD
Layer 04 fine compact powder, off-white	3 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
Layer 01	- - - - -	100 %
Layer 02	- 50 % - - -	50 %
Layer 03	- 5 % - - -	95 %
Layer 04	- - - - -	100 %





Lab/Cor Portland, Inc.
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BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 142160

Report Number: 142160R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0107 **Sample ID:** S7 **Date Analyzed:** 09/11/2014
Client Sample Description: **Analyst:** Ryan Brown

Asbestos Mineral Fibers

Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous				
putty, off-white with powder, white	100 %	-	-	NAD

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
-	-	-	-	-	100 %

Client Sample ID: 23562.000-0108 **Sample ID:** S8 **Date Analyzed:** 09/11/2014
Client Sample Description: **Analyst:** Ryan Brown

Asbestos Mineral Fibers

Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous				
granular materia with putty, gray	100 %	-	-	NAD

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
-	-	-	-	-	100 %

Client Sample ID: 23562.000-0109 **Sample ID:** S9 **Date Analyzed:** 09/11/2014
Client Sample Description: **Analyst:** Ryan Brown

Asbestos Mineral Fibers

Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01				
textured paint, beige with fine compact powder, off-white	15 %	-	-	NAD
Layer 02				
granular compact powder, light green/white	15 %	-	-	NAD
Layer 03				
granular compact powder, gray	70 %	-	-	NAD

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	100 %
Layer 02	-	-	-	-	100 %
Layer 03	-	-	-	-	100 %

Client Sample ID: 23562.000-0110 **Sample ID:** S10 **Date Analyzed:** 09/11/2014
Client Sample Description: **Analyst:** Ryan Brown

Asbestos Mineral Fibers

Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous				
compressed fibers, brown with paint, white	100 %	-	-	NAD

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
-	90 %	-	-	-	10 %





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BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
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<http://www.labcorpdx.net>

Asbestos and Environmental Analysis

Job Number: 142160

Report Number: 142160R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0111	Sample ID: S11	Date Analyzed: 09/11/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Layer 01			
thick paper sheet, brown	35 %	-	-
			NAD
Layer 02			
fibrous backing, gray/green	65 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	90 %	-
			10 %
Layer 02	-	100 %	-
			0 %

Client Sample ID: 23562.000-0112	Sample ID: S12	Date Analyzed: 09/11/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Homogeneous			
mastic, black with granular material, red	100 %	8 %	-
			8 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
			92 %

Client Sample ID: 23562.000-0113	Sample ID: S13	Date Analyzed: 09/11/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Layer 01			
rubbery material, white	85 %	-	-
			NAD
Layer 02			
mastic, brown	10 %	-	-
			NAD
Layer 03			
granular compact powder, gray with mastic, white	5 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			100 %
Layer 02	-	-	-
			100 %
Layer 03	-	-	-
			100 %





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BULK SAMPLE ASBESTOS ANALYSIS

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Asbestos and Environmental Analysis

Job Number: 142160

Report Number: 142160R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0114

Sample ID: S14

Date Analyzed: 09/11/2014

Client Sample Description:

Analyst: Ryan Brown

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
paint, white with fine compact powder, white	10 %	-	-	-		NAD
Layer 02						
hard compact powder, white	15 %	-	-	-		NAD
Layer 03						
compact chalky material with paper, white	75 %	-	-	-		NAD
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %
Layer 03	-	-	-	-	-	100 %

Client Sample ID: 23562.000-0115

Sample ID: S15

Date Analyzed: 09/11/2014

Client Sample Description:

Analyst: Ryan Brown

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
vinyl sheet, off-white	25 %	-	-	-		NAD
Layer 02						
fibrous backing, gray with mastic, white	25 %	-	-	-		NAD
Layer 03						
vinyl tile, brown with mastic, white	50 %	-	-	-		NAD
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	-	-	-	-	100 %

Client Sample ID: 23562.000-0116

Sample ID: S16

Date Analyzed: 09/11/2014

Client Sample Description:

Analyst: Ryan Brown

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
vinyl sheet, red	40 %	Trace	-	-		< 1 %
Layer 02						
fibrous backing, black with coating, brown	50 %	-	-	-		NAD
Layer 03						
fine compact powder, off-white	10 %	-	-	-		NAD
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	75 %	-	-	-	25 %
Layer 03	-	-	-	-	-	100 %





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BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

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Job Number: 142160

Report Number: 142160R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0117

Sample ID: S17

Date Analyzed: 09/11/2014

Client Sample Description:

Analyst: Ryan Brown

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:		
Layer 01							
vinyl sheet, gray	45 %	-	-	-	NAD		
Layer 02							
fibrous backing, gray with mastic, white	45 %	-	-	-	NAD		
Layer 03							
fine compact powder, off-white	10 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool		Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	-	100 %
Layer 02	-	75 %	-	-	-	-	25 %
Layer 03	-	-	-	-	-	-	100 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders.

Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

x

Ryan Brown
Analyst





Engineering + Environmental

142160 p1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 09, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

JAMES BLANKO
Name

[Signature] 9/9/14 12:00
Authorized Signature Date

RECEIVER

Date Received: 9/9/14 12:30

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

STEPHANIE GOLDEN
Name

[Signature] 9/9/14
Authorized Signature Date

Sender's ID No.	Brief Description	Receiver's ID No.
23562.000-0101		
23562.000-0102		
23562.000-0103		
23562.000-0104		
23562.000-0105		
23562.000-0106		
23562.000-0107		
23562.000-0108		
23562.000-0109		
23562.000-0110		
23562.000-0111		
23562.000-0112		
23562.000-0113		
23562.000-0114		



Engineering +
Environmental

142160 P1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

23562.000-0115 _____
23562.000-0116 _____
23562.000-0117 _____

Please analyze the enclosed 17 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 72 Hour

SPECIAL INSTRUCTIONS:

(JA)



Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 142285R01
Report Date: 09/24/2014

Job Number: 142285

P.O. No: n/a

Project Name:

Project Number: 23562.000 Phase 0001

Project Notes:

Client Sample ID: 23562.000-0118	Sample ID: S1	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Layer 01			Percent Asbestos:
paint, off-white with fine compact powder, off-white	75 %	-	NAD
Layer 02			
granular compact powder, gray	25 %	-	NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other Matrix
Layer 01	-	-	100 %
Layer 02	-	-	100 %

Client Sample ID: 23562.000-0119	Sample ID: S2	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Layer 01			Percent Asbestos:
textured paint, white with fine compact powder, off-white	15 %	-	NAD
Layer 02			
granular compact powder, gray	85 %	-	NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other Matrix
Layer 01	-	-	100 %
Layer 02	-	-	100 %

Client Sample ID: 23562.000-0120	Sample ID: S3	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Layer 01			Percent Asbestos:
woven fibers, brown	65 %	-	NAD
Layer 02			
loose particulate, brown	35 %	-	NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other Matrix
Layer 01	-	100 %	0 %
Layer 02	-	5 %	95 %





Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 142285

Report Number: 142285R01

Report Date: 09/24/2014

Client Sample ID: 23562.000-0121	Sample ID: S4	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Homogeneous			
rocky fibrous tar, black	100 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
	10 %	5 %	- - - -
			Matrix 85 %

Percent Asbestos:

NAD

Client Sample ID: 23562.000-0122	Sample ID: S5	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Homogeneous			
compressed fibrous material, gray	100 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
	-	2 %	98 % - - - -
			Matrix 0 %

Percent Asbestos:

NAD

Client Sample ID: 23562.000-0123	Sample ID: S6	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Homogeneous			
fibrous backing, black	100 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
	-	80 %	- - - -
			Matrix 20 %

Percent Asbestos:

NAD

Client Sample ID: 23562.000-0124	Sample ID: S7	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Layer 01			
putty, white	85 %	-	-
Layer 02			
putty, red	5 %	-	-
Layer 03			
putty, gray	5 %	-	-
Layer 04			
fine compact powder, off-white	5 %	-	-
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
Layer 01	-	-	- - - -
Layer 02	-	-	- - - -
Layer 03	-	-	- - - -
Layer 04	-	-	- - - -
			Matrix 100 %

Percent Asbestos:

NAD

NAD

NAD

NAD

100 %

100 %

100 %

100 %





Lab/Cor Portland, Inc.

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Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
<http://www.labcorpdx.net>

Job Number: 142285

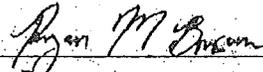
Report Number: 142285R01

Report Date: 09/24/2014

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected.
Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.
Asbestos detection interferences may result from material binders.
Qualitative and quantitative TEM analysis may be recommended for difficult samples.
Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.
The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.
This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

x 

Ryan Brown
Analyst





Engineering + Environmental

142285

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 22, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Harmony Kelly
Name
Authorized Signature
Date 9/22/14

RECEIVER

Date Received: 9/22/14 3:10

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Alex. Johnson
Name
Authorized Signature
Date 9/22/14

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No. Rows include IDs 23562.000-0118 through 23562.000-0124.

Please analyze the enclosed 7 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: AM/PM Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 48 Hour

SPECIAL INSTRUCTIONS:



Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 142159R01
Report Date: 09/11/2014

Job Number: 142159

P.O. No: n/a

Project Name:

Project Number: 23562.000 Phase 0001

Project Notes:

Client Sample ID: 23562.000-0201	Sample ID: S1	Date Analyzed: 09/10/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Homogeneous			
hard compact powder, off-white	100 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
			100 %

Client Sample ID: 23562.000-0202	Sample ID: S2	Date Analyzed: 09/10/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Layer 01			
rocky fibrous tar, black	50 %	-	-
			NAD
Layer 02			
rocky fibrous tar, black	35 %	-	-
			NAD
Layer 03			
fibrous tar, black	15 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	8 %	-	-
			92 %
Layer 02	8 %	-	-
			92 %
Layer 03	-	35 %	-
			65 %

Client Sample ID: 23562.000-0203	Sample ID: S3	Date Analyzed: 09/10/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Layer 01			
cementitious material, gray	95 %	-	-
			NAD
Layer 02			
paper with tar, black	5 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			100 %
Layer 02	-	-	-
			100 %





Lab/Cor Portland, Inc.

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Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 142159

Report Number: 142159R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0204		Sample ID: S4			Date Analyzed: 09/10/2014		Percent Asbestos:
Client Sample Description:							
Asbestos Mineral Fibers							
	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
	vinyl sheet, off-white	35 %	-	-	-	NAD	
Layer 02							
	fibrous backing, black with coating, off-white	35 %	-	-	-	NAD	
Layer 03							
	fibrous backing, black	30 %	-	-	-	NAD	
Other Fibers							
	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	100 %	
Layer 02	-	75 %	-	-	-	25 %	
Layer 03	-	75 %	-	-	-	25 %	

Client Sample ID: 23562.000-0205		Sample ID: S5			Date Analyzed: 09/11/2014		Percent Asbestos:
Client Sample Description:							
Asbestos Mineral Fibers							
	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
	paint, white with paper backing	3 %	-	-	-	NAD	
Layer 02							
	compact chalky material with paper, white	97 %	-	-	-	NAD	
Other Fibers							
	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	50 %	-	-	-	50 %	
Layer 02	-	25 %	-	-	-	75 %	

Client Sample ID: 23562.000-0206		Sample ID: S6			Date Analyzed: 09/11/2014		Percent Asbestos:
Client Sample Description:							
Asbestos Mineral Fibers							
	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
	vinyl sheet, off-white/blue	40 %	-	-	-	NAD	
Layer 02							
	fibrous backing, gray with mastic	40 %	-	-	-	NAD	
Layer 03							
	compact chalky material with paper, white	20 %	-	-	-	NAD	
Other Fibers							
	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	100 %	
Layer 02	-	75 %	-	-	-	25 %	
Layer 03	-	25 %	-	-	-	75 %	





Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 142159

Report Number: 142159R01

Report Date: 09/11/2014

Client Sample ID: 23562.000-0207	Sample ID: S7	Date Analyzed: 09/11/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Homogeneous woven material with coating, white	100 %	-	-
			Percent Asbestos: NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
	-	50 %	-
			Matrix 50 %

Client Sample ID: 23562.000-0208	Sample ID: S8	Date Analyzed: 09/11/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Layer 01 textured paint, white with fine compact powder, off-white	35 %	Trace	-
			Percent Asbestos: < 1 %
Layer 02 granular compact powder, gray	65 %	-	-
			Percent Asbestos: NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
Layer 01	-	-	-
Layer 02	-	-	-
			Matrix 100 %
			100 %

Client Sample ID: 23562.000-0209	Sample ID: S9	Date Analyzed: 09/11/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite Crocidolite
Layer 01 vinyl sheet, gray	40 %	-	-
			Percent Asbestos: NAD
Layer 02 fibrous backing, gray	40 %	-	-
			Percent Asbestos: NAD
Layer 03 compressed fibers, brown	20 %	-	-
			Percent Asbestos: NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool Synthetic Other
Layer 01	-	-	-
Layer 02	-	100 %	-
Layer 03	-	100 %	-
			Matrix 100 %
			0 %
			0 %





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BULK SAMPLE ASBESTOS ANALYSIS

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Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 142159

Report Number: 142159R01

Report Date: 09/11/2014

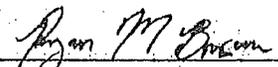
Client Sample ID:	23562.000-0210	Sample ID:	S10	Date Analyzed:	09/11/2014	
Client Sample Description:				Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
paper sheet, brown	12 %	-	-	-	NAD	
Layer 02						
vinyl sheet, off-white/tan	18 %	-	-	-	NAD	
Layer 03						
fibrous backing, gray	15 %	35 %	-	-	35 %	
Layer 04						
fine compact powder, dark gray	15 %	Trace	-	-	< 1 %	
Layer 05						
vinyl sheet, brown	10 %	-	-	-	NAD	
Layer 06						
vinyl sheet, green	10 %	-	-	-	NAD	
Layer 07						
fibrous backing, black	20 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	100 %	-	-	-	0 %
Layer 02	-	-	-	-	-	100 %
Layer 03	-	50 %	-	-	-	15 %
Layer 04	-	-	-	-	-	100 %
Layer 05	-	25 %	-	-	-	75 %
Layer 06	-	25 %	-	-	-	75 %
Layer 07	-	75 %	-	-	-	25 %

Comments: Chrysotile found in layer 04 is highly likely to be contaminant from layer 03.

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

x 
Ryan Brown
Analyst





Engineering + Environmental

142159 p1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 09, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

JAMES BLANCO
Name

Authorized Signature Date 9/9/14 12:21

RECEIVER

Date Received: 9/9/14 12:30pm

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

STEPHANIE GOLDEN
Name

Authorized Signature Date 9/9/14

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No. Rows 0201-0210.



Engineering +
Environmental

142159 p2/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Please analyze the enclosed 10 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 72 Hour

SPECIAL INSTRUCTIONS:

IA

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Client:** PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239**Report Number:** 142286R01
Report Date: 09/24/2014**Job Number:** 142286

P.O. No: n/a

Project Name:**Project Number:** 23562.000 Phase 0001**Project Notes:**

Client Sample ID: 23562.000-0211	Sample ID: S1	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
hard compact powder, gray with paint, white	100 % Trace - -		< 1 %
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 100 %
	- - - - -		

Client Sample ID: 23562.000-0212	Sample ID: S2	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01			
textured paint, white with hard compact powder, off-white	15 % - - -		NAD
Layer 02			
granular compact powder, gray	85 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 100 %
Layer 01	- - - - -		100 %
Layer 02	- - - - -		100 %

Client Sample ID: 23562.000-0213	Sample ID: S3	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01			
fibrous tar, black with rocky material, dark brown	65 % - - -		NAD
Layer 02			
fibrous tar, black with rocky material, white	35 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 92 %
Layer 01	8 % - - - - -		92 %
Layer 02	8 % - - - - -		92 %





Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 142286

Report Number: 142286R01

Report Date: 09/24/2014

Client Sample ID: 23562.000-0214		Sample ID: S4			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:					Analyst: Ryan Brown		
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
fibrous tar, black with rocky material, white	65 %	-	-	-	NAD		
Layer 02							
fibrous tar, black with rocky material, dark brown	35 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	8 %	-	-	-	-	92 %	
Layer 02	8 %	-	-	-	-	92 %	

Client Sample ID: 23562.000-0215		Sample ID: S5			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:					Analyst: Ryan Brown		
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Homogeneous							
compressed fibrous material, dark gray	100 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	Trace	100 %	-	-	0 %	

Client Sample ID: 23562.000-0216		Sample ID: S6			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:					Analyst: Ryan Brown		
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
textured paint, white with fine compact powder, white	20 %	-	-	-	NAD		
Layer 02							
compact chalky material with paper, white	80 %	-	-	-	NAD		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	100 %	
Layer 02	-	4 %	-	-	-	96 %	





Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
Fax: (503) 228-8282
<http://www.labcorpdx.net>

Asbestos and Environmental Analysis

Job Number: 142286

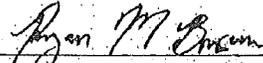
Report Number: 142286R01

Report Date: 09/24/2014

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected.
Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.
Asbestos detection interferences may result from material binders.
Qualitative and quantitative TEM analysis may be recommended for difficult samples.
Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.
The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.
This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

x 

Ryan Brown
Analyst

142286



Engineering + Environmental

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 22, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.9140

RECEIVER

Date Received: 9/22/14 310

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Harmony Kelly
Name
H Kelly
Authorized Signature
9/22/14
Date

Alex Johnson
Name
[Signature]
Authorized Signature
9/22/14
Date

Sender's ID No.	Brief Description	Receiver's ID No.
23562.000-0211		
23562.000-0212		
23562.000-0213		
23562.000-0214		
23562.000-0215		
23562.000-0216		

Please analyze the enclosed 6 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.
Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 48 Hour

SPECIAL INSTRUCTIONS:

JA

Client: PBS Engineering and Environmental
 4412 SW Corbett Avenue
 Portland, OR 97239

Report Number: 142287R01
Report Date: 09/24/2014

Job Number: 142287

P.O. No: n/a

Project Name:

Project Number: 23562.000 Phase 0001

Project Notes:

Client Sample ID: 23562.000-0301	Sample ID: S1	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Layer 01			
brittle vinyl sheet, off-white	8 %	-	-
			NAD
Layer 02			
fibrous backing, black	32 %	-	-
			NAD
Layer 03			
mastic, brown	8 %	-	-
			NAD
Layer 04			
fibrous backing, tan	52 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			100 %
Layer 02	-	75 %	-
			25 %
Layer 03	-	-	-
			100 %
Layer 04	-	100 %	-
			0 %

Client Sample ID: 23562.000-0302	Sample ID: S2	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Homogeneous			
fibrous cement, gray with paint, blue	100 %	12 %	-
			12 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
	-	-	-
			88 %

Client Sample ID: 23562.000-0303	Sample ID: S3	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
		Crocidolite	Percent Asbestos:
Layer 01			
vinyl sheet, green	25 %	-	-
			NAD
Layer 02			
fibrous backing, gray	65 %	35 %	-
			35 %
Layer 03			
hard compact powder, off-white	10 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
			Matrix
Layer 01	-	-	-
			100 %
Layer 02	-	55 %	-
			10 %
Layer 03	-	-	-
			100 %

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number: 142287****Report Number: 142287R01****Report Date: 09/24/2014**

Client Sample ID: 23562.000-0304		Sample ID: S4			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
vinyl sheet, tan/off-white	25 %	-	-	-			NAD
Layer 02							
fibrous backing, gray with mastic, yellow	75 %	-	-	-			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	100 %
Layer 02	-	75 %	-	-	-	-	25 %
Client Sample ID: 23562.000-0305		Sample ID: S5			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
fibrous backing, dark gray with mastic, gray	75 %	-	-	-			NAD
Layer 02							
mastic, brown	25 %	-	-	-			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	90 %	-	-	-	-	10 %
Layer 02	-	15 %	-	-	-	-	85 %
Client Sample ID: 23562.000-0306		Sample ID: S6			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Layer 01							
paint, purple	10 %	-	-	-			NAD
Layer 02							
fine compact powder, off-white with paper backing	90 %	-	-	-			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	-	100 %
Client Sample ID: 23562.000-0307		Sample ID: S7			Date Analyzed: 09/24/2014		Percent Asbestos:
Client Sample Description:		Analyst: Ryan Brown					
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			
Homogeneous							
fibrous material, brown	100 %	-	-	-			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
	-	100 %	-	-	-	-	0 %

Job Number: 142287

Report Number: 142287R01

Report Date: 09/24/2014

Client Sample ID: 23562.000-0308		Sample ID: S8			Date Analyzed: 09/24/2014		Percent Asbestos:	
Client Sample Description:					Analyst: Ryan Brown			
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				
Layer 01								
textured paint, orange with fine compact powder, off-white	35 %	-	-	-	NAD			
Layer 02								
compact chalky material with paper, white	65 %	-	-	-	NAD			
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix		
Layer 01	-	-	-	-	-	100 %		
Layer 02	-	4 %	-	-	-	96 %		

Client Sample ID: 23562.000-0309		Sample ID: S9			Date Analyzed: 09/24/2014		Percent Asbestos:	
Client Sample Description: Progressive Analysis Group: 1					Analyst: Ryan Brown			
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				
Homogeneous								
fine compact powder with foam, off-white	100 %	8 %	-	-	8 %			
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix		
	-	-	-	-	-	92 %		

Client Sample ID: 23562.000-0310		Sample ID: S10			Date Analyzed: 09/24/2014		Percent Asbestos:	
Client Sample Description: Progressive Analysis Group: 1					Analyst: Ryan Brown			
Comments: Sample archived; not analyzed per request.								

Client Sample ID: 23562.000-0311		Sample ID: S11			Date Analyzed: 09/24/2014		Percent Asbestos:	
Client Sample Description:					Analyst: Ryan Brown			
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				
Homogeneous								
granular compact powder, white	100 %	-	-	-	NAD			
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix		
	-	-	-	-	-	100 %		

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number: 142287****Report Number: 142287R01****Report Date: 09/24/2014**

<u>Client Sample ID:</u>	<u>Sample ID:</u> S12				<u>Date Analyzed:</u>	09/24/2014	<u>Analyst:</u>	Ryan Brown	<u>Percent Asbestos:</u>
<u>Client Sample Description:</u>									
<u>Asbestos Mineral Fibers</u>									
Layer	Percent:	Chrysotile	Amosite	Crocidolite					
Layer 01									
textured paint, white with fine compact powder, off-white	50 %	12 %	-	-					12 %
Layer 02									
granular compact powder, gray	50 %	-	-	-					NAD
<u>Other Fibers</u>									
Layer	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix			
Layer 01	-	-	-	-	-	-	-	-	88 %
Layer 02	-	-	-	-	-	-	-	-	100 %

<u>Client Sample ID:</u>	<u>Sample ID:</u> S13				<u>Date Analyzed:</u>	09/24/2014	<u>Analyst:</u>	Ryan Brown	<u>Percent Asbestos:</u>
<u>Client Sample Description:</u>									
<u>Asbestos Mineral Fibers</u>									
Layer	Percent:	Chrysotile	Amosite	Crocidolite					
Layer 01									
paint, white with fine compact powder, off-white	10 %	2 %	-	-					2 %
Layer 02									
granular compact powder, gray	90 %	-	-	-					NAD
<u>Other Fibers</u>									
Layer	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix			
Layer 01	-	-	-	-	-	-	-	-	98 %
Layer 02	-	-	-	-	-	-	-	-	100 %

<u>Client Sample ID:</u>	<u>Sample ID:</u> S14				<u>Date Analyzed:</u>	09/24/2014	<u>Analyst:</u>	Stephanie Golden	<u>Percent Asbestos:</u>
<u>Client Sample Description:</u>									
Progressive Analysis Group: 2									
<u>Asbestos Mineral Fibers</u>									
Layer	Percent:	Chrysotile	Amosite	Crocidolite					
Layer 01									
rocky fibrous tar, black/brown	50 %	-	-	-					NAD
Layer 02									
rocky fibrous tar, black/gray	50 %	-	-	-					NAD
<u>Other Fibers</u>									
Layer	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix			
Layer 01	10 %	-	-	-	-	-	-	-	90 %
Layer 02	10 %	-	-	-	-	-	-	-	90 %

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number: 142287****Report Number: 142287R01****Report Date: 09/24/2014**

Client Sample ID: 23562.000-0315	Sample ID: S15	Date Analyzed: 09/24/2014
Client Sample Description: Progressive Analysis Group: 2		Analyst: Stephanie Golden
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Layer 01	rocky fibrous tar, black 65 % - - -	NAD
Layer 02	rocky tar, black 35 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
Layer 01	10 % - - - -	90 %
Layer 02	5 % - - - -	95 %

Client Sample ID: 23562.000-0316	Sample ID: S16	Date Analyzed: 09/24/2014
Client Sample Description:		Analyst: Stephanie Golden
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Homogeneous	rubbery material, white with paint, blue 100 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other	Matrix
	- - - - -	100 %

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.

Asbestos detection interferences may result from material binders.

Qualitative and quantitative TEM analysis may be recommended for difficult samples.

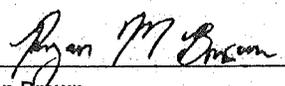
Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.

The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.

This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

x 

Ryan Brown
Analyst



Engineering + Environmental

142287 1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 22, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Harmony Kellory
Name
H. Kellory 9/22/14
Authorized Signature Date

RECEIVER

Date Received: 9/22/14 3:10

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Alex Johnson
Name
[Signature] 9/22/14
Authorized Signature Date

Sender's ID No.	Brief Description	Receiver's ID No.
23562.000-0301		
23562.000-0302		
23562.000-0303		
23562.000-0304		
23562.000-0305		
23562.000-0306		
23562.000-0307		
23562.000-0308		
23562.000-0309 }	Progressive Analysis Group: 1	
23562.000-0310 }	" 1	
23562.000-0311		
23562.000-0312		
23562.000-0313		
23562.000-0314 }	Progressive Analysis Group: 2	



Engineering +
Environmental

142287 3/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

23562.000-0315 } **Progressive Analysis Group: 2** _____

23562.000-0316 _____

Please analyze the enclosed 16 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 48 Hour

SPECIAL INSTRUCTIONS: **Stop at first positive layer on Progr. Samples.*
Please note the progressive analysis groups defined above.

(1A)

LABORATORY REPORT

 PBS Environmental - Portland, OR
 4412 Southwest Corbett Ave.
 Portland, OR 97239

 RJ Lee Group Job No.: PA230920140009
 Samples Received: September 23, 2014
 Report Date: September 25, 2014
 Client Project: 23562.000 Phase 0001
 Purchase Order No.: N/A
 Matrix: Solid
 Prep/Analysis: EPA 3050B / EPA 7420

 Attn: Harmony Kilby
 Phone: 503-248-1939
 Fax: 866-727-0140
 Email: harmony.kilby@pbsenv.com

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration			Minimum Reporting Limit			
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	
LB23562.000-1301	PA230920140009-001	NP	Lead	< 0.00963	< 96.3	96.3	0.00963	96.3	09/25/2014	-

Comments:
Report Qualifiers (Q):

E = Value above highest calibration standard
 J = Value below lowest calibration standard but above MDL (Method Detection Limit)
 L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
 H = Holding times for preparation or analysis exceeded
 P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
 N : NY ELAP Accredited (NY ELAP Lab Code 10884)
 C : CA ELAP Accredited (CA ELAP Certificate 1970)
 - : Test (anlyte-matrix-preparation-analysis) is performed under RJC's General Quality System requirements and is not part to any of the above scopes of accreditations
 These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
 This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to <http://www.rjg.com/about-us/accreditations/> for more information and current status. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.


 Philip Grindle
 Laboratory Supervisor

PH 230720140007

3



Engineering + Environmental

TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

RECEIVER

Date Sent: September 22, 2014

Date Received: 09/23/14

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Company: R.J. Lee Group
Address: 350 Hochberg Road
Monroeville, PA 15146
724-325-1776

Name: Harmon Kelly
Authorized Signature: [Signature]
Date: 9/22/14

Name: T. Hall
Authorized Signature: [Signature]
Date: 09/23/14

Sender's ID No.
LB23562.000-1301

Brief Description

Receiver's ID No.

ANALYSIS REQUESTED:
LEAD: [X] Paint
[] Wipe
[] Soil/Misc.
[] Air
[] TCLP

Please analyze the enclosed 1 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:
48 Hour

SPECIAL INSTRUCTIONS:

[Signature]

LABORATORY REPORT

PBS Environmental - Portland, OR
4412 Southwest Corbett Ave.
Portland, OR 97239

RJ Lee Group Job No.: PA230920140008
Samples Received: September 23, 2014
Report Date: September 25, 2014
Client Project: 23562.000 Phase 0001
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3050B / EPA 7420

Attn: Harmony Kilby
Phone: 503-248-1939
Fax: 866-727-0140
Email: harmony.kilby@pbsenv.com

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration			Minimum Reporting Limit		
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	Q
LB23562.000-1201	PA230920140008-001	NP	Lead	7.24	72400	0.00950	95.0	09/25/2014	-
LB23562.000-1202	PA230920140008-002	NP	Lead	0.197	1970	0.00979	97.9	09/25/2014	-
LB23562.000-1203	PA230920140008-003	NP	Lead	0.0564	564	0.00962	96.2	09/25/2014	-

Comments:

Report Qualifiers (Q):

E = Value above highest calibration standard
 J = Value below lowest calibration standard but above MDL (Method Detection Limit)
 L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
 H = Holding times for preparation or analysis exceeded
 P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
 N : NY ELAP Accredited (NY ELAP Lab Code 10884)
 C : CA ELAP Accredited (CA ELAP Certificate 1970)
 - : Test (analyte-matrix-preparation-analysis) is performed under RJLC's General Quality System requirements and is not part to any of the above scopes of accreditations. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report. RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
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Philip Grindle
Philip Grindle
Laboratory Supervisor

PA 230920140008

2



Engineering + Environmental

TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 22, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Handwritten signature: Harmony Kelly
Name: H. Kelly
Date: 9/22/14
Authorized Signature: [Signature] Date: [Date]

RECEIVER

Date Received: 09/23/14

Company: R.J. Lee Group
Address: 350 Hochberg Road
Monroeville, PA 15146
724-325-1776

Handwritten signature: J. Hall
Name: J. Hall
Authorized Signature: [Signature] Date: 09-23-14

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No.
Rows: LB23562.000-1201, LB23562.000-1202, LB23562.000-1203

ANALYSIS REQUESTED:
LEAD:
 Paint
 Wipe
 Soil/Misc.
 Air
 TCLP

Please analyze the enclosed 3 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:
48 Hour

SPECIAL INSTRUCTIONS: (FA)

LABORATORY REPORT

 PBS Environmental - Portland, OR
 4412 Southwest Corbett Ave.
 Portland, OR 97239

 RJ Lee Group Job No.: PA230920140007
 Samples Received: September 23, 2014
 Report Date: September 25, 2014
 Client Project: 23562.000 Phase 0001
 Purchase Order No.: N/A
 Matrix: Solid
 Prep / Analysis: EPA 3050B / EPA 7420

 Attn: Harmony Kilby
 Phone: 503-248-1939
 Fax: 866-727-0140
 Email: harmony.kilby@pbsenv.com

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration			Minimum Reporting Limit			
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	
LB23562.000-1101	PA230920140007-001	NP	Lead	< 0.00938	< 93.8	93.8	0.00938	93.8	09/25/2014	-
LB23562.000-1102	PA230920140007-002	NP	Lead	2.25	22500	94.0	0.00940	94.0	09/25/2014	-

Comments:
Report Qualifiers (Q):

 P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
 N : NY ELAP Accredited (NY ELAP Lab Code 10884)
 C : CA ELAP Accredited (CA ELAP Certificate 1970)

 - : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part of any of the above scopes of accreditations. These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples. This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to <http://www.rjlg.com/about-us/accreditations/> for more information and current status. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

 E = Value above highest calibration standard
 J = Value below lowest calibration standard but above MDL (Method Detection Limit)
 L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
 H = Holding times for preparation or analysis exceeded

 B = Analyte detected in the associated Method Blank
 S = Spike Recovery outside accepted limits
 R = RPD (relative percent difference) outside accepted limits
 D = RL (reporting limit verification) outside accepted limits
 NP = Not Provided

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAP standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.


 Philip Grindle
 Laboratory Supervisor

PA 230920140007



Engineering + Environmental

TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 23562.000 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 22, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Harmony Kellon
Name
H. Kellon
Authorized Signature
9/22/14
Date

RECEIVER

Date Received: 09/23/14

Company: R.J. Lee Group
Address: 350 Hochberg Road
Monroeville, PA 15146
724-325-1776

J. Hall
Name
Kevin Hall
Authorized Signature
09/23/14
Date

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No.
Row 1: LB23562.000-1101, [blank], [blank]
Row 2: LB23562.000-1102, [blank], [blank]

ANALYSIS REQUESTED:
LEAD:
[checked] Paint
[] Wipe
[] Soil/Misc.
[] Air
[] TCLP

Please analyze the enclosed 2 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:
48 Hour

SPECIAL INSTRUCTIONS:
(1A)

THIS IS TO CERTIFY THAT

IMAD ABOUZAKI

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE
for
ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 01/10/2014

Course Location: Portland, OR

Certificate: IR-14-0425A



**Engineering +
Environmental**

Expiration Date 01/10/2015

AHERA is the Asbestos Hazard Emergency
Response Act enacting Title II of Toxic
Substance Control Act (TSCA)

For verification of the authenticity of this
certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

David Stover

David Stover, Director of Training



Pre-Demolition Asbestos and Lead Survey Report

152 NE 5th Avenue
Hillsboro, OR 97124

Prepared for:

City of Hillsboro



General Information	1.1
Inspection Summary	1.2
Sample Inventories	2.1
Laboratory Data	Not Numbered
AHERA Certificates	Not Numbered

October 2014

Project No.: 23562.002 Phase No.: 0001

4412 SW Corbett Avenue, Portland, OR 97239
503.248.1939 Main
866.727.0140 Fax
888.248.1939 Toll-Free

www.pbsenv.com

GENERAL INFORMATION

BUILDING DATA

152 NE 5th Avenue
Hillsboro, OR 97124

CLIENT DATA

City of Hillsboro
Public Works Engineering Operations
Hillsboro, OR 97123

SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed a pre-demolition asbestos and lead-based paint survey of accessible areas of the residence in accordance with the Occupational Safety and Health Administration (OSHA) in 29 Code Federal Regulations (CFR) 1910.1001 and compiled a report with the following information:

- The type, location, and approximate quantity of suspect asbestos-containing materials
- Bulk sampling of selected suspect building materials
- Lead paint sampling
- Inspection summary
- Laboratory analytical data of bulk material sampled

PBS endeavored to locate all the suspect asbestos-containing materials in the residence; however, suspect asbestos-containing materials may be present and concealed within wall, ceiling, or floor spaces. If suspect materials are uncovered during demolition activities that are not identified in this report, testing should be performed prior to impact.

PBS has conducted a physical inspection of the residence, compiled this report consistent with the survey scope, and certifies that the information is correct and accurate within the standards of professional quality and contractual obligations.

Imad Abouzaki
Project Manager/Prime Inspector
Accreditation # IR-14-0425A



10/01/2014

Signature

Date



INSPECTION SUMMARY

DATES	SURVEYED BY	ACTIVITY
9/22/2014	Imad Abouzaki	Asbestos and Lead Survey

PBS has investigated accessible areas inside of the residence to locate suspect asbestos-containing building materials (ACBM). Suspect materials may be present in concealed areas (e.g., behind walls and under carpet). The findings are listed below.

ASBESTOS MATERIALS

The following materials either tested positive, or, based on the experience of PBS field personnel, were not tested and should be considered asbestos-containing. Materials that had mixed results are considered positive. Materials not sampled may contain asbestos and should be tested to verify asbestos content prior to impact through demolition, renovation, etc.

(+) Tested Positive, (M) Mixed Results, (P) Presumed Positive, (T) Previously Tested Positive.

<u>Result</u>	<u>Material (type)</u>	<u>Location</u>	<u>Approx. Quantity</u>
(+)	Vinyl Floor Tile/Mastic	In the half bathroom on the first floor	35 SF
(+)	Duct Felt Wrap	Basement, on HVAC duct	200 LF
(+)	Sink Undercoating Material	On the bottom of the kitchen sink	1 EA

MATERIALS WHICH TESTED NEGATIVE FOR ASBESTOS

The following materials tested negative based on ASHARA sampling minimums and testing by NVLAP participating laboratories. Although no asbestos was detected, it is possible that further sampling could indicate asbestos content. It may be prudent to test prior to impact through demolition, renovation, etc.

<u>Material (type)</u>	<u>Location</u>
Sheet Floor Covering	Kitchen, bathroom, and second floor living room
Mastic	Kitchen, beneath wood underlayment
Vapor Barrier	Entry way, beneath hardwood floor
Blown-in Insulation	Attic
Wall and Ceiling Plaster	Throughout
Composition Shingles	Throughout the roof
Brick Mortar	On the brick exterior of the house and garage
Caulk	Around windows
Mastic	Garage, carpet mastic
Gypsum Wallboard/Joint Compound	Throughout the garage

INSPECTION SUMMARY

BACKGROUND

In September 2014, PBS performed a pre-demolition asbestos and lead-based paint building materials survey in the residential property located at 152 NE 5th Avenue in Hillsboro, Oregon.

The purpose of the survey was to identify asbestos-containing building materials and lead paint that may be impacted by the planned demolition of the structure.

This survey is compiled to satisfy the requirements to perform an asbestos inspection prior to any renovation or demolition activities Occupational Safety and Health Administration (OSHA) hazard communication requirements.

ASBESTOS SUMMARY

Samples were collected of all accessible suspect asbestos-containing materials. Samples were submitted under chain of custody to Lab/Cor, Inc., of Portland, Oregon, for polarized light microscopy (PLM) asbestos analysis.

The following materials were found to contain asbestos at the residential structure:

- Asbestos-containing vinyl floor tile exists in the half bathroom on the first floor. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing tape exists on the seams of the HVAC duct in the basement. This material is intact and in good condition but should be removed prior to any demolition activities.
- Asbestos-containing undercoating was identified around the bottom of the kitchen sink. This material is intact and in good condition but should be removed prior to any demolition activities.

PBS performed destructive investigation in wet wall cavities and found no suspect asbestos-containing materials.

Refer to the Bulk Sample Inventory and the Materials Which Tested Negative section of this report for greater detail of the negative samples collected.

Asbestos Regulatory Issues

The State of Oregon Department of Environmental Quality (DEQ) and Environmental Protection Agency (EPA) regulations require proper removal and handling of asbestos-containing materials by licensed and certified asbestos abatement contractors prior to the renovation or demolition of buildings. In addition, Oregon OSHA has specific requirements when workers may encounter or disturb ACM or when ACM is removed.

In 1994, Oregon-OSHA adopted federal regulations governing asbestos, (29 CFR Part 1926, 1101), OSHA requires building owners to perform "due diligence" in identifying and communicating information about installed building materials in order to prevent workers from unknowingly or improperly disturbing asbestos-containing materials (ACM) or presumed asbestos containing materials (PACM). Hazard communication, training, personal protection, work practices, exposure monitoring, and recordkeeping are all major components of the regulation.

INSPECTION SUMMARY

Documents of reference for the removal of asbestos-containing materials include:

1. Oregon Occupational Safety and Health Administration (OAR-437, 1926.1101 asbestos)
2. Department of Environmental Quality (OAR-340, Division 248)

LEAD-PAINT SUMMARY

A total of two representative paint-chip samples were collected from the interior of the residence. Laboratory analysis of these samples produced results ranging from 101 parts per million (ppm) to 11,600 parts per million (ppm).

Please refer to the Lead Sample Inventory for specific building components sampled, sample locations, and analytical results.

Lead-Based Paint Regulatory Issues

The consumer product safety commission limit for lead in consumer paint products is 0.000009 percent or 90 parts per million (ppm) or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as that which contains 0.5 percent or 5,000 ppm. Under OSHA, any concentration of lead in paint that may become airborne during construction work operations triggers requirements in the OSHA Lead in Construction Standard 29 CFR 1926.62 to protect employees impacting the paint.

Oregon OSHA adopted the federal OSHA Lead in Construction Standard (29 CFR 1926.62) in November 1993 under Oregon Administrative Rule (OAR) 437 Division 3 1926.62. The OR-OSHA standard outlines worker exposure limits, personal protection requirements and employer responsibility for exposure assessment, training, housekeeping, and recordkeeping. OSHA's lead standard applies to all work where employees may be exposed to lead in construction, alteration, or repair activities. This includes demolition and/or renovation of structures where lead-containing materials are present.

Reference the enacted regulations for additional requirements.

Disposal of building demolition waste (architectural components from residential buildings) coated with lead-based paint will generally not require a hazardous waste determination (i.e., TCLP testing). Demolition debris with high concentrations of lead paint will require a hazardous waste determination. Typical demolition debris may be disposed of at a solid waste landfill that is permitted by the DEQ and which meets the current design standards for municipal solid waste disposal facilities of 40 CFR, Part 258.

Refer to the DEQ Hazardous Waste Reduction Policy and follow all requirements under the Oregon DEQ, Management of Building Demolition Waste, 97-PO-002A for proper disposal of lead-based painted demolition waste.

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>	
23562.002-0001	Sheet Floor Covering	Kitchen; top layer, blue/tan sheet vinyl		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	vinyl sheet with foam, white		No Asbestos Detected
	Layer 2	compressed wood fibers, brown	No Asbestos Detected		
23562.002-0002	Mastic	Kitchen; black mastic under particle board		Lab Cor	
		Layer:	Description:		Analysis:
	Layer 1	mastic, dark brown	No Asbestos Detected		
23562.002-0003	Vapor Barrier	Entryway; vapor barrier under hardwood		Lab Cor	
		Layer:	Description:		Analysis:
	Layer 1	fibrous backing, black	No Asbestos Detected		
23562.002-0004	Sheet Floor Covering	Bathroom; tan sheet vinyl, no mastic		Lab Cor	
		Layer:	Description:		Analysis:
	Layer 1	vinyl sheet, off-white	No Asbestos Detected		
23562.002-0005	Vinyl Floor Tile	Half bathroom; 12" mottled green on leveling compound, on wood		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	vinyl tile, gray		<1% Chrysotile
	Layer 2	fine compact powder, off-white	No Asbestos Detected		
23562.002-0006	Sheet Floor Covering	Upstairs living room; second floor, multi-colored linoleum		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	vinyl sheet, yellow		No Asbestos Detected
	Layer 2	fibrous backing, black with coating, red	No Asbestos Detected		
23562.002-0007	Blown-in Insulation	Attic; blown-in insulation		Lab Cor	
		Layer:	Description:		Analysis:
	Layer 1	fibrous material, white	No Asbestos Detected		
23562.002-0008	Wall and Ceiling Plaster	Second floor bedroom; wall plaster		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	paint, white		No Asbestos Detected
		Layer 2	fine compact powder, off-white		No Asbestos Detected
	Layer 3	coarse cementitious material, gray	No Asbestos Detected		

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>	
23562.002-0009	Duct Tape	Basement; tape on duct work		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	fibrous backing, gray		35% Chrysotile
		Layer 2	fibrous material, black	No Asbestos Detected	
23562.002-0010	Wall and Ceiling Plaster	Entryway; wall plaster		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	paint, white		No Asbestos Detected
		Layer 2	coarse cementitious material, gray	No Asbestos Detected	
23562.002-0011	Wall and Ceiling Plaster	Living room; wall plaster		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	fine compact powder, off-white		No Asbestos Detected
		Layer 2	coarse cementitious material, gray	No Asbestos Detected	
23562.002-0012	Composition Shingles	Garage roof; shingled roofing		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
23562.002-0013	Composition Shingles	West roof; shingled roofing		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
23562.002-0014	Composition Shingles	East roof; shingled roofing		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
23562.002-0015	Mortar	West exterior; brick mortar		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	fibrous tar backing, black	No Asbestos Detected	
23562.002-0016	Caulk	South living room window; exterior, gray caulking compound		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	rubbery material, white with paint, gray		No Asbestos Detected
23562.002-0017	Mortar	Garage; brick mortar		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	coarse cementitious material, gray	No Asbestos Detected	

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>	
23562.002-0018	Mastic	Garage; carpet mastic		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	mastic, yellow with powder, off-white		No Asbestos Detected
		Layer 2	coarse cementitious material, dark gray	No Asbestos Detected	
23562.002-0019	Gypsum Wallboard/Joint Compound	Garage; white gypsum wallboard with joint compound		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	fine compact powder, white		No Asbestos Detected
		Layer 2	compact chalky material with paper, off-white	No Asbestos Detected	
23562.002-0020	Sink Undercoating	Kitchen sink; sink undercoating		Lab Cor	
		Layer:	Description:		Analysis:
		Layer 1	soft compact material, black	2% Chrysotile	

LEAD SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB23562.002-1001	Paint	11,600 ppm	Second floor; bedroom, wall, plaster, white, poor condition	R.J. Lee Group
LB23562.002-1002	Paint	101 ppm	Basement; wall, concrete, green, poor condition	R.J. Lee Group



Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Report Number: 142288R01
Report Date: 09/24/2014

Job Number: 142288

P.O. No: n/a

Project Name:

Project Number: 23562.002 Phase 0001

Project Notes:

Client Sample ID: 23562.002-0001	Sample ID: S1				Date Analyzed: 09/24/2014	Analyst: Stephanie Golden
Client Sample Description:						
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
vinyl sheet with foam, white	55 %	-	-	-	NAD	
Layer 02						
compressed wood fibers, brown	45 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	8 %	-	-	92 %
Layer 02	-	100 %	-	-	-	0 %

Client Sample ID: 23562.002-0002	Sample ID: S2				Date Analyzed: 09/24/2014	Analyst: Stephanie Golden
Client Sample Description:						
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic, dark brown	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	2 %	-	-	-	98 %

Client Sample ID: 23562.002-0003	Sample ID: S3				Date Analyzed: 09/24/2014	Analyst: Stephanie Golden
Client Sample Description:						
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
fibrous backing, black	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	65 %	-	-	-	35 %

Client Sample ID: 23562.002-0004	Sample ID: S4				Date Analyzed: 09/24/2014	Analyst: Stephanie Golden
Client Sample Description:						
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
vinyl sheet, off-white	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %



Job Number: 142288

Report Number: 142288R01

Report Date: 09/24/2014

Client Sample ID: 23562.002-0005	Sample ID: S5	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Layer 01			Percent Asbestos:
vinyl tile, gray	35 %	Trace	-
			< 1 %
Layer 02			
fine compact powder, off-white	65 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
Layer 01	-	-	-
Layer 02	-	4 %	-
			Matrix
			100 %
			96 %

Client Sample ID: 23562.002-0006	Sample ID: S6	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Layer 01			Percent Asbestos:
vinyl sheet, yellow	8 %	-	-
			NAD
Layer 02			
fibrous backing, black with coating, red	92 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
Layer 01	-	-	-
Layer 02	-	65 %	-
			Matrix
			100 %
			35 %

Client Sample ID: 23562.002-0007	Sample ID: S7	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Homogeneous			Percent Asbestos:
fibrous material, white	100 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
	-	-	100 %
			Matrix
			0 %

Client Sample ID: 23562.002-0008	Sample ID: S8	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite
			Crocidolite
Layer 01			Percent Asbestos:
paint, white	7 %	-	-
			NAD
Layer 02			
fine compact powder, off-white	2 %	-	-
			NAD
Layer 03			
coarse cementitious material, gray	91 %	-	-
			NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool
			Synthetic
			Other
Layer 01	-	-	-
Layer 02	-	-	-
Layer 03	-	1 %	-
			Matrix
			100 %
			100 %
			99 %

Job Number: 142288

Report Number: 142288R01

Report Date: 09/24/2014

Client Sample ID: 23562.002-0009		Sample ID: S9			Date Analyzed: 09/24/2014	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01						
fibrous backing, gray		90 %	35 %	-	-	35 %
Layer 02						
fibrous material, black		10 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
Layer 01		-	30 %	-	-	-
Layer 02		-	20 %	-	-	-
				Animal hair	80 %	-
						Matrix
						35 %
						0 %

Client Sample ID: 23562.002-0010		Sample ID: S10			Date Analyzed: 09/24/2014	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01						
paint, white		5 %	-	-	-	NAD
Layer 02						
coarse cementitious material, gray		95 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
Layer 01		-	-	-	-	-
Layer 02		-	3 %	-	-	-
						Matrix
						100 %
						97 %

Client Sample ID: 23562.002-0011		Sample ID: S11			Date Analyzed: 09/24/2014	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01						
fine compact powder, off-white		55 %	-	-	-	NAD
Layer 02						
coarse cementitious material, gray		45 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
Layer 01		-	-	-	-	-
Layer 02		-	-	-	-	-
						Matrix
						100 %
						100 %

Client Sample ID: 23562.002-0012		Sample ID: S12			Date Analyzed: 09/24/2014	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous						
rocky fibrous tar, black		100 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
Layer 01		12 %	-	-	-	-
						Matrix
						88 %

Job Number: 142288

Report Number: 142288R01

Report Date: 09/24/2014

Client Sample ID: 23562.002-0013	Sample ID: S13	Date Analyzed: 09/24/2014	Percent Asbestos:
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		
Homogeneous			
rocky fibrous tar, black	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 90 %
	10 % - - - - -		

Client Sample ID: 23562.002-0014	Sample ID: S14	Date Analyzed: 09/24/2014	Percent Asbestos:
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		
Homogeneous			
rocky fibrous tar, black	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 94 %
	6 % - - - - -		

Client Sample ID: 23562.002-0015	Sample ID: S15	Date Analyzed: 09/24/2014	Percent Asbestos:
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		
Homogeneous			
fibrous tar backing, black	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 15 %
	- 85 % - - - - -		

Client Sample ID: 23562.002-0016	Sample ID: S16	Date Analyzed: 09/24/2014	Percent Asbestos:
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		
Homogeneous			
rubbery material, white with paint, gray	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 100 %
	- - - - -		

Client Sample ID: 23562.002-0017	Sample ID: S17	Date Analyzed: 09/24/2014	Percent Asbestos:
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		
Homogeneous			
coarse cementitious material, gray	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 100 %
	- - - - -		

Job Number: 142288

Report Number: 142288R01

Report Date: 09/24/2014

Client Sample ID: 23562.002-0018	Sample ID: S18	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01			
mastic, yellow with powder, off-white	5 % - - -		NAD
Layer 02			
coarse cementitious material, dark gray	95 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
Layer 01	- - - - -	-	100 %
Layer 02	- - - - -	-	100 %

Client Sample ID: 23562.002-0019	Sample ID: S19	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01			
fine compact powder, white	40 % - - -		NAD
Layer 02			
compact chalky material with paper, off-white	60 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
Layer 01	- - - - -	-	100 %
Layer 02	- 4 % - - -	-	96 %

Client Sample ID: 23562.002-0020	Sample ID: S20	Date Analyzed: 09/24/2014	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
soft compact material, black	100 % 2 % - -		2 %
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- - - - -	-	98 %



Job Number: 142288

Report Number: 142288R01

Report Date: 09/24/2014

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected.
Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.
Asbestos detection interferences may result from material binders.

Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.

The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.

This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:


X Digital Signature for Lab Use Only

Stephanie Golden

Technical Manager





142288 1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 23562.002 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

RECEIVER

Date Sent: September 22, 2014

Date Received: 9/22/14 3.10

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Handwritten signature: Harmony Kelly
Name: H. Kelly
Date: 9/22/14
Authorized Signature

Handwritten signature: Alex Johnson
Name: Alex Johnson
Date: 9/22/14
Authorized Signature

Sender's ID No.

Brief Description

Receiver's ID No.

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No. Rows 23562.002-0001 to 23562.002-0014.



142288
3/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

23562.002-0015	_____	_____
23562.002-0016	_____	_____
23562.002-0017	_____	_____
23562.002-0018	_____	_____
23562.002-0019	_____	_____
23562.002-0020	_____	_____

Please analyze the enclosed 20 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: 48 Hour

SPECIAL INSTRUCTIONS:



LABORATORY REPORT

 PBS Environmental - Portland, OR
 4412 Southwest Corbett Ave.
 Portland, OR 97239

 Attn: Harmony Kilby
 Phone: 503-248-1939
 Fax: 866-727-0140
 Email: harmony.kilby@pbsenv.com

 RJ Lee Group Job No.: PA230920140005
 Samples Received: September 23, 2014
 Report Date: September 25, 2014
 Client Project: 23562.002 Phase 0001
 Purchase Order No.: N/A
 Matrix: Solid
 Prep/Analysis: EPA 3050B / EPA 7420

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
LB23562.002-1001	PA230920140005-001	NP	Lead	1.16	11600	0.00839	83.9	09/25/2014	—
LB23562.002-1002	PA230920140005-002	NP	Lead	0.0101	101	0.00864	86.4	09/25/2014	—

Comments:
Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
C : CA ELAP Accredited (CA ELAP Certificate 1970)

— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part of any of the above scopes of accreditations

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

This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to <http://www.rjlg.com/about-us/accreditations/> for more information and current status. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided



 Philip Grindle
 Laboratory Supervisor

PA230920140005

D



Engineering + Environmental

TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 23562.002 Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: September 22, 2014

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Harmony Kelly
Name
Authorized Signature
Date 9/22

RECEIVER

Date Received: 09/23/14

Company: R.J. Lee Group
Address: 350 Hochberg Road
Monroeville, PA 15146
724-325-1776

T. Hall
Name
Authorized Signature
Date 09.23.14

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No.
Rows: LB23562.002-1001, LB23562.002-1002

ANALYSIS REQUESTED:
LEAD:
Paint (checked)
Wipe
Soil/Misc.
Air
TCLP

Please analyze the enclosed 2 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:
48 Hour

SPECIAL INSTRUCTIONS:
(IA)

THIS IS TO CERTIFY THAT

IMAD ABOUZAKI

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 01/10/2014

Course Location: Portland, OR

Certificate: IR-14-0425A



**Engineering +
Environmental**

Expiration Date 01/10/2015

AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

For verification of the authenticity of this certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

A handwritten signature in cursive script that reads "David Stover".

David Stover, Director of Training