INVITATION FOR BIDS



FOR CONSTRUCTING

BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

CONTRACT NUMBER

ISSUED BY

CAPITAL PROJECTS ENGINEERING DIVISION CITY OF SANTA ROSA, CALIFORNIA

2019

Last Updated: March 1, 2016

A T T E N T I O N Prebid Conference See Page 1



STATE OF CALIFORNIA

INVITATION FOR BIDS

CONTAINING:

NOTICE TO BIDDERS

SPECIAL PROVISIONS

BID FORMS

CONTRACT

FOR

BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

Contract No. C02162

BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

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CITY OF SANTA ROSA STATE OF CALIFORNIA

NOTICE TO BIDDERS

A	For technical questions regarding this project, contact Grant Bailey at (707) 543-4508.
$\mathbf{\lambda}$	For direct access to plans, specifications and planholders' lists, go to www.srcity.org/bids and click on Bid/Proposal Opportunities or call (707) 543-3800.
~	For direct access to bid results, go to <u>www.srcity.org/bids</u> . Under Link to Capital Projects, click on <u>Capital Projects Contracts</u> or call (707) 543-3835.

- IMPORTANT -

Bid Acceptance Deadline

Sealed bids will be accepted at the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California 95401 <u>until</u> 2:00 p.m., June 6, 2019, for Building Demolition – Various City Locations, Contract No. C02162. (Engineer's Range: \$525,000 - \$575,000.)

Bids tendered after this deadline will not be accepted. The official time clock for accepting bids will be an electric date and time stamping clock, located in the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California. In order to be accepted, bids must be received <u>prior to</u> 2:00 p.m. Therefore, a bid stamped in at 1:59 p.m. will be accepted, but one delivered at or after 2:00 p.m. is late and <u>will not be accepted</u>.

Mandatory Pre-Bid Meeting

Prospective bidders are required to attend a mandatory pre-bid meeting scheduled to be held at 11:30 a.m., May 30, 2019, in the Transportation and Public Works Department located at 69 Stony Circle, Santa Rosa, California. Bids will not be accepted from any bidder who has not participated in the mandatory pre-bid meeting.

Subcontractor Information; Department of Industrial Relations Registration

Bidders shall provide the names, business addresses and license numbers of all subcontractors listed on bidder's List of Subcontractors. No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

CITY OF SANTA ROSA ESTIMATED QUANTITIES BUILDING DEMOLITION - VARIOUS CITY LOCATIONS

Item No.	Description	Quantity	Units
1	TRAFFIC CONTROL	1	LS
2	WATER POLLUTION CONTROL	1	LS
3	CHAIN LINK FENCE	70	LF
4	TYPE K TEMPORARY RAILING	70	LF
5	2810 FOURTH ST DEMOLITION	1	LS
6	952 SONOMA AVE DEMOLITION	1	LS
7	7630 & 7650 LAKEVILLE HWY DEMOLITION	1	LS
8	1595 MEADOW LN DEMOLITION	1	LS
9	4090 WALKER AVE DEMOLITION	1	LS
10	4099 WALKER AVE DEMOLITION	1	LS
11	1027 MCMINN AVE DEMOLITION	1	LS
12	1370 & 1372 BURBANK AVE DEMOLITION	1	LS
13	1400 BURBANK AVE DEMOLITION	1	LS
14	DOYLE PARK DEMOLITION	1	LS
15	HOWARTH PARK DEMOLITION	1	LS
16	JULLIARD PARK DEMOLITION	1	LS
17	ABANDON SEPTIC SYSTEM	1	EA

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the City of Santa Rosa does not expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, as may be deemed necessary or expedient by the Engineer.

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the Director of the DIR pursuant to Labor Code sections 1770 *et seq.*

Contractor shall be responsible for compliance with the Immigration Reform Control Act of 1986.

If the project requires the employment of workers in any apprenticeable craft or trade, once awarded, Contractor and subcontractors must apply to the Joint Apprenticeship Council unless already covered by local apprentice standards (see Labor Code section 1777.5).

All bids are to be compared on the basis of the Engineer's estimate of the quantities of work to be performed. No bid will be awarded to a contractor who is not licensed in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code. Contractor must hold a Class C-21 license for this project.

Project plans, bid and contract forms for C02162 Building Demolition – Various City Locations may be obtained through PlanetBids at <u>www.srcity.org/bids</u>. These documents can no longer be obtained at the Transportation and Public Works Department.

No bid will be accepted unless it is made on the contract bid forms furnished by the Transportation and Public Works Department through PlanetBids. The original of the completed bid forms bearing original signatures must be submitted. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at <u>www.srcity.org/bids</u>, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

The successful bidder will be required to hold a current City of Santa Rosa business tax certificate issued pursuant to Chapter 6.04 of the Santa Rosa City Code before commencing work on this project. For information regarding the business tax, contact Revenue and Collections at (707) 543-3170.

For any moneys earned by Contractor and withheld by the City of Santa Rosa to ensure the performance of the Contract, Contractor may, at its request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Section 22300 of the California Public Contract Code.

The City of Santa Rosa reserves the right to reject any or all bids and the right to waive minor irregularities of informalities in any bid or bonds.

ERICH RAUBER Supervising Engineer

5/23/19

Date

SPECIAL PROVISIONS

General Specifications

CITY OF SANTA ROSA, CALIFORNIA

BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

1 GENERAL

The work described herein shall be done in accordance with the "Contract Documents," which are the:

- 1. Special Provisions
- 2. City of Santa Rosa Design and Construction Standards (City Standards)
- 3. City of Santa Rosa Construction Specifications for Public improvements (City Specifications)
- 4. State of California Department of Transportation Standard Specifications 2010 (Standard Specifications), and
- 5. State of California Department of Transportation Standard Plans 2010 (Standard Plans).

In the event of a conflict in any of these documents, the order of precedence shall be determined by Section 5-1.02 of these Special Provisions.

Whenever the Standard Specifications use the terms State of California, Department of Transportation, Director, Engineer, or Laboratory, the following terms shall be substituted therefor, and any reference to any of the foregoing terms shall be understood and interpreted to mean and refer to such substituted terms as follows:

For State of California - the City of Santa Rosa;

For Department - the City of Santa Rosa Department of Transportation and Public Works or the City of Santa Rosa Water Department;

For Director - the City Engineer of the City of Santa Rosa;

For Engineer - the City Engineer of the City of Santa Rosa or the City Engineer's authorized agents;

For Laboratory – Materials Engineering of the City of Santa Rosa Water Department, or such other laboratory as may be authorized by the City.

Unless otherwise provided, whenever in these Special Provisions attention is directed to specific provisions in the Standard Specifications, such direction shall not be interpreted as excluding other applicable provisions of the Standard Specifications.

Unless otherwise provided, when sections and subsections of the Standard Specifications are used in these Special Provisions, such use is not exclusive and shall not be interpreted as excluding other applicable provisions of said sections and subsections, but is only intended to add to or modify such sections or subsections.

Unless otherwise provided, full compensation for compliance with these Special Provisions is included in the contract price and no additional allowance will be made to Contractor therefor.

The Standard Specifications are hereby modified to delete any reference or incorporation of provisions providing for or requiring arbitration of any and all claims and disputes arising under this contract.

2 BIDDING

2-1.06 Bid Documents: Prospective bidders will be furnished with an Invitation for Bids which will state the location and description of the contemplated public works project and will show the approximate estimate of the various quantities and kinds of work to be performed and materials to be furnished with a schedule of items for which unit prices are requested.

<u>2-1.07 Approximate Estimate</u>: The quantities given in the Contract Documents are approximate only, being given as a basis for the comparison of bids, and the City does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or part of the work or to omit parts of the work, as may be deemed necessary or advisable by the Engineer.

2-1.31 Examination of Project Plans, Specifications, City Standards, Invitation for Bids and Work Site: Prior to submitting a bid, the bidder shall carefully examine the Project Plans, Invitation for Bids, City Standards and the proposed work site. If any person contemplating submitting a bid for this public works project is in doubt as to the meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the Contract Documents, he or she may submit a <u>written</u> request for interpretation or correction to the Engineer. <u>The written request must be received by the</u> <u>Engineer a minimum of **96** hours prior to bid opening</u>. Any interpretation or correction of the Contract Documents prior to bid opening will be made only by written addendum issued by the City. Notification of addenda will be handled through PlanetBids: the listed primary contact will receive an e-mail generated by PlanetBids informing them of a recently uploaded addendum. The City will not be bound by any other explanations or interpretations of the Contract Documents.

<u>2-1.33 Bid Document Completion</u>: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

<u>2-1.33A Bid Forms</u>: All bids shall be made on bid forms obtained from PlanetBids at <u>www.srcity.org/bids</u>. The bidder shall submit its bid on the original bid forms furnished by the City. Bids submitted on forms other than the forms furnished to the bidder by the City will not be considered.

The bid forms to be submitted at the time of and with the bid are:

- 1. Unit Price Schedule
- 2. List of Subcontractors
- 3. List of Previous Similar Jobs
- 4. Noncollusion Declaration
- 5. Bid Guaranty Information and Bidder's Information and Signature
- 6. Bid Guaranty (Bid Bond or alternate security)

All bids shall give the proposed prices and must bear the original signature of the bidder. Bidders shall fill in all blanks on the bid forms where required. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at <u>www.srcity.org/bids</u>, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

<u>2-1.33B Registration with DIR</u>: No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this

public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

<u>2-1.33C Subcontractors</u>: The Subletting and Subcontracting Fair Practices Act, Public Contract Code sections 4100-4113, inclusive (the "Act") shall apply to all subcontracts in excess of one-half of one percent of the total amount of a bid. The Act requires subcontractors, if used for such work, to be listed in the contractor's bid and prohibits the substitution of subcontractors, except as authorized by the Act. Each bidder shall, with respect to the work of any subcontractor in excess of one-half of one percent of the total amount of the bid, include as part of the bid on the bid form provided:

- 1. The name, business address and DIR registration number of each subcontractor who will perform work or labor or render services to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Project Plans or other Contract Documents in an amount in excess of one-half of one percent of the Contractor's total bid; and
- 2. The portion of the work that will be done by each subcontractor. Only one subcontractor shall be listed for each portion.

The purchase of sand, gravel, crushed rock, batched concrete, aggregate, ready-mixed concrete, and/or any other materials produced and furnished by established and recognized commercial plants, together with the delivery of such materials to the work site by the source of the materials or by recognized commercial hauling companies, is not considered as subcontracting under this section.

<u>2-1.33E Rejection of Bids Containing Alterations, Erasures or Irregularities</u>: Bids may be rejected if they show any alterations of forms, additions not called for, conditional bids, incomplete bids, erasures or irregularities of any kind.

<u>2-1.34 Bid Guaranty</u>: All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's or certified check, or by a bidder's bond made payable to the City of Santa Rosa and executed as surety by a corporate surety authorized and admitted to transact a surety business in the State of California in an amount equal to ten percent of the amount of the bid. No bid shall be considered unless such cash, cashiers or certified check, or bidder's bond is enclosed with the bid. Any bidder's bond shall contain provisions for forfeiture consistent with California Public Contract Code section 20172.

2-1.40 Withdrawal of Bid: A bid may be withdrawn prior to, but not after, the hour fixed in the public notice for the opening of bids, provided that a written request to withdraw the bid, executed by the bidder or the bidder's authorized representative, is filed with the Engineer before this deadline. The withdrawal of a bid shall not prejudice the right of a bidder to submit a new bid.

<u>2-1.43 Public Opening of Bids</u>: Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

<u>2-1.46 Disgualification of Bidders</u>: Serial bids from the same bidder will not be accepted. This section shall not be interpreted to mean that the same contractor may not be the contractor in one bid and listed as a subcontractor in another bid, provided that no collusion exists.

<u>2-1.48 Competency of Bidders</u>: No bid will be accepted from or contract awarded to a contractor that is not licensed in accordance with the law, that does not hold a license qualifying it to perform work under this contract, to whom a bid form has not been issued by the Engineer, or that has not

successfully completed projects of similar character, scope and cost to the proposed project. Bidders will be required to provide a list of previous similar jobs with their bids.

3 CONTRACT AWARD AND EXECUTION

<u>3-1.04 Contract Award</u>: The City reserves the right to reject any or all bids. Bids are required for the entire work described herein. All bids will be compared with the Engineer's estimate of the quantities of work to be completed. Contract award, if any, will be made to the lowest responsible bidder within sixty days from the date bids are opened.

<u>3-1.05 Contract Bonds</u>: The successful bidder will NOT be required to furnish a performance bond or material guaranty bond for this project. In the event that the contract award exceeds \$25,000.00, the successful bidder will be required to provide a payment bond for labor and materials within ten days after receipt of the Notice of Award in accordance with California Civil Code section 9550, executed in a sum of 100% of the Contract price. <u>A BID BOND IS</u> **REQUIRED. REFER TO SECTION 2-1.34 OF THESE SPECIAL PROVISIONS.**

Within ten days after receipt of the Notice of Award, the successful bidder shall provide the following bonds to the City:

- a. <u>Performance Bond</u>: A performance bond to guarantee the faithful performance of the terms and conditions of the Contract by Contractor, which shall be executed in a sum of not less than one-half of the Contract price;
- b. <u>Labor and Materials Bond</u>: A labor and materials bond (payment bond) in accordance with Part 6 of Division 4, sections 8000 *et seq*. of the California Civil Code, to guarantee against any and all claims of subcontractors or other third parties furnishing labor, materials, or supplies for the Contract, which shall be executed in a sum of 100% of the Contract price; and
- c. <u>Material Guaranty Bond</u>: A material guaranty bond (warranty bond) to serve as surety for the guarantee requirements outlined in Section 6-3.01B, which shall be executed in a sum of not less than one-half of the Contract price.

The bond(s) shall be provided in a form acceptable to the City and issued by a corporate surety in good financial standing and authorized and admitted to transact a surety business in the state of California for the purposes and in the amount(s) stated above.

Whenever the financial or legal status of any surety on any such bond(s) is/are unacceptable to the City, it may make a demand to Contractor for further bond(s) or additional surety, not exceeding the sums originally required. Thereafter, no payment shall be made upon the Contract to Contractor or any assignees of Contractor until such bond(s) or additional surety has/have been provided to the City.

3-1.07 Indemnification and Insurance: Indemnification: Contractor shall defend, hold harmless and indemnify City, its officers, agents and employees, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death; damage to personal, real or intellectual property or the environment; contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with the performance of or the failure to perform the Contract by Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not such Liabilities are caused in part by a party indemnified hereunder, or such Liabilities are

litigated, settled or reduced to judgment; provided, that the foregoing indemnity does not apply to liability for any damage or expense for death or bodily injury to persons or damage to property to the extent arising from (i) the sole negligence, or willful misconduct of, or defects in design furnished by City, its agents, servants, or independent contractors who are directly responsible to City (excluding Contractor), or (ii) the active negligence of City.

The existence of any of the insurance policies or coverages described in this Contract shall not affect or limit any of City's rights hereunder, nor shall the limits of such insurance limit Contractor's liability to the City hereunder. The provisions of this section shall survive any expiration or termination of the Contract.

Insurance: Contractor shall maintain in full force and effect all of the insurance coverage described in and in accordance with the insurance requirements set forth below. Maintenance of such insurance coverage during the entire performance of the Contract is a material element of the Contract. Failure by Contractor to (i) maintain or renew coverage, (ii) provide notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, if necessary, may be deemed a material breach of the Contract by Contractor, whereas the City shall be entitled to all rights and remedies at law or in equity. Notwithstanding the foregoing, any failure by Contractor to maintain required insurance coverage shall not excuse or alleviate Contractor from any of its other duties or obligations under the Contract. In the event Contractor retains or utilizes any subcontractors or sub-consultants in performance of the work, Contractor shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverage requirements herein set forth below.

Insurance Requirements:

A. Insurance Policies: Contractor shall maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with an AM Best rating of no less than A-:VI or a rating otherwise acceptable to the City.

	Insurance	Minimum Coverage Limits	Additional Coverage Requirements
1.	Commercial general liability	\$5 million per occurrence \$5 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include products liability and completed operations coverage which shall continue for a period of three years after acceptance of the work by the City. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. Coverage may be met by a combination of primary and umbrella or excess insurance but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Completed Operations Coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 37 04 13. See endorsements below for other Additional Insured Requirements. Coverage shall not exclude subsidence.
2.	Business auto coverage	\$3 million	Coverage at least as broad as ISO Form Number CA 00 01 covering any auto (Code 1). Insurance shall cover owned, non-owned and hired autos.

- 3. Workers' \$1 million As required by the State of California, with Statutory Limits and Employer's compensation Liability Insurance with limit of no less than \$1 million per and Employer's Liability accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by Contractor, its employees, agents and subcontractors. 4. Contractor's \$1 million per If the work involves lead-based paint or asbestos
- pollution legal occurrence or identification/remediation, the pollution liability liability and/or policy must not contain lead-based paint or claim asbestos legal asbestos exclusions. If the work involves mold \$2 million liability and/or identification, the pollution liability policy must not aggregate errors and contain a mold exclusion and a definition of "Pollution" in said policy shall include microbial omission matter including mold.
- 5. Course of Amount of construction/ completed builders' risk value of project without co-insurance provisions

Required for construction projects over \$3 million. The City shall be named as loss payee.

B. Endorsements:

- 1. All policies shall provide or be endorsed to provide that coverage shall not be canceled by either party, except after prior written notice has been provided to the City in accordance with the policy provisions.
- 2. Liability policies shall provide or be endorsed to provide the following:
 - a. For any claims related to this Contract, Contractor's insurance coverage shall be primary and any insurance or self-insurance maintained by City shall be in excess of Contractor's insurance and shall not contribute with it. Endorsements at least as broad as 20 01 04 13 or evidence of policy language will be required in non ISO CGL policies.
 - b. The City of Santa Rosa, its officers, agents and employees are to be covered as additional insureds on the CGL policy. Additional Insured Endorsements at least as broad as 20 10 04 13 or 20 38 04 13 are required.
- C. Verification of Coverage and Certificates of Insurance: Contractor shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Contract. The City reserves the right to require complete copies of all required policies and endorsements during the duration of the Contract and for a period of three years following City's acceptance of the work.

D. Other Insurance Provisions:

1. No policy required by this Contract shall prohibit Contractor from waiving any right of recovery prior to loss. Contractor hereby waives such right with regard to the

indemnitees.

- 2. All insurance coverage amounts provided by Contractor and available or applicable to this Contract are intended to apply to the full extent of the policies. Nothing contained in this Contract limits the application of such insurance coverage. Coverage for an additional insured shall NOT be limited to the insured's vicarious liability. Defense costs must be paid in addition to coverage amounts.
- 3. Self-insured retentions above \$10,000 must be approved by the City. At the City's option, Contractor may be required to provide financial guarantees.
- 4. City reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

<u>3-1.18 Contract Execution</u>: The fully executed Contract, original bonds and insurance certificates and endorsements required under the Contract shall be delivered to the City <u>within ten calendar days of Contractor's receipt of the Notice of Award.</u>

The Engineer will supply Contractor with up to ten sets of the Invitation for Bids and Project Plans. At least one complete set of the Invitation for Bids and Project Plans shall be kept at the construction site in good condition and made available to the Engineer at all times. Additional copies of the Invitation for Bids and Project Plans will be provided by the Engineer at Contractor's cost.

<u>3-1.20 Failure to Execute Contract</u>: Contractor's failure to deliver to the City the fully executed Contract within ten calendar days of Contractor's receipt of the Notice of Award shall be cause for the cancellation of the award and the forfeiture of the bid guaranty to the City. If the successful bidder refuses or fails to execute the Contract, the City may award the Contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the Contract to the third lowest responsible bidder. The refusal or failure by the second or third lowest responsible bidder to deliver to the City the fully executed Contract within ten calendar days of receipt of the Notice of Award to the respective bidder shall likewise be cause for the cancellation of the award and the forfeiture of the bid guaranty of the respective bidder. In its discretion, the City may then re-advertise the project or construct it by day labor.

<u>3-1.21 Return of Bid Guarantees</u>: Within ten days after the opening of bids, the City will return the bid guarantees to all bidders except the three lowest responsible bidders. The bid guarantees of the three lowest responsible bidders will be retained until the Contract has been fully executed. In the event all bids are rejected, all bid guarantees will be returned to the respective bidders.

<u>3-1.22 Subcontractors</u>: The successful bidder shall furnish a list of all subcontractors as required under Sections 2-1.33C. The list shall include the name, business address, DIR registration number and the state contractor's license number of each subcontractor on the list and the names of the responsible managing employees whose names appear on the subcontractors' licenses.

4 SCOPE OF WORK

<u>4-1.05 Changes and Extra Work</u>: All changes to the Contract shall be made by written change order only.

All extra work shall be recorded by Contractor on a daily report signed by both the City and Contractor. The "daily reports" shall thereafter be considered the true record of extra work performed. A copy of the daily reports will be furnished to Contractor. Contractor is directed to Section 9-1.04 of this Invitation for Bids.

<u>4-1.05C</u> Compensation for Altered Quantities: Payment and compensation for altered quantities shall conform to the provisions of Section 9-1.06 of the Standard Specifications, except as modified herein.

5 CONTROL OF WORK

<u>5-1.02 Contractor's Copies of Contract Documents</u>: In the event of a conflict in any of the Contract Documents, the order of precedence from highest to lowest shall be as follows:

- 1. Special Provisions
- 2. City Standards
- 3. City Specifications
- 4. Standard Specifications
- 5. Standard Plans

<u>5-1.05 Order of Work</u>: The work as shown on the Project Plans and as specified in the Invitation for Bids shall be constructed in a sequence that is satisfactory to and approved by the Engineer.

Contractor shall prepare a work schedule per Section 8-1.02 of the Standard Specifications.

With the exception of trenching, all existing street, street light base, curb and gutter, storm drain, water line, and sewer line work shall be completed before any existing street paving is removed.

Full compensation for the conformance to the requirements of this section is included in the Contract price and no additional allowance will be made to Contractor for this work.

<u>5-1.17 Character of Workers</u>: Contractor is directed to Section 5-1.17 of the Standard Specifications which states:

"If any subcontractor or person employed by the Contractor shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the request of the Engineer, and such person shall not again be employed on the work."

No additional compensation shall be granted to Contractor in the event City exercises any part of its rights under this section and any and all costs related to such exercise shall be borne by Contractor.

<u>5-1.20 Cooperation with Other Entities</u>: Attention is directed to Section 5-1.20 of the Standard Specifications.

Other construction including but not limited to utility, power, and pipe line relocation, may be in progress by other forces within and adjacent to the project area at the same time work is being performed under this Contract by Contractor.

Contractor shall cooperate with the forces performing other work, to the end that such forces may conduct their operations with as little inconvenience and delay as possible. Contractor shall grant such forces access to the project area as is reasonable and necessary to transport materials and equipment to the site of operations by the other forces.

<u>5-1.20B(4)(a)</u> Offsite Staging Areas and Construction Yards: Attention is directed to Santa Rosa City Code section 20-52.040, Temporary Use Permit.

A Temporary Use Permit shall be obtained for any offsite construction yard on private property to be used for any of the following:

- a. Stockpiling of equipment and/or materials;
- b. Staging of construction;

- c. Placement of work trailers or mobile offices;
- d. Storage of trench spoils; or
- e. Other construction related activities not specifically enumerated above.

<u>5-1.26 Lines and Grades</u>: Contractor shall carefully preserve all bench marks, grade stakes, and all other survey markers. In the case of willful or careless destruction, Contractor shall bear the cost of replacing the markers.

Contractor shall contact the Engineer directly for coordination of survey staking. Written staking requests must be submitted at least two working days in advance of the date and time stakes are needed.

5-1.27B Examination and Audit: Pursuant to California Government Code section 8546.7, any contract with the City involving expenditures in excess of \$10,000 shall be subject to the examination and audit of the California State Auditor for a period of three years after final payment is made to Contractor by City under this Contract. Any such examination and audit will be confined to those matters connected with the performance of this Contract.

5-1.30A Inspection: Contractor shall bear all costs associated with the re-inspection of any defective, rejected or unauthorized work as determined by the Engineer in Engineer's sole discretion. Such costs of re-inspection, including any costs incurred by the City for additional staff time or fees for third-party consultant inspectors, will be deducted from one or more progress payments hereunder.

<u>5-1.36A Property and Facility Preservation</u>: Attention is directed to Section 5-1.36 of the Standard Specifications.

At Contractor's sole expense, all fences, gates, landscaping, drainage ditches, sidewalks, irrigation systems, and any other improvements that are damaged, removed or destroyed because of Contractor's operations, shall be replaced in accordance with City Standards at a minimum and restored to the same or better condition. Concrete surface treatment and score marks shall match adjacent existing concrete improvements.

5-1.36E Obstructions: Attention is directed to Section 5-1.36 of the Standard Specifications and to the possible existence of underground gas mains, high voltage lines, telephone ducts, storm drains and water and sewers systems, the locations of which are not shown on the Project Plans. The determination of the location of these facilities and the cost of repair or replacement in the event of damage to such facilities are the sole responsibility of Contractor.

Should Contractor alter any public utility or private improvements to facilitate its operations or for its sole benefit, which alteration would not be otherwise required, Contractor shall make whatever arrangements are necessary with the owner or controlling authorities, and shall bear all expenses in connection therewith. Any damages to any public utility or private improvement caused by Contractor shall be repaired by Contractor at its sole expense and to the full satisfaction of the Engineer or the controlling authority.

Any subsurface information and data furnished under any part of this Contract are not intended as a representation or warranty but are furnished for information only. It is expressly understood that the City will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn therefrom by Contractor. The information is made available so that Contractor may have ready access to the same information available to the City and is not part of this Contract.

PRIOR TO STARTING ANY EXCAVATION, CONTRACTOR SHALL (AT LEAST TWO WORKING DAYS IN ADVANCE) CALL UNDERGROUND SERVICE ALERT (USA) toll free at (800) 227-2600 and provide USA with all necessary data relative to the proposed excavation. USA will accept calls

and process information to participating agencies who have underground facilities in the area between the hours of 7:30 a.m. and 5:00 p.m. daily, except Saturdays, Sundays, and holidays. Between the hours of 5:00 p.m. and 7:30 a.m., calls will be recorded and then processed after 7:30 a.m. For emergency situations, after hours, and on Saturdays, Sundays and holidays, Contractor shall contact the owner of the affected facility.

Contractor shall coordinate all work with the appropriate City field personnel. When City work forces are required at the job site to perform Contract items of work, Contractor shall give a minimum of two working days advanced notification to the appropriate field office:

Water Division:	(707) 543-4200
Sewer Division:	(707) 543-4200
Street Division:	(707) 543-3880
Survey Division:	(707) 543-3834

5-1.43 Potential Claims and Dispute Resolution: "Claim" means a separate demand by Contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following: (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the City under the Contract; (B) Payment by the City of money or damages arising from work done by, or on behalf of, Contractor pursuant to the Contract and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled; or (C) Payment of an amount that is disputed by the City.

Upon receipt of a Claim, the City shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed, provided, the parties may extend the 45 day time period by mutual agreement.

If the City needs approval from the City Council to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the Claim, and the Council does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim, the City shall have up to three days following the next duly publicly noticed meeting of the City Council after the 45-day period, or extension expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. If the City fails to issue a written statement, the Claim shall be deemed rejected in its entirety.

If a Contractor disputes the City's written response, or if the City fails to respond to a Claim within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the City shall conduct a meet and confer conference within 30 days for settlement of the dispute. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the Claim, as identified by Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

6 CONTROL OF MATERIALS

<u>6-2.01 Source of Supply and Quality of Materials</u>: All materials required to complete the work under the Contract shall be furnished by Contractor and shall be free of hazardous substances.

<u>6-3.01 General</u>: Statistical means will not be used by the City for determination of Standard Specification compliance. Whenever both operating range test results and Contract compliance requirements are specified in these special provisions, the operating range requirements shall apply to the individual test results.

<u>6-3.01A</u> Material Submittals: Upon award of the Contract by City, Contractor shall submit to the Engineer a list of all materials proposed to be used on this project and any supporting documentation and/or samples required and source of supply.

For material listed on the "Engineer's List of Approved Items" which is located in the Sewer and Water sections only of the City Standards, the Engineer shall be provided with the name of the manufacturer and model/part number for all material proposed for this project, unless that item has been replaced as shown on the Project Plans or in the Invitation for Bids.

For all other materials used on this project, regardless of the type of work, Contractor shall provide to the Engineer the name of the manufacturer and model/part number along with supporting documentation and/or samples that will allow the Engineer to determine the material's acceptability.

The Engineer reserves the right to reject any proposed material, whether on the City's "Engineer's List of Approved Items" or not. If the City obtains information indicating that a listed item is not performing satisfactorily or is found to be defective, that item will be rejected and Contractor shall submit a replacement for review at no additional cost to the City.

6-3.01B Material Guarantee: Before any contract is awarded, the bidder may be required to furnish samples of materials and detailed descriptions of equipment to be used in the construction of the project. The materials samples may be subjected to the tests provided for in the Standard Specifications or in this Invitation for Bids to determine their quality and fitness for the project. The successful bidder shall unconditionally guarantee project materials and workmanship for a period of one year from the date of recording of the Notice of Completion. The guarantee shall cover 100% of all costs of repairs within the one year period, including all costs of labor, materials, equipment, and incidentals. Except as may be otherwise provided in Section 3-1.05, the successful bidder shall provide a surety bond executed by a corporate surety authorized and admitted to transact a surety business in the state of California in the minimum amount of one-half of the Contract price to cover this guarantee.

<u>6-3.05 Quality Assurance</u>: California Test 216 (Relative Compaction) testing will be modified as follows: A mechanical compactor (Ploog Engineering Co. Model M 100 or equivalent) with 10-pound hammer and split compaction molds shall be used in lieu of the specified manual compaction equipment.

California Test 231 (Nuclear Gage Determination of In-Place Density) will be modified as follows: In-place density and relative compaction may be determined on the basis of individual test sites in lieu of the area concept, at the discretion of the Engineer.

6-4 Water Utility

<u>6-4.01A Construction Water</u>: All water required for the performance of the work shall be provided by Contractor. Prior to obtaining water from the City's water system, Contractor shall obtain a Water

Use Permit from the City of Santa Rosa Water Department and rent a hydrant or bridge meter. Contractor is responsible for the cost of all water and the cost of all deposits, permits and fees.

Contractor is prohibited from operating gate valves or fire hydrants on the City system.

The acquisition of water from the City's water system through un-metered hydrants or other facilities is a violation of City ordinance and State law. The use of water from sources other than the City's water system must be approved by the Engineer in advance of the use.

Citations and fines will be levied for violation of these and other utility regulations and deductions will be made from payments consistent with Section 7-1.02A(1) of the Standard Specifications.

<u>6-4.01B Water Utility Notification</u>: Contractors or parties requiring work of any kind by the City of Santa Rosa Water Department forces shall request such services a minimum of 48 hours in advance of the time such services are desired. Work requests which will involve the City of Santa Rosa Water Department forces for more than eight hours or an extensive number of City parts shall be requested a minimum of seven calendar days in advance.

If it is necessary to terminate or disrupt utility service to any customer, Contractor shall make the request for such work by City forces an <u>additional</u> 72 hours (three additional working days for a total of five working days advance notice) in advance of the time such services are desired to allow affected customers a minimum of 72 hours' notice. Contractors who fail to keep field appointments will be billed for scheduled City of Santa Rosa Water Department crew standby time which was used and the Contractor shall bear the costs incurred by the City of Santa Rosa's Water Department for re-notification of customers.

City of Santa Rosa Water Department crews work a 9/80 schedule. This schedule may prohibit shutdowns for tie-ins on alternating Fridays. After hours work or weekend work may be performed if prior authorization from the Engineer is obtained.

Other than the hours specified in this Invitation for Bids, requests by Contractor for after hours or weekend work is to be avoided whenever possible. Any overtime costs incurred by City for such work shall be borne by Contractor.

Interruption of utilities service to commercial customers shall be coordinated with the customer to minimize disruption to the enterprise to the greatest extent practicable. After notification by the Contractor of the need, the City of Santa Rosa Water Department will contact all commercial customers and inform Contractor accordingly.

<u>6-4.01C Water Facility Damage</u>: All damage caused to the City's water system shall be immediately reported to the Engineer.

Damage caused to the City's water system by Contractor's operations shall be repaired by the Contractor at <u>Contractor's sole expense</u> in a manner satisfactory to the City of Santa Rosa Water Department. Such repairs shall <u>not</u> be charged to the City or any City project. All repair work shall be witnessed and approved by the City of Santa Rosa Water Department <u>prior to</u> backfilling the excavation. The City will require re-excavation if backfilling occurs prior to inspection, which costs shall be borne by Contractor.

Contractor is responsible for, at its sole cost and expense, the repair and remediation of damage to property and facilities caused by any of the following circumstances:

a. Contractor fails to make a written request for a markout or begins excavation without providing the City of Santa Rosa Water Department a reasonable opportunity to mark facilities;

- b. Contractor destroys markouts;
- c. Contractor fails to perform hand digging or probing for utilities near markouts; or
- d. Contractor fails to use reasonable caution, regardless of whether markouts are present or clear. Reasonable caution includes any efforts to avoid damaging existing facilities, such as when excavating in the vicinity of water mains.

City may, in its discretion, opt to make the repairs for which Contractor is responsible with its own forces. In such cases, the repairs will be made at Contractor's expense in accordance with the emergency repair rate schedule of the City of Santa Rosa Water Department. The City may make repairs whenever restoration of service requires extraordinary speed or special equipment. Contractor will be billed accordingly and City shall have the right and option to withhold payment hereunder, or a portion thereof, for any such costs billed but not promptly paid by Contractor.

<u>6-4.02</u> Salvage: All valves, hydrants, and other appurtenances of the water system that are the property of City and removed by Contractor shall be delivered to the City's Municipal Services Center (55 Stony Point Road) unless Contractor has obtained specific written approval from the City of Santa Rosa Water Department to otherwise dispose of the materials.

6-4.03 Trade Names and Alternatives: Unless otherwise specified, material and equipment specifications that identify a particular patent, trade name or manufacturer, may be satisfied through substitute materials and equipment accepted by the City. Contractor may offer substitute materials and equipment of equal or better quality y to the City. Any such offer shall be made in writing to the Engineer at least four weeks in advance of the time Contractor wishes to order the materials or equipment. Contractor shall include sufficient data which, together with any other information the Engineer may require, will enable the Engineer to determine the acceptability of the materials and equipment. When the substitute materials or equipment necessitate changes to any part of the work, the information shall include drawings and details showing all such changes and Contractor shall perform these changes as a part of any acceptance of substitute materials or equipment. The use of substituted materials and equipment will be permitted only after written acceptance of the materials and equipment by the Engineer. Such acceptance shall not relieve the Contractor from full responsibility for the sufficiency, quality and performance of the substitute materials and equipment.

The City will not, under any circumstances, acknowledge or consider any offers to accept substitute materials or equipment between the dates of public notice of advertisement and the bid opening.

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.02A(1) Forfeitures for Health and Safety Violations: Contractor shall comply with all applicable provisions of the Santa Rosa City Code and any failure to do so shall constitute a breach of the Contract. In the event of any violation of the Santa Rosa City Code that may impact public health and safety, including, but not limited to Chapter 17-12, "Storm Water" and Chapter 13-04, "Street Encroachments," City shall have the right to impose a charge against Contractor in an amount equal to \$500.00 per violation per day. Prior to the imposition of any charge hereunder, City shall first provide a written notice to Contractor of the violation and setting forth a reasonable period of time for Contractor to cure the violation(s). In the event Contractor fails to cure any such violation within the time provided, City shall have the right, in addition to all other rights and remedies available to City, to deduct and withhold as a permanent forfeiture by Contractor the appropriate amounts from any payment otherwise due Contractor under this Contract.

<u>7-1.02K(2) Wages</u>: Pursuant to Labor Code sections 1770 *et seq.*, each laborer or mechanic of Contractor or any subcontractor engaged in work on the project under this contract shall be paid not less than the hourly wage rate of per diem wages set forth in the prevailing wage rate schedule published by the Director of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor and such laborers and mechanics. A copy of the schedule of prevailing wage rates can be obtained online at <u>www.dir.ca.gov</u> or from the Department of Transportation and Public Works at 69 Stony Circle, Santa Rosa.

Any laborer or mechanic employed to perform work on the public works project under this Contract, which work is not covered by any of the foregoing classifications, shall be paid not less than the prevailing wage rate of per diem wages specified herein for the classification which most nearly corresponds to the work to be performed by the worker.

The foregoing specified prevailing wage rates are minimum rates only, and Contractor may pay any wage rate in excess of the applicable rate.

Pursuant to Labor Code Section 1775, Contractor as a penalty to the owner shall forfeit not more than \$200.00 for each calendar day, or a portion thereof, for each worker paid less than the prevailing wage rate established by the Department of Industrial Relations for such work or craft in which such worker is employed. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.

Contractor shall only provide prevailing wage reports upon written request from City.

7-1.02K(4) Apprentices: Contractor agrees to comply with Chapter 1, Part 7, Division 2, sections 1777.5 *et seq.* of the California Labor Code. These sections require contractors and subcontractors to employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice work for each five hours of journeyman work (unless an exception is granted in accordance with Section 1777.5), and the contractors and subcontractors shall not discriminate among otherwise qualified employees as apprentices solely on the ground of sex, race, religion, creed, national origin, ancestry, or color. Only apprentices as defined in Labor Code section 3077, who are in training under apprenticeship standards and who have written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

<u>7-1.02K(6)(a)(1)</u> Notice to Vendors: Attention is directed to the current OSHA Standards. All equipment, tools and materials which are furnished and/or installed as part of this Contract shall meet or exceed the aforementioned standards in order to be considered acceptable.

<u>7-1.02K(6)(b) Excavation Safety</u>: When the digging or excavation occurs during project construction, Contractor shall:

- a. Promptly notify City in writing of the following conditions before any such conditions are disturbed:
 - Material that the Contractor believes may be hazardous waste as defined in Health and Safety Code section 25117 that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law;
 - 2. Subsurface or latent physical conditions at the site differing from those indicated in the Invitation for Bids; and
 - 3. Physical conditions at the site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in the type of work under the Contract.
- b. The City will investigate the conditions and will issue a change order under the terms of the Contract if it finds that the conditions warrant it.
- c. If a dispute arises between City and Contractor as to whether a change order is warranted, Contractor shall not be excused from any scheduled completion date provided for in the Contract, but shall proceed with all work to be performed under the Contract.

7-1.02K(6)(b)(1) Trench Excavation Safety Plans: When the estimated cost for the excavation of any trench or trenches five feet or more in depth will exceed \$25,000.00, Contractor shall submit to the Engineer in advance of excavation a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the construction safety orders, or if the trench is anticipated to be greater than 20 feet, the plan shall be prepared by a registered civil or structural engineer.

A permit to do the above described work shall be obtained from the State of California, Division of Industrial Safety. Proof of such permit shall be submitted to the Engineer prior to starting the trench work.

Full compensation for complying with the provisions of this section shall be considered as included in the Contract price and no additional allowance will be made for the work.

7-1.02K(6)(d) Confined Space Safety: Any confined space entry for this project, including but not limited to manhole or water storage tank entry, will require a confined space entry permit pursuant to Cal/OSHA regulations as set forth in title 8 California Code of Regulations (CCR) sections 5157 or 5158. Confined space entry shall have the meaning ascribed in title 8 CCR sections 5157 and 5158. For any confined space entry for construction operations regulated by title 8 CCR section 1502, Contractor shall comply with title 8 CCR section 5158, "Other Confined Space Operations." For any other confined space operations, Contractor shall comply with title 8 CCR section 5157, "Permit-Required Confined Spaces."

Attention is directed to the technical specifications in the Special Provisions for information regarding entry to any City maintained confined space. Pursuant to title 8 CCR section 5157, Contractor is required to obtain any available information regarding hazards and operations for any City maintained confined spaces. The City maintained Confined Space Entry Manual is available

for viewing at the City of Santa Rosa Water Department or Transportation and Public Works Department office at 69 Stony Circle, Santa Rosa.

Contractor shall immediately inform the Engineer of any previously unidentified hazards confronted or created during confined space entry.

7-1.02L(2)(a) Patents and Royalties: All fees, royalties, or claims for any patented invention, article, process or method that may be used upon or in any manner connected with the work under this Contract shall be paid by Contractor. Contractor and its sureties shall protect and hold harmless City and its officers, agents, and employees from any and all demands made for such fees royalties or claims brought or made by any third party, and before the final payment is made on the account of the Contract, Contractor shall, if requested by City, furnish acceptable proof of a proper release from all such claims and liabilities.

Should Contractor, its officers, agents, or employees, or any one of them be enjoined from furnishing or using any invention, article, material, or plans supplied or required to be supplied or used under the Contract, Contractor shall promptly substitute other articles, materials, or appliances in lieu thereof of equal efficiency, quality, finish, suitability, and market value, and satisfactory in all respects to the Engineer. In the event that the Engineer elects, in lieu of such substitution, to have supplied and to retain and use any such invention, article, materials, or plans as may be required to be supplied by the Contract, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for City, its officers, agents, and employees, or any one of them to use such invention, article, materials, or appliance without being disturbed or in any way interfered with by any proceeding in law of equity on account thereof. Should Contractor neglect or refuse to make the substitution promptly or to pay such royalties and secure such licenses as may be necessary, then in that event the Engineer shall have the right to make such substitutions or City may pay such royalties and secure such licenses and be necessary.

<u>7-1.02M(3)</u> Mined Materials: California Public Contract Code section 20676 prohibits surface mining operators which are subject to the Surface Mining and Reclamation Act of 1975 (SMARA) from selling California mined construction material to the City unless the operator is identified in a list referred as the **3098 List**. The List, which is maintained by the Department of Conservation's Office of Mine Reclamation (OMR), changes throughout the year and can be viewed at the OMR website: <u>http://www.consrv.ca.gov/OMR/ab 3098 list/index.htm</u>. To confirm whether or not a specific operator is on the List at any given time, Contractor shall call the OMR at (916)323-9198.

<u>7-1.03A Maintaining Traffic</u>: Attention is directed to Sections 7-1.04 of the Standard Specifications and to the following modifications thereof.

If construction is within City owned right-of-way, provisions shall be made for the safe passage of public traffic through the work site at all times consistent with the requirements of Santa Rosa City Code Chapter 13-04.

Except for projects to be performed under a minor contract, Contractor shall install and maintain project identification signs at each end of the project or as directed by the Engineer two weeks prior to any construction activity. City shall furnish the appropriate sign panels upon request from Contractor. To mount the sign panels, Contractor shall furnish and install 4" X 4" posts or mount by other appropriate methods as approved by the Engineer. These sign panels shall be returned to the City Corporation Yard at 55 Stony Point Road after completion of the project.

Two weeks prior to any construction activity, advance notice signs for road closures shall be furnished and installed by Contractor at each end of the project and shall remain in place throughout the duration of the subject closure. Details of panel construction and lettering shall be approved by the Engineer.

Contractor shall furnish, install, and maintain at its expense all barricades, signs, lights, and other devices necessary to adequately warn of any obstructions to the traveled and pedestrian way and provide flaggers as necessary for the safety of public traffic and pedestrians and to provide access to property adjacent to the work site and Contractor shall comply with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, *et seq.*) (ADA) and any regulations and guidelines issued pursuant to the ADA.

Contractor shall comply with the current edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) for all items related to traffic within the work site.

Rain and other occurrences that may cause the suspension or delay of the work shall in no way relieve Contractor of its responsibility to provide traffic control and public access through the work site as specified herein. At all times, Contractor shall keep at the work site such materials, forces and equipment as may be necessary to keep roads, streets, and driveways within the work site open to traffic and in good repair and shall expedite the passage of such traffic, using such forces and equipment as may be necessary.

Should Contractor fail, in the opinion of the Engineer, to provide all the materials, forces and equipment necessary to maintain traffic through the work site as set forth herein, City may take steps necessary to remedy any such failure, including but not limited to causing such work to be performed and/or suspending any further work under the Contract. Any such remedial cost and expense incurred by the City, plus an administrative charge of 15%, shall be immediately due and payable by Contractor and may be deducted from any amounts owed to Contractor hereunder. In the event there are insufficient sums owed to Contractor hereunder to cover the foregoing costs and charges, City shall have the right to pursue any other remedy to recover the same, including but not limited to, proceeding against any surety or bond in favor of City. City's rights under Section 7-1.02 are intended to be in addition to and not in lieu of any charges imposed by City against Contractor under Section 7-1.02A(1) above for violations of the Santa Rosa City Code.

Contractor shall be responsible for informing emergency response agencies operating within the area of the work of obstructions to either public or private roads caused by reason of Contractor's operations hereunder.

Contractor shall make provisions for the safe passage of pedestrians around the project work site at all times.

8 PROSECUTION AND PROGRESS

<u>8-1.01A</u> Assignments: Once awarded, this Contract shall not be transferred, assigned, or subcontracted, except as herein expressly provided without the prior written consent of the City in the City's sole and absolute discretion. See Section 5-1.12 of the Standard Specifications.

<u>8-1.04B</u> Standard Start: Contractor shall begin work within ten calendar days after the date authorized in the Notice to Proceed and shall diligently prosecute the Contract to completion before the expiration of:

50 WORKING DAYS

<u>8-1.05 Time</u>: Working days will be counted beginning with the day the Contractor begins work or with the tenth day after the date authorized in the Notice to Proceed, whichever occurs first.

Unless otherwise directed by Engineer, Contractor shall not conduct any activities that generate noise earlier than 7:00 a.m. or later than 7:00 p.m.

<u>8-1.10 Liquidated Damages</u>: Contractor hereby agrees that Contractor shall pay to the City liquidated damages for each and every calendar day delay over and above the number of working days prescribed above for finishing the work in the amount shown in Section 8-1.10 of the Standard Specifications.

9 MEASUREMENT AND PAYMENT

<u>9-1.04 Force Account Work</u>: All work done on a force account basis shall be recorded daily on report sheets prepared by Contractor and signed by both the Engineer and Contractor. Such reports shall thereafter be considered the true record of force account work performed during the project. Such reports shall be furnished to the Engineer and a copy retained by Contractor.

All extensions of labor, equipment, and material costs shall be completed by Contractor and submitted to the Engineer within 30 days of the completion of the extra work. Completed and extended extra work reports received later than the times herein prescribed may be deemed invalid and rejected without payment at the discretion of the Engineer.

<u>9-1.07 Payment Adjustments For Price Index Fluctuations</u>: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

9-1.16 Progress Payments: Once each month for progress pay purposes, the City will prepare a written estimate of the total amount of completed work and accepted materials purchased by Contractor but not installed. The City shall retain five percent of such estimated value of the completed work and the unused materials and pay Contractor the balance after deducting all previous payments and all sums to be retained under the provisions of the Contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract or when, in the Engineer's judgment, the total value of the completed work since the last estimate is less than \$500.00. No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

After Contract acceptance, the Engineer will prepare a written proposed final estimate of the proposed final quantities of work completed under the Contract and the value of such work and will submit such estimate to Contractor. The City shall retain five percent of such estimated value of the work done and shall pay to Contractor the balance after deducting all amounts to be retained under the provisions of the Contract.

The City may, at its option and at any time, retain out of any amounts due Contractor sums sufficient to cover any unpaid claims of City or others, provided that sworn statements of all non-City claims shall have been filed with the Director of Finance.

9-1.16E(6) Substitution of Securities for Withheld Amounts: Pursuant to Public Contract Code section 22300, securities may be substituted for any moneys withheld by City to ensure performance under this Contract, provided that substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmer's Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 USC sections 1921 *et seq.*), and where federal regulations or policies or both do not allow the substitution of securities. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank as the escrow agent, which shall then pay such moneys to Contractor. The Director of Finance is authorized to execute substitution of securities agreements on behalf of the City. The City will return the securities to Contractor upon satisfactory completion of the Contract as determined by City in its sole discretion and the resolution of all outstanding claims against the securities. Contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Securities eligible for investment under this section shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit or any other security mutually agreed to by Contractor and the City, provided that the substituted security is equal to or not less than five percent of the Contract amount.

Security substitutions must be submitted by Contractor and approved by City prior to the time of the first progress payment to be made under the Contract. No other method of substituting securities for retention will be accepted. The security substitution shall be done only upon execution of an agreement satisfactory to City which includes the following provisions:

- a. The amount of securities to be deposited;
- b. The terms and conditions of conversion to cash in case of the default of Contractor; and
- c. The procedure for return of securities upon completion of the Contract.

<u>9-1.17D Final Payment and Claims</u>: The processing of payment of the final estimate shall not be commenced less than 35 days after the date of recording of the Notice of Completion with the County Recorder's Office. Contractor is advised that it takes approximately ten days for a check to be issued following a request for payment.

Contractor shall submit its written statement of all claims for additional compensation under the Contract to the Engineer within 15 days after submission to Contractor of the proposed final estimate.

If Contractor does not file a claim within the 15 day period, or upon Contractor's approval, the Engineer will issue a final written estimate and the City shall pay to Contractor the entire sum due after deducting all previous payments, if any, and all amounts to be retained under the provisions of the Contract.

If Contractor files a claim within the 15 day period, the Engineer will furnish a semi-final estimate and pay the amount due under the semi-final estimate within 30 days. The semi-final estimate is conclusive as to the amount payable except as may be affected by claims and any amount retained. The Engineer shall then consider and investigate such claim, and shall make such revision in the final quantities as the Engineer may find to be due, and shall then make and issue a final written estimate. The City will pay the amount due, after deducting all previous payments, if any, and amounts to be retained under the provisions of the Contract.

Any and all prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The final estimate shall be conclusive and binding against both parties to the Contract on all questions relating to the performance of the Contract and the amount of work done thereunder and compensation therefor, except in the case of gross error.

9-1.17D(3) Final Determination of Claims: Claims filed by Contractor shall be in sufficient detail to enable the Engineer to determine the basis and amount of the Claims. Contractor shall also furnish reasonable documentation to the City to support Claims. If additional information is required by the Engineer, Contractor shall provide such information to the Engineer no later than the 15th day after receipt of the written request from the Engineer. If the 15th day falls on a weekend, holiday, or day City offices are closed, then the information shall be provided to the Engineer no later than close of the next business day. Failure to submit the requested information to the Engineer within the time specified will be sufficient cause for denying the Claim.

Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated Claim

investigator or auditor shall have access to those records and any other records as may be reasonably required by the Engineer to determine the facts or contentions in each Claim. Failure to grant access to such records shall be sufficient cause for denying the Claims.

<u>9-1.22 Arbitration</u>: Any references to Arbitration in the Standard Specifications are deleted in their entirety.

Claims submitted by Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code sections 12650 *et seq.*, the undersigned,

(Name)

____ of

(Title)

(Contractor)

hereby certifies that the claim for additional compensation made herein is supported by a true statement of the actual costs incurred and time expended on this project, and is fully documented by records maintained by Contractor.

Dated _____

/s/_____

Subscribed and sworn before me this _____ day of

Notary Public

My Commission Expires _____

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead expenses, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the City at its discretion.

Any costs or expenses incurred by the City in reviewing or auditing any claims that are not supported by Contractor's cost accounting or other records shall be deemed to be damages incurred by the City within the meaning of the California False Claims Act.



TECHNICAL SPECIFICATIONS

FOR

BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

CONTRACT NO. C02162



2019

12 TEMPORARY TRAFFIC CONTROL

12-1 General

<u>12-1.01 General</u>: Construction area traffic control devices shall be installed and maintained in accordance with the applicable sections of these Special Provisions, the Standard Specifications, the current Edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD), the Americans with Disabilities Act (ADA) and as directed by Engineer.

<u>12-1.03 Flagging Costs</u>: The first paragraph of Section 12-1.03, "Flagging Costs" is amended to read:

The cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic through the work under the provisions in Section 7-1.03, "Public Convenience", and Section 7-1.04, "Public Safety", shall be considered as included in the contract lump sum price paid for traffic control and no additional allowance will be made therefor.

12-3 Traffic-Handling Equipment and Devices

12-3.01 General: Prior to commencing construction which will affect existing vehicular and pedestrian traffic, Contractor shall submit for review by Engineer, Traffic Control Plans on 11" x 17" sheets of paper which contains only information specifically related to work zone vehicular and pedestrian traffic control. If the Contractor proposes to use the current edition of the CA MUTCD published by Caltrans in lieu of a traffic control plan, in specific work operations, they shall submit <u>in writing</u> for consideration which Typical Application Diagram will be used and how it will be applied for each work operation. Traffic Control Plans or proposals shall be submitted for review <u>at least</u> two weeks prior to implementation.

Traffic Control Plans shall contain a title block which contains Contractor's name, address, phone number, project superintendent's name, contract name, dates and hours traffic control will be in effect, and a space for review acknowledgment.

The content of the Traffic Control Plan shall include, but is not limited to, the following:

- 1. Show location and limits of the work zone.
- 2. Give dimensions of lanes affected by traffic control that will be open to traffic.
- 3. Indicate signing, cone placement, and other methods of delineation and reference to appropriate City or Caltrans Standards.
- 4. Dimension location of signs and cone tapers.
- 5. Identify side streets and driveways affected by construction and show how they will be handled.
- 6. Show how pedestrian traffic will be handled through the construction site. Pedestrian pathways through the work zone shall be in compliance with the requirements of ADA during and after work hours.
- 7. Demonstrate how two-way traffic will be maintained.

No work except for installation of project identification signs will be allowed to commence prior to approval of the Work Zone Traffic Control Plans.

12-4 Maintaining Traffic

12-4.01 Maintaining Traffic:

- 1. The full width of the traveled way shall be open for use by public traffic on Saturday, Sundays and designated legal holiday(s), after 4:00 p.m. on Fridays and the day preceding designated legal holidays, and when construction operations are not actively in progress; unless work has specifically been authorized by Engineer.
- 2. The location of traffic control signing, barricades, and other facilities shall be monitored frequently (four to five times per day) by the Contractor to verify their proper location. All traffic signal and other traffic control devices shall be maintained at all times.
- 3. Contractor shall conduct his operations so as to cause the minimum obstruction and inconvenience to traffic and to places of business, multiple dwelling units and residences adjacent to the work. Contractor shall notify Engineer of his planned work and utility service interruption at least five working days in advance to allow time to notify residents and businesses.
- 4. When construction activities will prevent vehicle access to individual driveways Contractor shall notify and receive permission from the affected businesses and residents. Attention is directed to Section 7-1.03, "Public Convenience". Full access shall be provided to all driveways during non-working hours.
- 5. At locations where traffic is routed perpendicular to trench excavation, the excavation shall be conducted in a manner to provide a surface reasonably satisfactory for traffic at all times. Substructure installation or construction shall be conducted on only one-half the width of the roadway at a time, and that portion of the roadway being used by traffic shall be kept open and unobstructed until the opposite side of the roadway is ready for use. Upon completion of the rough grading, the surface of the roadbed shall be brought to a smooth, even condition free from humps and depressions and made satisfactory for traffic.

<u>12-4.01A Construction Traffic:</u> Contractor shall submit a trucking route along with the traffic controls plans for approval by Engineer. The route must minimize traffic on residential streets that are not part of the project.

Existing pavement damaged by Contractor's operations and not shown to be replaced shall be replaced at Contractor's expense, per City Standards and to the satisfaction of Engineer.

<u>12-4.02 Closure Requirements:</u> Attention is directed to Section 7-1.03, "Public Convenience", to Section 5-1.05, "Order of Work," of these Special Provisions.

Exact locations of Project Identification signs and Advance Notice signs (7-1.03, "Public Convenience") shall be determined in the field by Engineer.

Lane closures will be permitted between the hours of 8:30 a.m. and 4:00 p.m. only. Only one lane at a time may be closed and no lanes shall be closed at any other hours unless specifically approved by Engineer. Contractor shall maintain vehicle access to homes and other properties at all times while work is in progress. At no time shall any lanes of vehicular or pedestrian traffic be closed on Farmers Ln.

Contractor shall not park construction vehicles, contractor employee vehicles, stage materials or stockpiles in front of any business or residential driveway access and Contractor shall maintain access to private parking lots within the block where work is in progress. Construction vehicles shall not be left running for any length of time if parked in front of a business or residential unit.

Contractor shall notify Sonoma County Transit at (707) 585-7516, Superintendent of Golden Gate Transit at (415) 257-4442, Santa Rosa City Bus at (707) 543-3922, Sonoma County Airport Express at (707) 837-8700, the local Postal Service at (707) 526-0113 and Recology at 1-(800) 243-0291 <u>5 calendar days</u> prior to <u>any lane</u> closures or restrictions in turning movements.

At no time shall Contractor store equipment, vehicles or debris bins in the street or blocking a pedestrian walkway. All equipment, vehicles and debris bins must remain within the property boundaries.

Where necessary, and only after receiving written approval from Engineer, Contractor may temporarily suspend curb side parking in their immediate work zone. Notification to businesses and residents shall be hand delivered at least 72 hours prior to construction in the affected areas.

Notification shall be as follows:

- A notice placed on the front door of each home or business where curb side parking will be suspended and attempt made to notify each business or resident verbally that work will be underway within the block and that curb side parking will be suspended during stated working hours and request that vehicles be parked out of the roadway by 8:00 a.m. Service of notice shall not bar use of cars within the block, as individual plans change and emergencies arise.
- 2. Type 1 barricades every 50 feet adjacent to the curb where parking will be suspended with a notice posted on the barricade stating specific dates and times that curb side parking will be temporarily suspended. If work will not take place in the posted area, then Contractor shall remove "No Parking" notices.

Contractor shall maintain vehicle access to all homes and other properties.

Cross streets will require maintenance of at least one-half (1/2) width of each street for traffic purposes, unless a parallel route is approved by Engineer. Flagging will only be allowed between the hours of 8:30 am and 4:00 pm.

Barricades and flaggers shall be positioned to allow safe turns at intersections and curves.

12-7 Temporary Pedestrian Walkways

12-7.01 Pedestrian Traffic Control: Contractor is directed to Chapter 6D, Pedestrian and Worker Safety, in the CA MUTCD, the improvement plans and these Special Provisions.

Pedestrians shall be provided with a safe convenient and accessible path that, at a minimum, replicates the most desirable characteristics of the existing sidewalk, path or

footpath. At no point along the road shall the sidewalks on both sides of the road be closed at the same time.

Contractor shall construct and maintain temporary pedestrian pathways through the work zone, where required, that shall be in compliance with the requirements of the Americans with Disabilities Act (ADA), and the CA MUTCD.

Pedestrian routes shall not be impacted for the purposes of any non-construction activities such as parking of vehicles or equipment, or stock piling of materials. Pedestrians shall not be led into conflicts with work site vehicles, equipment or operations.

Pedestrian routes shall be open and accessible at the end of the work day unless an alternate ADA compliant route has been approved by Engineer.

12-9 Measurement and Payment

12-9.01 Payment: Traffic Control shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in **vehicular and pedestrian** traffic control, including but not limited to, providing, placing, maintaining, and removal of temporary paths and/or ramps, , project and public notification signs, flagging, excavation, compaction, furnishing, and placement of asphalt concrete and/or PCC, barricades, toerails, hand rails, complying with CA MUTCD Standards for Pedestrian Safety, coordination efforts and any other items necessary for vehicle and pedestrian traffic control not specifically enumerated in the plans or these specifications, and no additional allowance will be made therefor.

[Version: 08/16/18 CDA STD2010]

13 WATER POLLUTION CONTROL

13-1 General

<u>13-1.01A</u>: Water Pollution Control shall be performed in accordance with Section 13, Water Pollution Control, of the Standard Specifications and these technical specifications. In addition, construction activities shall comply with:

The current California Water Quality Control Board, North Coast Region Order No. National Pollutant Discharge Elimination System Municipal Storm Water Permit, commonly referred to as the "<u>Storm Water Permit</u>". A copy of the Storm Water Permit is available for review at the City of Santa Rosa Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, CA, and at <u>www.srcity.org/stormwaterpermit</u>.

The California Stormwater Quality Association Storm Water BMP Handbook for Construction (<u>CASQA Handbook</u>). BMPs shall be selected, installed and maintained in accordance with the latest edition. A copy of the handbook can be viewed at the City of Santa Rosa Department of Transportation and Public Works office at 69 Stony Circle or downloaded from CASQA, <u>http://www.casqa.org/</u>.

In this technical specification the CASQA Handbook BMP numbers are appended to the associated Standard Specification sections. If a conflict occurs the CASQA Handbook BMP's shall govern.

13-2 Water Pollution Control Program

<u>13-2.01B</u> Submittals: The program to control water pollution required to be submitted under this section of the Standard Specifications shall include a spill contingency plan that establishes clean-up procedures that will be followed in the event of a spill of potentially hazardous, toxic, or polluting materials.

<u>13-2.04 Payment:</u> The City Pays you to prepare **Water Pollution Control** Program as the **lump sum** price for **Water Pollution Control** and as follows:

13-3 Storm Water Pollution Prevention Plan

<u>13-3.01A Summary:</u> This project is exempt from the State Water Resources Control Board General NPDES Permit for the Discharge of Storm Water related to Construction Activities (Construction General Permit), and not required to have a Storm Water Pollution Prevention Plan (SWPPP), therefore Section 13-3, Storm Water Pollution Prevention Plan, of the Standard Specifications does not apply to this project.

13-4 Job Site Management

<u>13-4.03B: Spill Prevention and Control/CASQA Spill Prevention and Control (BMP WM-4):</u>

If a spill occurs at the construction site and contractor does not take immediate and adequate steps to contain and clean up the spill, especially if rain is threatening or if a discharge to a storm drain or creek could occur, the City shall have the right, in its sole

and absolute discretion, to clean up the spill using City forces or an independent contractor. The cost of any such cleanup, in addition to recovery of any penalty or fine imposed upon the City, plus an administrative charge of fifteen percent (15%) of the costs incurred by the City, shall be deducted from any amounts owed to Contractor hereunder.

In the event there are insufficient amounts owed to Contractor hereunder to cover the foregoing costs and charges, the City shall have the right to pursue any other remedy to recover same, including, but not limited to, proceeding against any surety or bond in favor of the City. The City's rights under this section are intended to be in addition to and not in lieu of any imposed by the City against Contractor for violations of City Code Chapter 17-12, "Storm Water".

13-4.03C(2): Material Storage/CASQA Material Delivery and Storage (BMP WM-1)

<u>13-4.03C(3): Stockpile Management/CASQA Stockpile Management (BMP WM-3):</u> Do not block storm water flows.

13-4.03D(1): Waste Management/CASQA Solid Waste Management (BMP WM-5): Contractor shall dispose of all trash, rubbish, and waste materials of any kind generated by contractor, subcontractor, or any company hired by Contractor on a <u>daily</u> basis.

13-4.03D(3): Concrete Waste/CASQA Concrete Waste Management (BMP WM-8): Ensure the containment of concrete washout areas and other washout areas that may contain pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

13-4.03D(4): Sanitary and Septic Waste/CASQA Sanitary and Septic Waste <u>Management (BMP WM-9):</u> Sanitation facilities must be maintained periodically by a licensed service to keep them in good working order and prevent overflows. Portable toilets are required to have secondary containment.

<u>13-4.03D(5): Liquid Waste:</u> Liquid waste includes water generated from excavation dewatering. Minimize transfer piping by locating containers near the excavation to be dewatered while protecting the containers from moving vehicles and equipment.

<u>13-4.03E(1): Water Control and Conservation/CASQA Water Conservation Practices</u> (BMP NS-1 and NS-2)

<u>13-4.03E(3): Vehicle and Equipment Cleaning/CASQA Vehicle and Equipment</u> Cleaning (BMP NS-8)

<u>13-4.03E(4): Vehicle and Equipment Fueling and Maintenance/CASQA Vehicle and Equipment Fueling (BMP NS-9), and CASQA Vehicle and Equipment Maintenance (BMP NS-10)</u>

13-4.03E(7): Paving, Sealing, Sawcutting, Grooving, and Grinding Activities: As listed in Part 9, sections 4 and 5 of the Storm Water Permit, the following additional BMPs shall be implemented for street paving, repaving, reconstruction, patching, digouts or resurfacing.

- 1. Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions;
- 2. Install BMPs at all susceptible storm drain inlets and manholes to prevent paving products and tack coat from entering;
- 3. Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses;
- 4. Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt;
- 5. Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly
- 6. Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled, or disposed of properly **13-4.03D(5)**;
- Collect solid waste by shoveling and vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled, or disposed of properly 13-4.03D(5);
- 8. Cover "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm **13-4.03C(3)**;
- 9. Cover loads with tarp before haul-off to a storage site, ensuring that trucks are not overloaded;
- 10. Minimize airborne dust by using water spray during grinding 14-9.03;
- 11. Protect stockpiles with a cover or sediment barriers during a rain event and;
- Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or watercourses 13-4.03C(1),

13-4.03F: Sweeping/CASQA Street Sweeping and Vacuuming (BMP SE-7)

<u>13-4.04 Payment:</u> Job Site Management shall be paid for at the contract lump sum price for Water Pollution Control.

13-6 Temporary Sediment Control

<u>13-6.03C: Temporary Drainage Inlet Protection/CASQA Storm Drain Inlet Protection</u> (BMP SE-10)

<u>13-6.04: Payment:</u> Temporary Sediment Control shall be paid for at the contract lump sum price for Water Pollution Control. Contractor pays all maintenance costs.

13-7 Temporary Tracking Control

<u>13-7.01A: Temporary Tracking Control/Stabilized Construction Entrance and Exit</u> (BMP TC-1), Entrance Outlet Tire Wash (BMP TC-3)

<u>13-7.03 Construction/CASQA Stabilized Construction Site Entrance / Exit (BMP TC-</u> <u>1)</u>

<u>13-7.04 Payment:</u> Temporary Tracking Control shall be paid for at the lump sum price for Water Pollution Control. Contractor pays all maintenance costs.

13-10 Temporary Linear Sediment Barrier

13-10 Temporary/CASQA Silt Fence and Sand Bag Barrier (BMP SE-1 and SE-8)

<u>13-10.04 Payment:</u> Temporary Linear Sediment Barriers shall be paid for at the lump sum price for Water Pollution Control. Contractor pays all maintenance costs.

[Revised: 12/15/16 CDA STD2010]

14 ENVIRONMENTAL STEWARDSHIP

14-9.03 Dust Control

<u>14-9.03A General</u>: Sweeping per section 14-9.03C shall also be performed to prevent and alleviate dust.

Sweeping, covering stockpiles, applying water, and/or dust palliative, to control dust caused by public traffic is not change order work.

<u>14-9.03C</u> Construction: All dust-producing work and unpaved construction sites shall require a minimum watering in the middle and ending of each workday. The frequency of watering shall increase if dust is airborne. Watering shall not produce runoff.

Contractor shall maintain dust control to the satisfaction of Engineer, 7 days a week, 24 hours per day.

At the end of each work day Contractor shall thoroughly sweep all streets in the work zone to minimize airborne dust.

At the end of each work week Contractor shall sweep all streets in the work zone with a commercial street sweeping truck equipped with a rear pick up broom.

At Engineer's discretion additional sweeping or watering may be required, including the use of a commercial street sweeping truck equipped with a rear pick up broom, at any time or place.

<u>14-9.03D Payment</u>: Full compensation for conforming to this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed.

<u>14-10.01 General</u>: Contractor shall dispose of all portland cement concrete and asphalt concrete, generated from removal or demolition activities on the project, at a recycler for these materials.

All other excess materials from the project shall become the property of Contractor and shall be disposed of by him, at his expense.

<u>14-10.02A(1)</u> Submittals: Submit a Solid Waste Disposal and Recycling Report prior to final acceptance of work performed under the Contract. Show the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project.

Submit a Solid Waste Disposal and Recycling Report prior to Contract acceptance. Show the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project.

<u>14-10.02D Payment</u>: Full compensation for material recycling as specified herein shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be allowed therefor.

[Revised: 01/08/18-CDA STD2010]

15 EXISTING FACILITIES

15-1.03A General: Existing facilities disturbed by construction shall conform to the applicable provisions of Section 5-1.36. All existing active utilities found to reside in excavated areas shall be supported in place with service maintained during construction. Contractor shall be responsible for any damage caused by their operations and any needed repairs shall be completed to Engineer's satisfaction.

Existing storm drains found to reside in excavated areas shall be supported, removed, or replaced at Contractor's option and at no additional cost to the City. Contractor shall be responsible for maintaining the existing line and grade of the storm drains. If Contractor elects to remove and replace, it shall be done per applicable City Standards and Specifications.

Existing utility trenches and/or structures that are in close proximity to proposed trenches shall be safeguarded in an appropriate manner from damage.

<u>15-1.04 Payment:</u> Full compensation for supporting, removal and disposal of existing utilities and their appurtenances is considered as included in the contract prices paid for various contract items of work and no additional allowance will be made therefor.

15-2.02N Asbestos Cement Pipe: Contractor is advised that asbestos cement pipe (ACP) will likely be encountered on the project and must be cut, handled, and disposed of according to the Contractor's State Licensing Law and all other applicable laws and regulations.

<u>15-2.020 Payment</u>: Full compensation for the cutting, removal and disposal of asbestos cement pipe shall be considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

<u>15-3.03 Construction</u>: All removed concrete shall become the property of Contractor and shall be immediately off-hauled. None of the removed concrete shall be dumped or stockpiled on the work site. Contractor shall dispose of all removed concrete at a recycler for this material. Burying of broken concrete within the limits of the project will not be allowed.

All concrete which is to be removed from sidewalk, curb, gutter, patio and driveway areas shall be removed to the nearest score mark or construction joint as directed by Engineer unless otherwise noted on Project Plans. The edge of existing concrete to remain shall be neat and free of defects. Saw cutting may be required to achieve this.

Reinforcing steel may be encountered in portions of concrete to be removed and no additional allowance will be made for the removal of such steel.

Irrigation facilities may be encountered during concrete removal and replacement. Contractor shall exercise care in this area and repair any damage done by their operations at no additional cost to the City. Landscaping and other surfaces or structures shall be restored to original condition at no additional cost to the City.

Where a honey bee hive is uncovered/exposed during hazardous material abatement or demolition, and it is not able to remain or be protected in place, Contractor is to notify a beekeeper from the Sonoma County "Swarm List" found here: https://sonomacounty.ca.gov/Agriculture-Weights-and-Measures/Agriculture-Division/Services/Apiary/. Bee removal service is to be expected to be free of charge. Contractor is responsible for coordination of the removal and appropriate time allowed for the removal. The City shall not be held responsible for any delays associated with bee removal. Currently the City has seen two possible hives in the structure at 2810 Fourth St.

<u>15-3.04 Payment</u>: Payment for saw cutting, removal and disposal of concrete sidewalk, curb and gutter, patio, and driveway areas shall be included in the contract prices paid for various contract items of work and no additional allowance will be made therefor.

Full compensation for repair of existing irrigation facilities damaged during any phase of the work shall be included in the prices paid for various contract items of work and no additional allowance will be made therefor.

Full compensation for noticing and coordinating work with the beekeepers shall be considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

<u>**15-7 Utility Clearances**</u>: All items noted in this Section shall take place prior to any other construction activities.

Pothole information provided on the Project Plans shall be for reference use only and shall not be considered as accurate information for any other areas within the project limits.

Contractor shall investigate, confirm and/or determine the exact locations of existing utilities, and verify clearances between existing and proposed utilities at crossings and/or known potential conflicts. Contractor shall determine elevations and alignments of existing utilities at connection points.

Contractor shall determine elevations and alignments of existing sewer laterals, at the back of sidewalk, if a new proposed sewer main is at a higher elevation than the existing sewer main.

Contractor shall provide all relevant information in writing to Engineer immediately upon discovery of any conflict. Any delay in notification to Engineer may delay direction and/or corrective action and a delay claim due to this reason shall not be considered by the City. Contractor shall not proceed with any work that is in conflict until direction is provided by Engineer and shall redirect crews to other contract work. All the information required to be obtained per this Section and any other information not noted but relative to the project shall be provided to Engineer on a set of Plans when the investigative effort is complete.

<u>15-7.01 Payment</u>: Full compensation for **Utility Clearances** is considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

15-8 Tree Root Pruning: All tree roots two inches and greater which are encountered during excavation must be pruned by hand. The root shall be cut cleanly with a saw to avoid splits. When digging within the drip line of trees, Contractor shall exercise extreme caution to avoid pulling on roots with excavation equipment. Hand dig around all roots greater than one inch in diameter. Contractor shall notify Engineer when encountering roots within the drip line of trees which are greater than one inch. If Engineer elects to get direction from an arborist Contractor shall redirect crews to other contract work after safeguarding the area.

<u>15-8.01 Payment</u>: Full compensation for removing and pruning tree roots, hand digging to avoid root damaging roots, and excavating cautiously with respect to tree roots is considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor.

[Revised: 01/08/18-CDA STD2010]

26 AGGREGATE BASE

<u>26-1.01 Aggregate Base</u>: Aggregate base shall be Class 2 conforming to and placed in accordance with the requirements of Section 26 of the City Specifications, with the following modifications and additional requirements.

Rolling shall commence immediately after spreading of the damp material and before the material has dried sufficiently to allow separation between the fine and coarse particles.

<u>26-1.02B Quality Requirements</u>: The minimum sand equivalent shall be 31 for any individual test.

<u>26-1.03D Compacting</u>: The surface of the finished aggregate base shall be firm and unyielding. Any visible movement vertically or horizontally of the aggregate base under the action of construction equipment or other maximum legal axle loads shall be considered as evidence that the aggregate base does not meet this requirement.

<u>26-1.04 Payment</u>: Full compensation for **Class 2 Aggregate Base** is considered as included in the prices paid for various contract items of work and no additional allowance will be made therefor. The work shall include furnishing all labor, materials, tools and equipment and doing all the work involved in furnishing and placing the base material as specified, including furnishing, hauling and applying water as specified and directed by Engineer.

[Version: 05/03/14 STD2010]

80 FENCES

80-1.01 Description: All fence shall be constructed in accordance with Section 80 of the Standard Specifications, these Special Provisions, and as directed by Engineer.

Fencing shall consist of steel mesh fabric and steel posts. Fence shall be constructed per Caltrans Standard Plan A85.

The fence shall be 6 feet high. Fences shall not be topped with barbed wire.

<u>80-1.03 Connections</u>: Existing fences shall be connected to the new fence. End posts with braces for direction of strain shall be placed at the junction with existing fences.

80-3.01 Materials: Fencing materials shall conform to applicable type of fence described in Section 80 of the Standard Specifications.

<u>80-3.03 Construction</u>: Fence construction shall be in accordance with Section 80-3.03 of the Standard Specifications, these Special Provisions, and as directed by Engineer.

80-3.04 Payment: Chain Link Fence shall be paid for at the contract price per linear foot, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all work involved in constructing chain link fence including furnishing and installing posts including end posts, chain link fence, and wire, clearing the line of the fence and disposing of the resulting material, excavating high points in the existing ground, excavating and backfilling holes, disposing of surplus excavated material, and furnishing and placing concrete footings and deadmen, and connecting new fences to existing fences, and no additional allowance will be made therefor.

[Updated: 10/3014CDA STD2010]

SECTION 83 RAILING AND BARRIERS

83-4.01 General: The work shall consist of the placement of Type K temporary railing behind the new chain link fence as shown on Exhibit 1, the Standard Specifications Section 12-3.08, the Standard Plans T3A & T3B, and as directed by Engineer. Railing installed as part of this contract shall be a permanent fixture that Contractor will not be required to remove.

<u>83-4.03 Payment</u>: Type K Temporary Railing will be paid for at the contract unit price per **linear foot**, which price shall include full compensation for furnishing all labor, materials, tools and equipment and incidentals, and for doing all the work involved in furnishing transporting and installing the type K temporary railing, as shown in Exhibit 1, and as directed by Engineer.

121 NOTIFICATION

121-1.01: Contractor <u>shall</u> notify Engineer of any work to be performed on any given work day either on the afternoon of the prior working day or before 8:30 a.m. on the given working day. Any work completed for which Engineer has not received prior notification of its scheduling MAY NOT BE ACCEPTED FOR PAYMENT.

<u>121-3.01 Payment</u>: Full compensation for conforming to the provisions of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

[Version: 10/13/14-CDA STD2010]

125 SPECIAL CONDITIONS FOR DEMOLITION AND SITE CLEARANCE

<u>125-1.01 Project or Demolition Area</u>: The project scope includes the demolition of existing structures, concrete; septic abandonment; and associated hazardous abatement work.

At the following locations Contractor shall demolish existing structures, concrete, disconnect water and sewer, and perform hazardous material abatement work:

2810 Fourth St, APN 181-200-009 952 Sonoma Ave, APN 009-211-086 Doyle Park, APN 009-231-004 Howarth Park, APN 013-191-014 Julliard Park, APN 010-212-001

At the following location Contractor shall demolish existing structures, concrete, abandon septic tank, and perform hazardous material abatement work:

7630 & 7650 Lakeville Hwy, APN 068-120-013 & 068-120-012

At the following locations Contractor shall demolish existing structures, disconnect water and sewer, and perform hazardous material abatement work:

1595 Meadow Ln, APN 134-231-024 4090 Walker Ave, APN 134-232-022 4099 Walker Ave, APN 134-232-021 1027 McMinn Ave, APN 125-252-004, 1370 & 1372 Burbank Ave, APN 125-252-003 1400 Burbank Ave, APN 125-331-001,

125-1.02 Release of Buildings: It is anticipated that all buildings will be released by a single Notice to Proceed to the Contractor. Approximate anticipated date for release is August 12, 2019. Failure of the City of Santa Rosa to release any buildings according to the schedule, however, shall not be grounds for any claim by Contractor for any extra compensation.

Upon receipt of Notice to Proceed, Contractor shall have control of the progress and sequence of the demolition of the building or buildings as released and removal and Clearance of Site, subject to all contract stipulations and covenants. Except as follows:

Contractor shall abate the hazards and demolish the following three locations first, in the order shown: 2810 4th St, 952 Sonoma Ave and Julliard Park then proceed with the other locations and contract items.

125-1.03 Responsibility of Contractor: Except as otherwise specifically stated in the contract documents and technical specifications, Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees, or other expenses incurred, and all other services and facilities of every nature whatsoever necessary for his performance of the contract within the specified time.

<u>125-1.04 Work by Others</u>: Contractor is responsible for coordination with the various utility companies and verification that utilities are disconnected. The following work will be done by the City of Santa Rosa at no expense to Contractor:

- 1. Disconnect existing gas services
- 2. Disconnect existing Cable TV facilities
- 3. Disconnect existing electrical services
- 4. Disconnect existing telephone services

125-1.05 Demolition Permits and Grading Permit: Contractor is advised that they will be required to obtain a Job Number (J number) from the Bay Area Air Quality Management District (BAAQMD). Contractor shall obtain a demolition permit and/or grading permit, if greater than 50 cubic yards of fill material are required, from the County of Sonoma where parcels are located outside of the City limits. Contractor shall obtain a permit for septic tank abandonment from the County of Sonoma Permit and Resource Management Department (PRMD), 2550 Ventura Avenue, Santa Rosa, CA 95403, before the commencement of any work. Cost of the permit shall be considered as included in the various items of work.

Contractor shall submit to the City **<u>before</u>** any work commences on site copies of the J number letter, the demolition, and septic system abandonment permits.

125-1.06 Scope of Work: The provisions for demolition and removal work included in these specifications shall apply to all work performed under this contract and shall include the demolition and removal of all the buildings shown on the attached drawing and all other structures, existing rubbish and debris from the site as detailed in these specifications.

No work shall take place on Saturdays, Sundays, or a legal State holiday.

The work of this Section shall be performed in a manner that maximizes salvage and recycling of materials and includes the dismantling and removal of the following materials: Concrete, brick, asphalt concrete, concrete unit masonry, dimensional lumber, land clearing wood, asphalt material, precast concrete panels, building components and fixtures, appliances, metal, and gypsum board. All materials dismantled and removed shall be separated, set aside, prepared for reuse, and stored or delivered to a designated collection point for reuse, remanufacture, or recycling to the maximum extent economically feasible. Material piles shall be removed from the site promptly and not remain on the site longer than 1 week.

Maintain an inventory of all removed materials and submit tracking forms and certifications for all removed materials indicating type, quantities, condition, destination, and end use.

For the following locations, Contractor shall construct and maintain temporary chain link fencing around each of the individual buildings being removed or abated. Contractor shall work within the fence line for the safety of the general public. The fencing must be secured if no activity is being done on the building.

The locations that shall follow the above requirement are:

2810 Fourth St 952 Sonoma Ave 1027 McMinn 1370 & 1372 Burbank Ave 1400 Burbank Ave Doyle Park Howarth Park Julliard Park

Demolished materials shall become Contractor's property and shall be removed from the site with further disposition at Contractor's option.

- A. Submittals Submit each item listed below according to the Conditions of the Contract unless otherwise indicated.
 - 1. Proposed dust-control measures.
 - 2. Proposed noise-control measures.
 - 3. Schedule of demolition activities indicating the following:
 - a. Detailed sequence of demolition and removal work, with starting and ending dates for each activity.
 - 4. Inventory of items to be removed and salvaged.
 - 5. Health and Safety Plan.
 - 6. Landfill records for record purposes indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.
 - 7. Receipts for tipping fees.
- B. Quality Assurance
 - 1. Regulatory Requirements: Comply with governing EPA notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Conform to TITLE 24 CBC code for demolition work, dust control, and products requiring electrical disconnection and reconnection.
 - Comply with applicable procedures, rules and regulations when hazardous or otherwise contaminated materials are encountered. Contractor's attention is directed to the "Hazardous Building Materials Survey" Report(s) for the project sites prepared by Ninyo & Moore, as referenced in Section 125-1.17, and located in these Special Provisions.
 - 3. Buildings to be demolished will be vacated and their use discontinued before start of work.
 - 4. City shall assume no responsibility for actual condition of buildings to be demolished. Conditions existing at time of inspection for bidding purpose will be maintained by City as far as practical.
 - 5. Asbestos: Contractor shall expect that asbestos and lead containing materials will be encountered in the course of this Contract.
 - 6. Sale of removed items or materials on-site will not be permitted.

Contractor shall note that three of the locations are within active City Parks and shall maintain a work area that is clean, safe, and secure and shall not complete work on the

dates listed below for the individual parks. The City shall not be held responsible for any delays or additional costs resulting from no work days listed below.

Doyle Park; October 11, 2019 Julliard Park May 17, 2019 June 6 & 7, 2019

For the following locations, Contractor shall submit for City approval, to Engineer two weeks prior to the work taking place a plan to scale showing the number of parking spaces and their location for the storage of equipment, vehicles and debris bins, and their locations while the work is actively taking place.

The locations for the above requirement are;

Doyle Park Howarth Park Julliard Park

Access to the sites of the work is available from adjacent public streets, shared driveways, or asphalt paths through parks.

Contractor shall <u>NOT drive or park vehicles or equipment or place any debris bins on any turf, landscaped area, or within the drip line of existing trees.</u> Contractor shall be responsible for all damage to asphalt paths due to vehicles, equipment and debris bins. Any and all damage to asphalt paths, turf, landscaping and irrigation systems, shall be repaired or replaced to the satisfaction of Engineer at no additional cost to the City.

Six of the locations are accessed through locked gates. For these locations Contractor shall supply their own lock and on the first day of work on the property, Engineer will open the gate and Contractor will add their lock to the chain of locks. Upon the completion of the work Contractor will coordinate with Engineer to remove lock. At the completion of the contract, any Contractor locks left shall be removed and disposed. The locations of the gates are:

7630 & 7650 Lakeville Hwy 1595 Meadow Dr 4090 Walker Ave 4099 Walker Ave 1370 & 1372 Burbank Ave 1400 Burbank Ave

It shall be Contractor's responsibility to gain access to all structures as needed. At the end of every work day Contractor shall re-secure sites to prevent access until completion of work and acceptance by the Engineer.

When accessing the project site located at 7630 & 7650 Lakeville Hwy, construction traffic shall not exceed a speed of 15 miles per hour on paved roads off Lakeville Hwy and shall travel at a speed that does not create dust on unpaved roads. Speed limits shall be strictly followed. Any driver found violating the above speed limits shall be discharged immediately on the request of Engineer, and the driver shall not again be employed on the work.

125-1.07 Utilities: All utilities within and across the project area and all utilities serving structures or facilities not under this contract but adjacent to the sites of the work shall be preserved and kept in operating condition during the progress of this contract. In addition, these utilities shall be left operable after completion of demolition and cleanup. Any damage to any utility due to the operation of Contractor shall be repaired or replaced to the requirements of the City of Santa Rosa.

As noted in these special provisions and on the enclosed exhibits, Contractor shall be responsible to disconnect the City water at the meter and abandon the service line into the structure, abandon existing wells and the service line to the structure, or preserve and protect the well.

As noted in these special provisions and on the enclosed exhibits the Contractor shall cap the sewer lateral at the property line or abandon the septic system.

Contractor shall notify Pacific Gas and Electric Company at 3965 Occidental Road, Santa Rosa, California ; AT&T California at 2125 Occidental Road, Santa Rosa, California; and Cablecom of California at 825 Chadbourne Road, Fairfield, California for removal of utilities under the jurisdiction of these agencies prior to beginning demolition work.

125-1.08 Demolition and Removal: The process of demolition, clearance, and removal by Contractor shall be performed and supervised using employees experienced with this kind of work. Contractor shall use care and proper precautions to insure the safety of workers, inspectors, and the public, and to insure no unreasonable disturbances to surrounding business, or residential establishments.

All existing foundations, steps, porches, concrete slabs, and other similar types of construction shall be completely removed except at the following locations, where foundations shall remain with as minimal ground disturbance as possible:

2810 Fourth St 1595 Meadow Dr 4090 Walker Ave 4099 Walker Ave 1027 McMinn Ave 1370 & 1372 Burbank Ave 1400 Burbank Ave

At the above locations where foundations and concrete are to remain, all objects protruding from the foundation or concrete shall be cut to make a smooth surface, level with surrounding grades.

Existing fencing and gates shall be removed as indicated on exhibits. Metal fence posts shall be removed in a manner that minimizes ground disturbance. Wooden fence posts shall be cut flush with the surrounding grade.

Where ground disturbance occurs, Contractor shall grade disturbed areas to assure proper drainage and the elimination of ponded areas. If required, Contractor shall import fill material to insure drainage of the finished lots. Fill material shall be placed in lifts not exceeding eight inches and compacted to a relative compaction of not less than 90 percent (Test Method No. Calif. 216 and 231).

Contractor shall demolish and remove all floors, paving, partitions, walls, columns, and column pedestals as required by these specifications. All exterior concrete and parking areas shall be removed (except as specified herein), and these areas shall then be backfilled and compacted to a relative compaction of not less than 90 percent (Test Method No. Calif. 216 and 231). Grading for drainage shall be as specified in Section 125-1.10.

Ground disturbance outside of paved and gravel surfaces is strictly prohibited at the following locations:

1595 Meadow Dr 4090 Walker Ave 4099 Walker Ave 1027 McMinn Ave 1370 & 1372 Burbank Ave 1400 Burbank Ave

At 2810 Fourth St, there is a basement area with two partitions each measuring approximately 16ft x 20ft x 8ft and 16ft x 20ft x 2ft. After all debris is removed from the basement area, to Engineers satisfaction, Contractor shall backfill the area with a Control Density Fill (CDF) per City Standard 215 page 6, with the exception that the compressive strength shall be from 75 psi to 100 psi. The CDF shall be placed in lifts no greater than 2 feet in thickness and there shall be a curing time of at least 20 hours between lifts. The final lift shall be sloped to drain to the parking lot.

Trees shall only be pruned with proper size cutting tools. At the following locations trees shall not be pruned without prior written permission from the City:

1027 McMinn 1370 & 1372 Burbank Ave 1400 Burbank Ave Doyle Park Howarth Park Julliard Park

Drain, purge or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials in a manner that complies with all local, state and federal guidelines.

Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt generated during demolition activities. Comply with governing environmental protection regulations. Do not create hazardous or objectionable conditions, such as ice, flooding, and pollution, when using water.

Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level.

Execute dismantling, salvage operations, and hazardous abatement in such manner as to minimize the risk of damage to the immediately adjacent environment.

Demolish buildings completely and remove all resulting debris from the site. Use methods required to complete work within limitations of governing regulations and as follows:

- 1. Locate demolition equipment throughout the building and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 2. Demolish concrete and masonry in small sections.
- 3. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
- 4. Break up and remove concrete slabs-on-grade.
- 5. In a safe manner consistent with OSHA requirements.

Promptly repair damages to adjacent facilities caused by demolition operations.

Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.

Separate and recycle waste materials to the greatest extent that is economically feasible.

Debris, waste, and removed materials, other than items to be salvaged, are Contractor's property for legal disposal off the site, as required by applicable Federal and State regulations. Continuously clean up and remove these items.

Clean adjacent buildings and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to conditions, existing before start of demolition.

Debris boxes and construction equipment will be located off all City and County roads.

At 2810 Fourth St, all hazardous abatement and or demolition operations shall stop immediately in the event any debris falls into creek area. Contractor shall retrieve the debris from the creek area and perform any necessary remediation activities, to the satisfaction of Engineer before hazardous abatement and or demolition operations resume.

125-1.10 Wells, Cesspools, and Underground Tanks: Contractor shall take all necessary measures to protect the public from any abandoned, cased, or dug wells. Any wells encountered must be protected against contamination in accordance with any rules, regulations, laws, or ordinances in existence at the time of the work.

The method of modification for protection against contamination or abandonment shall require written approval from Engineer.

Cesspools encountered shall be cleared out as directed by Engineer and then backfilled and compacted as specified in Section 125-1.08 with fill material suitable for future building foundations in compliance with the Uniform Building Code.

Underground tanks encountered shall be removed and disposed of off work site and the resulting pit shall be prepared and backfilled, as directed by Engineer and compacted as specified in Section 125-1.08.

Cesspools and septic tanks shall be immediately cleaned out, if necessary, and properly backfilled.

<u>125-1.11 Dust Nuisance</u>: Contractor, shall at all times during its operations, control movement of dust. Contractor shall have water available and used to lay dust wherever necessary and at Contractor's expense.

<u>125-1.12</u> Burning: The site of the work is within an air pollution control district. No burning of any kind will, therefore, be permitted.

125-1.13 Blasting: No use of explosives will be permitted.

125-1.14 Prevention of Accidents: The prevention of accidents shall be a prime consideration under the operations of this contract. Contractor is instructed to take due care to comply with all provisions of these specifications as to accident prevention. Contractor shall submit a Health and Safety plan for review by the City.

125-1.15 Protection of Existing Buildings Adjacent to the Site: Those structures adjacent to a building or a group of buildings which will be demolished must be carefully inspected by Contractor to ensure that they will in no way be damaged by the removal of the buildings proposed to be demolished. Roofing or walls of adjacent buildings shall be left in such a condition that there shall be no leakage attributable to the work of demolition of buildings under this contract.

125-1.16 Sidewalk and Street Repair: All sidewalks adjacent to the job site which are broken as a result of Contractor's operation and any damage to streets, curbs, or gutters shall be repaired in accordance with the Standard Specifications of the City of Santa Rosa.

125-1.17 Asbestos & Hazardous Materials: Contractor shall take all necessary measures to protect the public from any asbestos found at the demolition site. All asbestos and hazardous materials shall be removed and disposed of by Contractor in accordance with all local, state, and federal agencies rules, regulations, laws, or ordinances, in existence at the time of the work.

Contractors attention is directed to the following reports prepared by Ninyo & Moore in the appendix of these specifications:

- "Hazardous Building Materials Survey, Former Liquor Store Building, 2810 Fourth St, dated February 5, 2019"
- "Hazardous Building Materials Survey, Former Residence, 952 Sonoma Ave, dated February 7, 2019"
- "Hazardous Building Materials Survey, Lakeville Hwy Structures, 7630 &7650 Lakeville Hwy dated February 11, 2019"
- "Hazardous Building Materials Survey, Residence and associated Structures, 1595 Meadow Ln, dated February 14, 2019"

- "Hazardous Building Materials Survey, 4090 & 4099 Walker Ave, dated February 13, 2019"
- "Hazardous Building Materials Survey, 1370 & 1372 and 1400 Burbank Ave and 1027 McMinn Ave, Roseland Creek Community Park Area dated February 19, 2019"
- "Hazardous Building Materials Survey, Various Structures, Doyle Park, dated February 12, 2019"
- "Hazardous Building Materials Survey, Caretaker's House, Howarth Park, dated February 8, 2019"
- "Hazardous Building Materials Survey, Julliard Park Restroom Building, 227 Santa Rosa Ave, dated February 5, 2019"

125-1.18 Post Demolition Treatment of Site: At 2810 Fourth St, the CDF shall be installed to the top of the foundation and sloped toward the parking lot.

At 952 Sonoma Ave, after demolition and debris removal, the site shall have a minimum 4-inches of Class 2 Aggregate Base placed on all the areas disturbed during the abatement and demolition. Base shall be graded sufficiently to ensure proper drainage and the elimination of ponded areas. Class 2 Aggregate Base shall be compacted to a relative compaction of not less than 90 percent.

At all other locations, after demolition and debris removal, the site shall be graded sufficiently to ensure proper drainage and the elimination of ponded areas. If necessary, Contractor shall import clean, low expansive, fill material (Liquid Limit <25, Plasticity Index < 15) to ensure drainage of the lot to adjacent drainage facilities. Fill material shall be placed in lifts not exceeding 8 inches and compacted to a relative compaction of not less than 90 percent (Test Method No. Calif. 216 and 231). If greater than 50 cubic yards of fill material are required, Contractor shall obtain a grading permit from the Permit Sonoma, as specified in Section 125-1.05. Contractor shall install shredded bark approved by Engineer, 1 inch thick on all areas disturbed by demolition and/or grading operations.

Contractor shall return adjacent areas to condition existing before start of demolition, and leave the site in a neat and orderly condition.

125-1.19 Payment:

2810 Fourth St Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, sewer capping, water service abandonment, CDF backfilling and compaction, storm water BMPs, fence removal, temporary fencing, tree pruning and removal, bee removal, creek maintenance, dust control, sweeping, and grading as specified in Exhibit 1 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

952 Sonoma Ave Demolition shall be paid for at the contract **lump sum** price. Price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition of two structures, and site clearance, protection of existing adjacent structures, including but not limited to, maintaining compliance with all laws, regulations

and ordinances, locks for security, sewer capping, water service abandonment, backfilling and compaction, storm water quality, fence removal, temporary fencing, AB-2 placement and compaction, tree pruning and removal, dust control, sweeping, and grading as specified in Exhibit 2 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

7630 & 7650 Lakeville Hwy Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, removing boards for access and reinstalling, backfilling and compaction, storm water quality, fence removal, preserving and protecting wells, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibits 3A & 3B and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

1595 Meadow Ln Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, backfilling and compaction, storm water quality, fence removal, preserving and protecting wells, shredded bark placement and spreading, tree pruning, and removal, dust control, sweeping, and grading as specified on Exhibit 4 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

4090 Walker Ave Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, backfilling and compaction, storm water quality, fence removal, preserving and protecting wells, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 5 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

4099 Walker Ave Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, backfilling and compaction, storm water quality, fence removal, preserving and protecting wells, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 6 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

1027 McMinn Ave Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not

limited to, maintaining compliance with all laws, regulations and ordinances, removing boards for access and reinstalling, backfilling and compaction, storm water quality, fence removal, temporary fencing, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 7 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

1370 & 1372 Burbank Ave Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, removing boards for access and reinstalling, backfilling and compaction, storm water quality, fence removal, temporary fencing, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 8 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

1400 Burbank Ave Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, locks for security, removing boards for access and reinstalling, backfilling and compaction, storm water quality, fence removal, temporary fencing, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 9 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

Doyle Park Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, backfilling and compaction, storm water quality, temporary fencing, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibits 10A, 10B & 10C and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

Howarth Park Demolition shall be paid for at the contract **lump sum** price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, backfilling and compaction, storm water quality, temporary fencing, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 11 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

Julliard Park Demolition shall be paid for at the contract lump sum price, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in hazardous material removal and

abatement, demolition and site clearance for all site structures indicated, including but not limited to, maintaining compliance with all laws, regulations and ordinances, removing boards for access and reinstalling, backfilling and compaction, storm water quality, temporary fencing, shredded bark placement and spreading, tree pruning and removal, dust control, sweeping, and grading as specified on Exhibit 13 and as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

Abandon Septic System shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, permits, tools and equipment, and for doing all the work involved in abandoning septic system including but not limited to, excavation, backfilling and compaction, storm water quality, and complying with all laws that pertain to septic system abandonment, as specified in the Standard Specifications, these Special Provisions, and as directed by Engineer.

The estimated quantity of **Abandon Septic System** is for bidding purposes only. This item may be increased, decreased, or eliminated in its entirety based on field conditions evaluated by Engineer, and no adjustments in the contract bid price or other contract items will be made therefore. The provisions of section 9-1.06, Changed Quantity Payment Adjustments, of the Standard Specification SHALL NOT apply.

[Version: 11/6/14CDA STD2010]

A - FEES AND PERMITS

Contractor shall obtain all necessary and required permits for the project. All permits issued by the City Building Department will be issued at no cost to Contractor; these fees will be paid by an appropriate City department. All other required permits (i.e. from Permit Sonoma) shall be the responsibility of Contractor and all costs shall be considered as included in the various items of work.

All **electrical service charges or fees** that may be required by Pacific Gas and Electric Company will be paid for by the City.

Contractor shall obtain a Job Number (J number) from the Bay Area Air Quality Management District (BAAQMD) prior to the start of work and submit a copy of the permit to the City.

Where Project sites are located outside of City limits **Contractor shall obtain** a Building Permit (demolition) from the County prior to the start of work and submit a copy of the permit to the City. Prior to final payment Contractor shall submit a copy of the approved permit to the City.

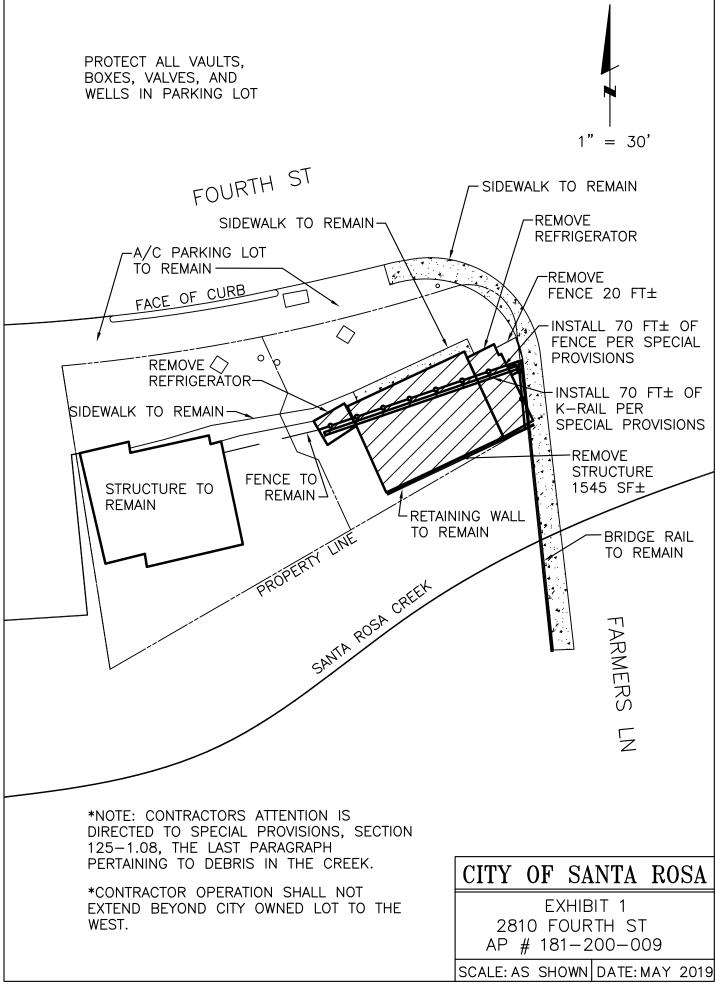
Contractor shall obtain a septic system abandonment permit for each system abandonment from the County of Sonoma Permit and Resource Management Division prior to the start of work and submit a copy of the permit to the City. Prior to final payment Contractor shall submit a copy of the approved permit to the City.

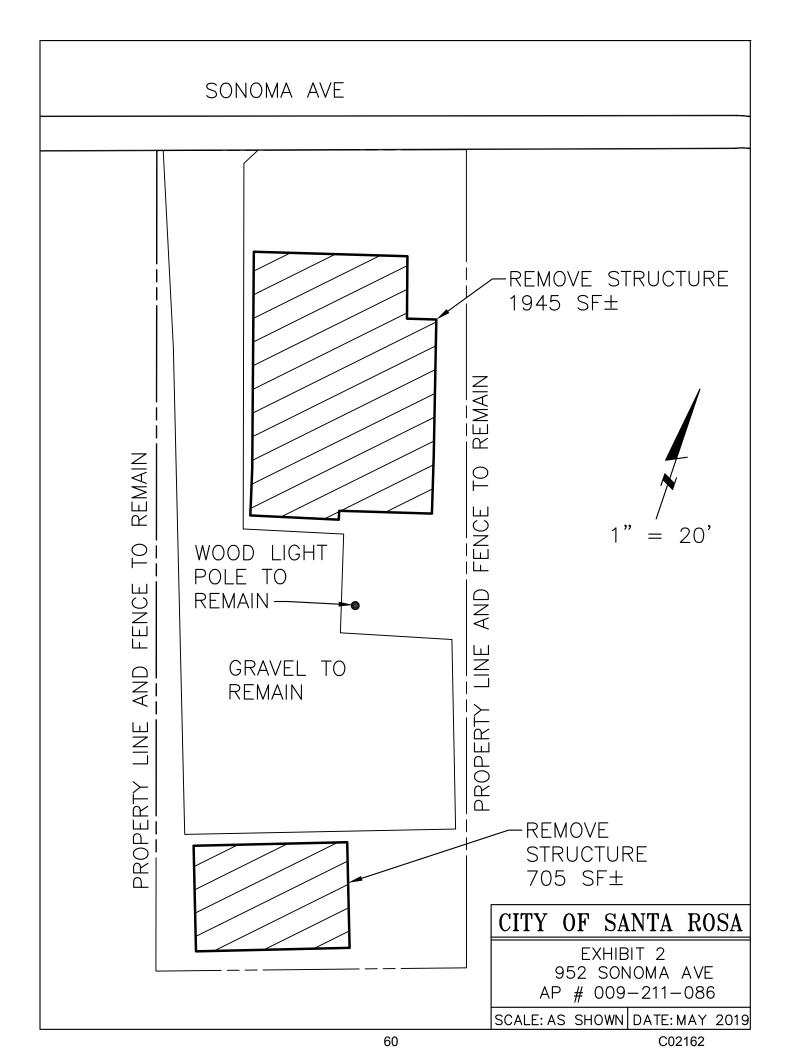
Contractor may need to obtain a grading permit from the County of Sonoma (PRMD), as specified in Section 125-1.05 if greater than 50 cubic yards of fill material per parcel is required.

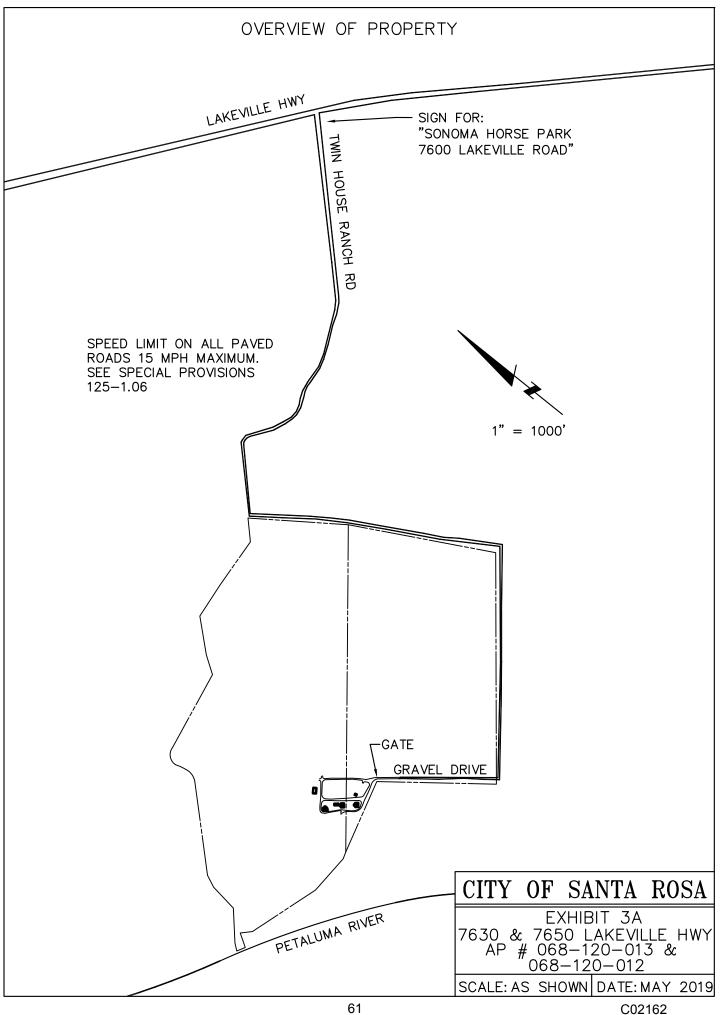
Contractor shall reference SECTION 125 "Special Conditions for Demolition and Site Clearance" for additional permitting information.

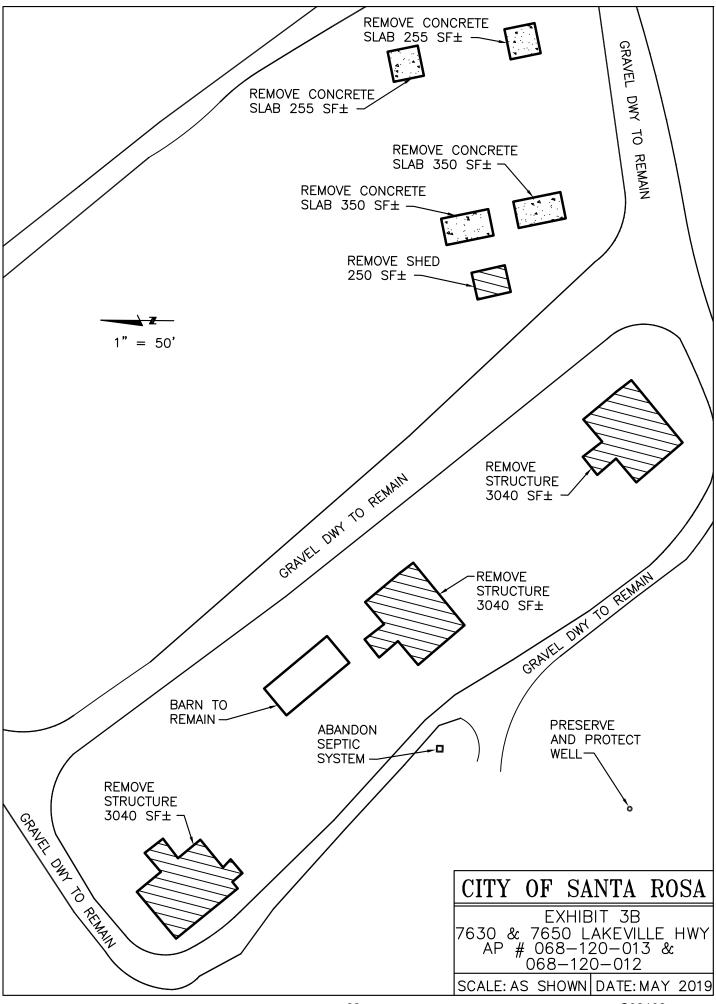
<u>Payment</u>: Full compensation for conforming to the provisions of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

[Version: 2/2/15CDA STD2010]

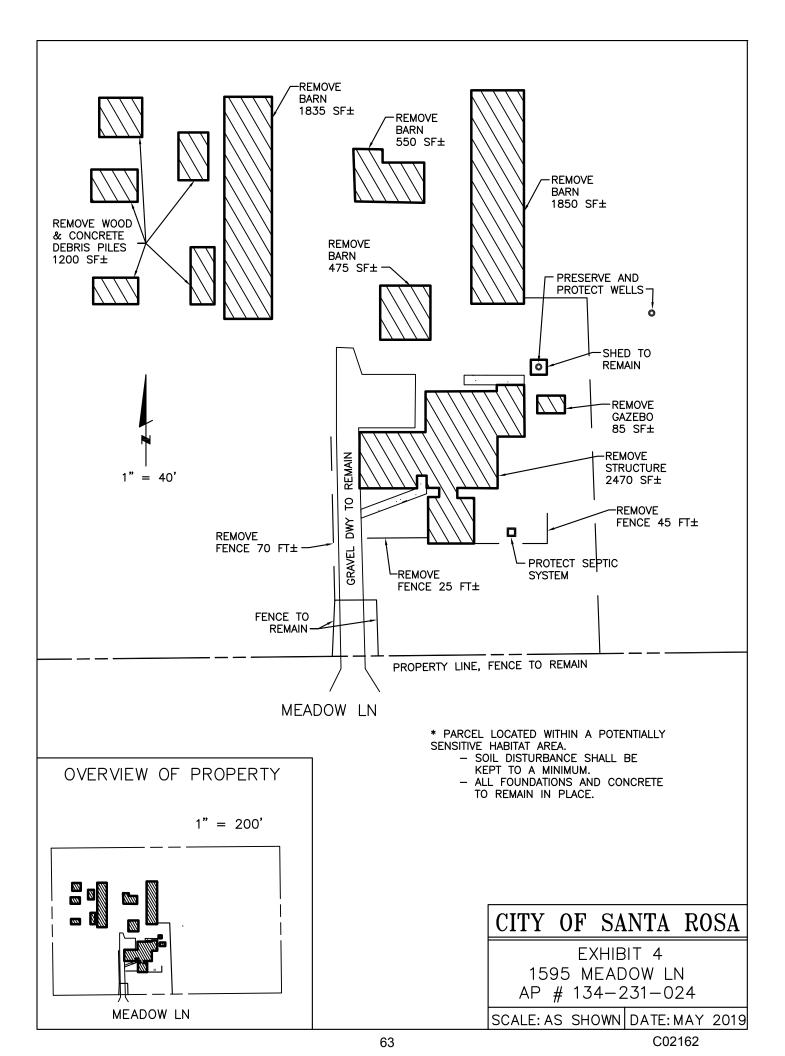


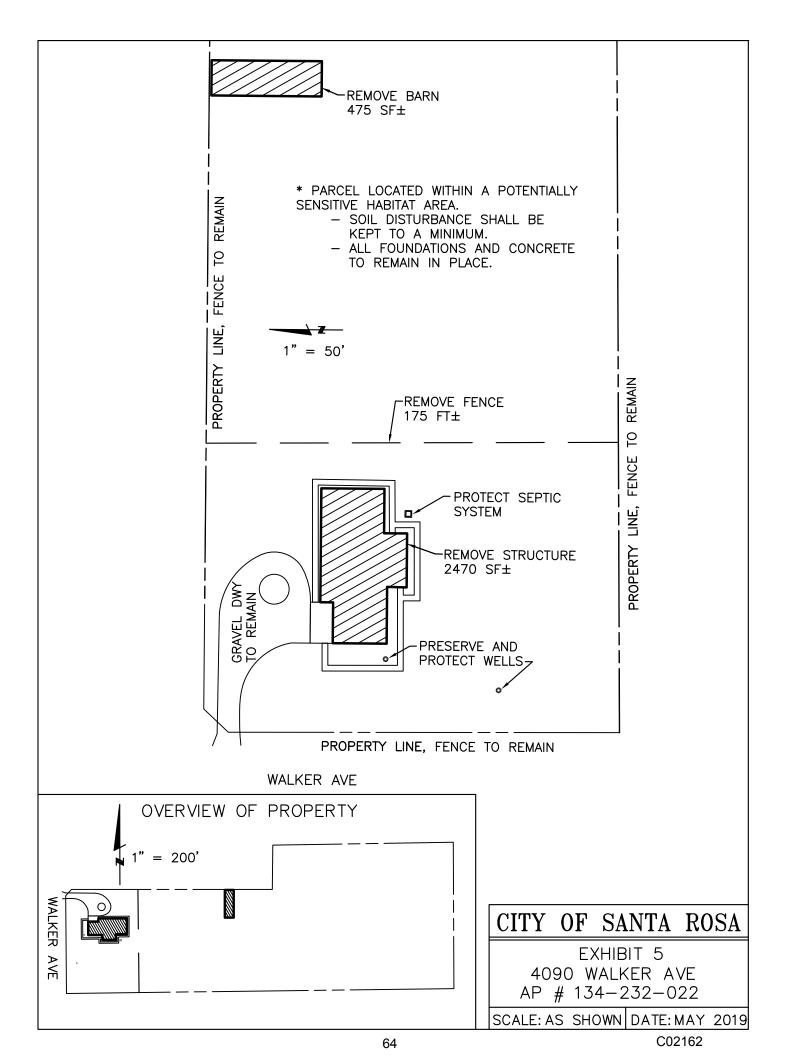


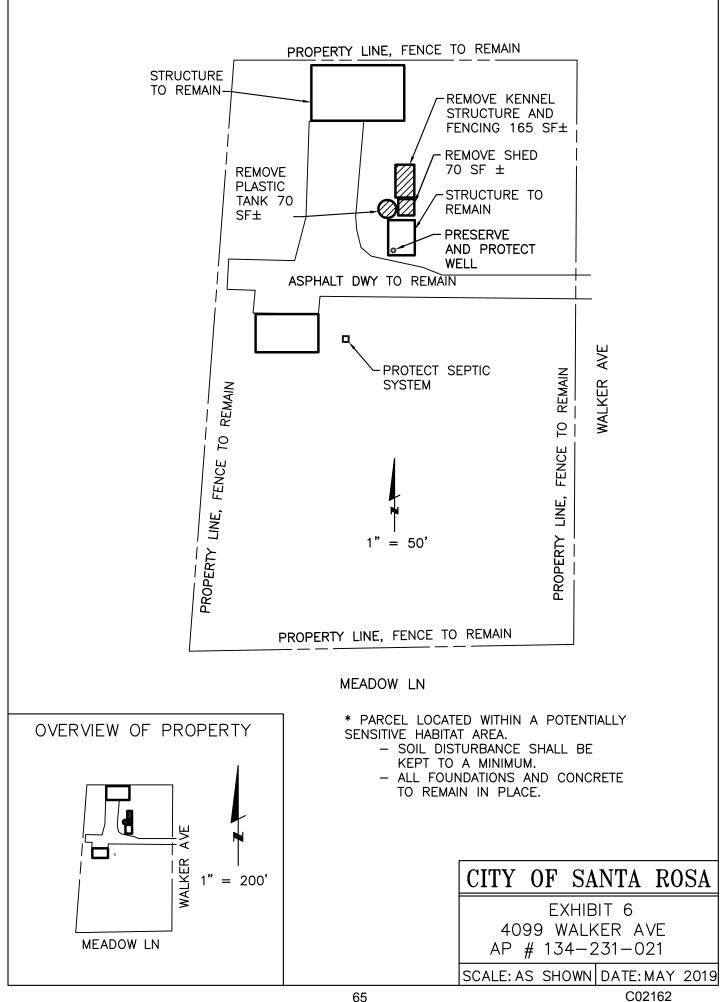


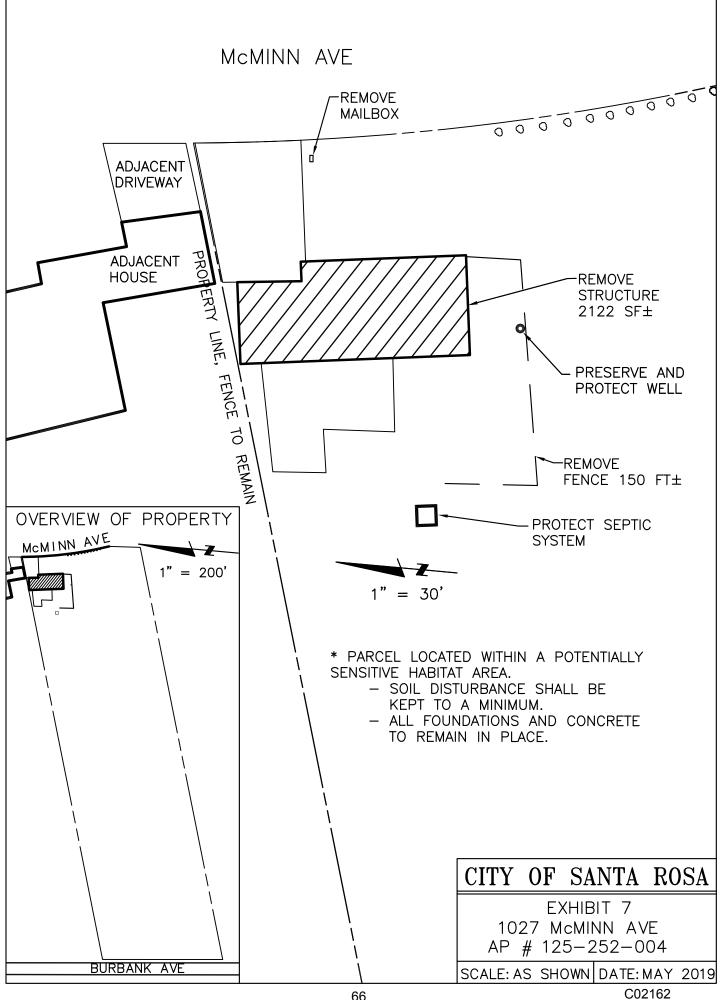


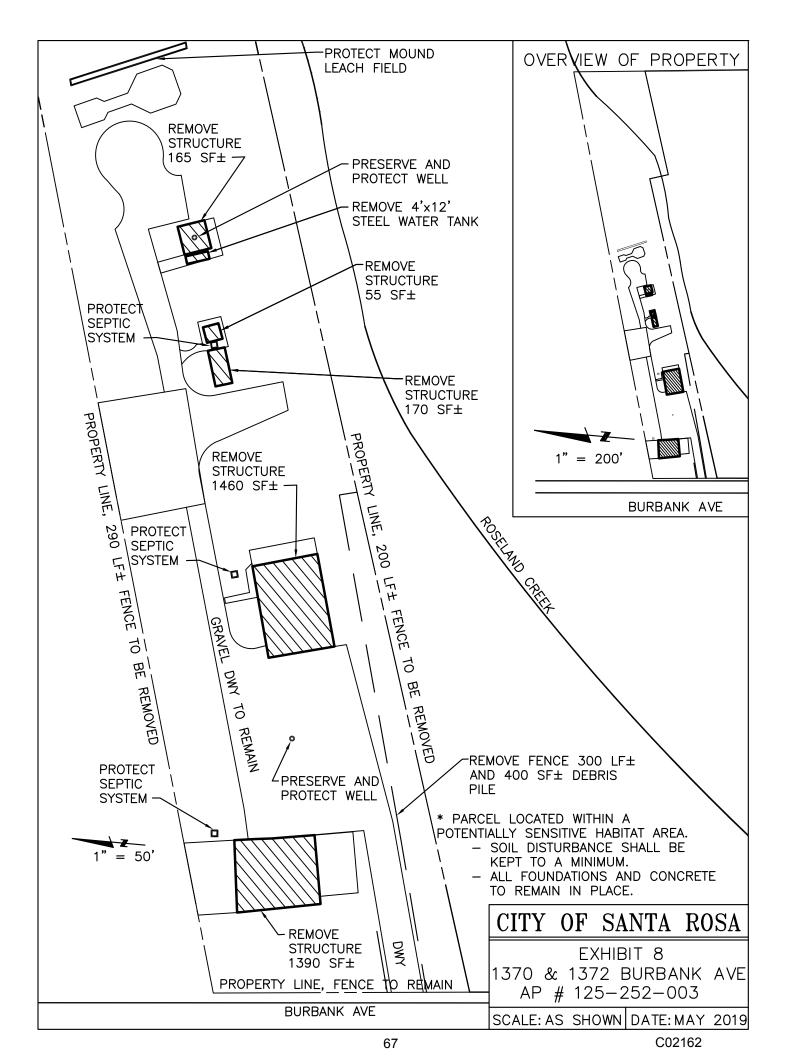
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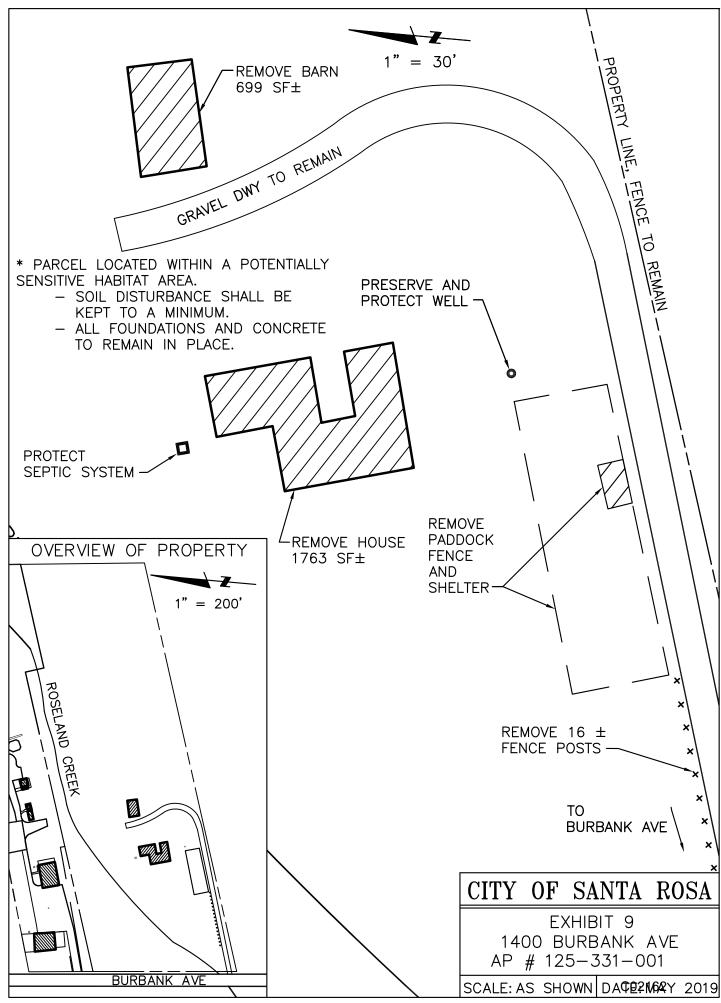


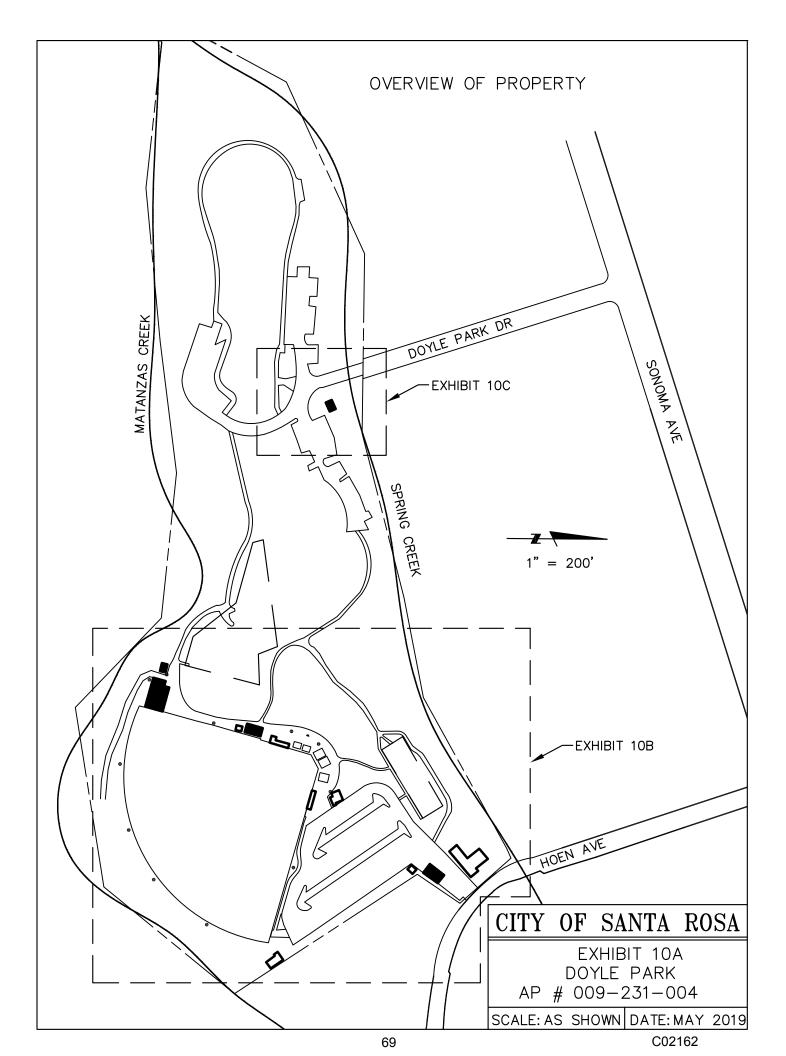


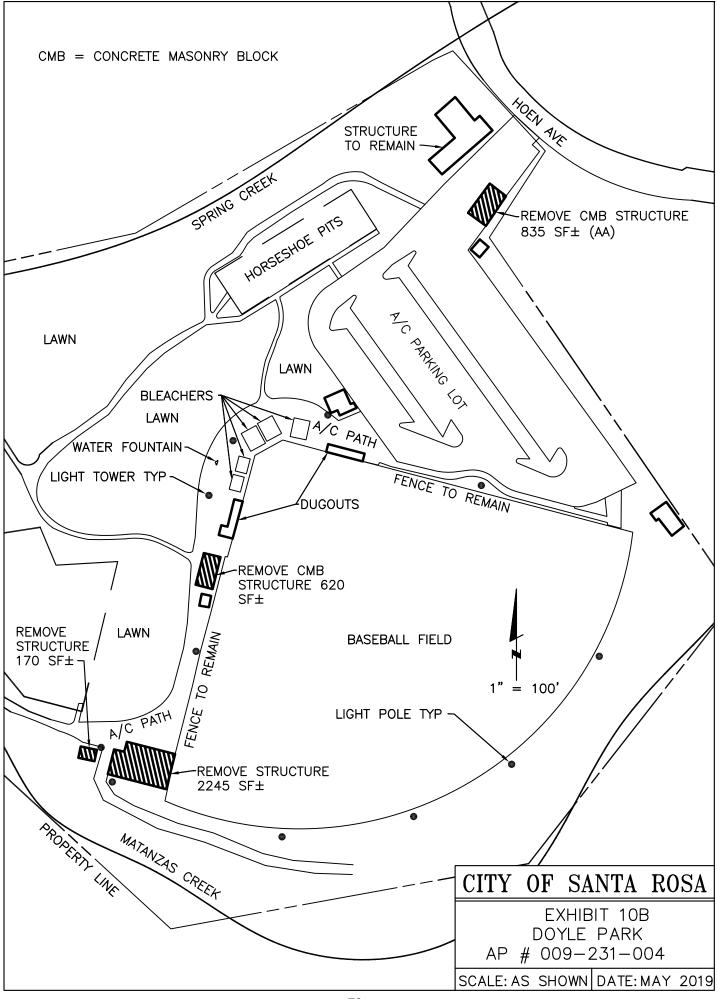




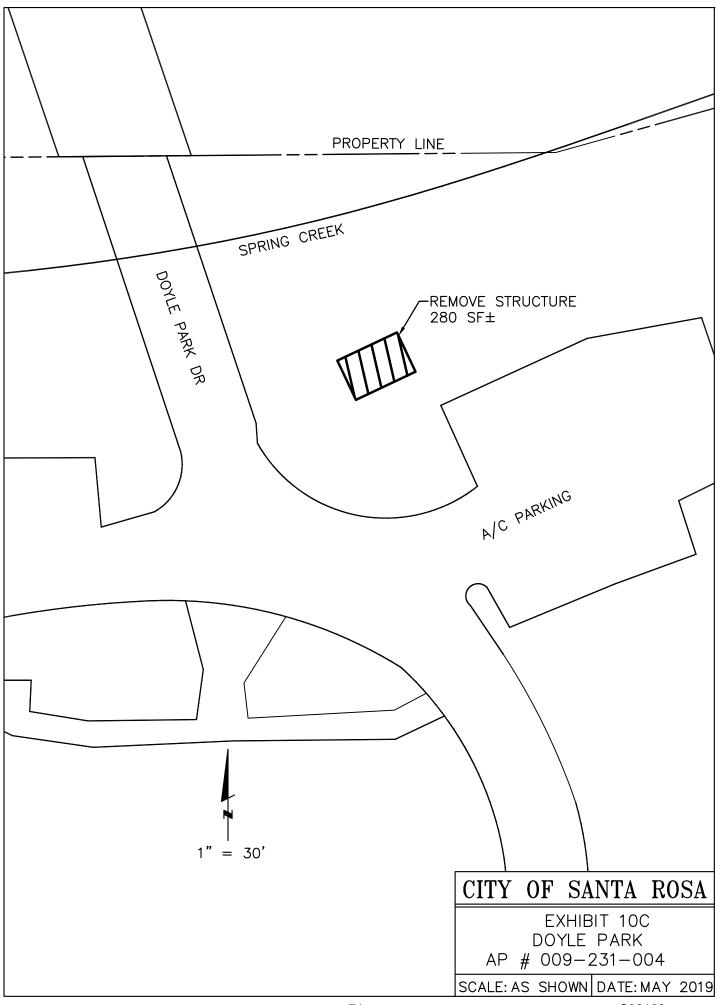


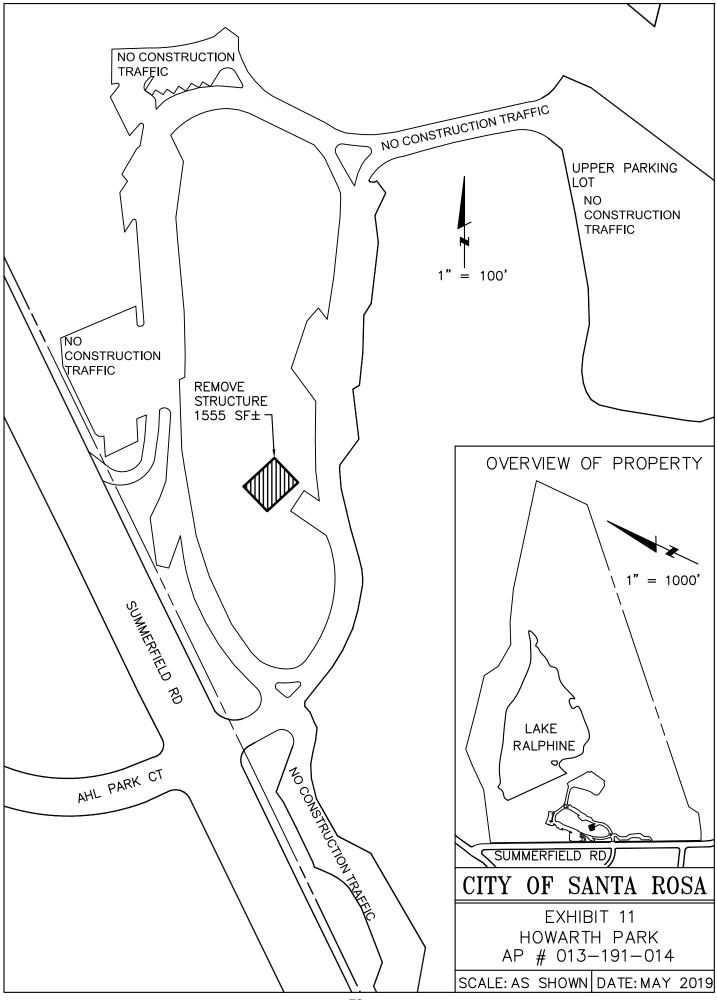




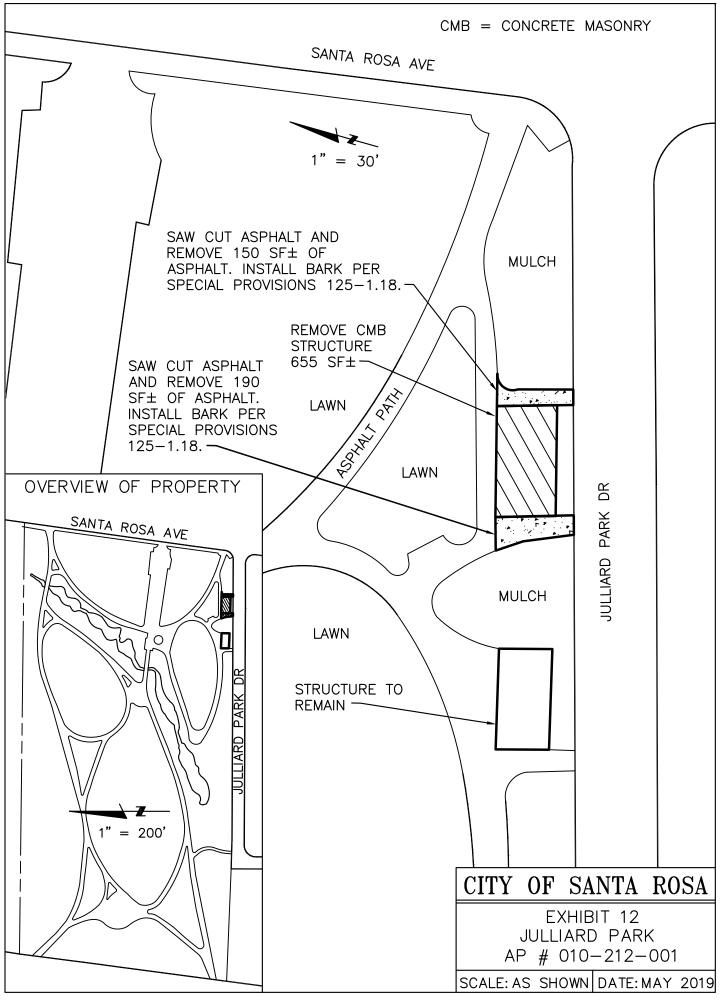


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HAZARDOUS BUILDING MATERIALS SURVEY

Former Liquor Store Building 2810 4th Street Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 5, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY Former Liquor Store Building 2810 4th Street Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 1, 2019 | Project No. 403435001

A lilla and P. Lowhand

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

2020 Challenger Drive, Suite 103 | Alameda, California 94501 | p. 510-343-3000 | www.ninyoandmoore.com

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1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at the former liquor store building located on the southwest corner of the intersection of 4th Street and Farmer's Lane at 2810 4th Street in Santa Rosa, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the former liquor store building.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the former liquor store building at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 23, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the former liquor store building to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

• Visual reconnaissance of the site structure to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.

- Collection of 22 bulk sample of suspect ACMs and submittal of this sample to a certified, independent laboratory for analysis of asbestos content.
- Collection of six suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of suspect bulk PCB sample (if any) and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The former liquor store building is vacant and encompasses approximately 1,500 square feet with two exterior coolers and a basement area (accessible through a trap door in the back/eastern portion of the building). Building finishes include painted wood walls and ceilings, vinyl floor tiles (VFTs) and associated mastic and underlying paper, vinyl floor sheeting (VFS) and built-up roofing materials.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 23, 2019, the vacant former liquor store building was assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM and LCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.



5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Twenty-two bulk suspect asbestos sample was collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by



weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the building are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

No suspect PCBCM were observed during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the former liquor store building.

6 FINDINGS

A HBMS was performed at the former liquor store building to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACMs and LCMs are located within the former liquor store building. Miscellaneous hazardous building materials observed at the former liquor store building included fluorescent light tubes and associated light ballasts.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

 Approximately 1,200 square feet of black paper and VFT/flooring in one assembly (samples 2810-03, 2810-04, 2810-08 and 2810-10) composed of at least three layers of flooring located throughout the main former sales area, the back (east) area and the small bathroom of the structure, containing up to 15% chrysotile asbestos. • Approximately 40 square feet (10 linear feet) of Transite pipe (sample 2810-14) observed in the basement area of the structure (accessible through trap door in the back room), containing 18% chrysotile asbestos and 4% crocidolite asbestos.

6.2 Lead-Containing Materials

Five paint chip samples and one ceramic sink sample were collected for analysis of lead content. Three of the five paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). Beige paint from an exterior wall of the western outside cooler (sample 2810-01P) was reported at 3.6% by weight (or 36,000 mg/kg); beige paint from an exterior wall from the small storage area (sample 2810-02P) was reported at 0.55% by weight (or 5,500 mg/kg); and red paint from an exterior roof eave (sample 2810-04P) was reported to contain lead at 0.73 % by weight (or 7,300 mg/kg). These paint samples are considered LBP.

The other two paint samples (2018-03P and 2810-06P) were reported at 0.4% by weight (or 4,000 mg/kg) and 0.49% by weight (or 4,900 mg/kg), respectively. These paint samples are considered LCP. The ceramic sink sample (2018-05P) was reported at less than 0.008% by weight, its associated limit of lead detection (or less than 80 mg/kg). Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix D.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

As stated above, no suspect bulk PCBCM was observed during our site sampling activities.

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 32 fluorescent light bulbs and 16 associated light ballasts were observed during our sampling activities. Please see Table 3.

7 RECOMMENDATIONS

Since ACMs and LCMs have been reported within the former liquor store building, the following recommendations and precautions are provided:

• The identified ACMs within the former liquor store building should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that this ACMs should not be disturbed. Any ACMs in damaged condition

should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACMs, a licensed asbestos abatement removal contractor should remove the ACMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. *While Ninyo & Moore provided an estimate of the quantity of ACMs present at the former liquor store building (Table 1), it is the abatement contractor's responsibility to assess the actual ACM quantity present.*

- The identified LCMs reported at the former liquor store building should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. While Ninyo & Moore provided an estimate of the quantity of LCMs present at the former liquor store building (Table 2), it is the responsibility of abatement contractors to assess the actual LCM quantities present.
- Prior demolition potential mercury-containing to or renovation activities, thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the former liquor store building, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that,



should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 LIMITATIONS

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

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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



Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
2810-01	2810	Main Room, West Floor	Black 9"x9" Vinyl Floor Tile	N/A	N/A	N/A	ND
2810-02	2810	Main Room, East Floor	Red 9"x9" Vinyl Floor Tile	N/A	N/A	N/A	ND
2810-03	2810	Main Room, East Floor	Black Paper/Wood Laminate Sub Floor	Y	1,200 SF	Good	Paper = 5% CH Sub-Flooring = ND
2810-04	2810	Main Room, South Base Floor	12"x12" Tan Vinyl Floor Tile	N	See Sample 281003	Good	Vinyl Floor Tile = <1% CH (<025% CH)* Mastic = ND
2810-05	2810	Main Room, West Floor	Tan Vinyl Floor Sheeting	N/A	N/A	N/A	ND
2810-06	2810	East Storage	Carpet	N/A	N/A	N/A	ND
2810-07	2810	East Storage	Carpet Mastic Associated With 2810-06	N/A	N/A	N/A	Carpet = ND Mastic = ND
2810-08	2810	Bathroom	Base Floor Under Vinyl Floor Sheeting	N	See Sample 281003	Good	Flooring 1 = 15% CH Mastic 1 = ND Flooring 2 = <1% CH (0.7% CH)* Mastic 2 = ND
2810-09	2810	West Wall Cavity	Paper Vapor Barrier	N/A	N/A	N/A	ND
2810-10	2810	Basement Hatch Door	Black Paper/Wood Laminate Sub Floor	Ν	See Sample 281003	Good	Paper = 5% CH Laminate = ND
2810-11	2810	Basement Wall	Concrete	N/A	N/A	N/A	ND
2810-12	2810	East Cooler	Foam Insulation in Wall	N/A	N/A	N/A	ND
2810-13	2810	East Cooler	Wall Seam Insulation	N/A	N/A	N/A	ND
2810-14	2810	Basement	Transite Pipe	N	40 SF	Good	18% CH 4% CR
2810-15	2810	West Cooler Door	Door Insulation	N/A	N/A	N/A	ND
2810-16	2810	East Roof/Shake Roof	Black Vapor Barrier (under)	N/A	N/A	N/A	ND
2810-17	2810	West Cooler Roof	Roof Assembly	N/A	N/A	N/A	Shingle = ND Felt = ND

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
2810-18	2810	Main Building Roof	Roof Assembly	Ν	700 SF	Good	ND
2810-19	2810	Main Roof-Triangle	Black Roof Penetration Mastic	Ν	50 SF	Good	ND
2810-20	2810	Main Roof-Triangle	Black Roof Penetration Mastic	Ν	10 SF	Good	ND
2810-21	2810	East Cooler Door	Door Insulation (Floor)	N	10 SF	Good	ND
2810-22	2810	Main Room/West Wall	White Wallpaper/Mastic	N	500 SF	Good	Paper = ND Mastic = ND

NOTES:

Analysis by Polarized Light Microscopy (PLM/EPA 600/R-93/116 Method). * = re-analysis via PLM 400 point quantitation NA = Not Applicable ND = None detected CH = Chrysotile CR = Crocidolite **BOLD** indicates sample is an asbestos containing material (> 1% asbestos) Estimated quantities are not intended for use in bidding calculations.

Table 2 - Lead-Containng Material Sampling Results

Sample I.D.	Building	Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t [SF] or Linear	Condition	Total Lead		
				Substrate)	Feet[LF])		Weight Percent	Parts per Million (or mg/kg)	
2810-01P	2810	Exterior East Side of Exterior Cooler	Wall	Beige/2/Wood	500 SF	Non-Intact	3.6	36,000	
2810-02P	2810	East Eave of Storage	Wall	Beige/2/Wood	250 SF	Non-Intact	0.55	5,500	
2810-03P	2810	East Exterior Eave	Eave	Beige/2/Wood	250 SF	Non-Intact	0.4	4,000*	
2810-04P	2810	East Eave at Roof	Eave	Red/2/Wood	150 SF	Intact	0.73	7,300	
2810-05P	2810	Bathroom	Ceramic Sink	White Ceramic Sink	10 SF	Intact	< 0.0080	80	
2810-06P	2810	Main Room/ West Ceiling	Ceiling	White-Beige/2/Wood	600 SF	Intact	0.49	4,900*	

mg/kg = Milligrams per kilogram

SF = Square feet

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight)

Estimated quantities are not intended for use in bidding calculations

BOLD concentration indicate lead-based paint

					5		
Location	Number of Transformers	Number of Light Ballasts	Number of Mercury Thermostats	Number of A/C Units	No. of Fluorescent Light Tubes	Number of Exit Signs	No. of Freon Refrigerator Systems
2810 4th Street	0	16	0	0	32	0	0

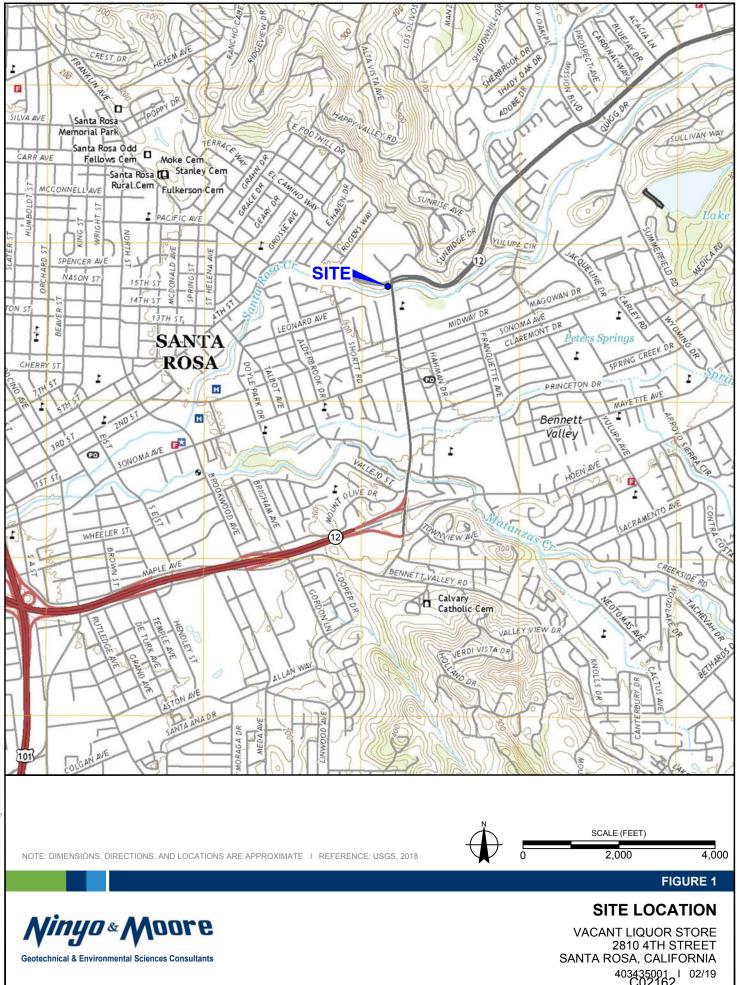
Table 3 - Miscellaneous Hazardous Building Materials Survey Results

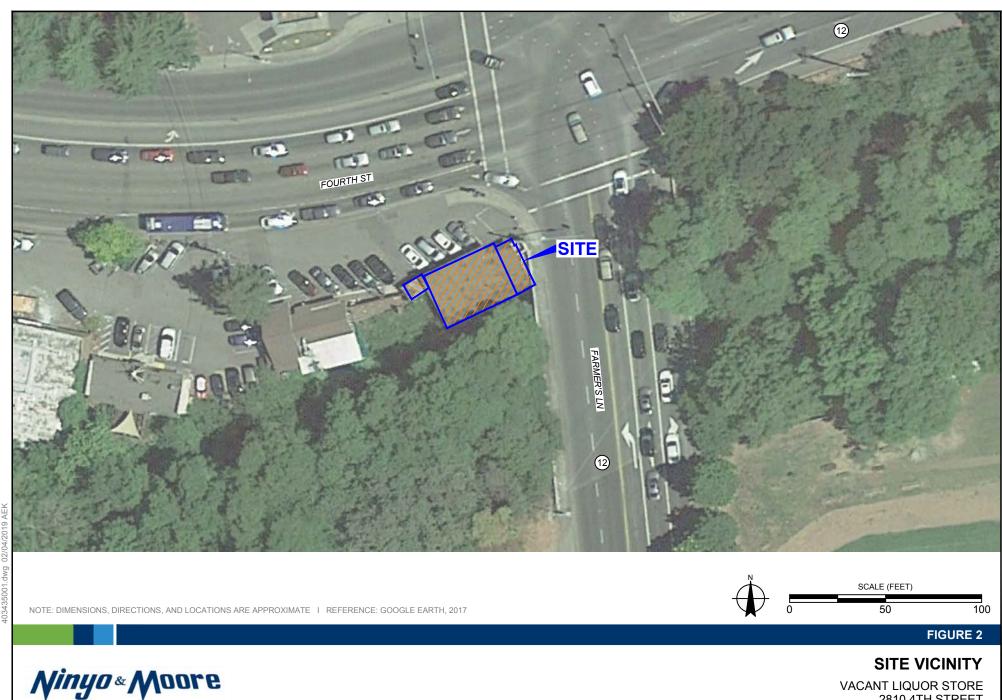
NOTES:

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

FIGURES

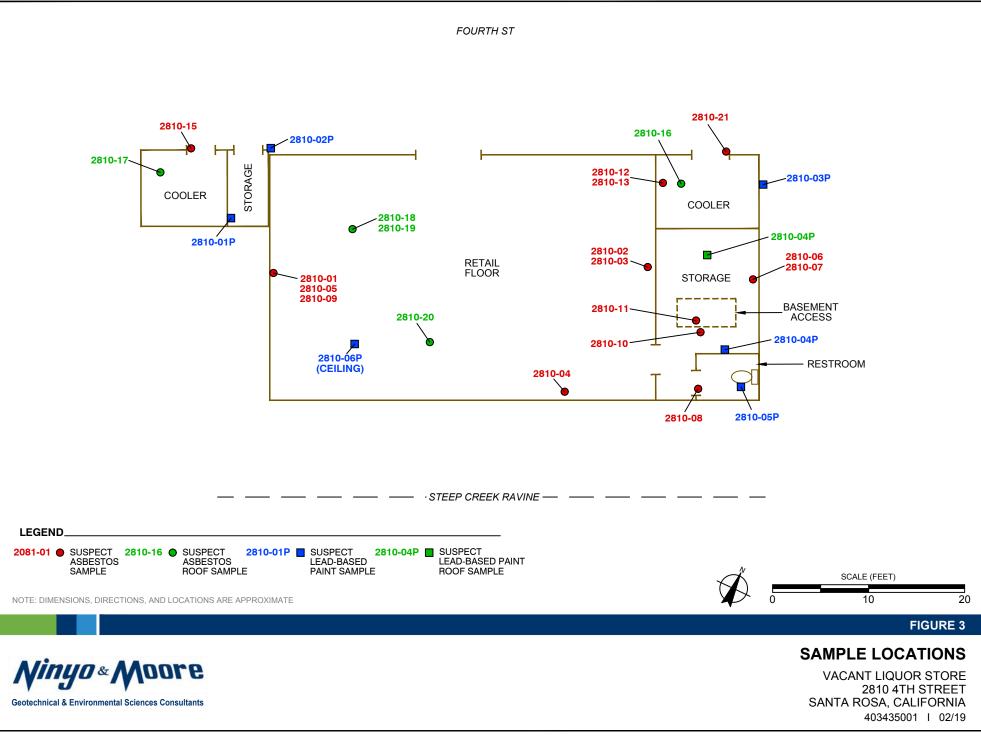




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Geotechnical & Environmental Sciences Consultants

VACANT LIQUOR STORE 2810 4TH STREET SANTA ROSA, CALIFORNIA 403435001 I 02/19



APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



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October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

The

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

EMSL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	William Larkin	Phone:	(510) 343-3000
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	01/30/2019
	Alameda, CA 94501	Collected Date:	01/23/2019
Project:	403435001 - SANTA ROSA		negenaliseinen sevene K

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

			Non-Asbe	<u>Asbestos</u>		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
2810-01	MAIN ROOM, WEST FLOOR-BLACK 9X9 VFT	Black Non-Fibrous Homogeneous	25% Cellulose	50% Matrix 25% Non-fibrous (Other)	None Detected	
2810-02 091902333-0002 Backing layer included in san	MAIN ROOM, EAST FLOOR-RED 9X9 VFT	Brown/Black Non-Fibrous Homogeneous	20% Cellulose	60% Matrix 20% Non-fibrous (Other)	None Detected	
2810-03-Paper 091902333-0003	MAIN ROOM, EAST FLOOR-BLACK PAPER/WOOD LAMINATE SUB FLOOR	Black Non-Fibrous Homogeneous		80% Matrix 15% Non-fibrous (Other)	5% Chrysotile	
2810-03-Sub-flooring 081802333-0003A	MAIN ROOM, EAST FLOOR-BLACK PAPER/WOOD LAMINATE SUB FLOOR	Brown Non-Fibrous Homogeneous	100% Cellulose		None Detected	
2810-04-Vinyl Floor Tile 091902333-0004	MAIN ROOM, SOUTH BASE FLOOR-12X12 TAN VFT	Tan Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	<1% Chrysotile	
2810-04-Mastic 091902333-0004A	MAIN ROOM, SOUTH BASE FLOOR-12X12 TAN VFT	Tan Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected	
2810-05 091902333-0005 Backing layer included in anai	MAIN ROOM, WEST FLOOR-TAN VFS	Tan/White Fibrous Homogeneous	30% Cellulose	15% Ca Carbonate 30% Matrix 25% Non-fibrous (Other)	None Detected	
2810-06-Mastic	EAST STORAGE-CARPET	Tan/Yellow Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected	
2810-06-Flooring	EAST STORAGE-CARPET	White/Red Non-Fibrous Homogeneous	40% Cellulose	10% Ca Carbonate 15% Matrix 23% Non-fibrous (Other)	12% Chrysotile	
2810-07-Carpet	EAST STORAGE-CARPET ASSOC. W 2810.06	Red/Blue Fibrous Homogeneous	100% Synthetic		None Detected	
2810-07-Mastic	EAST STORAGE-CARPET ASSOC. W 2810.06	Tan/Yellow Non-Fibrous Homogeneous		15% Ca Carbonate 70% Matrix 15% Non-fibrous (Other)	None Detected	
2810-08-Flooring 1	BATHROOM-BASE FLOOR UNDER UFS	White/Red Fibrous Homogeneous		20% Ca Carbonate 40% Matrix 25% Non-fibrous (Other)	15% Chrysotile	
2810-08-Mastic 1	BATHROOM-BASE FLOOR UNDER UFS	Tan Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected	

EMSL Analytical, Inc.

EMSL

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com
 EMSL Order:
 091902333

 Customer ID:
 NOMO22

 Customer PO:
 403435001

Project ID:

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

			Non-Asbe	stos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
2810-08-Flooring 2	BATHROOM-BASE FLOOR UNDER UFS	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	<1% Chrysolile	
2810-08-Mastic 2	BATHROOM-BASE FLOOR UNDER UFS	Tan/Clear Non-Fibrous Homogeneous	5% Cellulose	80% Matrix 15% Non-fibrous (Other)	None Detected	
2810-09	WEST WALL CAVITY-PAPER	Brown Fibrous	70% Cellulose	20% Matrix 10% Non-fibrous (Other)	None Detected	
091902333-0009	VAPOR BARRIER	Homogeneous		80% Matrix	5% Chrysotile	
2810-10-Paper 091902333-0010	BASEMENT HATCH DOOR-BLACK PAPER/WOOD LAMINATE	Black Fibrous Homogeneous		15% Non-fibrous (Other)	5% Chrysolie	
2810-10-Laminate 091902333-0010A	BASEMENT HATCH DOOR-BLACK PAPER/WOOD LAMINATE	Brown Fibrous Homogeneous	100% Cellulose		None Detected	
2810-11 091902333-0011	BASEMENT WALL-CONCRETE	Gray Non-Fibrous Homogeneous	<1% Cellulose	15% Quartz 20% Ca Carbonate 30% Gypsum 35% Non-fibrous (Other)	None Detected	
2810-12	EAST COOLER-FOAM	White Non-Fibrous		100% Non-fibrous (Other)	None Detected	
091902333-0012	INSULATION IN WALL	Homogeneous				
2810-13	EAST COOLER-WALL	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected	
2810-14	SEAM INSULATION BASEMENT-TRANSI TE PIPE	Homogeneous Gray Fibrous		50% Ca Carbonate 28% Non-fibrous (Other)	18% Chrysotile 4% Crocidolite	
091902333-0014		Homogeneous		100/11/11	None Detector	
2810-15 091902333-0015	WEST COOLER DOOR-DOOR INSULATION	Brown Fibrous Homogeneous	40% Cellulose	40% Matrix 20% Non-fibrous (Other)	None Detected	
2810-16	EAST ROOF/SHAKE ROOF-BLACK	Brown Fibrous	70% Cellulose	20% Matrix 10% Non-fibrous (Other)	None Detected	
091902333-0016	VAPOR BARRIER	Homogeneous White/Black	15% Glass	5% Quartz	None Detected	
2810-17-Shingle 091902333-0017	WEST COOLER ROOF-ROOF ASSEMBLY	Non-Fibrous Homogeneous	1070 01035	15% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)		
2810-17-Felt	WEST COOLER ROOF-ROOF	Black Fibrous	20% Cellulose	10% Ca Carbonate 50% Matrix 20% Nas fibrous (Other)	None Detected	
091902333-0017A	ASSEMBLY	Homogeneous	20% Olasa	20% Non-fibrous (Other)	None Detected	
2810-18 291902333-0018	MAIN BLDG ROOF-ROOF/ASSEM BLY	Black Non-Fibrous Homogeneous	30% Glass	10% Ca Carbonate 50% Matrix 10% Non-fibrous (Other)	None Detected	
2810-19	MAIN	Black	10% Cellulose	5% Ca Carbonate	None Detected	
291902333-0019	ROOF-TRIANGLE THING-BLACK ROOF PEN MASTIC	Non-Fibrous Homogeneous		70% Matrix 15% Non-fibrous (Other)		
2810-20	MAIN ROOF-TRIANGLE THING-BLACK ROOF PEN MASTIC	Black Non-Fibrous Homogeneous	5% Cellulose	15% Ca Carbonate 70% Matrix 10% Non-fibrous (Other)	None Detected	

Initial report from: 01/30/2019 14:05:27

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EME

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091902333 Customer ID: NOMO22 Customer PO: 403435001 Project ID:

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

			Non-As	sbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
2810-21	EAST COOLER DOOR-DOOR	Black Non-Fibrous		100% Matrix	None Detected
091902333-0021	INSUALTION (FLOOR)	Homogeneous			
2810-22-Paper	MAIN ROOM/WEST WALL-WHITE WALL	White Non-Fibrous		100% Matrix	None Detected
091902333-0022	PAPER/MASTIC	Homogeneous			
2810-22-Mastic	MAIN ROOM/WEST WALL-WHITE WALL	Clear Non-Fibrous		90% Matrix 10% Non-fibrous (Other)	None Detected
091902333-0022A	PAPER/MASTIC	Homogeneous			

Analyst(s)

Kevin Lares (32)

Matthic

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 01/30/2019 14:05:27

ASB_PLM_0008_0001 - 1.78 Printed: 1/30/2019 11:05 AM

Page 3 of 3



EMSL Analytical, Inc 464 McCormick Street, San Leandro, CA 94577 Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com sanleandrolab@emsl.com EMSL Order: 0 CustomerID: N CustomerPO: 44 ProjectID:

091902333 NOMO22 403435001

Attn:	William Larkin	Phone:	(510) 343-3000
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received:	01/29/19 12:00 PM
	· 성실 방송 · · · · · · · · · · · · · · · · · ·	Analysis Date:	2/3/2019
	Suite 103	Collected:	1/23/2019
	Alameda, CA 94501		
Projec	t: 403435001 - SANTA ROSA		

Test Report: Polarized Light Microscopy (PLM) - Point Count Performed by EPA 600/R-93/116 Method with Gravimetric Reduction and 400 Point Count

SAMPLE ID	DESCRIPTION	APPEARANCE		Matrix ic Acid	NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES
2810-04-Vinyl Floor Tile 091902333-0004	MAIN ROOM, SOUTH BASE FLOOR-12X12	Tan Fibrous	26.0	41.0		33.1 Non-fibrous (other)	<0.25 Chrysotile
91902333-0004	TAN VFT	Homogeneous					
2810-08-	BATHROOM-	White	26.7	40.7		31.9 Non-fibrous (other)	0.7 Chrysotile
Flooring 2 091902333-0008B	BASE FLOOR UNDER UFS	Fibrous					
		Homogeneous					

Analyst(s)

Oscar Merino (2)

Matthew Batongbacal or other approved signatory

Disclaimers: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc. suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical Inc.. This report must not be used to claim product endorsement by NVLAP or any agency of the United States Governmet. EMSL Analytical Inc. bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layer samples. EMSL Analytical Inc. liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from 02/03/2019 09:10:51

Test Report PLMPCGrav-7.26.0 Printed: 2/3/2019 9:10:51 AM

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INTA SHEET . 24 Mr TAN	Project Name: SANIA RUSA San Project No.: 403435001 San Project Manager. WPC San APN: Site Address:	AAIN OF CUSTODY INFORMATION- International Control of the Control of Control of Control of Activity of the Control of Control of Control of Control International Control of Developments and the Control of Control of Activity of the Control of Control of Control	The resources 1/23/19 500		ber Sample Location	MyIN ROOM, WEST Floor	MAIN ROOM, East floor R	MAIN ROOM, East Floor B	MAIN ROOM, South base floor 1.		EAST STORBE, &	8	BATHKOUM BATHKOUM	WEST WALL CANITY PR	Hutch Par	1/2m from	DLER	Page 1 Of 2
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ASBESTOS BULK SAMPLE DATA SHEET	unyo & inoore 1956 Webster Street, #400 Oekland, CA 94612 Tel: (510) 633-5646 Far: (510) 633-5646	CHAIN OF CUSTODY INFORMATION: MATTER AND THE APPRILMENT OF A SAMPLE AND A SAMPLE A	Man P.J.		Labin .												*		
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OrderID: 091902333

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APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

EMSL	EMSL Analytical, 464 McCormick Street, San Lu Phone/Fax: (510) 895-3675 http://www.EMSL.com	andro, CA 94577	EMSL Order: CustomerID: CustomerPO: ProjectID:	091902294 NOMO22
Suite 103 Alameda	Moore allenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/23/2019	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Des	scription Lab ID Collected Analyzed	Weight	Lead Concentration
2810-01P	091902294-0001 01/23/2019 01/29/2019	0.2524 g	3.6 % wt
	Site: EXT EAST SIDE OF EXT COOLER		
2810-02P	091902294-0002 01/23/2019 01/29/2019	0.254 g	0.55 % wt
	Site: EAST EAVE OF STORAGE		
2810-03P	091902294-0003 01/23/2019 01/29/2019	0.2644 g	0.40 % wt
	Site: EAST EXT EAVE		
2810-04P	091902294-0004 01/23/2019 01/29/2019	0.2505 g	0.73 % wt
	Site: EAVE @ ROOF		
2810-05P	091902294-0005 01/23/2019 01/29/2019	0.2517 g	<0.0080 % wt
	Site: BATHROOM		
2810-06P	091902294-0006 01/23/2019 01/29/2019	0.2588 g	0.49 % wt
	Site: MAIN ROOM / WEST CEILING		

Julton

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/29/2019 15:34:24

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 01/29/2019 3:34:24 PM

Page 1 of 1

	ED PAINT BI	oore Project Name : SMM/A, R.G. Sampled BY: WPU Laboratory: berger Road, Suite 220 Project No.: VD3V3 506.1 Sampled BY: WPU Laboratory: A 94621 Project Manager, VPU Sampled BY: 1/23/19 CMSC APN: MPL I Date Sampled: 1/23/19 Tet: Iste Address: Iste Address:	and ,	Sample ID Building Sample Description (Color # Estimated		act Eavle Red 2/wbb) Inta	" " " Mann Rown West Ceiling		
LEAD 100 LEAD 100 Ininyo & Minyo & Min	erID: 091902294 LEAD BASED P	Ninyo & Moore 675 Hegenberger Road, Suite 220 Oakland, CA 94621 Tet: (510) 633-5640 Fac: (510) 633-5646 Fac: (510) 633-5646 Fac: (510) 633-5646	William Printien	LabiD Sam	2810	2810	2810		

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APPENDIX D

CDPH Form 8552 - Lead Hazard Evaluation Report

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation / 2-3 / 9
Section 2 — Type of Lead Hazard Evaluation (Check one box only)
\Box Lead Inspection \Box Risk assessment \Box Clearance Inspection \square Other (specify) \underline{Chip} Samp \underline{ing}
Section 3 — Structure Where Lead Hazard Evaluation Was Conducted
Address [number, street, apartment (if applicable)] City County Zip Code
28104th Street Santa Rosa Sonoma 95401
Construction date (year) Type of structure Children living in structure?
1950 s Multi-unit building School or daycare Yes No
Section 4 — Owner of Structure (if business/agency, list contact person)
City of Santa Rosa, Grant Bailey 707/543-4508
Address [number, street, apartment (if applicable)] City Santa Rosa State CA 210 Code 9540/
Section 5 — Results of Lead Hazard Evaluation (check all that apply)
No lead-based paint detected Intact lead-based paint detected
No lead hazards detected Lead-contaminated dust found Lead-contaminated soil found Other
Section 6 — Individual Conducting Lead Hazard Evaluation
Name William P. Laukin 510/343-3000
Address [number, street, apartment (if applicable)] City 1 0 State Zip Code
2020 Challenger Drive, #103 Alameda CA 94501
CDPH certification number J Signature Julian P. Laulan 1/31/19
Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)
N/A
Section 7 — Attachments
 A. A foundation diagram or sketch of the structure indicating the specifc locations of each lead hazard or presence of lead-based paint; B. Each testing method, device, and sampling procedure used; C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector

Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:

California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656

TRANSMISSION VERIFICATION REPORT

TIME	:	02/01/2019 21:42
NAME	:	NINYO AND MOORE
FAX	:	510-633-5646
TEL	:	510-633-5640
SER.#	:	BR0D5J252210

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE 02/01 21:41 6205656 00:00:21 01 OK STANDARD ECM



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2020 Challenger Drive, Suite 103 | Alameda, California 94501 | p. 510.343.3000

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SAN JOSE | PHOENIX | TUCSON | PRESCOTT | LAS VEGAS | DENVER | BROOMFIELD | HOUSTON

www.ninyoandmoore.com

HAZARDOUS BUILDING MATERIALS SURVEY

Former Residence 952 Sonoma Avenue Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 7, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY Former Residence 952 Sonoma Avenue Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 7, 2019 | Project No. 403435001

William P. Louken

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

2020 Challenger Drive, Suite 103 | Alameda, California 94501 | p. 510-343-3000 | www.ninyoandmoore.com

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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
- 3 Bulk Polychlorinated Biphenyl Sampling Results
- 4 Miscellaneous Hazardous Building Materials Survey Results

FIGURES

- 1 Site Location
- 2 Site Vicinity
- 3 Sample Locations

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A – Certifications

B – Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C – Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

D – Polychlorinated Biphenyl Laboratory Analytical Report and Chain-of-Custody Records

E – CDPH Form 8552 - Lead Hazard Evaluation Report

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1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at the former residence located at 952 Sonoma Avenue in Santa Rosa, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the former residence.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the former residence at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 23, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the former residence to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the former residence to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of 34 bulk sample of suspect ACMs and submittal of these samples to a certified, independent laboratory for analysis of asbestos content.

- Collection of 16 suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of two suspect bulk PCBCM samples and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The former residence is vacant and encompasses approximately 2,000 square feet on two stories with a detached garage in the rear (south) area of the property. Building finishes include painted gypsum walls/ceilings with texture, painted exterior wood walls, bare wood and carpeted floors, vinyl floor tiles (VFTs) and associated mastic, vinyl floor sheeting (VFS) and shake/wood shingle roofing with asphalt shingle roofing materials installed over them in certain places. The former residence is currently vacant and was formerly used for storage space by the City of Santa Rosa Police Department.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 23, 2019, the vacant residence was assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM, LCM and PCBCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Thirty-four bulk suspect asbestos sample was collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by



weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the building are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

Two suspect PCBCM samples (sample PCB-01/window putty from a 1st floor north window and sample PCB-02/window putty from a 1st floor west window) were collected during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the former residence.

6 FINDINGS

A HBMS was performed at the former residence to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACMs, LCMs and miscellaneous hazardous building materials are located within the former residence. Miscellaneous hazardous building materials observed at the former residential structure included fluorescent light tubes and associated light ballasts.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

Approximately 6,000 square feet of texture and/or skim coat on wallboard (samples 952-06 and 952-08) located throughout the residence. Each of these materials were reported to contain <1% chrysotile asbestos. Both of these materials were re-analyzed via PLM 400-point quantitation. The results of the re-analysis of the texture was reported at 0.5% chrysotile asbestos. The results of the re-analysis of the skim coat was reported at



<0.25% chrysotile asbestos. These material assemblies are considered asbestoscontaining construction material (ACCM).

- Approximately 100 square feet of vinyl floor sheeting in the kitchen (sample 952-10), containing 30% chrysotile asbestos.
- Approximately 40 square feet of vinyl floor sheeting in the downstairs bathroom (sample 952-20), containing 40% chrysotile asbestos.

Additionally, window putty from a northwest exterior window was sampled and reported to contain <1% chrysotile asbestos. This material was re-analyzed via PLM 1,000-point quantitation with gravimetric reduction with reported results of <0.1% chrysotile asbestos.

6.2 Lead-Containing Materials

Sixteen paint chip samples were collected for analysis of lead content. Six of the 16 paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). Beige paint from a north exterior wall (sample 952-01P) was reported at 11% by weight (or 110,000 mg/kg); brown paint from the exterior floor of the front porch (sample 952-04P) was reported at 7.5% by weight (or 75,000 mg/kg); brown paint the exterior bannister of the front porch (sample 952-05P) was reported to contain lead at 6% by weight (or 60,000 mg/kg); brown paint from a front window casing (sample 952-06P) was reported to contain lead at 11% by weight (or 110,000 mg/kg); white paint from a front window frame (sample 952-07P) was reported to contain lead at 5% by weight (or 50,000 mg/kg); and brown paint collected from a rooftop facia board (sample 952-016P) was reported to contain lead at 12% by weight (or 120,000 mg/kg). These paint samples are considered LBP.

Seven other paint samples were reported to contain lead from 0.015% by weight (or 150 mg/kg) to 0.4% by weight (or 4,000 mg/kg). These paint samples are considered LCP. The remaining three paint samples were reported at less than their associated limits of detection. Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the former residence is included in Appendix C.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

As stated above, two suspect PCBCM samples (sample PCB-01/window putty from a 1st floor north window and sample PCB-02/window putty from a 1st floor west window) were observed and collected during our site sampling activities. Both samples were reported as non-detect for PCB concentrations (Table 3 and Appendix D).

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 32 fluorescent light bulbs and 16 associated light ballasts were observed during our sampling activities. Please see Table 4.

7 RECOMMENDATIONS

Since ACMs and LCMs have been reported within the former residence, the following recommendations and precautions are provided:

- The identified ACMs within the former residence should be incorporated into a buildingspecific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that this ACMs should not be disturbed. Any ACMs in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACMs, a licensed asbestos abatement removal contractor should remove the ACMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. *While Ninyo & Moore provided an estimate of the quantity of ACMs present at the former residence (Table 1), it is the abatement contractor's responsibility to assess the actual ACM quantity present.*
- The identified LCMs reported at the former residence should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. *While Ninyo & Moore provided an estimate of the quantity of LCMs present at the former residence (Table 2), it is the responsibility of abatement contractors to assess the actual LCM quantities present.*
- Prior to demolition or renovation activities, potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.),

fluorescent light tubes, exit signs, air conditioning units, and FreonTM-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). *While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the former residence, it is the abatement contractor's responsibility to confirm the quantities of items present.*

 There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 **LIMITATIONS**

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

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.



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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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



Table 1 - Bulk Asbestos Sampling Results

February 7, 2019 Project No. 403435001

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
952-01	952	Northwest Exterior Window	Window Putty	N	50 SF	Poor	<1% CH (<0.1% CH*)
952-02	952	Front Steps	Stair Tread Material/Mastic	N/A	N/A	N/A	Ŋ
952-03	952	Entryway Floor	12x12 Wood Tile with Mastic	N/A	. N/N	N/A	Wood Tile = ND Mastic = ND
952-04	952	Entryway Wall, East Corner	Texture/Wallboard	Y	See 925-06	Poor	Texture = ND Wallboard = ND
952-05	952	Living Room, near Entry	Texture/Wallboard	Y	See 925-06	Poor	Texture = ND Wallhoard = ND
952-06	952	Living Room, Northwest Corner	Texture/Wallboard	Y	6,000 SF	Poor	Texture = <1% CH (0.50% CH**) Skim Coat = <1% CH (<0.25% CH**)
952-07	952	Living Room, Southeast Corner	Wallpaper/Wallboard	Y	See 925-06	Poor	Vallpaper = ND Wallpaper = ND Skim Coat = ND
952-08	952	Kitchen, Southeast Corner	Wallboard	Y	See 925-06	Poor	Plaster = ND Plaster = ND Skim Coat = ND Texture = <1% CH
952-09	952	Kitchen, Closet	Wallboard	Y	See 925-06	Poor	(0.25% CH**) Texture = ND Weithcoud = ND
952-10	952	Kitchen Floor, At Closet	Vinyl Floor Sheeting with Particle Board	Y	100 SF	Poor	VFS = 30% CH $Mastic = ND$
952-11	952	Stairway Landing	Texture/Wallboard	Y	See 925-06	Poor	rarricle Board = ND Texture = ND Wallhoard = ND
952-12	952	Top of Stairs	Texture/Wallboard	Y	See 925-06	Poor	Texture = ND Wallhoard = ND
952-13	952	North Bedroom Northwest Corner	Texture/Wallboard	Y	See 925-06	Poor	Texture = ND Wallboard - ND
952-14	952	North Bedroom Closet	Texture/Wallboard	Y	See 925-06	Poor	Texture = ND Wallboard = ND

Table 1 - Bulk Asbestos Sampling Results

February 7, 2019 Project No. 403435001

			sunsay Sundana				•	
Sample L.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content	
952-15	952	Upstairs Bathroom	Vinyl Floor Sheeting with Particle Board	N/A	N/A	N/A	VFS = ND Mastic = ND Leveler = ND	
952-16	952	Upstairs South Bedroom	Wallpaper/Plaster	N/A	N/A	N/A	Particle Board = ND Wallpaper = ND	
952-17	952	Downstairs South Patio Room	Wallboard/Joint Compound	N/A	N/A	N/A	Plaster = ND Wallboard = ND	
952-18	952	South Sunroom	Wallboard/Joint Compound	N/A	N/A	N/A	Joint Compound = ND Wallboard = ND	
952-19	. 952	Patio Room	Wood Panel with Mastic	N/A	N/A	N/A	Joint Compound = ND Wood Panel = ND	
952-20	952	Downstairs Bathroom	Vinyl Floor Sheeting	Y	40 SF	Good	Mastic = ND VFS = 40% CH Mosts - ND	
952-21	952	Sun Room, Ceiling	Pink Batt Insulation	N/A	N/A	N/A	ND ND	
952-22	952	Sun Room, Floor	Wood with Black Mastic	N/A	N/A	N/A	CIN = booW	
952-23	952	Middle Room Floor	Wood with Mastic	N/A	N/A	N/A	Mastic = ND Wood = ND	
952-24	952	Detached Garage	Concrete Floor at Door	N/A	N/A	N/A	Mastic = ND Not Submitted	
952-25	952	Southwest Corner of Rear Flat Roof	Roof Assembly	N/A	N/A	N/A	Shingle = ND	
92-26	952	Southwest Area of Main Roof (Steep)	Roof Assembly	N/A	N/A	N/A	l ar = ND Shingle = ND	
952-27	952 Garage	Garage Roof	Roof Assembly	N/A	N/A	N/A	Shingle 2 = ND Shingle = ND Felt = ND	
952-28	952	Shake Shingle and Vapor Barrier under 952. 26	Shake Shingle / Vapor Barrier	N/A	N/A	N/A	R	
952-29	952	South Window Frame	Window Putty	N/A	N/A	N/A	£	
952-30	952	2nd Floor Attic	Attic Insulation	N/A	N/A	N/A	E E	
952-31	952	2nd Floor Attic	Attic Insulation	N/A	N/A	N/A	e e	
*								

Santa Rosa, California 952 Sonoma Avenue

Table 1 - Bulk Asbestos Sampling Results

February 7, 2019 Project No. 403435001

			Sind a support of the support of the support				
Sample L.D.	Building	Material Location	Sample Description	Friable	Quantity	Condition	Asbestos Content
952-32	952	Central Room	Leveling Compound	N/A	N/A	NIA	-
					UNI	VIN	UN
952-33	952	Garage Floor	Concrete	N/A	N/A	N/A	QN
952-34	952	Middle Room	Mastic on Wood	N/A	N/A	N/A	Q
							1

NOTES:

Analysis by Polarized Light Microscopy (PLM/EPA 600/R-93/116 Method). * = re-analyzed via PLM 1,000 Point Quantitation with Gravimetric Reduction ** = re-analyzed via PLM 400 Point Quantitation NA = Not Applicable ND = None detected

CH = Chrysotile BOLD indicates sample is an asbestos containing material (> 1% asbestos) Estimated quantities are not intended for use in bidding calculations.

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Table 2 - Lead-Containing Material Sampling Results

Lead	Parts per Million	(or mg/kg)	110,000	4,000*	1.800*	75.000	60,000	110.000	000'011	50,000	250*	2,300*	3.100*	≪80	150*	710*	/10.	<260	<160	120,000
Total Lead	Weight Percent		11	0.4	0.18	7.5	6	11		0	0.025	0.23	0.31	<0.0080	0.015	0.071	1/0.0	<0.026	<0.016	12
Condition			Non-Intact	Non-Intact	Non-Intact	Non-Intact	Non-Intact	Non-Intact	Non Intest	INUII-IIIIIACI	Intact	Intact	Intact	Non-Intact	Non-Intact	Non-Intact	T	Intact	Non-Intact	Non-Intact
Estimated Surface Area (Square Fee+t ISFI or Linear	Feet[LF])	\$ DOD OF	JC 000'r	200 SF	200 SF	150 SF	100 SF	same as 952-02P	same ac 057_03D	100-207 CD 2000	100 SF	100 SF	100 SF	350 SF	100 SF	20 SF	20.01	00 SF	500 SF	500 SF
Sample Description (Color / # of Layers /	Substrate)	Reige/3/Wood	Douguoi moou	Brown/2/wood	White/2/Wood	Brown/2/Wood	Brown/2/Wood	Brown/2/Wood	White/2/Wood	Divid/Mood	D00 M /7 /2010	White/I/Wood	Tan/2/Wood	Cream/2/Wallboard	Green/1/Wood	White/1/Wood	Red/1/Wood	THE POOL	DOOM /1 /ITM	Brown/2/Wood
Substrate/Surface		Wall	Casino	Cability	Frame	r loor	Bannister	Casing	Frame	Door Frame	Window Thim		WINDOW ITIM	Wall	Door Frame	Bannister Rail	Wood Door	Wall	Toof.	racia
Sample Location		Northwest Exterior Wall	Northwest Exterior Window Casino	Northwest Fyterior Windom Econo	Front Doroh Floor	Front Doroh Estavior D.	Event AT and WE TO BADDISTER	FTOLL (NOTIN) WINDOW CASING	Front (North) Window Frame	Living Room Wall, Near Entry	Living Room North Window	Kitchen Window	Kitchen Southnoot Comme	Articulari, Jouureast Corner County Dodage		Upstairs, 1 op of Stairs Bannister	Garage	Garage	Southwest Facia	1101 × 10011 11000
Building		952	952	952	650	050	1050	776	706	952	952	952	650	957	200	776	206	952	952	
Sample I.D.		952-01P	952-02P	952-03P	952-04P	952-05P	d90-030	100 200	1/0-706	952-08P	952-09P	952-10P	952-11P	952-12P	057_120	101-200	441-7C6	952-15P	952-16P	NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B). mg/kg = Milligrams per kilogram

SF = Square feet

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight)

Estimated quantities are not intended for use in bidding calculations. BOLD concentratins indicate lead-based paint.

February 7, 2019 Project No. 403435001

D a D a Table 3 - Bulk Polychlorinated Biphenyl Sampling Results \$ ć Material I acation Sampie I.D. Building Date Sampled

r CD Content	(mungrams/kulogram)	QN	, in the second s	ND	
Condition		NA	NIA	L'ANI	
Quantity	NIA	NA.	NA	UNI	
Sample Description	Window Dutty	Ann T MONIN I	Window Putty	from a second	
MAICHAI FOCATION	North Window		West Window		
nudman man	1/23/2019	01001001	6107/27/1		
0	952	050	704		Contraction of the second seco
	PCB-01	DCB 00	70-001	NOTES:	

Analysis for PCB content via USEPA Method 8082A with preparation Method 3540C

PCB = Polychlorinated Biphenyl

*Lab analytes include Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Aroclor 1262, and Aroclor 1268

February 7, 2019 Project No. 403435001

No. of Freon Refrigerator Systems 0 Number of Exit Signs 0 Fluorescent Light Tubes No. of 32 Number of A/C Units 0 Number of Thermostats Mercury 0 Light Ballasts Number of 16 Transformers Number of 0 952 Sonoma Avenue Location

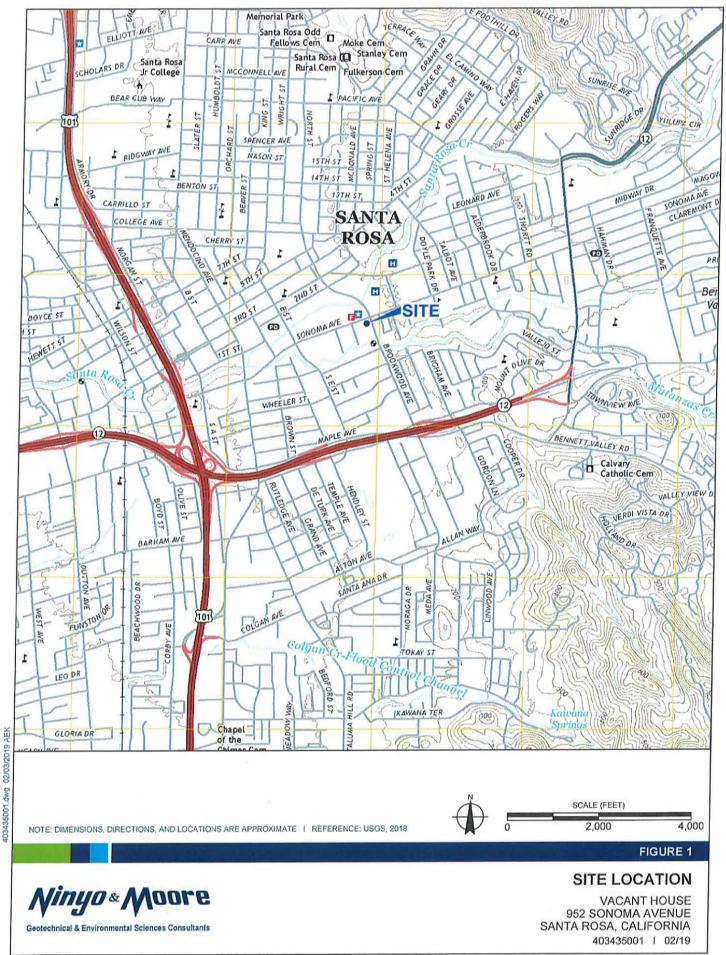
Table 4 - Miscellaneous Hazardous Building Materials Survey Results

NOTES:

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

FIGURES



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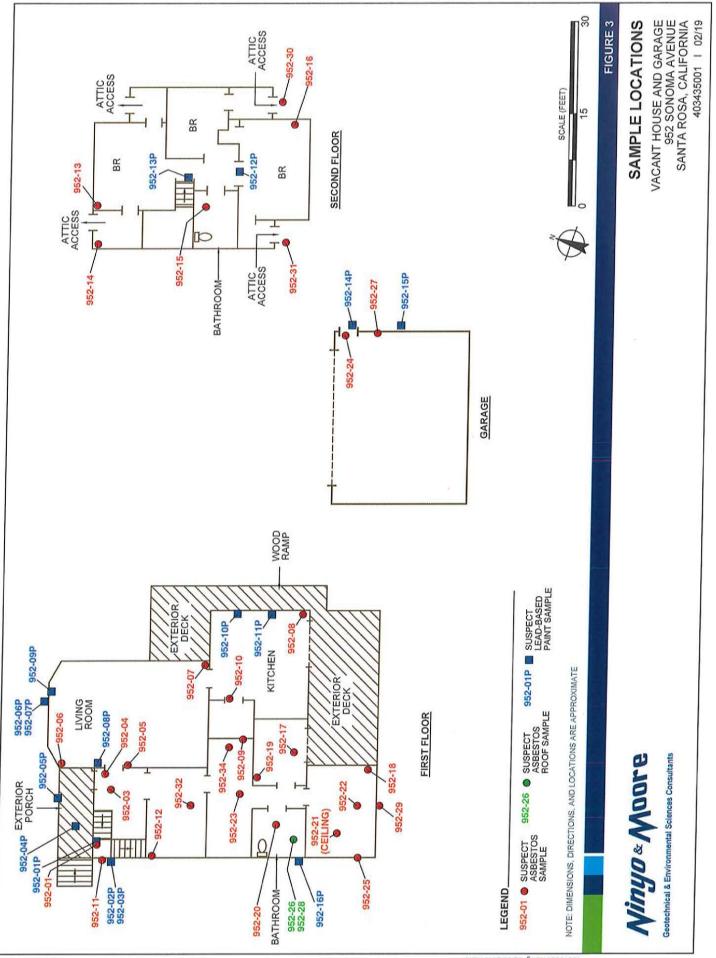


Geotechnical & Environmental Sciences Consultants

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APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



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October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

The

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

EMISI	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@ernsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	01/29/2019 - 01/30/2019
	Alameda, CA 94501	Collected Date:	01/24/2019
Project:	403435001 - SANTA ROSA		

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
952-01	952 - NORTHWEST EXT. WINDOW - WINDOW PUTTY	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	<1% Chrysotile
952-02	952 - FRONT STEPS - STAIR TREAD MATERIAL/MASTIC	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
952-03-Wood Tile 091902323-0003	952 - ENTRY WAY FLOOR - 12"X12" WOOD TILE WITH MASTIC	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
952-03-Mastic 091902323-0003A	952 - ENTRY WAY FLOOR - 12"X12" WOOD TILE WITH MASTIC	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
952-04-Texture 091902323-0004	952 - ENTRYWAY WALL, EAST CORNER - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
952-04-Wallboard 091902323-0004A	952 - ENTRYWAY WALL, EAST CORNER - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
952-05-Texture 091902323-0005	952 - LIVING ROOM, BY ENTRY - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
952-05-Wallboard 091902323-0005A	952 - LIVING ROOM, BY ENTRY - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
952-06-Texture	952 - LIVING ROOM, NW CORNER - TEXTURE/WALLBOA RD	Beige Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	<1% Chrysotile
952-06-Skim Coat 991902323-0006A	952 - LIVING ROOM, NW CORNER - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	<1% Chrysotile
952-06-Plaster 91902323-0006B	952 - LIVING ROOM, NW CORNER - TEXTURE/WALLBOA RD	Gray Non-Fibrous Homogeneous		50% Quartz 50% Non-fibrous (Other)	None Detected
952-07-Wallpaper 91902323-0007	952 - LIVING ROOM, SE CORNER - WALL PAPER/WALL BOARD	White Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

Initial report from: 01/30/2019 13:58:33

ASB_PLM_0008_0001 - 1.78 Printed: 1/30/2019 10:58 AM

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EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902323 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asb	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
952-07-Skim Coat 091902323-0007A	952 - LIVING ROOM, SE CORNER - WALL PAPER/WALL BOARD	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
952-07-Plaster 091902323-00078	952 - LIVING ROOM, SE CORNER - WALL PAPER/WALL BOARD	Gray Non-Fibrous Homogeneous		50% Quartz 50% Non-fibrous (Other)	None Detected
952-08-Plaster	952 - KITCHEN SE CORNER - WALL BOARD	Gray Non-Fibrous Homogeneous		50% Quartz 50% Non-fibrous (Other)	None Detected
952-08-Skim Coat	952 - KITCHEN SE CORNER - WALL BOARD	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
952-08-Texture	952 - KITCHEN SE CORNER - WALL BOARD	Beige Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	<1% Chrysotile
091902323-0008B 952-09-Texture	952 - KITCHEN CLOSET - WALLBOARD	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
091902323-0009 952-09-Wallboard	952 - KITCHEN CLOSET -	White Non-Fibrous		80% Gypsum 20% Non-fibrous (Other)	None Detected
091902323-0009A 952-10-VSF 091902323-0010	WALLBOARD 952 - KITCHEN FLOOR, AT CLOSET - VSF WITH	Homogeneous Gray/White Fibrous Homogeneous	20% Cellulose	50% Non-fibrous (Other)	30% Chrysotile
952-10-Mastic	PARTICLE BOARD 952 - KITCHEN FLOOR, AT CLOSET - VSF WITH PARTICLE BOARD	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
952-10-Particle Board 991902323-00108	952 - KITCHEN FLOOR, AT CLOSET - VSF WITH PARTICLE BOARD	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
952-11-Texture	952 - STAIRWAY LANDING - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
91902323-0011A	952 - STAIRWAY LANDING - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		50% Quartz 50% Non-fibrous (Other)	None Detected
152-12 91902323-0012	952 - TOP OF STAIRS - TEXTURE/WALLBOA	White Non-Fibrous Homogeneous		50% Quartz 50% Non-fibrous (Other)	None Detected
	RD	White		50% Quartz	None Detected
52-13 91902323-0013	952 - NORTH BEDROOM NORTHWEST CORNER - TEXTURE/WALLBOA RD	Vonite Non-Fibrous Homogeneous		50% Non-fibrous (Other)	
52-14 91902323-0014	952 - BEDROOM CLOSET - TEXTURE/WALLBOA RD	White Non-Fibrous Homogeneous		50% Quartz 50% Non-fibrous (Other)	None Detected

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 EMSL Order:
 091902323

 Customer ID:
 NOMO22

 Customer PO:
 403435001

Project ID:

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

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
952-15-VSF	952 - UPSTAIRS BATHROOM - VSF WITH PARTICLE	White Fibrous Homogeneous	30% Cellulose 10% Glass	60% Non-fibrous (Other)	None Detected
037902023-0013	BOARD				
952-15-Mastic	952 - UPSTAIRS BATHROOM - VSF	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
091902323-0015A	WITH PARTICLE BOARD	Homogeneous			
952-15-Leveler	952 - UPSTAIRS BATHROOM - VSF	White Non-Fibrous		50% Gypsum 50% Non-fibrous (Other)	None Detected
091902323-0015B	WITH PARTICLE BOARD	Homogeneous			
952-15-Particle Board	952 - UPSTAIRS BATHROOM - VSF	Brown Fibrous	60% Cellulose	40% Non-fibrous (Other)	None Detected
091902323-0015C	WITH PARTICLE BOARD	Homogeneous			
952-16-Wallpaper	952 - UPSTAIRS	White	60% Cellulose	40% Non-fibrous (Other)	None Detected
091902323-0016	SOUTH BEDROOM - WALLPAPER/PLAST ER	Fibrous Homogeneous			
952-16-Plaster	952 - UPSTAIRS	White		50% Quartz 50% Non-fibrous (Other)	None Detected
091902323-0016A	SOUTH BEDROOM - WALLPAPER/PLAST ER	Non-Fibrous Homogeneous		50% Non-hibrous (Other)	
952-17-Joint Compound	952 - DOWNSTAIRS SOUTH PATIO	White Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
091902323-0017	ROOM - JC/WALLBOARD	Homogeneous			
952-17-Wallboard	952 - DOWNSTAIRS SOUTH PATIO	White Non-Fibrous		80% Gypsum 20% Non-fibrous (Other)	None Detected
091902323-0017A	ROOM - JC/WALLBOARD	Homogeneous			
952-18-Joint Compound	952 - SOUTH SUN ROOM -	White Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
091902323-0018	JC/WALLBOARD	Homogeneous			
952-18-Wallboard	952 - SOUTH SUN ROOM -	White Non-Fibrous		80% Gypsum 20% Non-fibrous (Other)	None Detected
991902323-0018A	JC/WALLBOARD	Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
52-19-Wood Panel	952 - PATIO ROOM - WOOD PANEL WITH MASTIC	Brown Fibrous Homogeneous	60% Cellulose	40% (Kil-Ibrods (Ciller)	
91902323-0019	952 - PATIO ROOM -	Gray		100% Non-fibrous (Other)	None Detected
152-19-Mastic 91902323-0019A	WOOD PANEL WITH	Non-Fibrous Homogeneous			
52-20-VSF	952 - DOWNSTAIRS BATHROOM - VSF	White Fibrous	20% Cellulose	40% Non-fibrous (Other)	40% Chrysotile
91902323-0020		Homogeneous			
52-20-Mastic	952 - DOWNSTAIRS BATHROOM - VSF	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
91902323-0020A		Homogeneous	000/ 10/- 10/1	10% Non (ibrave (Other)	None Detected
52-21	952 - SUNROOM, CEILING - PINK BATT INSULATION	Tan Fibrous Homogeneous	90% Min. Wool	10% Non-fibrous (Other)	None Detected
91902323-0021			80% Cellulose	20% Non-fibrous (Other)	None Detected
52-22-Wood 01902323-0022	952 - SUNROOM FLOOR - WOOD WITH BLACK MASTIC	Brown Fibrous Homogeneous	or // Centriose	2010 Horn Include (online)	

Initial report from: 01/30/2019 13:58:33

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 EMSL Order:
 091902323

 Customer ID:
 NOMO22

 Customer PO:
 403435001

Project ID:

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

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
952-22-Mastic 091902323-0022A	952 - SUNROOM FLOOR - WOOD WITH BLACK MASTIC	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
952-23-Wood 091902323-0023	952 - MIDDLE ROOM FLOOR - WOOD WITH	Brown Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
952-23-Mastic	MASTIC 952 - MIDDLE ROOM FLOOR - WOOD WITH	Tan/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
952-24 091802323-0024	MASTIC 952 - DETACHED GARAGE - FLOOR AT DOOR CONCRETE - SAMPLE NOT SUBMITTED			5,	Not Submitted
952-25-Shingle 091902323-0025	952 - SW CORNER OF REAR FLAT ROOF - ROOF ASSEMBLY	Black/Orange Non-Fibrous Homogeneous	5% Glass	15% Quartz 60% Matrix 20% Non-fibrous (Other)	None Detected
952-25-Tar 091902323-0026A	952 - SW CORNER OF REAR FLAT ROOF - ROOF ASSEMBLY	Black Non-Fibrous Homogeneous		95% Matrix 5% Non-fibrous (Other)	None Detected
952-26-Shingle	952 - SWAREA OF MAIN ROOF (STEEP) - ROOF ASSEMBLY	Black/Orange Non-Fibrous Homogeneous		25% Quartz 70% Matrix 5% Non-fibrous (Other)	None Detected
952-26-Shingle 2	952 - SWAREA OF MAIN ROOF (STEEP) - ROOF ASSEMBLY	Black/Green Non-Fibrous Homogeneous	5% Glass	20% Quartz 60% Matrix 15% Non-fibrous (Other)	None Detected
952-27-Shingle	952 - GARAGE ROOF - ROOF ASSEMBLY	Black/Orange Non-Fibrous Homogeneous		25% Quartz 70% Matrix 5% Non-fibrous (Other)	None Detected
952-27-Felt	952 - GARAGE ROOF - ROOF	Black Fibrous	85% Cellulose	10% Matrix 5% Non-fibrous (Other)	None Detected
91902323-0027A 52-28 91902323-0028	ASSEMBLY 952 - SHAKE SHINGLE + VAPOR BARRIER UNDER 952-26 - SHAKE SHINGLE/VAPOR BARRIER	Homogeneous Brown/Black Non-Fibrous Homogeneous	90% Cellulose	10% Matrix	None Detected
52-29 01902323-0029	952 - SOUTH WINDOW FRAME -WINDOW PUTTY	Tan Non-Fibrous Homogeneous		75% Matrix 25% Non-fibrous (Other)	None Detected
52-30	952 - 2ND FLOOR ATTIC - ATTIC	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
52-31	INSULATION 952 - 2ND FLOOR ATTIC - ATTIC	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
1902323-0031 52-32	INSULATION 952 - CENTRAL ROOM - LEVELING COMPOUND	Tan/White Non-Fibrous Homogeneous		10% Quartz 70% Ca Carbonate 20% Non-fibrous (Other)	None Detected

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Project ID:

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

Sample	Description	Non-Asbestos			Asbestos
		Appearance	% Fibrous	% Non-Fibrous	% Туре
952-33	952 - GARAGE FLOOR -	Gray Non-Fibrous		30% Quartz 60% Ca Carbonate	None Detected
091902323-0033	CONCRETE	Homogeneous		10% Non-fibrous (Other)	
952-34	952 - MIDDLE ROOM - MASTIC ON WOOD	Tan/White Non-Fibrous		90% Matrix 10% Non-fibrous (Other)	None Detected
091902323-0034		Homogeneous			

Analyst(s) Adam C. Fink (46) Oscar Merino (13)

atthic

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("Inal") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 01/30/2019 13:58:33

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Page 5 of 5



EMSL Analytical, Inc 464 McCormick Street, San Leandro, CA 94577 Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com sanleandrolab@emsl.com EMSL Order: CustomerID: CustomerPO: ProjectID: 091902323 NOMO22 403435001

Attn:	Bill Larkin	Phone:	(510) 343-3000
	Ninyo & Moore	Fax:	(510) 633-5646
	- 이상 이 가 가 두 집 같아. 그 아이는 그 아이 가 가 있다. 이상 것 같아	Received:	01/29/19 12:00 PM
	2020 Challenger Drive	Analysis Date:	2/2/2019
	Suite 103	Collected:	1/24/2019
	Alameda, CA 94501		
Projec	t: 403435001 - SANTA ROSA		

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

SAMPLE ID	DESCRIPTION	APPEARANCE		Matrix nic Acid	NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES
952-01 091902323-0001	952 - NORTHWEST EXT. WINDOW - WINDOW PUTTY	White Fibrous Homogeneous	6.9	89.6		3.5 Non-fibrous (other)	<0.1 Chrysotile

Analyst(s)

Shane Heisser (1)

Matthe Estration

Matthew Batongbacal or other approved signatory

Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.1%. EMSL Analytyical Inc suggests that samples reported as <0.1% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc. bears no esponsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from 02/02/2019 15:03:28

Test Report PLMPCGrav-7.26.0 Printed: 2/2/2019 3:03:28 PM

THIS IS THE LAST PAGE OF THE REPORT.

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Attention: Bill Larkin

Ninyo & Moore 2020 Challenger Drive

Alameda, CA 94501 Project: 403435001 - SANTA ROSA

Suite 103

EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577

Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091902323 Customer ID: NOMO22 Customer PO: 403435001 Project ID:

Phone:	(510) 385-5054
	(510) 633-5646
	01/29/2019 12:00 PM
Analysis Date:	
Collected:	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non-	Asbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
952-06-Texture	952 - LIVING ROOM,	Beige		99.50% Non-fibrous (Other)	0.50% Chrysotile
091902323-0006	NW CORNER -	Fibrous			
	TEXTURE/WALLBOAR D	Homogeneous			
952-06-Skim Coat	952 - LIVING ROOM,	White		100.0% Non-fibrous (Other)	<0.25% Chrysotile
091902323-0006A	NW CORNER -	Fibrous			
	TEXTURE/WALLBOAR D	Homogeneous			
952-08-Texture	952 - KITCHEN SE	Beige		99.75% Non-fibrous (Other)	0.25% Chrysotile
91902323-0008B	CORNER - WALL	Fibrous			
	BOARD	Homogeneous			

Analyst(s)

Shane Heisser (3)

Matthe

Matthew Batongbacal or other approved signatory

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government . EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/02/2019 15:03:28

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OLE DA	Project Name : Project No.: Project Manager APN: Site Address		Low Jaw	Building	AC.										+		>
K SAM	0	MATION: Mathematicana Mathematicana Mathematicana	Bull La	Sample ID	952-01	952-02	627-03	952-04:	352-05	922 - 06	10-7	2-08	952-09	952-10	11-729	2-12	
DS BUI	Street, #40 94612 5640 -5646	ODY INFOR	Ada I	. San	95.	952	952	952	952	952	952	952	951	95	36	952	1
ASBESTOS BULK SAMPLE DATA SHEET	1956 Webster Streer, #400 Oakland, CA 94612 Tet: (510) 633-5640 Fax: (510) 633-5646	CHAIN OF CUSTODY INFORMATION: Interviewentschungenummenten Informationen Auflichtight English-Historichten Annungenpeninnunnen Annungenennen Millionistieben Informationen Artiken Annungenennen Annungenennennen Annungenennennennennennennennennen Annung	Whithm	Dide				н. 15 1	1								Mudec
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ASBESTO Minvo & Moore	1956 Webster Street Oakland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646 GHAIN OF GUSTODY R	記述 Sul Cu	Didal		,	· · .									

OrderID: 091902323

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A SHEET		- 1/24/14		Garage Root which Knot Weep	1	1 5	Minddle Parm
MPLE DA	Project Manager. Project Manager. APN: Site Address:	and and a	Building Number	152 Barnes	152 . 152 .	952	ES ¹ .
ASBESTOS BULK SAI	Onkland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646 Far: (510) 633-5646 CHAIN OF CUSTODY INFORMATION	BM July Man. P. Manustration and the second se	10 . Sample ID 052-25	55- 56-	92-29 92-29	952-32	952-34
ASBESTO. Ninyo & Moore	Orkland, Tck: (Sid Fax: (Sid Fax: (Sid	警察 BNJ		952	SS .		

Page 3 Of 3

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OrderID: 091902323

APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

EMISL	EMSL Analytical, In 464 McCormick Street, San Leand Phone/Fax: (510) 895-3675 / (57 http://www.EMSL.com	EMSL Order: 091902309 CustomerID: NOMO22 CustomerPO: ProjectID:	
Suite 103 Alameda,	/loore llenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/23/2019

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample D	escription Lab ID Collected Analyzed	Weight	Lead Concentration
952-01P	091902309-0001 01/23/2019 01/29/2019	0.2479 g	11 % wt
002 011	Site: NW EXTERIOR WALL		
952-02P	091902309-0002 01/23/2019 01/29/2019	0.2527 g	0.40 % wt
	Site: NW EXT WINDOW CASING		
952-03P	091902309-0003 01/23/2019 01/29/2019	0.2563 g	0.18 % wt
	Site: NW EXT WINDOW FRAME		
952-04P	091902309-0004 01/23/2019 01/29/2019	0.2506 g	7.5 % wt
	Site: FRONT PORCH FLOOR	and the second sec	
952-05P	091902309-0005 01/23/2019 01/29/2019	0.254 g	6.0 % wt
	Site: FRONT PORCH EXT BANNISTER		
952-06P	091902309-0006 01/23/2019 01/29/2019	0.2528 g	11 % wt
	Site: FRONT (NORTH) WINDOW CASING		
952-07P	091902309-0007 01/23/2019 01/29/2019	0.259 g	5.0 % wt
	Site: FRONT (NORTH) WINDOW FRAME		
952-08P	091902309-0008 01/23/2019 01/29/2019	0.2569 g	0.025 % wt
	Site: LIVING ROOM WALL NEAR ENTRY		
952-09P	091902309-0009 01/23/2019 01/29/2019	0.2727 g	0.23 % wt
	Site: LIVING ROOM NORTH WINDOW		
952-10P	091902309-0010 01/23/2019 01/29/2019	0.2503 g	0.31 % wt
	Site: KITCHEN WINDOW TRUN		
952-11P	091902309-0011 01/23/2019 01/29/2019	0.2527 g	<0.0080 % wt
	Site: KITCHEN SOUTHEAST CORNER WALL		
52-12P	091902309-0012 01/23/2019 01/29/2019	0.2589 g	0.015 % wt
	Site: SOUTH BEDROOM DOORFRAME		
52-13P	091902309-0013 01/23/2019 01/29/2019	0.2033 g	0.071 % wt
	Site: UPSTAIRS TOP OF STAIRS BANNISTER		
52-14P	091902309-0014 01/23/2019 01/29/2019	0.0784 g	<0.026 % wt
	Site: GARAGE WOOD DOOR		
52-15P	091902309-0015 01/23/2019 01/29/2019	0.1233 g	<0.016 % wt
	Site: GARAGE WALL		

ante 1

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/29/2019 19:02:15

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 01/29/2019 7:02:15 PM

EMISL	EMSL Analytical, In 464 McCormick Street, San Lear Phone/Fax: (510) 895-3675 / (5 http://www.EMSL.com	Iro, CA 94577	EMSL Order: CustomerID: CustomerPO: ProjectID:	091902309 NOMO22
Suite 103 Alameda,	Moore Ilenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/23/2019	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Lab ID	Collected	Analyzed	Weight	Lead Concentration
952-16P	091902309-0016	01/23/2019	01/29/2019	0.2525 g	12 % wt
	Site: SW FACIA				

Julth

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/29/2019 19:02:15

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 01/29/2019 7:02:15 PM

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	Sheet 1 of A			Contraction and and and and and and and and and an	12 Primili 10V	1	Condition	11- 741	1 T I A	11-T-	NON: LINA	Non-Inda	Let 7 Juli	tter!	I what	Inter 7	1×13-01	NoN- NoN-	NON :	1241
		Laboratory: EMSL	Fac		129/19		Estimated	Snon IT	Don IA	JANT H	150 m	Ing	Sould ar	JA luns	M-reta	100 1	100 1			
·	091902309	WPL : 1/23 1/9	111 1	Received By: (sign/print)	, EMAL	-	Sample Description (Color /# Layers /Substrate)	Pere /2/. han	Rein/2/i.hon	What I hindr	Rown 2 hond	Brain 12 Mahan	Roman 1 1. his	And 1/ C/ 2/ 1/1/	i and a second	1	TAN/2/W000100	WAUL CREAM 12/WAUL	FRAME GREEN/1/WWD/160 E	
Cher My 180		Sampled By: WPL Sampled By: Sampled By: Date Sampled: 1/23 //4			8	<u></u>	Building Component		1	T		Rinuster	1	-	1	3-	3	WAUL	POOR	2 .
	A SHEET	ame: South Roog o.: 403435061 anager: MPL	ess:	Comparty Date	NnyaEMaala	:	Sample Location	Nu/Exterior Work	NV/Edi Mineda Cosina	WW Ect Window Fromme	Front Book Floor	Front Bordy Ext. Rownister	Frant (North) Window Casing	Frint (North) Mindred Freme	LIUWG ROOM Wall, CONTRY	LIVING ROOM, WORTH	KITCHEN WINDOW	KITCHEN, SOUDEAST.	South BEDROOM	Page 1 Of
2	K SAN	Project Name : 5 Project No.: 4 Project Manager: APN:	Site Address.		> levlen		Building Number	952	<u></u>											İ
309	LEAD BASED PAINT BULK SAMPLE DAT	Nirryo & Moore 1956 Webster Street, Suite 400 Oakland, CA 94612 510-633-5640	Y INFORMATION:	Significant in the second street by (significant) :	What Respect William	1	Sample ID	952-61P	952-02P	952-03P	952-04P	952-059	0952-06P	0152-07P	952-08P	952-09P	952-100	952-11P	1952-121	
OrderID: 091902309	LEAD BAS	Nirrys & Moore 1956 Webster Street Oaldand, CA 94612 510-633-5640	CHAIN OF CUSTODY INFORMATION	States Sector	Nulline R		Clider												<u>~</u>	
Ord	ξ	7-1-1								150							, C	 02162	2	1

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OrderID: 091902309

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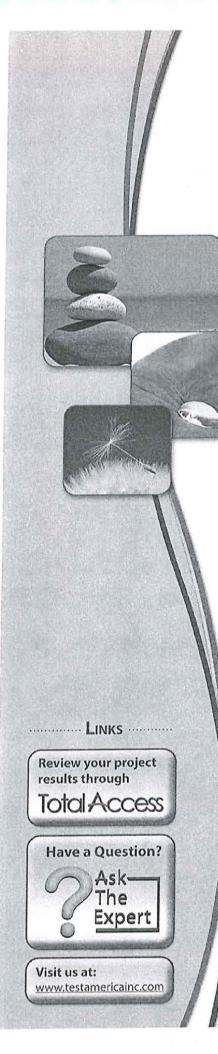
Non- Inter Condition NON-ユ Now. IN TACT Sheet 2 of Elys 2 B B Laboratory: Surface Area 0 TAN/1/Way 500 P 20 0 Estimated RED/1/wood 60 Fax: Sample Description (Color # Krown/2/wb/ 5/22 Mille/11/2000 Layers /Substrate) 1/23/19 WPL W m-hc Date Sampled; Sampled By: Sampled By: Building Component 2000 WALL Sampled By: FILON N 952-13P 952 UPSTAIRS, TOP OF STAIRS 29 Ъ Page 2 Sample Location -- Company ---- Date ------LEAD BASED PAINT BULK SAMPLE DATA SHEET 123/19 Project Name: Such ASE Project No.: 413435001 Project Manager: WPU APN: GARAGE SW FACAN GARAGE Ninyo&Moote APN: Site Address: William P. Leuha WIMain P. Laking Building Number . P CHAIN OF CUSTODY INFORMATION: 952-148 952-15P 91-256 1956 Webster Street, Suite 400 Sample ID Oakland, CA 94612 510-633-5646 (fax) Ninyo & Moore 510-633-5640 Ulde ;

151

C02162

APPENDIX D

Polychlorinated Biphenyl Laboratory Analytical Report and Chain-of-Custody Records



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Pleasanton 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-91037-1 Client Project/Site: Santa Rosa

For: Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, California 94501

Attn: Bill Larkin

Akenef Sal D

Authorized for release by: 2/5/2019 4:06:10 PM

Afsaneh Salimpour, Senior Project Manager (925)484-1919 afsaneh.salimpour@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

TestAmerica Job ID: 720-91037-1

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Definitions/Glossary

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job ID: 720-91037-1

3

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
NDC	Minimum Detectable Concentration (Radiochemistry)
NDL	Method Detection Limit
ИL	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
EF	Toxicity Equivalent Factor (Dioxin)
EQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Pleasanton

2/5/2019 C02162

Client: Ninyo & Moore Project/Site: Santa Rosa

Job ID: 720-91037-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-91037-1

Comments

No additional comments.

Receipt

The samples were received on 1/28/2019 1:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC Semi VOA

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: PCB-01/952-NORTH WINDOW PUTTY (720-91037-1), PCB-02/952-WEST WINDOW PUTTY (720-91037-2), PCB-03/CARETAKER-EAST WINDOW PUTTY (720-91037-3), PCB-04/GREENHOUSE-NORTH WINDOW PUTTY (720-91037-4), (LCS 720-259677/2-A), (LCSD 720-259677/3-A) and (MB 720-259677/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

TestAmerica Job ID: 720-91037-1

TestAmerica Pleasanton

2/5/2019 C02162

Project/Site: Santa Rosa Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY No Detections. Client Sample ID: PCB-02/952-WEST WINDOW PUTTY

No Detections.

Client: Ninyo & Moore

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW PUTTY

No Detections.

Client Sample	ID: PCB-04/GREENHOUSE-NORTH WINDO	WC
PUTTY		

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	430		290		ug/Kg	1		8082	Total/NA

Detection Summary

TestAmerica Job ID: 720-91037-1

Lab Sample ID: 720-91037-1

Lab Sample ID: 720-91037-2

Lab Sample ID: 720-91037-3

Lab Sample ID: 720-91037-4

5

2

Client Sample Results

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY Date Collected: 01/24/19 10:05 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-1 Matrix: Solid

6

TestAmerica Job ID: 720-91037-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1260 .	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69	-	32 - 112				02/01/19 14:53	02/05/19 12:09	1
DCB Decachlorobiphenyl	100		2 - 122				02/01/19 14:53	02/05/19 12:09	1

Client Sample Results

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY Date Collected: 01/24/19 10:15 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-2 Matrix: Solid

TestAmerica Job ID: 720-91037-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1221	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1232	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1242	ND		280	6	ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1248	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1254	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1260	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		32 - 112				02/01/19 14:53	02/05/19 12:26	1
DCB Decachlorobiphenyl	83		2 - 122				02/01/19 14:53	02/05/19 12:26	1

5 6

Client Sample Results

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW

PUTTY

Date Collected: 01/24/19 13:05 Date Received: 01/28/19 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1260	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		32 - 112				02/01/19 14:53	02/05/19 12:43	1
DCB Decachlorobiphenyl	99		2 - 122				02/01/19 14:53	02/05/19 12:43	1

15

TestAmerica Job ID: 720-91037-1

Lab Sample ID: 720-91037-3

Matrix: Solid

6

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW

PUTTY

Date Collected: 01/24/19 14:10 Date Received: 01/28/19 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1260	430		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		32 - 112				02/01/19 14:53	02/05/19 13:00	1
DCB Decachlorobiphenyl	110		2 - 122				02/01/19 14:53	02/05/19 13:00	1

Lab Sample ID: 720-91037-4

Matrix: Solid

6

Surrogate Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job-ID: 720-91037-1

7

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

				Percent Surrogate Recovery (Acceptance Limits)
		TCX1	DCBP1	
Lab Sample ID	Client Sample ID	(32-112)	(2-122)	
720-91037-1	PCB-01/952-NORTH WINDOW PU1	69	100	
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	87	83	
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	90	99	
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	87	110	
LCS 720-259677/2-A	Lab Control Sample	59	93	
LCSD 720-259677/3-A	Lab Control Sample Dup	61	95	
MB 720-259677/1-A	Method Blank	59	87	
Surrogate Legend				

DCBP = DCB Decachlorobiphenyl

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job ID: 720-91037-1

8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 720-259677/1 Matrix: Solid Analysis Batch: 259796	-A	MB	мв								Client S		: Metho Type: T Batch:	otal/NA
(A week state)			Qualifier	RL		MDL	Unit		D	1	Prepared	Anal	vzed	Dil Fac
Analyte PCB-1016		ND	Quanner	50	· · · · · · · · · · · · · · · · · · ·	Mide	ug/Ke	3	- -		01/19 14:5:	-	100000000	1
1.777.17947d		ND		50			ug/Kg				01/19 14:5:			1
PCB-1221 PCB-1232		ND		50			ug/Kg	54			01/19 14:53		9 11:18	1
PCB-1232 PCB-1242		ND		50			ug/Kg				01/19 14:53		9 11:18	1
		ND		50			ug/Kg				01/19 14:53			1
PCB-1248		ND		50			ug/Kg				01/19 14:53			1
PCB-1254		ND		50			ug/Kg				01/19 14:53			1
PCB-1260		ND		50			uging	,		010	01110111.00	02000		
		ΜΒ	MB											
Surrogate	%Reco	overy	Qualifier	Limits							Prepared	Analy	Contraction and the	Dil Fac
Tetrachloro-m-xylene		59	Post I	32 - 112							01/19 14:53			1
DCB Decachlorobiphenyl		87		2 - 122						02/0	01/19 14:53	02/05/19	9 11:18	1
Analyte PCB-1016 PCB-1260	LCS			Added	Result 93.7 114			Unit ug/Kg ug/Kg			%Rec 70 85	Limits 55 - 112 65 - 120		
	&Recovery	Quali	fier	Limits 32 - 112										
Tetrachloro-m-xylene	59													
DCB Decachlorobiphenyl	93			2 - 122										
_ab Sample ID: LCSD 720-259677/ Matrix: Solid Analysis Batch: 259796	/3-A			Spike	LCSD	LCSD)	Cli	ent S	Sam	nple ID: L		ol Samp Type: To Batch: 2	tal/NA
Analyte				Added	Result	Quali	fier	Unit		D	%Rec	Limits	RPD	Limit
PCB-1016				133	102			ug/Kg		—	76	55 - 112	8	20
2CB-1260				133	120			ug/Kg			90	65 - 120	6	20
	LCSD													
		Qualit	fier	Limits										
"etrachloro-m-xylene	61			32 - 112										
CB Decachlorobiphenyl	95			2 - 122										

QC Association Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

GC Semi VOA

Prep Batch: 259677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Total/NA	Solid	3550B	
MB 720-259677/1-A	Method Blank	Total/NA	Solid	3550B	
.CS 720-259677/2-A	Lab Control Sample	Total/NA	Solid	3550B	
_CSD 720-259677/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
nalysis Batch: 25979(Madalu	Method	Pren Batch
	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
ab Sample ID		Prep Type Total/NA	Solid	8082	259677
nalysis Batch: 25979(ab Sample ID /20-91037-1 /20-91037-2	Client Sample ID			a constant of the second	259677 259677
ab Sample ID 20-91037-1	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY	Total/NA	Solid	8082	259677
ab Sample ID 20-91037-1 20-91037-2 20-91037-3	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY PCB-02/952-WEST WINDOW PUTTY	Total/NA Total/NA	Solid Solid	8082 8082	259677 259677 259677 259677
ab Sample ID 20-91037-1 20-91037-2	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY PCB-02/952-WEST WINDOW PUTTY PCB-03/CARETAKER-EAST WINDOW PUTTY	Total/NA Total/NA Total/NA	Solid Solid Solid	8082 8082 8082	259677 259677 259677
ab Sample ID 20-91037-1 20-91037-2 20-91037-3 20-91037-4	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY PCB-02/952-WEST WINDOW PUTTY PCB-03/CARETAKER-EAST WINDOW PUTTY PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8082 8082 8082 8082	259677 259677 259677 259677

TestAmerica Job ID: 720-91037-1

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Lab Chronicle

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY

Date Collected: 01/24/19 10:05 Date Received: 01/28/19 13:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:09	DCH	TAL PLS

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY

Date Collected: 01/24/19 10:15 Date Received: 01/28/19 13:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:26	DCH	TAL PLS

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW PUTTY Date Collected: 01/24/19 13:05

Date Received: 01/28/19 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:43	DCH	TAL PLS

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW PUTTY

Lab Sample ID: 720-91037-4

TestAmerica Job ID: 720-91037-1

Lab Sample ID: 720-91037-1

Lab Sample ID: 720-91037-2

Lab Sample ID: 720-91037-3

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Date Collected: 01/24/19 14:10 Date Received: 01/28/19 13:35

-	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082	3)	1	259796	02/05/19 13:00	DCH	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

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Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date
California	State Prog	ram	9	2496	01-31-20
The following analytes	are included in this report, but	the laboratory is not c	ertified by the governin	ng authority. This list may inc	lude analytes for which
The following analytes the agency does not off		the laboratory is not c	ertified by the governin	ng authority. This list may inc	lude analytes for which

Method Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

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Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
3550B	Ultrasonic Extraction	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Ninyo & Moore Project/Site: Santa Rosa TestAmerica Job ID: 720-91037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Solid	01/24/19 10:05	01/28/19 13:35
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Solid	01/24/19 10:15	01/28/19 13:35
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Solid	01/24/19 13:05	01/28/19 13:35
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Solid	01/24/19 14:10	01/28/19 13:35

TestAmerica Pleasanton

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Toot A	THE LEADED IN ENVIRONMENTAL TESTING	TestAmerica Laboratories, Inc.	COC No		For Lab Use Only:	Walk-in Client	Lab Sampling.	Job / SDG No.:			vample specific Notes.										ed longer than 1 month)	Monthe			I nerm ID No	122/19 OUS	1728/19/33S	Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018	
Chain of Custody Record	he1881 #	off I . Is have a	ct: Dul UAA (AM UARC: (/ L+/)9 ct:															720-91037 Chain of Custody			sample Uisposal (A fee may be assessed if samples are retained longer than 1 month)	OReturn to Client Disposal by Lab Development		Cooler Temp. (C): Oberd Coords	Company	and a series of the series of	Referved in Laboratory by. Company:	* 7 C FORM NO. C	
Chain of Cus	Contram: Dumos			Analysis Turnaround Time	JEXTIMO DAYS	N //) (N	111	SW/	Sample Type	G=Grab) Matrix Cont.	Bulk I		8	X						T	and the second se	Dunknown			Date/Time: 0 Received by	1/ BaterTithey 2 Receiv	-		14
(20-91037 Requision Program: Dow	Project Manager:	Tel/Fax:	Analysis	515			00	Samula Samula		ty 11/24/39 10:45	21:01 1 12		11:11 × 11/				 +	 S: 5=NaOH- 6= Othor	Kaino -o fuosit-o fo	ase List any EPA Was	C Poison B	At	Custody Seal No	CompagyAAA	Company	Company:		
>>> Select a Laboratory <<<		Client Contact	Your Company Name there N , N YU Y M 00 RE	CityIstate/Zip 21 A 1/1 CANA #103	Phone		Project Name: S.A.N.Y.A. Ros.A.	PO# 403435001		Sample	-	POB-02/452-11/est Window Ru	PCE-03/landoler. East Window Ruf	PCB 404 / Green house North Window P		17.0			Preservation Used: 1= Ice, 2= HCI; 3= H2SO4; 4=HNO3: 5=NaOH: 6= Other	Possible Hazard Identification:	Are any samples from a listed EPA Hazardous Waste ² Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.	Chon-Hazard Creamable CSon Intant Special Instructions/OC Remisements & Commenter	S day / regular	Custody Seals Intact: D Yes D No	Retinquished by S M Shar No.	Relinquished by. V	Relinguistied by:	2019	

Page 17 of 18 169

Client: Ninyo & Moore

Job Number: 720-91037-1

List Source: TestAmerica Pleasanton

Login Number: 91037 List Number: 1 Creator: Perry, Janae R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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APPENDIX E

CDPH Form 8552 – Lead Hazard Evaluation Report



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C02162

SAN DIEGO | IRVINE | LOS ANGELES | FONTANA | OAKLAND | SAN FRANCISCO | SACRAMENTO SAN JOSE | PHOENIX | TUCSON | PRESCOTT | LAS VEGAS | DENVER | BROOMFIELD | HOUSTON

www.ninyoandmoore.com

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

	1 1 4		
Section 1 — Date of Lead Hazard Evaluation	/23/19		
Section 2 — Type of Lead Hazard Evaluation (Chec	k one box only)	.1 *	0
Lead Inspection Risk assessment	Clearance Inspection	Other (specify)	p Sampling
Section 3 — Structure Where Lead Hazard Evaluation	on Was Conducted		
Address [number, street, apartment (if applicable)]	Santa Ros	G Sonoma	Zip Code
Construction date (year) Type of structure		Children living in structur	e?
Image: Multi-unit building Image: Single family dwelling	School or daycare	_ Yes 📉 No	
Section 4 — Owner of Structure (if business/agency	v, list contact person)		
Name City of Santa Rosa, Gr Address [number, street, apartment (if applicable)] 69 Stony Circle	city Santa Rosa	Telephone number 707/543-4 State	508 Zip Code 9540
Section 5 - Results of Lead Hazard Evaluation (che	eck all that apply)		
	-based paint detected	Deteriorated lead-ba	na an an an an an an a n an an an an an an ann an an an an an a
No lead hazards detected Lead-contaminated d	ust tound Lead-contai	minated soil found	ler
Section 6 — Individual Conducting Lead Hazard Eva	luation		
Name William P. Lankin		Telephone number	00
Address (number, street, apartment (if applicable)]	Alunda	State	Zip Code 64 501
5543	gnature William P	Lankin	Date 2/6/19
Name and CDPH certification number of any other individuals of N	onducting sampling or testing	(if applicable)	
Section 7 — Attachments			
 A. A foundation diagram or sketch of the structure indicate lead-based paint; B. Each testing method, device, and sampling procedure C. All data collected, including quality control data, laborational data, laborational data, laborational data, laborational data, laboratical data, laboratic	used;		
First copy and attachments retained by inspector	Third copy only (no al	tachments) mailed or faxed to:	
Second copy and attachments retained by owner		oning Prevention Branch Repor vay, Building P, Third Floor	ts

TRANSMISSION VERIFICATION REPORT

:	02/05/2019 02:11
:	NINYO AND MOORE
:	510-633-5646
:	510-633-5640
:	BROD5J252210

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE 02/05 02:11 6205656 00:00:19 01 OK STANDARD ECM

HAZARDOUS BUILDING MATERIALS SURVEY

Lakeville Highway Structures 7630 and 7650 Lakeville Highway Petaluma, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 11, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY

Lakeville Highway Structures 7630 and 7650 Lakeville Highway Petaluma, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 11, 2019 | Project No. 403435001

Illian P. Louken

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
- 3 Miscellaneous Hazardous Building Materials Survey Results

FIGURES

- 1 Site Location
- 2 Site Vicinity
- 3 Sample Locations

APPENDICES

- A Certifications
- B Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C – Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

D - CDPH Form 8552 - Lead Hazard Evaluation Report

1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct hazardous building materials surveys (HBMSs) at two parcels with five structures (Lakeville structures) addressed 7630 and 7650 Lakeville Highway, Sonoma County, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the subject residences and associated buildings.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the Lakeville structures at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 29 and 30, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the Caretaker's house to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the site structures to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of seventy bulk samples of suspect ACMs and submittal of these samples to a certified, independent laboratory for analysis of asbestos content.

- Collection of eighteen suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of suspect bulk PCB sample (if any) and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and FreonTM-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The site consists of three separate residences (Houses 1, 2 and 3), a horse tethering post/shed, and a polo practice barn. Two small concrete pads near the horse tethering post/shed were also sampled. The buildings are vacant and each encompass approximately 3,300 square feet on two stories (over ground floor garages). Building finishes include painted wood walls and ceilings, carpeted and bare-wood floors, ceramic tiles and mortar, vinyl floor sheeting (VFS) and associated mastic and built-up roofing materials. Many of the rooms within the houses were observed to be gutted (toilets, vanities torn out, etc.)

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 29 and 30, 2019, the vacant residences were assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM, LCM and PCBCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Seventy bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by weight (or 5,000 milligrams

per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the building are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

No suspect PCBCM was observed during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the Lakeville structures (Table 3).

6 FINDINGS

A HBMS was performed at the Lakeville structures to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, LCMs and some miscellaneous hazardous building materials are located within the Lakeville structures.

6.1 Asbestos-Containing Materials

Seventy suspect ACM samples (samples LH-01 through LH-70) were collected. All were reported as non-detect for asbestos.

6.2 Lead-Containing Materials

Fifteen paint chip and three ceramic tile samples (samples LH-01L through LH-18L) were collected for analysis of lead content. None of the paint chip or ceramic tile samples were reported above their associated reporting limits for lead.

Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix D.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

No suspect bulk PCBCM samples were collected during our site sampling activities.

6.4 Miscellaneous Hazardous Building Materials Survey

Six long fluorescent tubes and three associated ballasts were observed in the polo practice barn and one 2 fluorescent bulbs and one associated ballast were observed on the second floor of Lakeville House 1.

7 RECOMMENDATIONS

No ACMs, LCMs or PCBCMs have been reported within the identified Lakeville structures. However, the following recommendations and precautions are provided:

- Prior to demolition or renovation activities. potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the Lakeville structures, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 **LIMITATIONS**

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

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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



Lakeville Highway Strutures Petaluma, California

Table 1 - Bulk Asbestos Sampling Results

February 11, 2019 Project No. 403435001

a bom	Sample Description Concrete Concrete Concrete Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound	Friable Quantity Y/N N/A N/A N/A N/A N/A N/A N/A	Condition N/A	Asbestos Content
LHI North Exterior Area LHI South Exterior Concrete Pad LHI Interior South Bedroom LHI Stairs/Ist Floor LHI Stair Floor Room Wall Cavityy	Concrete Concrete Concrete Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound		N/A	
LHI South Exterior Concrete Pad LHI Interior South Bedroom LHI LHI LHI Living Room LHI Stairs! Ist Floor LHI Stad Floor Room Wall Cavity LHI Stad Floor Bathroom	Concrete Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound			QN
LHI Interior South Bedroom LHI Living Room LHI Living Room LHI Carage Wall LHI Stairs/1st Floor LHI Staf Floor Room Wall Cavity LHI Staf Floor Room LHI Staf Floor Bathroom LHI <td< td=""><td>Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound</td><td></td><td>N/A</td><td>QN</td></td<>	Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound		N/A	QN
LH1 Living Room LH1 Garage Wall LH1 Garage Wall LH1 Stairs/1st Floor LH1 Stairs/1st Floor LH1 Stairs/1st Floor LH1 Stairs/1st Floor LH1 2nd Floor (at Baseboard) LH1 2nd Floor Room LH1 2nd Floor Room LH1 2nd Floor Room LH1 2nd Floor Room Wall Cavity LH1 2nd Floor Room LH1 2nd Floor Bathroom	Wallboard/Joint Compound Wallboard/Joint Compound Wallboard/Joint Compound		N/A	Wallboard - ND Joint Compound - ND
LHI Garage Wall LHI Stairs/1st Floor LHI Stairs/1st Floor LHI 2nd Floor (at Baseboard) LHI 2nd Floor (at Baseboard) LHI 2nd Floor Room Wall Cavity LHI 2nd Floor Bathroom LHI 2nd Floor B	Wallboard/Joint Compound Wallboard/Joint Compound	N/A N/A	N/A	Wallboard - ND Joint Compound - ND
LHI Stairs/1st Floor LHI 2nd Floor (at Baseboard) LHI 2nd Floor (at Baseboard) LHI 2nd Floor Room Wall Cavity LHI 2nd Floor Bathroom LHI LHI LHI Attic Ducting	Wallboard/Joint Compound	N/A N/A	N/A	Wallboard - ND Joint Comnound - ND
LHI 2nd Floor (at Baseboard) LHI 2nd Floor (at Baseboard) LHI 2nd Floor Room LHI 2nd Floor Room Wall Cavity LHI 2nd Floor Bathroom		N/A N/A	N/A	Wallboard - ND Joint Compound - ND
LHI 2nd Floor Room LHI 2nd Floor Room Wall Cavity LHI 2nd Floor Room LHI 2nd Floor Room LHI 2nd Floor Bathroom LHI Attic Ducting	Wallboard/Joint Compound	N/A N/A	N/A	Wallboard - ND Joint Compound - ND
LH1 2nd Floor Room Wall Cavity LH1 2nd Floor Room LH1 2nd Floor Room LH1 2nd Floor Bathroom LH1 Antic Ducting LH1 Attic Ducting	Wallboard/Joint Compound	N/A N/A	N/A	Wallboard - ND Joint Compound - ND
LH1 2nd Floor Room Wall Cavity LH1 2nd Floor Room Wall Cavity LH1 2nd Floor Room Wall Cavity LH1 2nd Floor Room LH1 2nd Floor Room LH1 2nd Floor Bathroom LH1 Attic Ducting LH1 Attic Ducting	Pink Batt Insulation	N/A N/A	N/A	QN
LH1 2nd Floor Room Wall Cavity LH1 2nd Floor Room LH1 2nd Floor Bathroom LH1 Attic Ducting LH1 Attic Ducting LH1 Attic Ducting	Gold Batt Insulation	N/A N/A	N/A	QN
LH1 2nd Floor Room LH1 2nd Floor Bathroom LH1 Attic Ducting LH1 Attic Ducting LH1 Attic Ducting	Tan Vinyl Floor Sheeting	N/A N/A	N/A	£
LH1 2nd Floor Bathroom LH1 2nd Floor Bathroom LH1 2nd Floor Bathroom LH1 2nd Floor Bathroom LH1 Antic Ducting LH1 Attic Ducting LH1 Attic Ducting	Vinyl Floor Sheeting with Floral Pattern and Adhesive	N/A N/A	N/A	QN
LH1 2nd Floor Bathroom LH1 2nd Floor Bathroom LH1 2nd Floor Bathroom LH1 Attic Ducting LH1 Attic Ducting	Wallboard/Joint Compound	N/A N/A	N/A	Wallboard - ND
LH1 2nd Floor Bathroom LH1 Attic Ducting LH1 Attic Ducting LH1 Attic Ducting	Mortar with Screen	N/A N/A	NIA	Joint Compound - ND
LHI Attic Ducting LHI Attic Ducting	Tile Adhesive		N/A	R. A
LHI Attic Ducting	Gold/Yellow Foam Adhesive		N/A	Q Q
101 Million of the second seco	Gold Batt Insulation	N/A N/A	N/A	QN
ALLE DUCTING	Pink Batt Insulation with Black Cover	N/A N/A	N/A	QN
LH-19 LH1 1st Floor Bathroom Square Pattern Vinyl Floor Sheeting with	Square Pattern Vinyl Floor Sheeting with Mastic	N/A N/A	N/A	QN
LH-20 LH1 1st Floor Bathroom Wallboard/Joint Compound	Wallboard/Joint Compound	N/A N/A	N/A	Wallboard - ND Joint Compound - ND

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Table 1 - Bulk Asbestos Sampling Results

February 11, 2019 Project No. 403435001

			1 able 1 - Dulk ASDestos Sampling Results				LIUJect IN0. 403433001
Sample I.D.	Building	Material Location	Sample Description	Friable	Quantity	Condition	Asbestos Content
LH-21	LHI	1st Floor Bathroom	Square Pattern Vinyl Floor Sheeting with Mastic (White)	A/A	N/A	N/A	QN
LH-22	LHI	1st Floor Bathroom	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND
LH-23	LHI	Roof	Vapor Barrier Under Metal Roof Sheeting	N/A	N/A	N/A	Joint Compound - ND ND
LH-24	LHI	Roof Parapet	Roof Edge (Under Metal Sheet)	N/A	N/A	N/A	Q.
LH-25	LH Lean To	Concrete Pad #1	Concrete	N/A	N/A	N/A	QV
LH-26	LH Lean To	Lean To	Asphalt	N/A	N/A	N/A	Q
LH-27	LH Lean To	Concrete Pad #2	Concrete	N/A	N/A	N/A	QN
LH-28	LH2	East Concrete Pad	Concrete	N/A	N/A	N/A	QN
LH-29	LH2	East Deck Pier Block	Concrete	N/A	N/A	N/A	GN
LH-30	LH2	West Drive Concrete Pad	Concrete	N/A	N/A	N/A	Ē
LH-31	LH2	Interior Garage South Wall	Wallboard	N/A	N/A	N/A	QN
LH-32	LH2	Interior Garage North Wall	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND
CE-HJ	LH2	Stairway	Wallboard/Joint Compound (Green)	N/A	N/A	NA	Joint Compound - ND Wallboard - ND Joint Compound - ND
LH-34	LH2	Stairway	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND
LH-35	LH2	Living Room Floor	12x12 Wood Tile with Fiberboard Underlayment	N/A	N/A	N/A	Joint Compound - ND ND
LH-36	LH2	Living Room Wall	Wallboard/Joint Compound (Blue)	N/A	N/A	N/A	Wallboard - ND
LH-37	LH2	Bathroom	Wallboard/Joint Compound (White)	N/A	N/A	N/A	Joint Compound - ND Wallboard - ND
LH-38	LH2	Bathroom	Tan Vinyl Floor Sheeting with 10" Square Pattern	N/A	N/A	N/A	Joint Compound - ND
							TW1

Lakeville Highway Strutures Petaluma, California

Table 1 - Bulk Asbestos Sampling Results

February 11, 2019 Project No. 403435001

			sume with the second seco					2
Sample L.D.	Building	Material Location	Sample Description	Friable	Quantity	Condition	Asbestos Content	_
LH-39	LH2	South Room	Wallboard/Joint Compound (Blue)	N/A	N/A	N/A	Wallboard - ND	
LH-40	LH2	West Room	Wallboard/Joint Compound (Blue)	N/A	N/A	N/A	Joint Compound - ND Wallboard - ND	
LH-41	LH2	South Closet	Wallboard/Joint Compound (White)	N/A	N/A	N/A	Joint Compound - ND Wallboard - ND Joint Compound - ND	
LH-42 -	LH2	Downstairs Bathroom	Black and White Vinyl Floor Sheeting	N/A	N/A	N/A	QN	_
LH-43	LH2	. North Side Roofing	Roof Paper/ Below Metal Sheeting	N/A	N/A	N/A	QN	
LH-44	LH2	Attic	Gold Batt Insulation	N/A	N/A	N/A	Ð	
LH-45	LHB	East Porch Slab	Concrete	N/A	N/A	N/A	QN	_
LH-46	LHB	Roof	Roof Paper/ Below Metal Sheeting	N/A	N/A	N/A	GN ST	
LH-47	· · · · [THI - · ·	Entryway	Grout Associated with Ceramic Tile LH-03L	N/A	N/A	N/A	QN	
LH-48	LHB	North Concrete Pad	. Concrete	N/A	N/A	N/A	QN	-
LH-49	LH3	Southwest Exterior Area	Concrete	N/A	N/A	N/A	CN N	
LH-50	. LH3	North Entryway	Grout Associated with Black 12x12 Ceramic Tile	N/A	N/A	N/A	QN	
LH-51	TH3	North Entryway	Mastic Associated with LH-50	N/A	N/A	N/A	QN	_
LH-52	LH3	North Entryway	Wallboard/Joint Compound	N/A	N/A	N/A	QN	
. LH-53	LH3	2nd Floor/Main Area	Black Mortar Associated with Ceramic Tile (absent)	N/A	N/A	N/A	QN	
LH-54	- LH3	2nd Floor/Main Area	Levelling Compound	N/A	N/A	N/A	QN	_
LH-55	CHJ	Bathroom/2nd Floor	Vinyl Floor Sheeting with Diamond Pattern and Mastic	N/A	N/A	N/A	QN	
CH-56	LH3	Bathroom/2nd Floor	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND	-
LH-57	LH3	Southeast Bedroom	Batt Insulation in Wall	N/A	N/A	N/A	ND - DUD	
LH-58	LHB	Southcast Bedroom	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND Joint Compound - ND	-

Lakeville Highway Strutures Petaluma, California

Table 1 - Bulk Asbestos Sampling Results

February 11, 2019 Project No. 403435001

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Sample L.D.	Building	Material Location	Sample Description	Friable	Quantity	Condition	Ashestos Content
LH-59	LH3	Attic	Yellow Batt Insulation	N/A	N/A	NiA	NID
09-HT	LH3	2nd Floor Kitchen	Wallboard/Joint Compound	N/A	N/A	NIA -	E f
19-HJ	CH3	2nd Floor Kitchen	Vinyl Floor Sheeting with Square Pattern and Adheeive	N/A	N/A	N/A	2 9
LH-62	CLH3	2nd Floor Kitchen	Insulation Paper/Black	N/A	N/A	N/A	C. C.
CH-63	LHB	Exterior North Roof	Vanor Barrier [Inder Metal Proof Charsing	MA			
				WA	N/A	N/A	QN
LH-64	LH3	Northwest Apartment Bathroom	Wallboard/Joint Compound	N/A	N/A	N/A	UN
LH-65	LH3	Northwest Apartment Bedroom	Wallboard/Joint Compound	N/A	N/A	N/A	8
20-HJ	TH3	Northwest Apartment Kitchen	Weitherself		4		
111 67	-		wairooarwoont Compound	N/A	N/A	N/A	Joint Commund - ND
. /0-HJ	TH3	Northwest Apartment Bathroom	Vinyl Floor Sheeting with Multi-Color Speckles	N/A	N/A	N/A	CIN UN
1H-68	LH3	Northeast Apartment Bathroom	Vinyl Floor Sheeting with Black and White Pattern and Mastic	N/A	N/A	N/A	CN CN
69-HJ	LH3	Northeast Apartment Living Room	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND
1H-70	LH3	Northeast Apartment Entryway	Grout Associated with 12x12 Beige Ceramic Floor	N/A	N/A	N/A	Joint Compound - ND
NOTES:			1110				- M

Analysis by Polarized Light Microscopy (PLM/EPA 600/R-93/116 Method). NA = Not Applicable ND = None detected CH = Chrysotile BOLD indicates sample is an asbestos containing material (> 1% asbestos) Estimated quantities are not intended for use in bidding calculations.

Lakeville Highway Structures Petaluma, California

February 11, 2019 Project No. 403435001

Table 2 - Lead-Containing Material Sampling Results

ead	Parts per Million	(or mg/kg)	110	16	80	150	80	80	130	80	80	00	10	84	130	100	80	66	80	80	80	22
Total Lead	Weight Percent	いた うちょう	<0.011	<0.0091	<0.0080	<0.015	<0.0080	<0.0080	<0.013	<0.0080	<0.0080	<0.0081	1000.02	<0.0084	<0.013	<0.010	<0.0080	<0.0099	<0.0080	<0.0080	<0.0080	
Condition		中には前していたの	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intact	Intoot	1111dCl	Non-Intact	Non-Intact	Intact	Intact	Intact	Intact	Intact	
Estimated Surface Area (Square Fee+t [SF] or Linear	Feet[LF])		2,000 SF	500 SF	50 SF	100 SF	1,000 SF	500 SF	100 SF	200 SF	1,000 SF	300 SF	200 SF	10 007	15 0C1	10 OC1	100 SF	100 SF	2000 SF	500 SF	500 SF	
Sample Description (Color / # of Layers /	Substrate)	Dad/1/Wrod	000 A /1 /000	D00 V/7/2010 W	12X12 Ceramic Tile	White/1/Wood	Red/2/Metal	Red/1/Wood	White/2/Wood	White/2/Wood	Red/2/Wood	Tan/1/Wood	White/I/Wood	Red/2/Wood	White/1/Wood	12v12 Dicale Commit Tril-	12X12 DIACK CETAIIIIC 1116	W nite/2/ w ood	Red/2/Wood	White/2/Wood	12x12 Beige Ceramic Floor Tile	2017
Substrate/Surface		Wall	Woll	Commit: Tril	Cetamic The	DIII Di Ciur II	KOOT Wall	Wall	1 rim	Trim	Wall	Stairs	Sill	Wall	Trim	Ceramic Tile	Bannicter	Woll	wall	Wood Trim	Ceramic Tile	
Sample Location		North Exterior Garage Door	North Exterior Garage Door	Entroway	2nd Floor Interior Sill	Exterior North Area Wall	I.HI. Pan To/Stable	I H1 I am To/Stable	East Fast	Cast Exterior	East Exterior	Diairs	Stair Window Sill	East Wall	East Wall Trim	North Entryway	2nd Floor / Top of Stairs	North Exterior Wall	North Datasia Tri	MULT EXICUTE LITIN	Northeast Apartment Entryway	
Building		LHI	THI	LHI	LHI	LHI	LHI	1H.1	CH I	1 [1]	1 177	7117	7H1	LHB	LHB	LH3	LH3	LH3	1 H3	1117	LH3	
Sample L.D.		LH-01L	LH-02L	LH-03L	LH-04L	LH-05L	T90-HT	LH-071.	1,H-081	1 H_001	1 H-101	111 111	711-117	LH-12L	LH-13L	LH-14L	LH-15L	LH-16L	I.H-17I		LH-18L	NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B). mg/kg = Milligrams per kilogram

SF = Square feet

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight)

Estimated quantities are not intended for use in bidding calculations.

Lakeville Highway Structures Petaluma, California

February 11, 2019 Project No. 403435001

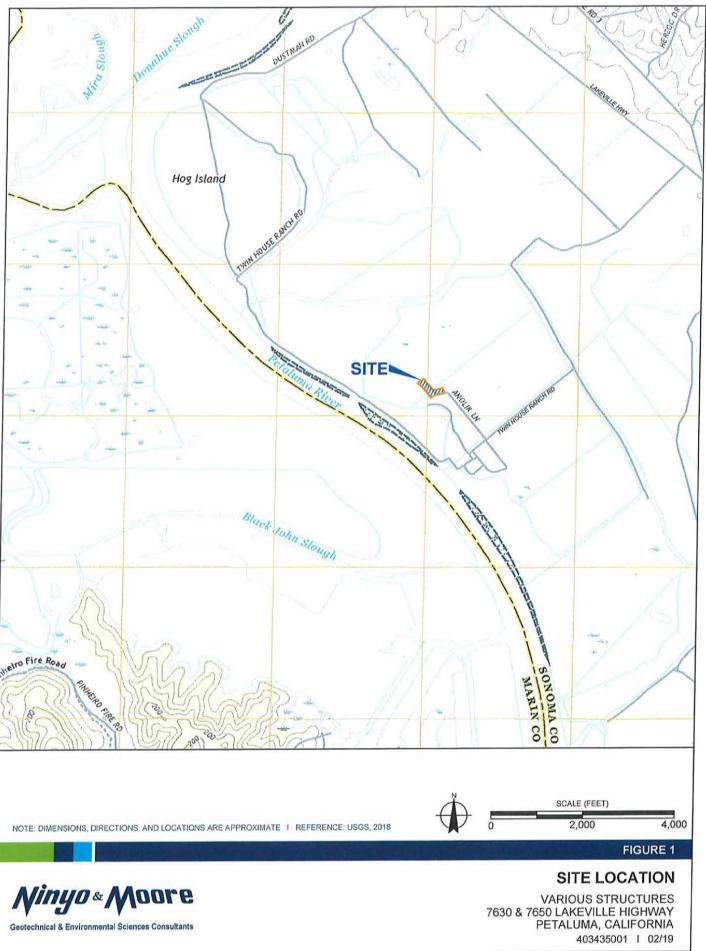
						1	\$
Location	Number of Transformers	Number of Number of Transformers Light Ballasts	Number of Mercury Thermostate	Number of A/C No. of Units Fluorescent	No. of Fluorescent Licht Tubas	Number of Exit Signs	No. of Freon Refrigerator
House 1	0	1	0	0	2	0	ovstems 0
							>
House 2	0	0	0	0	0	0	0
							20
House 3	0	0	0	0	0	0	0
Polo Practice Barn	0	ŝ	0	0	9	0	0
NOTEG							
NULES:							

Table 3 - Miscellaneous Hazardous Building Materials Survey Results

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

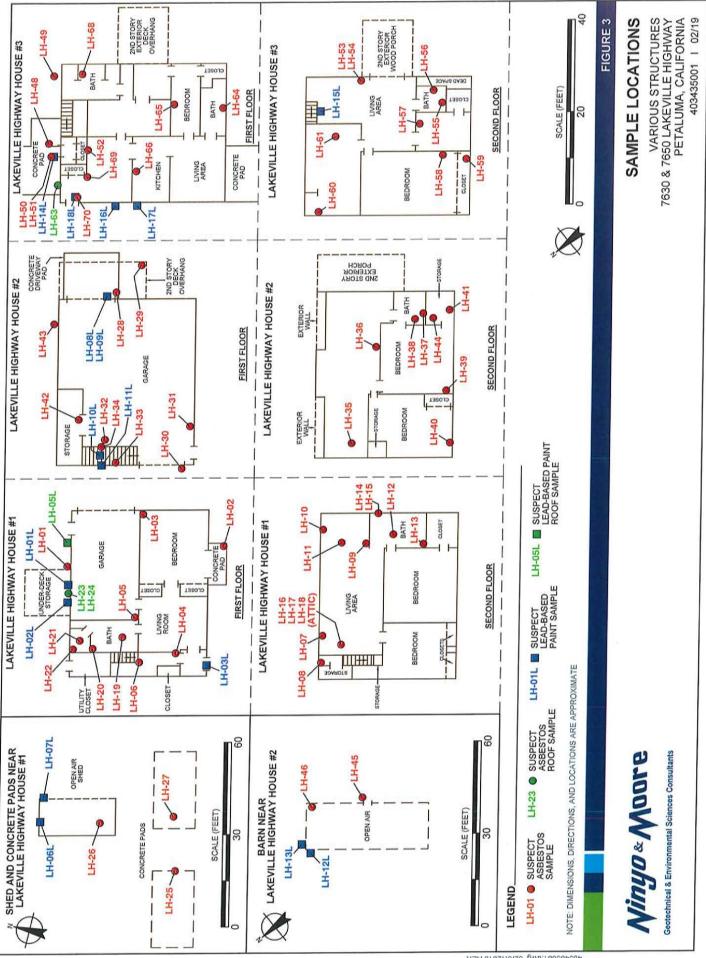
FIGURES



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403435001.dwg 02/05/2019 AEK





A03435001.dwg 02/07/2019 AEK

APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

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October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

The

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

	EMSL Analytical, Inc. 3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	02/01/2019 1:30 PM
	Suite 103	Analysis Date:	02/06/2019
	Alameda, CA 94501	Collected Date:	
Project:	Santa Rosa, 403435001		

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

t			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
LH-01	Concrete, N. exterior area	Gray Non-Fibrous	14	20% Quartz 80% Non-fibrous (Other)	None Detected
511900348-0001		Homogeneous		- Alman Area - Are	
LH-02 511900348-0002	Concrete, S. ext. concrete pad	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
LH-03-Wallboard	Wallboard/joint compound, Int. South	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900348-0003	bedroom	Heterogeneous			
LH-03-Joint Compound	Wallboard/joint compound, Int. South bedroom	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
LH-04-Wallboard	Wallboard/joint compound, Living	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900348-0004	room	Heterogeneous		2011 Q Q A A A A A A	None Detected
LH-04-Joint Compound	Wallboard/joint compound, Living room	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
LH-05-Wallboard	Wallboard/joint compound, Garage	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900348-0005	wall	Heterogeneous		· · · · · · · · · · · · · · · · · · ·	
LH-05-Joint Compound	Wallboard/joint compound, Garage	White Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
511900348-0005A	wall	Homogeneous			
LH-06-Wallboard	Wallboard/joint compound, Stairs/1st	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900348-0006	floor	Heterogeneous			New Detected
_H-06-Joint Compound	Wallboard/joint compound, Stairs/1st floor	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
and an and a second	Wallboard/joint	Brown/White	20% Cellulose	70% Gypsum	None Detected
H-07-Wallboard	compound, 2nd floor (at baseboard)	Fibrous Heterogeneous	20% Cellulose	10% Non-fibrous (Other)	
H-07-Joint Compound	Wallboard/joint compound, 2nd floor	White Non-Fibrous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
11900348-0007A	(at baseboard)	Homogeneous			
H-08-Wallboard	Wallboard/joint compound, 2nd floor	Brown/White Fibrous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
11900348-0008	room	Heterogeneous		and an Anthenet	None Detected
H-08-Joint Compound	Wallboard/joint compound, 2nd floor	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
11900348-0008A	room	Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
H-09-Wrap	Pink batt insulation, 2nd floor room wall cavity	Tan/Black Fibrous Homogeneous	90% Cellulose	10% Non-Inclode (Other)	Hone Deletion
H-09-Insulation	Pink batt insulation,	Pink	98% Min. Wool	2% Non-fibrous (Other)	None Detected
1900348-0009A	2nd floor room wall cavity	Non-Fibrous Homogeneous			

Initial report from: 02/06/2019 17:31:04

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EMEL

EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789

http://www.emsl.com / seattlelab@emsl.com

EMSL Order: 511900348 Customer ID: NOMO22 **Customer PO: Project ID:**

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

Sample	Description	Appearance	<u>Non-Asbe</u> % Fibrous	stos % Non-Fibrous	<u>Asbestos</u> % Type
LH-10-Wrap	Gold batt insulation, 2nd floor room wall	Tan/Black Fibrous	90% Cellulose	10% Non-fibrous (Other)	None Detected
511900348-0010	cavity	Homogeneous			
LH-10-Insulation	Gold batt insulation, 2nd floor room wall	Yellow Fibrous	98% Min. Wool	2% Non-fibrous (Other)	None Detected
511900348-0010A	cavity	Homogeneous			
LH-11	Tan VSF, 2nd floor room wall cavity	Gray Fibrous	30% Cellulose	70% Non-fibrous (Other)	None Detected
511900348-0011		Homogeneous			Ness Detected
LH-12-Vinyl Sheet Flooring	VFS w/ floral pattern & adhesive, 2nd floor room wall cavity	Gray Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
511900348-0012					
LH-12-Mastic	VFS w/ floral pattern & adhesive, 2nd floor	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected
511900348-0012A	room wall cavity	Homogeneous			
LH-13-Wallboard	Wallboard/joint compound, 2nd floor	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900348-0013	bathroom	Heterogeneous		60% Ca Carbonate	None Detected
LH-13-Joint Compound	Wallboard/joint compound, 2nd floor bathroom	White Non-Fibrous Homogeneous		40% Non-fibrous (Other)	None Deletied
LH-14-Mortar	Mortar w/ sc., 2nd	Gray		20% Quartz	None Detected
511900348-0014	floor bathroom	Non-Fibrous Homogeneous		80% Non-fibrous (Other)	
_H-14-Mesh	Mortar w/ sc., 2nd floor bathroom	White Fibrous	98% Glass	2% Non-fibrous (Other)	None Detected
511900348-0014A		Homogeneous			
.H-15	Tile adhesive, 2nd floor bathroom	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
11900348-0015	NUMBER OF STREET	Homogeneous			New Detected
.H-16 11900348-0016	Gold/yellow foam adhesive, Attic ducting	Brown/Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
and the second	Gold batt insulation,	Yellow	98% Min. Wool	2% Non-fibrous (Other)	None Detected
H-17 11900348-0017	Attic ducting	Fibrous Homogeneous	So to Min. Wood	270 Holi-India (autory	
H-18-Wrap	Pink batt insulation w/ black cover, Attic	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
11900348-0018	ducting	Homogeneous			
H-18-Insulation	Pink batt insulation w/ black cover, Attic	Pink Fibrous	98% Min. Wool	2% Non-fibrous (Other)	None Detected
1900348-0018A	ducting	Homogeneous			
H-19	Square pattern VFS w/ mastic, 1st floor	Gray Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
1900348-0019	bathroom	Heterogeneous	DOM Callulate	65% Gypsum	None Detected
H-20-Wallboard	Wallboard/joint compound, 1st floor bathroom	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	NOUR Delected
	Wallboard/joint	White		60% Ca Carbonate	None Detected
H-20-Joint Compound	compound, 1st floor bathroom	Non-Fibrous Homogeneous		40% Non-fibrous (Other)	1996 H 2 H 1997 H 1 H 1997 H 1997 H 1997 H 1997
I-21-Vinyl Sheet ooring	Square pattern VFS & mastic (white), 1st	White Non-Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
	floor bathroom	Homogeneous			

(Initial report from: 02/06/2019 17:31:04

EMSL

EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789

http://www.emsl.com / seattlelab@emsl.com

EMSL Order: 511900348 Customer ID: NOMO22 Customer PO: Project ID:

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
LH-21-Mastic	Square pattern VFS & mastic (white), 1st floor bathroom	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
LH-22-Wallboard	Wallboard/joint compound, 1st floor bathroom	Brown/White Fibrous Heterogeneous	20% Cellulose	70% Gypsum 10% Non-fibrous (Other)	None Detected
LH-22-Joint Compound		White Non-Fibrous Homogeneous	1	50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
LH-23	Vapor barrier under metal roof sheeting,	Black Fibrous	90% Cellulose	10% Non-fibrous (Other)	None Detected
511900348-0023 LH-24	Roof Roof edge (under metal sheet), Roof	Homogeneous Gray/Blue Non-Fibrous		100% Non-fibrous (Other)	None Detected
511900348-0024 LH-25	parapet Concrete, Concrete pad #1	Homogeneous Gray Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	None Detected
511900348-0025 LH-26	Asphalt, Leam-to	Homogeneous Black Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
_H-27	Concrete, Concrete pad #2	Homogeneous Gray Non-Fibrous	x	20% Quartz 80% Non-fibrous (Other)	None Detected
-H-28	Concrete, East concrete pad	Homogeneous Gray Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	None Detected
.H-29	Concrete, East deck pier block	Homogeneous Gray Non-Fibrous	0.67	20% Quartz 80% Non-fibrous (Other)	None Detected
,11900348-0029 ,H-30	Concrete, West drive pad	Homogeneous Gray Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	None Detected
H-31	Wallboard, Interior garage South wall	Homogeneous Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
11900348-0031 H-32-Wallboard 11900348-0032	Wallboard/joint compound, Interior garage North wall	Heterogeneous Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
H-32-Joint Compound	Wallboard/joint compound, Interior garage North wall	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
H-33-Wallboard	Wallboard/joint compound green, Stairway	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
H-33-Joint Compound	Wallboard/joint compound green, Stairway	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
H-33-Tape 1900348-00338	Wallboard/joint compound green, Stairway	White Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
H-33-Texture	Wallboard/joint compound green, Stairway	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1900348-0033C H-34-Wallboard 1900348-0034	Wallboard/joint compound, Stairway	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected

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EMSL Order: 511900348 Customer ID: NOMO22 Customer PO:

Project ID:

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

			Non-Asb	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
LH-34-Joint Compound	Wallboard/joint compound, Stairway	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
LH-35	12"x12" wood tile with	Brown		100% Non-fibrous (Other)	None Detected
511900348-0035	fiberboard from below, Living room floor	Non-Fibrous Homogeneous		9	
LH-36-Wallboard	Wallboard/joint compound blue,	Brown/White Fibrous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
511900348-0036	Living room wall	Heterogeneous White	30% Cellulose	60% Ca Carbonate	None Detected
LH-36-Joint Compound	Wallboard/joint compound blue, Living room wall	Fibrous Heterogeneous	50% Cellulose	10% Non-fibrous (Other)	
LH-37-Wallboard	Wallboard/joint compound white,	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900348-0037	Bathroom	Heterogeneous			
LH-37-Joint Compound	Wallboard/joint compound white, Bathroom	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
_H-38-Vinyl Sheet Flooring	Vinyl floor sheeting tan "10" square pattern, Bathroom	Gray/Beige Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
11900348-0038		X-11		100% Non fibraire (Other)	None Detected
H-38-Mastic	Vinyl floor sheeting tan "10" square pattern, Bathroom	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
H-39-Wallboard	Wallboard/joint compound blue,	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
11900348-0039	South room	Heterogeneous			New Detected
H-39-Joint Compound	Wallboard/joint compound blue, South room	White Non-Fibrous Homogeneous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
H-40-Wallboard	Wallboard/joint compound blue, West room	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
H-40-Joint Compound	Wallboard/joint compound blue, West	White Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1900348-0040A	room	Homogeneous			
H-40-Tape	Wallboard/joint compound blue, West room	White Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
1900348-0040B H-40-Texture	Wallboard/joint compound blue, West	White Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1900348-0040C	room	Homogeneous			
H-41-Wallboard	Wallboard/joint compound white,	Brown/White Fibrous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
1900348-0041	South closet	Homogeneous White		50% Ca Carbonate	None Detected
H-41-Joint Compound	Wallboard/joint compound white, South closet	vvnite Non-Fibrous Homogeneous		50% Non-fibrous (Other)	Hone Deleted
1-42-Vinyl Sheet	Black & white vinyl	Gray/White/Black	*	100% Non-fibrous (Other)	None Detected
ooring	floor sheeting,	Non-Fibrous Homogeneous			
900348-0042		N/K		10000 H	New Detected
I-42-Mastic 900348-0042A	floor sheeting,	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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1			Non-Asbe		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
LH-42-Fiberboard	Black & white vinyl floor sheeting, Downstairs bathroom	Tan Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
LH-43	Roof paper/below metal sheeting, North	Brown Fibrous	90% Cellulose	10% Non-fibrous (Other)	None Detected
511900348-0043	side roofing	Homogeneous			
LH-44	Gold batt insulation, Attic	Yellow Fibrous	95% Glass	5% Non-fibrous (Other)	None Detected
511900348-0044		Homogeneous	*** ,	25% 0	Ness Detected
LH-45	Concrete, East porch slab	Gray/Tan Non-Fibrous Homogeneous	0 K 1	25% Quartz 75% Non-fibrous (Other)	None Detected
LH-46	Roof paper below metal, Roof	Black Fibrous	85% Cellulose	15% Non-fibrous (Other)	None Detected
511900348-0046		Homogeneous			
LH-47-Grout	Grout associated with ceramic tile LH-03L,	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
511900348-0047	Entry way Grout associated with	Homogeneous		3% Quartz	None Detected
LH-47-Ceramic Tile	Grout associated with ceramic tile LH-03L, Entry way	Gray Non-Fibrous Homogeneous		97% Non-fibrous (Other)	
LH-48	Concrete, North concrete pad	Gray Non-Fibrous		25% Quartz 75% Non-fibrous (Other)	None Detected
511900348-0048		Homogeneous	1		
LH-49 511900348-0049	Concrete, SW ext. area	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
	Grout assoc. w/ black	Gray/Black	· ·	20% Quartz	None Detected
_H-50 511900348-0050	12x12 ceramic tile, North entryway	Non-Fibrous Homogeneous		80% Non-fibrous (Other)	
_H-51	Mastic assoc. w/ LH-50, North	Gray/White Non-Fibrous		10% Quartz 90% Non-fibrous (Other)	None Detected
11900348-0051	entryway	Homogeneous			
H-52-Wallboard	Wallboard/joint compound, North entryway	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
H-52-Joint Compound	Wallboard/joint compound, North	White Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
11900348-0052A	entryway	Homogeneous			Nens Detected
H-53 11900348-0053	Black mortar assoc. w/ ceramic tile (absent), 2nd floor/main area	Black Non-Fibrous Homogeneous	-4	20% Quartz 80% Non-fibrous (Other)	None Detected
H-54	Leveling compound, 2nd floor/main area	Gray/White Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	None Detected
1900348-0054		Homogeneous			New Detected
H-55-Vinyl Sheet looring	VFS with diamond pattern & mastic, Bathroom/2nd floor	Gray/White Fibrous Heterogeneous	30% Cellulose 5% Glass	65% Non-fibrous (Other)	None Detected
1900348-0055	VES with diseased	Vellow		100% Non-fibrous (Other)	None Detected
H-55-Mastic	VFS with diamond pattern & mastic, Bathroom/2nd floor	Yellow Non-Fibrous Homogeneous		100% Non-Invidus (Onter)	Hone Detected
H-56-Wallboard	Wallboard/joint compound,	Brown/White Fibrous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
1900348-0056	Bathroom/2nd floor	Heterogeneous		Cherry Propagation Statistics (1999) 182	

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			Non-Asbe		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
LH-56-Joint Compound 511900348-0056A	Wallboard/joint compound, Bathroom/2nd floor	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
LH-56-Mastic	Wallboard/joint	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
511900348-0056B	Bathroom/2nd floor	Homogeneous			
LH-57	Batt insulation in wall, Southeast bedroom	Yellow Fibrous	96% Glass	2% Gypsum 2% Non-fibrous (Other)	None Detected
511900348-0057		Homogeneous			
LH-58-Wallboard	Wallboard/joint compound, Southwest bedroom	Brown/White Fibrous Heterogeneous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
LH-58-Joint Compound	Wallboard/joint compound,	White/Yellow Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
511900348-0058A	Southwest bedroom	Homogeneous			
LH-59	Yellow batt insulation, Attic	Yellow Fibrous	2% Synthetic 96% Glass	2% Non-fibrous (Other)	None Detected
511900348-0059	Matelline and Calast	Homogeneous	15% Collulose	65% Gypsum	None Detected
LH-60-Wallboard	Wallboard/joint compound, 2nd floor kitchen	Brown/White Fibrous Heterogeneous	15% Cellulose	20% Non-fibrous (Other)	Hone Deletied
LH-60-Joint Compound	Wallboard/joint compound, 2nd floor	White/Yellow Non-Fibrous	1.	50% Ca Carbonate 50% Non-fibrous (Other)	None Detected
511900348-0050A	kitchen	Homogeneous			New Detected
H-60-Tape	Wallboard/joint compound, 2nd floor	White Fibrous	98% Glass	2% Non-fibrous (Other)	None Detected
511900348-0060B	kitchen	Homogeneous	45% Cellulose	45% Non-fibrous (Other)	None Detected
H-61-Vinyl Sheet	VFS w/ square pattern & adhesive, 2nd floor kitchen	Gray/White Fibrous Homogeneous	10% Glass	45% NOT-INFOUS (Other)	Hone Deletited
11900348-0061					No. Data dat
H-61-Mastic	VFS w/ square pattern & adhesive, 2nd floor kitchen	Yellow Non-Fibrous Homogeneous	14	100% Non-fibrous (Other)	None Detected
.H-62-Paper	Insulation paper/black, 2nd floor	Brown/Black Fibrous	85% Cellulose	15% Non-fibrous (Other)	None Detected
11900348-0062	kitchen	Homogeneous	56		
H-62-Insulation	Insulation paper/black, 2nd floor	White Fibrous	90% Glass	10% Non-fibrous (Other)	None Detected
11900348-0062A	kitchen ·	Homogeneous	the second second second		11
H-63	Vapor barrier under metal roof, Ext. North roof	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
11900348-0063 H-64-Wallboard	Wallboard/joint compound, NW	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
1900348-0064	apt-bathroom	Homogeneous	1		
H-64-Joint Compound	Wallboard/joint compound, NW	White Non-Fibrous		65% Ca Carbonate 35% Non-fibrous (Other)	None Detected
1900348-0084A	apt-bathroom	Homogeneous		CEN Computer	None Detected
H-65-Wallboard	Wallboard/joint compound, NW apt-bedroom	Brown/White Fibrous Homogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
I-65-Joint Compound	Wallboard/joint	White		60% Ca Carbonate	None Detected
1900348-0065A	compound, NW apt-bedroom	Non-Fibrous Homogeneous		40% Non-fibrous (Other)	
1-66-Wallboard	Wallboard/joint compound, NW	Brown/White Fibrous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
1900349-0066	apt-kitchen	Homogeneous			

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			Non-Asbe	stos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
LH-66-Joint Compound	Wallboard/joint compound, NW apt-kitchen	White Non-Fibrous Homogeneous	8 00 0 0	60% Ca Carbonate 40% Non-fibrous (Other)	None Detected	
LH-67-Vinyl Sheet Flooring 511900348-0067	VFS w/ multi-color speckled, NW apt bathroom	Gray/Various Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected	
LH-67-Mastic 511900348-0087A Result includes a small amou	VFS w/ multi-color speckled, NW apt bathroom int of inseparable attached m	White/Yellow Non-Fibrous Homogeneous aterial	3% Cellulose	10% Ca Carbonate 87% Non-fibrous (Other)	None Detected	
LH-68-Backing 511900348-0068 Result includes a small amou	⁷ Black/white pattern VFS/mastic, NE apt bathroom nt of inseparable attached mi	Tan/Yellow Fibrous Homogeneous astic	75% Cellulose	25% Non-fibrous (Other)	None Detected	
LH-68-Vinyl Sheet Flooring	Black/white pattern VFS/mastic, NE apt bathroom	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
511900348-0068A LH-68-Mastic 511900348-0068B	Black/white pattern VFS/mastic, NE apt bathroom	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
LH-69-Wallboard	Wallboard/joint compound, NE apt living room	Brown/White Fibrous Homogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected	
LH-69-Joint Compound	Wallboard/joint compound, NE apt living room	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
H-70-Grout 1	Grout assoc. w/ 12x12 beige ceramic floor tile, NE apt entryway	White Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected	
.H-70-Grout 2 11900348-0070A	Grout assoc. w/ 12x12 beige ceramic floor tile, NE apt entryway	Beige Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected	

Analyst(s) Ehrin Baul (34) Jason Stuhr (84)

Lauren Kerber, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations . Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

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Page 6 Of 7 212

#511900348 GEN-FM-10-1: Sample Transfer-One Time Revision Date: 1/05/2016 Effective Date: 1/05/2016



EMSL Analytical, Inc.

Sample Transfer Form

Receiving Lab:	EMSL-	in Le	andra	Phone Number:	510-34	3-4099
be the		in Le	anato	Fax Number:		
Relinquished to:	EMSL-	+10		Phone Number:	204-20	69-6310
	Seat	lle		Fax Number:		
Does new lab hold equ	livalent or ad	ditional acc	reditation? *		Yes No	
EMSL Customer ID # (if known):		Nor	nobd			
Client Name:		Bill	Larkin			
Client Project:	4	Sant	a Rosa			
Tests to be Performed		PLM				
Date Received:		2-11/1	9 1:	BIPM		
Date Relinquished:		2/1/1	9 4:0	popm		
Date Due:		Tah	rs Pue	Monda	4 2/4/19	5:00pm
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* Receiving and analyzing lat	s shall be awar					
Note: If customer has been in above. EMSL employee fillin	notified and app	proved this t	ransfer verbally o	or by e-mail, the	e receiving lab must sig	gn for the customer date agreement was
eceived, and then sign unde		chan of cust	orner andn prote	name of person		

Page 7 Of 213

APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

EMISL	EMSL Analytica 464 McCormick Street, San Phone/Fax: (510) 895-367 http://www.EMSL.com	10	nsl.com		EMSL Order: CustomerID: CustomerPO: ProjectID:	091902695 NOMO22
Attn: Bill Larkin Ninyo & M 2020 Chall Suite 103		λ	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 02/01/19 1:30 PM 01/29/2019	Λ	
Alameda, (Project: SANTA ROS	CA 94501 SA 403435001				•	-

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Des	scription Lab ID Collected Analyzed	Weight	Lead Concentration
LH-01L	091902695-0001 01/29/2019 02/01/2019	0.1884 g	<0.011 % wt
	Site: LH1 - N EXT GARAGE DOOR		
LH-02L	091902695-0002 01/29/2019 02/01/2019	0.2194 g	<0.0091 % wt
	Site: LH1 - N EXT GARAGE DOOR		
LH-03L	091902695-0003 01/29/2019 02/01/2019	0.2504 g	<0.0080 % wt
	Site: LH1 - ENTRYWAY		
LH-04L	091902695-0004 01/29/2019 02/01/2019	0.1356 g	<0.015 % wt
	Site: LH1 - 2ND FLOOR INT STILL		
_H-05L	091902695-0005 01/29/2019 02/01/2019	0.2616 g	<0.0080 % wt
	Site: LH1 - EXT NORTH AREA WALL	2010/2010/2010/2010	
_H-06L	091902695-0006 01/29/2019 02/01/2019	0.2699 g	<0.0080 % wt
	Site: LH1 - LH1-LEAN TO / STABLE		4
_H-07L	091902695-0007 01/29/2019 02/01/2019	0.1595 g	<0.013 % wt
	Site: LH1 - LH1-LEAN TO / STABLE		
.H-08L	091902695-0008 01/29/2019 02/01/2019	0.2572 g	<0.0080 % wt
	Site: LH2 - EAST EXTERIOR		
.H-09L	091902695-0009 01/29/2019 02/01/2019	0.2507 g	<0.0080 % wt
	Site: LH2 - EAST EXTERIOR		
.H-10L	091902695-0010 01/29/2019 02/01/2019	0.2483 g	<0.0081 % wt
	Site: LH2 - STAIRS	1437	
H-11L	091902695-0011 01/29/2019 02/01/2019	0.2386 g	<0.0084 % wt
	Site: LH2 - STAIR WINDOW SILL		
H-12L	091902695-0012 01/29/2019 02/01/2019	0.1585 g	<0.013 % wt
	Site: LHB - EAST WALL		
H-13L	091902695-0013 01/29/2019 02/01/2019	0.1961 g	<0.010 % wt
	Site: LHB - EAST WALL TRIM		
H-14L	091902695-0014 01/29/2019 02/01/2019	0.2576 g	<0.0080 % wt
1174 MARTINI	Site: LH3 - NORTH ENTRYWAY		
H-15L	091902695-0015 01/29/2019 02/01/2019	0.2014 g	<0.0099 % wt
	Site: LH3 - 2ND FLOOR TOP OF STAIRS		

whith

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/01/2019 18:48:16

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 02/01/2019 6:48:16 PM

	EMSL	EMSL. Analytical 464 McCormick Street, San L Phone/Fax: (510) 895-3675 http://www.EMSL.com	com		EMSL Order: CustomerID: CustomerPO: ProjectID:	091902695 NOMO22
Attn:	Bill Larkin		Phone:	(510) 343-3000		
	Ninyo & M		Fax:	(510) 633-5646		
			Received:	02/01/19 1:30 PI	M	
2020 Challenger Drive Suite 103		Collected:	01/29/2019			
	Alameda,	CA 94501				
Projec	t: SANTA RO	SA 403435001				

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

escription Lab ID Collected Analyzed	Weight	Lead Concentration
091902695-0016 01/29/2019 02/01/2019	0.258 g	<0.0080 % wt
Site: LH3 - NORTH EXT WALL		
091902695-0017 01/29/2019 02/01/2019	0.2595 g	<0.0080 % wt
Site: LH3 - NORTH EXT TRIM	712	
091902695-0018 01/29/2019 02/01/2019	0.2504 g	<0.0080 % wt
Site: LH3 - NE APT ENTRYWAY		
e	091902695-0016 01/29/2019 02/01/2019 Site: LH3 - NORTH EXT WALL 091902695-0017 01/29/2019 02/01/2019 Site: LH3 - NORTH EXT TRIM 091902695-0018 01/29/2019 02/01/2019	O91902695-0016 01/29/2019 02/01/2019 0.258 g Site: LH3 - NORTH EXT WALL 091902695-0017 01/29/2019 0.2595 g Site: LH3 - NORTH EXT TRIM 091902695-0018 01/29/2019 02/01/2019 091902695-0018 01/29/2019 02/01/2019 0.2504 g

unh/h

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per cur SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted, "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise.

14

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/01/2019 18:48:16

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Test Report ChmSnglePrm/nQC-7.32.3 Printed: 02/01/2019 6:48:16 PM

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RED/2 WOOD 11,000 B 11 NTACT Condition 2 Text: 2 2 Intact NIDRA 1star Tuted Sheet 1 of J INTACT Laboratory L'W X 3 Emsl Convie 2,000 0 360 2 5:00 K Surface Area Laboratory: X OCT Devia -200 0 Estimated 100 A 204 White (2/ WOOD (2000) 200 B 1:30~ Tel: Fax: NUD Received By: (sign/print) Sample Description (Color /# WHITE /1/W00D TAN 11/ WOOD White/2/wood Ogigozbess (1A/000) Uning NOON Layers /Substrate) Red/1/60 ILA KION AVI MAR. 也是我们 129/19 5 White/ Red 21 White 3 de la 3 Date Sampled: STAIRS | Sampled By: NALL Building Component CENTIN Sampled By: SILL Sampled By: Trim WWW UV/a/U Nall NE MUC te 2 TimeD(24 ht) Est North Area Well Page 1 Of El S Ntable Int Sil Est Connece Wool 11 LH 24 STAIR WINDOW SILL Sample Location LH ZLEAST EXIE in C Date Project Name: SANTA ROSA 0 LEAD BASED PAINT BULK SAMPLE DATA SHEET ままのを作 LH2/EAST Exterior WC Hendley 1-Leaver To 5 locs & heat F)00 Eighthur LH2 STAIRS -- Company Nanyo&Moote - Ale Project Manager: 2 Site Address: Project No.: し出ユ Building Number IH I 몬 圣 HI APN: 전 'R'Il Carlin Reinquished By. (signifind) :: - - ------1 5 LN 09L 1956 Webster Street, Suite 400 780-H7 LH-03L 101 HI 「おしみし LH-262 ましっとし CHAIN OF CUSTODY INFORMATION: H-05C コビア 14-021 Sample ID 有不 Oakland, CA 94612 510-633-5646 (fax) Ninye & Moore 510-633-5640 Clob 217 C02162

OrderID: 091902695

2 (NAM DA-1) ar 1 Sheet Jof J Condition inMeri NIDER Poor Capo. tAIR. EWS A 81 Surface Area Nov N Laboratory: 1500 2/WW 200 2000 Estimated 201 100 A See M LH3 [2nd Floor / two of Stark Blown aleter Why re/2/WO6D 100,2 1 Tel: Fax lerowic Flair The GROUT ASSOCIAT 6D WITH Sample Description (Color # 211-03 L Correction anthe /2/1000 TIRIM WHIG / 1/WOOD PEXIZ Block ayers /Substrate) RED /2/W00 1/29/19 2×12 \$6166 24-In TAY WPL Red .. Date Sampled: Building Comic Sampled By: Sampled By: Sampled By: Province - LUR GROVI Hele Kelk MALL World N Page 2 Of 1500 EAST WALL TRIM NE Aot Entry with North Et lijour North East Tim Noith Entrywen Sample Location Project Name: SANTA PolA LEAD BASED PAINT BULK SAMPLE DATA SHEET 61/ 62/1 403435001 EAST WALL Jan ENTRYWAY Ninyo&Moale Project Manager. 7º APN: Site Address: Project No.: L#3 (H-13L [44] LH3 Building Number LH-12L LHB LH1 2 Billian Cin Reinquished by (sign/print) : ' 1 レナートナレ 1-61-15'L LH-16L 1956 Webster Street, Suite 400 CH-176 LH-18L 4 CHAIN OF CUSTODY INFORMATION: Sample ID Ŧ Oakland, CA 94612 510-633-5646 (fax) I han Mai Nirye & Moore 510-633-5640 LabiD

OrderID: 091902695

218

C02162

APPENDIX D

CDPH Form 8552 - Lead Hazard Evaluation Report

California Department of Public Health

State of California—Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

• • • • • • • • • • • • • • • • • • •	1/20/10	
Section 1 — Date of Lead Hazard Evaluation	1/20/19	
Section 2 — Type of Lead Hazard Evaluation (Ch	eck one box only) Clearance Inspection 🛛 💭 Other (specify) _	Chip Sampling
Section 3 — Structure Where Lead Hazard Evaluation	tion Was Conducted	
Address [number, street, apartment (if applicable)] 7630 Lakeville Highway	Petaluma Soundy	Zip Code 94954
Construction date (year) of structure Multi-unit building	Children living	j in structure? ⊠ No
98 Single family dwellin	g 🗌 Other Don't	Know
Section 4 – Owner of Structure (if business/agen	y, list contact person)	
Name City of Santa Rosa, Gr Address [number, street, apartment (if applicable)] Gg Stany Circle	City City City City Rosg CA	H3 - 4508 . Zip Code 95 401
Section 5 - Results of Lead Hazard Evaluation (ch	eck all that apply)	
No lead-based paint detected	-based paint detected	l lead-based paint detected
No lead hazards detected Lead-contaminated	ust found 🔲 Lead-contaminated soil found	Other
Section 6 — Individual Conducting Lead Hazard Ev	luation	
Name William P. Larlin	Telephone number 5/0/3	43-3000
Address [number, street, apartment (if applicable)]	City Algunda CA	Zip Code 94501
5543	Milliam P. Laukin	Date 2/8/19
Name and CDPH certification number of any other individuals c	nducting sampling or testing (if applicable)	
N/A		
Section 7 — Attachments		
A. A foundation dlagram or sketch of the structure indicati lead-based paint; B. Each testing method, device, and sampling procedure C. All data collected, including quality control data, labora	ised;	
irst copy and attachments retained by inspector	Third copy only (no attachments) mailed or fa	xed to:
Second copy and attachments retained by owner	California Department of Public Health Childhood Lead Poisoning Prevention Branch 850 Marina Bay Parkway, Building P, Third Flo Richmond, CA 94804-6403 Fax: (510) 620-5656	

220

TRANSMISSION VERIFICATION REPORT

TIME	÷	02/09/2019 22:04
NAME	- 2	NINYO AND MOORE
FAX	:	510-633-5646
TEL		510-633-5640
SER. #		BROD5.J252210
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DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE

02/09 22:04 6205656 80:00:20 01 OK STANDARD ECM



222

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2020 Challenger Drive, Suite 103 | Alameda, California 94501 | p. 510.343.3000

SAN DIEGO | IRVINE | LOS ANGELES | FONTANA | OAKLAND | SAN FRANCISCO | SACRAMENTO

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www.ninyoandmoore.com

HAZARDOUS BUILDING MATERIALS SURVEY

Residence and Associated Structures 1595 Meadow Lane Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 14, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY

Residence and Associated Structures 1595 Meadow Lane Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 14, 2019 | Project No. 403435001

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

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1.2	User Reliance	1
2	OBJECTIVE AND SCOPE OF SERVICES	1
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4	PHYSICAL LIMITATIONS	2
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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
- 3 Miscellaneous Hazardous Building Materials Survey Results

FIGURES

- 1 Site Location
- 2 Site Vicinity
- 3 Sample Locations

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- A Certifications
- B Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C – Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

D - CDPH Form 8552 - Lead Hazard Evaluation Report

1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at the vacant residence and associated structures at 1595 Meadow Lane in Santa Rosa, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the various structures.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the Meadow Lane structures at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 29, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the Meadow Lane structures to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the site structure to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of 27 bulk samples of suspect ACMs and submittal of this sample to a certified, independent laboratory for analysis of asbestos content.

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- Collection of 12 suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of suspect bulk PCB sample (if any) and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The 1595 Meadow Lane parcel is located at the southeast corner of Meadow Lane and Llano Road. There are five main structures on site: the residence, two smaller outbuildings immediately north of the residence and two longer former chicken barns. All are vacant. The residential structure encompasses approximately 2,000 square feet (SF) and building finishes include gypsum wallboard walls and ceilings, acoustic ceiling treatment, ceramic tiles, vinyl floor sheeting and mastic, acoustic ceiling tiles, bare and painted concrete floors, and built-up roofing materials. The white outbuilding immediately north of the residence encompasses approximately 400 SF and building finishes include painted and bare wood walls, concrete floors and built-up roofing materials. The red outbuilding further north of the white building encompasses approximately 200 SF (with a small, open-air corral immediately to the west) and is composed of painted and bare wood walls and ceilings, concrete floors and wood shake roofing materials. The long chicken barns to the northeast and northwest each encompass approximately 2,000 SF and are composed of bare and painted wood walls and ceilings and wood shake roofing materials and were observed to be in very poor condition.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. The crawl space under the residence was not wholly accessed due to inaccessibility. A flashlight was shined into these areas and no suspect hazardous building materials were observed. Underground utilities such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site structure demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or

should be sampled and analyzed to assess whether they are hazardous (asbestos and/or leadcontaining, etc.). As-built diagrams of the site structures were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 29, 2019, the Meadow Lane structures were assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM and LCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Twenty-seven bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

Twelve bulk suspect LCM samples were collected and analyzed. After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the structures are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

No suspect PCBCM were observed during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the Meadow Lane structures.

6 FINDINGS

A HBMS was performed at the five Meadow Lane Structures to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACMs and LCMs are located within the Meadow Lane structures. Miscellaneous hazardous building materials observed at the Meadow Lane structures included thermostats, fluorescent light tubes and associated light ballasts.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

- Approximately 300 square feet of acoustic ceiling (samples 1595-02, 1595-05 and 1595-07), located in the entryway and the northwest and southwest bedrooms, containing 5-6% chrysotile asbestos.
- Approximately 5,000 square feet of joint compound associated with wallboard (samples 1595-03, 1595-04, 1595-06, 1595-08, 1595-10, 1595-12, and 1595-16) located throughout the interior of the residence, containing 2% chrysotile asbestos. This material assembly (wallboard and joint compound) was re-analyzed via PLM 400-point quantitation on a composite basis and was reported to contain <0.25% chrysotile asbestos. This material assembly is an ACCM.
- Approximately 1,000 square feet of orange star-patterned vinyl floor sheeting (sample 1595-21) observed throughout the central and kitchen areas of residence, containing 25% chrysotile asbestos.

6.2 Lead-Containing Materials

Six paint chip samples and six ceramic tile samples were collected for analysis of lead content. One of the six paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). White paint from exterior wall of the south outbuilding (sample 1595-09L) was reported as containing lead at 3.0% by weight (or 30,000 mg/kg). This sample is considered LBP.

Three paint samples (1595-10L [east chicken barn], 1595-11L [west chicken barn] and 1595-12L north outbuilding]) were reported to contain lead concentrations from 0.36% by weight (or 360 mg/kg) to 0.12% by weight (or 1,200 mg/kg). These paint samples are considered LCP. The remaining two paint samples (1595-01L and 1595-02L, both from the main residence) were reported at less than their associated detection limits (<0.008% by weight or < 80 mg/kg).

One ceramic floor tile sample from the front entryway of the residence (sample 1595-04L) was reported to contain lead at 0.0084% by weight (or 84 g/kg). The remaining five ceramic samples (including a ceramic toilet sample) (samples 1595-03L, 1595-05L, 1595-06L, 1595-07L and 2595-08L) were reported at less than associated detection limit (<0.008% by weight, or < 80 mg/kg).

Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix D.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

As stated above, no suspect bulk PCBCM was observed during our site sampling activities.

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 8 fluorescent light bulbs, 4 associated light ballasts and 3 thermostats were observed during our sampling activities. Please see Table 3.

7 RECOMMENDATIONS

Since ACMs have been reported within the Meadow Lane structures, the following recommendations and precautions are provided:

- The identified ACMs within the Meadow Lane structures should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that this ACMs should not be disturbed. Any ACMs in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACMs, a licensed asbestos abatement removal contractor should remove the ACMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. While Ninyo & Moore provided an estimate of the quantity of ACMs present at the Meadow Lane structures (Table 1), it is the abatement contractor's responsibility to assess the actual ACM quantity present.
- The identified LCMs reported at the Meadow Lane structures should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. While Ninyo & Moore provided an estimate of the quantity of LCMs

present at the Meadow Lane structures (Table 2), it is the responsibility of abatement contractors to assess the actual LCM quantities present.

- Prior to demolition or renovation activities. potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and FreonTM-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the Meadow Lane structures (Table 3), it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 LIMITATIONS

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

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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

February14, 2019 Project No.403435001

1595 Meadow Lane Structures Santa Rosa, California

E.

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description		Quantity	Condition	Asbestos Content
1595-01	1595	Northwest Roof	Roof Assembly	N/A N/A N		N/A	Shingle = ND Tar Paper = ND
1595-02	1595	Entryway	Acoustic Ceiling	Y	300 SF	Good	5% CH
1595-03	1595	Entryway	Wallboard/Joint Compound	Y	5,000 SF	Good	Wallboard = ND Joint Compound = 2% CH (<0.25% CH*)
1595-04	1595	Bathroom	Wallboard/Joint Compound	Y	Y See 1595-03 Good		Wallboard = ND Joint Compound = 2% CH
1595-05	1595	Northwest Bedroom	Acoustic Ceiling	Y	See 1595-02	Good	6% CH
1595-06	1595	Northwest Bedroom	Wallboard/Joint Compound	Y	Y See 1595-03 G		Wallboard = ND Joint Compound = 2% CH (<0.25% CH*) Surfacing = ND
1595-07	1595	Southwest Bedroom	Acoustic Ceiling	Y	See 1595-02	Good	6% CH
1595-08	1595	Southwest Bedroom	Wallboard/Joint Compound	Y	See 1595-03	Good	Wallboard = ND Joint Compound = 2% CH Surfacing = ND
1595-09	1595	Front Entryway	Grout Between 6"x6" Ceramic Tile	N/A	N/A	N/A	ND
1595-10	1595	Living Room	Wallboard/Joint Compound	Y	See 1595-03	Good	Wallboard = ND Joint Compound = 2% CH Wallpaper = ND
1595-11	1595	South Bedroom Vanity Floor	Tile Adhesive	N/A	N/A	N/A	ND
1595-12	1595	South Bedroom Wall	Wallboard/Joint Compound	Y	Y See 1595-03		Wallboard = ND Joint Compound = 2% CH
1595-13	1595	Living Room/Fireplace	Brick Façade/Fireplace	N/A	N/A	N/A	ND
1595-14	1595	Living Room/Fireplace	Mortar Associated With 1595-13	N/A	N/A	N/A	ND
1595-15	1595	Living Room	Stove Stand Brick	N/A	N/A	N/A	ND
1595-16	1595	Living Room	Wallboard/Joint Compound	Y	See 1595-03	Good	Wallboard = ND Joint Compound = 2% CH Surfacing = ND

1595 Meadow Lane Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content	
1595-17	1595	Kitchen Island	Mortar / Adhesive	N/A	N/A	N/A	ND	
1595-18	1595	Kitchen Island	Island Underlayment	N/A	N/A	N/A	ND	
1595-19	1595	Kitchen Island	Island Wall Adhesive	N/A	N/A	N/A	ND	
1595-20	1595	Kitchen Floor	Vinyl Floor Sheeting with Flower Pattern with Mastic	N/A	N/A	N/A	ND	
1595-21	1595	Throughout 1st Floor	Orange Star Pattern Vinyl Floor Sheeting with Mastic		1,000 SF	Good	25% CH	
1595-22	1595	Interior Floor	Concrete	N/A	N/A	N/A	ND	
1595-23	1595	Ceiling	White Ceiling/Wallboard	N/A	N/A	N/A	ND	
1595-24	East Chicken Barn	South Entrance Step	Concrete	N/A	N/A	N/A	ND	
1595-25	West Chicken Barn	Interior Wall/ South	Wallboard	N/A	N/A	N/A	ND	
1595-26	North Building	Interior Floor	Concrete	N/A	N/A	N/A	ND	
1595-27	1595	Living Room Ceiling	Acoustic Ceiling Tile-2'x2'	N/A	N/A	N/A	ND	
			+ +					

NOTES:

* = re-analysis via 400-Point Quantitation on a composite basis

NA = Not Applicable

ND = None detected

CH = Chrysotile

BOLD indicates sample is an asbestos containing material (> 1% asbestos) Estimated quantities are not intended for use in bidding calculations.

1595 Meadow Lane Structures Santa Rosa, California

Table 2 - Lead-Containing Material Sampling Results

Sample I.D.	Building	Building Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t	Condition	Total Lead			
1.D.				Substrate) [SF] or Linear Feet[LF])		Substrate)			Weight Percent	Parts per Million (or mg/kg)
1595-01L	1595	North Exterior Wall	Wall	Beige-Tan/2/Wood	2,500 SF	Intact	< 0.0080	<80		
1595-02L	1595	North Exterior Trim	Trim	White/2/Wood	250 SF	Intact	< 0.0080	<80		
1595-03L	1595	Bathroom	Ceramic Toilet	Ceramic Toilet	30 SF	Intact	< 0.0080	<80		
1595-04L	1595	Front Entryway	Ceramic Tile	6"x6" Ceramic Floor Tile (Beige)	30 SF	Intact	0.0084	84		
1595-05L	1595	South Bedroom/ Bath	Ceramic Toilet	Ceramic Toilet	30 SF	Intact	< 0.0080	<80		
1595-06L	1595	South Bedroom/ Vanity	Ceramic Floor Tile	18"x18" Ceramic Tile	50 SF	Intact	< 0.0080	<80		
1595-07L	1595	Kitchen Island	Ceramic Tile	Brown Ceramic Tile	30 SF	Intact	< 0.0080	<80		
1595-08L	1595	Kitchen Island	Ceramic Tile	Beige Ceramic Tile	30 SF	Intact	< 0.0080	<80		
1595-09L	White Out Building	Exterior Wall	Wall	White/2/Wood	800 SF	Non-Intact	3	30,000		
1595-10L	East Chicken Barn	Exterior Wall South	Wall	Red/2/Wood	1,500 SF	Non-Intact	0.12	1,200		
1595-11L	West Chicken Barn	Exterior Wall	Wall	Red/2/Wood	1,500 SF	Non-Intact	0.036	360		
1595-12L	North Red Building	Exterior Wall	Wall	Red/2/Wood	800 SF	Non-Intact	0.039	390		

NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B).

mg/kg = Milligrams per kilogram

SF = Square feet

 \ast indicates lead-containing paint that is less than 5,000 mg/kg $\,$ (or less than 0.5% by weight) $\,$

Estimated quantities are not intended for use in bidding calculations.

Table 3 - Miscellaneous	Hazardous	Building	Materials	Survey Result	s
Table 5 - Miscenaneous	Hazai uous	Dunung.	viatel lais	Survey Result	0

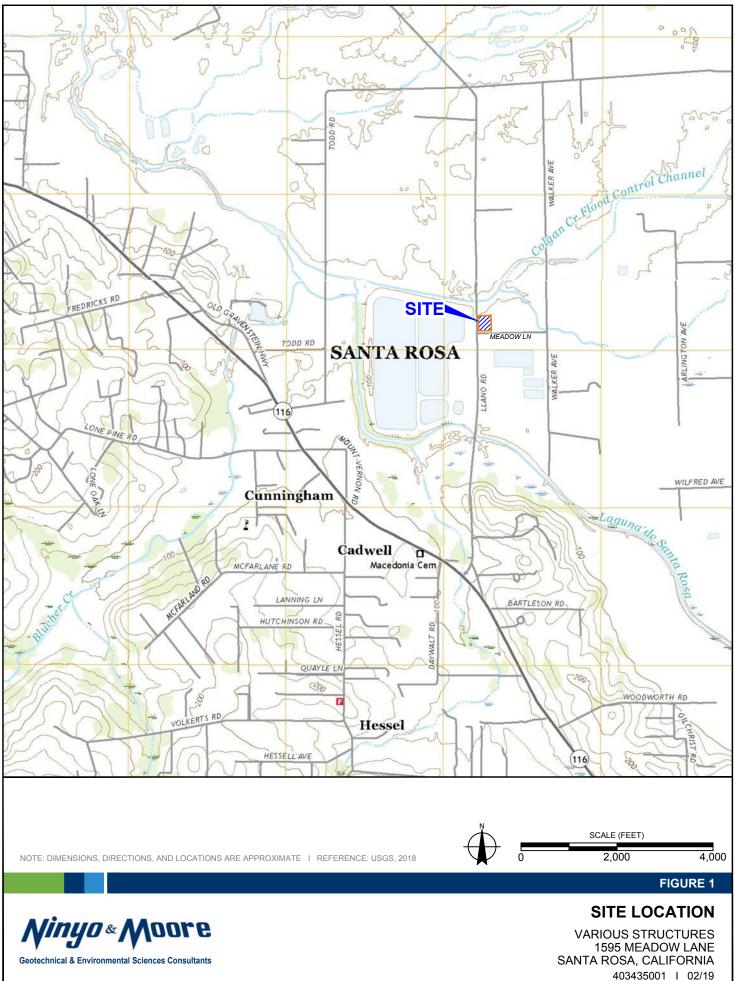
Location	Number of Transformers	Number of Light Ballasts	Number of Mercury Thermostats	Number of A/C Units	No. of Fluorescent Light Tubes	Number of Exit Signs	No. of Freon Refrigerator Systems
1595 Meadow	0	4	3	0	8	0	0

NOTES:

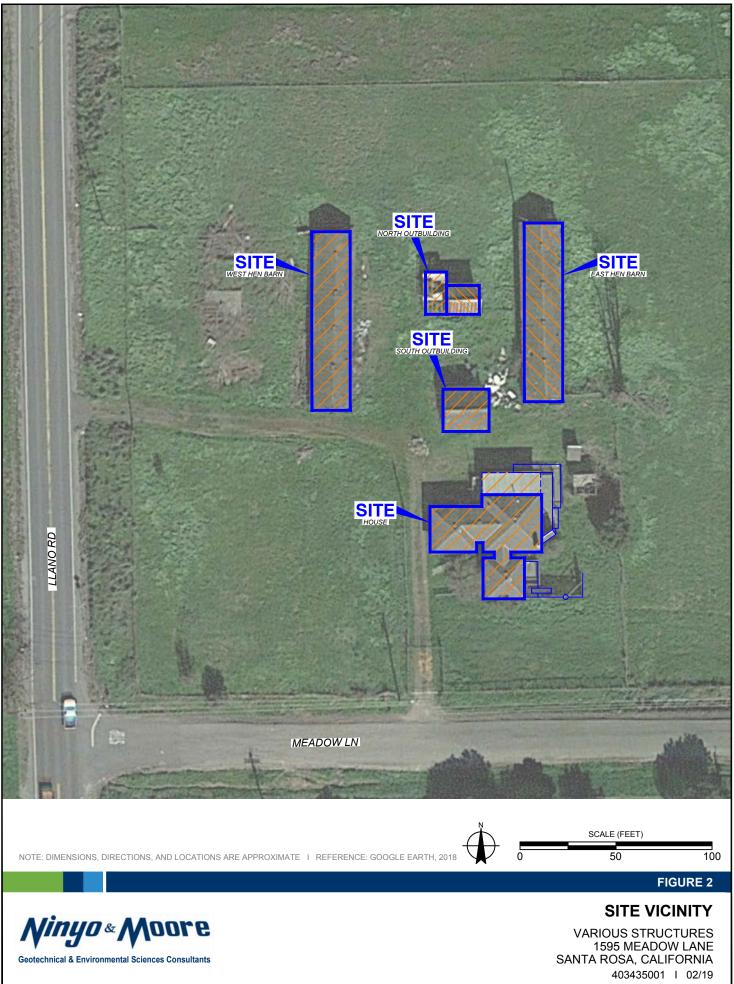
PCB = Polychlorinated biphenyl

A/C = Air Conditioning

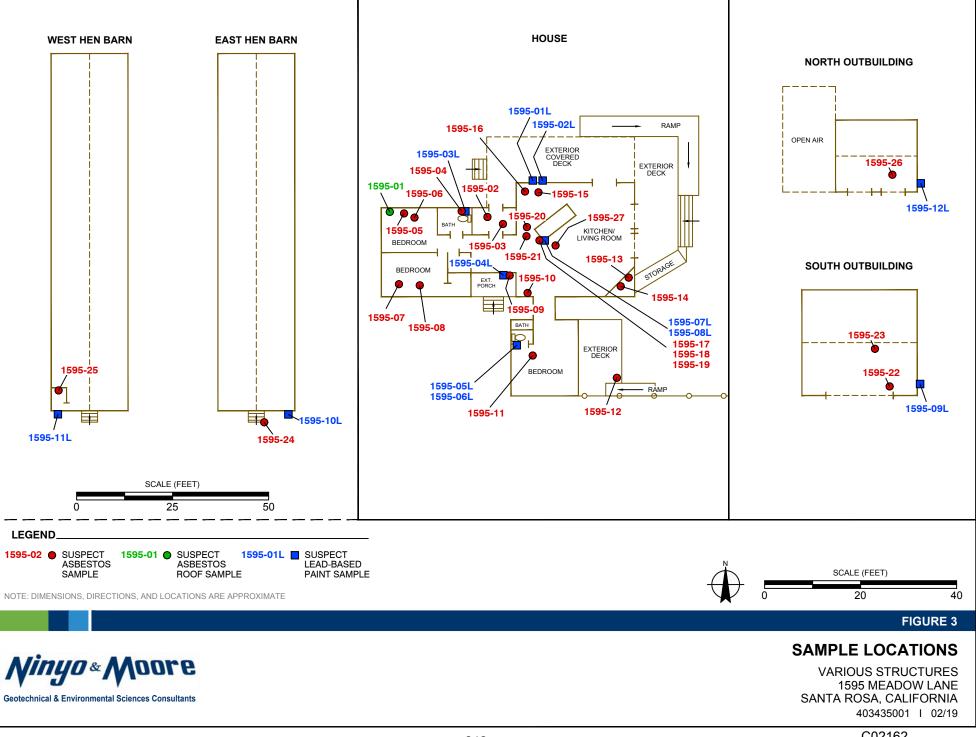
FIGURES







C02162



APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

193

October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Ifin

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

EMSL	EMSL Analytical, Inc. 3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	02/05/2019 1:50 PM
	Suite 103	Analysis Date:	02/05/2019 - 02/06/2019
	Alameda, CA 94501	Collected Date:	01/29/2019
Project:	Santa Rosa		

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
1595-01-Shingle	NW Roof - Roof Assembly	Various Fibrous	30% Glass	70% Non-fibrous (Other)	None Detected
511900346-0001		Homogeneous			
1595-01-Shingle	NW Roof - Roof Assembly	Various Fibrous	35% Glass	65% Non-fibrous (Other)	None Detected
511900346-0001A		Homogeneous			
1595-01-Shingle	NW Roof - Roof Assembly	Various Fibrous	30% Glass	70% Non-fibrous (Other)	None Detected
511900346-0001B		Homogeneous	0000 0-11-1		News Detected
1595-01-Tar Paper	NW Roof - Roof Assembly	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
1595-02	Entryway - Acoustic	White		95% Non-fibrous (Other)	5% Chrysotile
511900346-0002	Ceiling	Non-Fibrous Homogeneous			on onlycome
1595-03-Wallboard	Entryway - Wallboard/Joint	Brown/White Fibrous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	None Detected
511900346-0003	Compound	Heterogeneous			
1595-03-Joint Compound	Entryway - Wallboard/Joint	White Non-Fibrous		60% Ca Carbonate 38% Non-fibrous (Other)	2% Chrysotile
11900346-0003A	Compound	Homogeneous			
595-04-Wallboard	Bathroom - Wallboard/Joint	Brown/White Fibrous	15% Cellulose	60% Gypsum 25% Non-fibrous (Other)	None Detected
11900346-0004	Compound	Heterogeneous			
595-04-Joint	Bathroom -	White		60% Ca Carbonate	2% Chrysotile
Compound	Wallboard/Joint Compound	Non-Fibrous Homogeneous		38% Non-fibrous (Other)	W1400011198/1809809197919799999
11900346-0004A					
595-05	NW Bathroom - Acoustic Ceiling	White Non-Fibrous		60% Ca Carbonate 34% Non-fibrous (Other)	6% Chrysotile
11900346-0005		Homogeneous			
595-06-Wallboard	NW Bedroom - Acoustic Ceiling	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
595-06-Joint	NW Bedroom -	White		60% Ca Carbonate	2% Chrysotile
ompound	Acoustic Ceiling	Non-Fibrous		38% Non-fibrous (Other)	270 Onlysome
1999 - Baller Contern		Homogeneous			31
1900346-0006A					
595-06-Surfacing	NW Bedroom - Acoustic Ceiling	White Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1900346-0006B		Homogeneous			AA1 01
95-07 900346-0007	SW Bedroom - Acoustic Ceiling	White Non-Fibrous Homogeneous		60% Ca Carbonate 34% Non-fibrous (Other)	6% Chrysotile
	EW/ Pedect		20% Colluiona	65% Ouppur	None Detected
95-08-Wallboard	SW Bedoom - Wallboard/Joint Compound	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected

Initial report from: 02/06/2019 11:46:48

EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789

http://www.emsl.com / seattlelab@emsl.com

EMSL

EMSL Order: 511900346 Customer ID: NOMO22 Customer PO: Project ID:

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

			Non-Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
1595-08-Joint Compound	SW Bedoom - Wallboard/Joint Compound	White Non-Fibrous Homogeneous		60% Ca Carbonate 38% Non-fibrous (Other)	2% Chrysotile
511900346-0008A					
1595-08-Surfacing	SW Bedoom - Wallboard/Joint	White Fibrous	15% Glass	45% Ca Carbonate 40% Non-fibrous (Other)	None Detected
511900346-0008B	Compound	Heterogeneous		15W Overte	Nena Detected
1595-09 511900346-0009	Front Entryway - Grout between 6x6 ceramic tile	Beige Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
1595-10-Wallboard	Living Room - Wallboard/Joint	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
511900346-0010	Compound	Heterogeneous			
1595-10-Joint Compound	Living Room - Wallboard/Joint Compound	White Non-Fibrous Homogeneous		60% Ca Carbonate 38% Non-fibrous (Other)	2% Chrysotile
511900346-0010A	a state and a second second				News Detected
1595-10-Wallpaper	Living Room - Wallboard/Joint Compound	Various Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1595-11-Plaster	South bedroom vanity floor - Tile Adhesive	White Non-Fibrous		15% Quartz 85% Non-fibrous (Other)	None Detected
511900346-0011	1999-9997 - 1999-99999 (1999-9999) 1999-9999 - 1999-9999 (1999-9999)	Homogeneous		konstruktion all die versichen van einer Statischer Statischer die Statischer Statischer Statischer Statischer	
1595-11-Tape	South bedroom vanity floor - Tile Adhesive	Brown Fibrous	98% Cellulose	2% Non-fibrous (Other)	None Detected
511900346-0011A		Homogeneous			
1595-12-Wallboard	South bedroom wall - Wallboard/Joint	Brown/White Fibrous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
	Compound	Heterogeneous		and a contracto	00/ Observatile
595-12-Joint Compound	South bedroom wall - Wallboard/Joint Compound	White Non-Fibrous Homogeneous		60% Ca Carbonate 38% Non-fibrous (Other)	2% Chrysotile
11900346-0012A					
595-13 11900346-0013	Living Room/Fireplace - Brick Façade/fireplace	Gray Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected
595-14 1900346-0014	Living Room/Fireplace - Mortar assoc. with	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
595-15	1595-13 Living Room - Stove Stand Brick	Red Non-Fibrous		100% Non-fibrous (Other)	None Detected
1900346-0015		Homogeneous			
95-16-Wallboard	Living Room - Wallboard/Joint	Brown/White Fibrous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	None Detected
1900346-0016	Compound	Heterogeneous			
95-16-Joint ompound	Living Room - Wallboard/Joint Compound	White Non-Fibrous Homogeneous		50% Ca Carbonate 48% Non-fibrous (Other)	2% Chrysotile
900346-0016A		35.			
95-16-Surfacing	Living Room - Wallboard/Joint	White Non-Fibrous		60% Ca Carbonate 40% Non-fibrous (Other)	None Detected
900346-0016B	Compound Kitchen Island	Homogeneous		20% Queda	Nees Detected
95-17 900346-0017	Kitchen Island - Mortar/Adhesive	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected

Initial report from: 02/06/2019 11:46:48

EMSL Analytical, Inc. 3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134

Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com

EME

EMSL Order: 511900346 Customer ID: NOMO22 Customer PO: Project ID:

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

Light Microscopy						
			Non-Asbestos		Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
1595-18 511900346-0018	Kitchen Island - Island Underlayment	Gray Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected	
1595-19 511900346-0019	Kitchen Island - Island Wall Adhesive	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
1595-20-Vinyl Sheet Flooring 511900346-0020	Kitchen Floor - VFS w/ flower pattern w/ mastic	Gray/Tan Fibrous Heterogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected	
1595-20-Mastic 511900346-0020A	Kitchen Floor - VFS w/ flower pattern w/ mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected	
1595-21 511900346-0021	Throughout 1st floor - Orange star pattern VFS/Mastic	Gray/Orange Fibrous Heterogeneous	10% Cellulose	65% Non-fibrous (Other)	25% Chrysotile	
1595-22	LT Floor - Concrete	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected	
1595-23	Ceiling - White Ceiling/Wallboard	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected	
595-24 11900346-0024	South Entrance - Concrete	Gray Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected	
595-25 11900346-0025	Int. Wall/South - Wallboard	Brown/White Fibrous Heterogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected	
595-26 11900346-0026	Int. Floor - Concrete	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected	
595-27 11900346-0027	Living Room Ceiling - ACT- 2x2	Gray/White Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected	

Analyst(s)

Jason Stuhr (43)

Ten

Lauren Kerber, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP. NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 02/06/2019 11:46:48

MSL	EMSL Analytical, Inc. 3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Phone/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received:	02/05/2019 1:50 PM
	Suite 103	Analysis Date:	02/08/2019
	Alameda, CA 94501	Collected:	01/29/2019
Project:	Santa Rosa		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non-A	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
1595-03-Composite	Entryway -	Various		100.0% Non-fibrous (Other)	<0.25% Chrysotile
511900346-0003B	Wallboard/Joint	Fibrous			
	Compound	Heterogeneous			
			This is a composite point count result	t of wallboard, jt. compound.	
595-06-Composite	NW Bedroom -	Various		100.0% Non-fibrous (Other)	<0.25% Chrysotile
511900346-0006C	Acoustic Ceiling	Fibrous			
		Heterogeneous			
			This is a composite point count result	of waliboard, jt. compound, and surfacing	

Analyst(s)

Jason Stuhr (2)

a ren

Lauren Kerber, Laboratory Manager or other approved signatory

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government . EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA

Initial report from: 02/08/2019 13:11:43

ASB_PLMPC_0008_0003 Printed 2/8/2019 1:11:45PM

Page 1 of 1

#511900346

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GEN-FM-10-1: Sample Transfer-One Time Revision 4.2 Revision Date: 1/05/2016 Effective Date: 1/05/2016

510-363-4099



EMSL Analytical, Inc.

		Sample Tra	ansfer Form
Receiving Lab:	EMSL-San	Leandro	Phone Number:
	Our	L'EURINIO -	Fax Number:
Relinquished to:	EMSL-		Phone .

umber: Relinqui hone 206-269-6310 Number: Seattle Fax Number: Does new lab hold equivalent or additional accreditation? * Yes No **EMSL Customer ID #** Nomoda (if known): **Client Name:** Larkin **Client Project:** Rosa Tests to be Performed: **Date Received:** 1:30pm Date Relinguished: 4:00pm 2/4/19 5:00pm Date Due: 12 hrs Monday Lie Samolos Cer **Special Instructions:** (e.g. Work Order #, required qualifications, project specific, Tota Samples procedures/modifications) Date: , 13:50 Relipquished by (Signature). Date: Received by (Signature): Relinquished by (Signature): Date: Received by (Signature): Date: Customer Agreement- Please sign form and send to the receiving laboratory. By signing below, you agree to permit the above named receiving lab to transfer samples to a separate EMSL lab with equivalent qualifications* for analysis. The final report will be issued from the analyzing laboratory. Ensure any requirements are listed in special instructions. Date: Name (please print): Signature: Agent of: Emaileel per Client (Bill) Falaikha EMSL Sen Leandro 2/1/19

If this is a recurring project or sample type that may require samples to be relinquished on a regular basis, a Standing Agreement form must be completed.

* Receiving and analyzing labs shall be aware of required qualifications of project prior to transfer of samples. Note: If customer has been notified and approved this transfer verbally or by e-mail, the receiving lab must sign for the customer above. EMSL employee filling out form on behalf of customer shall print name of person to whom they spoke, date agreement was received, and then sign under Signature. 251 - 97 < 79199361 - Fe JECC

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APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

	VISIL 	EMSL Analytical, In 464 McCormick Street, San Leand Phone/Fax: (510) 895-3675 / (51 http://www.EMSL.com	dro, CA 94577		EMSL Order: CustomerID: CustomerPO: ProjectID:	091902696 NOMO22
Ni 20 Su Ali	iite 103 ameda,		Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 02/01/19 1:30 P 01/29/2019	м	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample D	escription Lab ID Collected Analyzed	Weight	Lead Concentration
1595-01L	091902696-0001 01/29/2019 02/02/2019	0.2632 g	<0.0080 % wt
1000 010	Site: 1595 - N EXT WALL		
1595-02L	091902696-0002 01/29/2019 02/02/2019	0.2514 g	<0.0080 % wt
	Site: 1595 - N EXT TRIM		
1595-03L	091902696-0003 01/29/2019 02/02/2019	0.2514 g	<0.0080 % wt
	Site: 1595 - BATHROOM		
1595-04L	091902696-0004 01/29/2019 02/02/2019	0.2525 g	0.0084 % wt
	Site: 1595 - FRONT ENTRYWAY		
1595-05L	091902696-0005 01/29/2019 02/02/2019	0.2657 g	<0.0080 % wt
	Site: 1595 - SOUTH BEDROOM/BATH		
595-06L	091902696-0006 01/29/2019 02/02/2019	0.2532 g	<0.0080 % wt
	Site: 1595 - SOUTH BEDROOM/VANITY		
595-07L	091902696-0007 01/29/2019 02/02/2019	0.264 g	<0.0080 % wt
	Site: 1595 - KITCHEN ISLAND		
595-08L	091902696-0008 01/29/2019 02/02/2019	0.2531 g	<0.0080 % wt
- 199 - 199	Site: 1595 - KITCHEN ISLAND		
595-09L	091902696-0009 01/29/2019 02/02/2019	0.2496 g	3.0 % wt
	Site: WHITE OUT BLDG - EXT WALL		
595-10L	091902696-0010 01/29/2019 02/02/2019	0.2223 g	0.12 % wt
	Site: EAST CHICKEN BARN - EXT WALL SOUTH		
595-11L	091902696-0011 01/29/2019 02/02/2019	0.252 g	0.036 % wt
	Site: WEST CHICKEN - EXT WALL		
595-12L	091902696-0012 01/29/2019 02/02/2019	0.2617 g	0.039 % wt
	Site: NORTH RED BLDG - EXT		

putipos

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted, "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/02/2019 11:50:53

くしていてき Nor-Intro maint Condition -5 2 Received Byctstophenty Laboratory Sheet 1 of 5 -2 2 1 1 1:39m purrel EMIL Peter Tonn/2/Was 2, 500 D Surface Area ISA A 1500 K Laboratory: Estimated NN N ROS R A Mar 250 M 30 2 Son Soo A ROOK Tel: Fax Sample Description (Color # 6x6 COLONNIC FLOY CONCONNILLA C Red 12 / WOOD Payin Unewa White/2/who J.H. W. TAT Levon, Clorlet 2/11/19 termic with Layers /Substrate) Buge arount 1Cell 12/1000 Red (2./ 1/00D 1129/19 TILE (RANG) NATE R Sampled By: WPL Date Sampled: CLACOMIC I FLIOR TILE Cevenarie Sampled By: Cercinite to the total Sampled By: Component I'vern'i Uprovin !! Building V lo/ WINN W/W/ Well 11 1CM Ner 09/902696 /Both HO 1500 COM 11 H Childrenterin Ext. D'all South Page SANUTA ROST US/land 2 Sample Location 0 595-056 Ilsas ISauth Rodunand 1595 Front Ediny were LEAD BASED PAINT BULK SAMPLE DATA SHEET 1005E4Egh SWY) 15C) Jam SGE N. EX. Wall 1545 Berthroom bxt. Well hum. lowinise the Wall 1595 NIEXT Nurya&Moole to to Project Manager; Project Name : 2 Site Address: Oluchar 1 Project No.: Building Number 1-22 Sarken Bill Carlen Wite West P Eest APN: Reinquished By (signifiant) : 11 720-565 5.9 5-08L 595-04L 760-565 595-03L 59,5-0 bc 5012-102 595-111 18trshi 1595-02L 1956 Webster Street, Suite 400 5950026 CHAIN OF CUSTODY INFORMATION: Sample ID OrderID: 091902696 Oakland, CA 94612 510-633-5646 (fax) Ninys & Moore 510-633-5640 LabiD **

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APPENDIX D

CDPH Form 8552 - Lead Hazard Evaluation Report

Ninyo & Moore | Residenc e and Assoc iated Struc tures, 1595 MeadowLane, S anta Rosa, California | 403435001 | February 14, 2010 CO2162

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation	1/29/19
Section 2 — Type of Lead Hazard Evaluation Lead Inspection Risk assessment	(Check one box only)
Section 3 — Structure Where Lead Hazard Ev	aluation Was Conducted
Address [number, street, apartment (if applicable)]	Santa Rosq Sonoma 95401
Construction date (year) Type of structure	Children living in structure?
Multi-unit buildin	ng 🗌 School or daycare
1780s Single family dw	velling Other Don't Know
Section 4 - Owner of Structure (if business/ag	gency, list contact person)
Name CH FSanta Rosa, Gr Address [number, street, apartment (if applicable)] 69 STORY Circle	Telephone number 707/543-4508 City Sanda Rosa State CA 95401
Section 5 - Results of Lead Hazard Evaluation	(check all that apply)
No lead-based paint detected	lead-based paint detected
No lead hazards detected	ed dust found 🗌 Lead-contaminated soil found 🗌 Other
Section 6 — Individual Conducting Lead Hazard	Evaluation
Name William P. Larkin	Telephone number 510 /343-3000
Address [number, street, apartment (if applicable)]	City Alameda CA Zip Code 94501
CDPH certification number 5543	Signature Date 2/2/9
lame and CDPH certification number of any other individua	Is conducting sampling or testing (if applicable)
ection 7 — Attachments	
lead-based paint; . Each testing method, device, and sampling procedu	cating the specifc locations of each lead hazard or presence of ure used; oratory results, including laboratory name, address, and phone number.
st copy and attachments retained by inspector	Third copy only (no attachments) mailed or faxed to:
cond copy and attachments relained by owner	California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656

259

	TRANSMISSION VERIFICATION REPORT	TIME . 00/10/0010 00:0
		TIME : 02/10/2019 20:01 NAME : NINYO AND MOORE FAX : 510-633-5646 TEL : 510-633-5640 SER.# : BROD5J252210
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2020 Challenger Drive, Suite 103 | Alameda, California 94501 | p. 510.343.3000

SAN DIEGO | IRVINE | LOS ANGELES | FONTANA | OAKLAND | SAN FRANCISCO | SACRAMENTO

SAN JOSE | PHOENIX | TUCSON | PRESCOTT | LAS VEGAS | DENVER | BROOMFIELD | HOUSTON

www.ninyoandmoore.com

HAZARDOUS BUILDING MATERIALS SURVEY 4090 and 4099 Walker Avenue

Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 13, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants

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HAZARDOUS BUILDING MATERIALS SURVEY

4090 and 4099 Walker Avenue Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 13, 2019 | Project No. 403435001

Villian P. Lonky

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

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1.2	User Reliance	1
2	OBJECTIVE AND SCOPE OF SERVICES	1
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4	PHYSICAL LIMITATIONS	2
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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
- 3 Miscellaneous Hazardous Building Materials Survey Results

FIGURES

- 1 Site Location
- 2 Site Vicinity 4090 Walker Avenue
- 3 Site Vicinity 4099 Walker Avenue
- 4 Sample Locations

APPENDICES

A – Certifications

- B Asbestos Laboratory Analytical Report and Chain-of-Custody Records
- C Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records
- D CDPH Form 8552 Lead Hazard Evaluation Report

1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at a vacant residence and associated barn at 4090 Walker Avenue and an outbuilding at 4099 Walker Avenue in Santa Rosa, California (Figures 1, 2 and 3). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the various buildings.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the Walker Avenue structures mentioned above at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 29, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the identified Walker Avenue structures to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

• Visual reconnaissance of the identified Walker Avenue structure to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.

- Collection of thirty-two bulk samples of suspect ACMs and submittal of this sample to a certified, independent laboratory for analysis of asbestos content.
- Collection of eight suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of suspect bulk PCB sample (if any) and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The parcel addressed 4090 Walker Avenue lies along the east side of Walker Avenue and a vacant residence (encompassing approximately 2,000 square feet) and an open-air barn structure (encompassing approximately 1,200 square feet) are located there. The parcel addressed 4099 Walker Avenue is located immediately across Walker Avenue from 4090 Walker Avenue. An outbuilding is located north of the residence of 4099 Walker Avenue and encompasses approximately 100 square feet. All are vacant buildings. Building finishes in the vacant residence include gypsum wallboard walls and ceilings, bare concrete floors, cove base and associated mastic, ceramic tiles and adhesive, vinyl floor sheeting (VFS) and associated mastic, wood floors and built-up roofing materials. The outbuilding is composed of painted wood walls and built-up roofing materials.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 29, 2019, the three Walker Avenue structures were assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM and LCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Thirty-two bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 4. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

Eight bulk suspect LCM samples were collected and analyzed. After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic

Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the buildings are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

No suspect PCBCM were observed during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the three Walker Avenue structures.

6 FINDINGS

A HBMS was performed at the three Walker Avenue structures to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACMs and LCMs are located within the vacant residence at 4090 Walker Avenue and at the outbuilding at 4099 Walker Avenue. Miscellaneous hazardous building materials observed at the Walker Avenue structures included fluorescent light tubes and associated light ballasts and a thermostat.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

- Joint/taping compound on approximately 5,000 square feet of wallboard (sample 4090-13 through 4090-18 and samples 4090-21, 4090-24, 4090-25 and 4090-29) observed throughout the interior of the vacant residence, containing up to 2% chrysotile asbestos. This material assembly (including the underlying wallboard) was re-analyzed via PLM 400-point quantitation on a composite basis and reported to contain <0.25% asbestos. This material assembly is considered ACCM.
- Approximately 120 square feet of vinyl floor sheeting with a diamond-sparkle pattern (sample 4090-19) located in the hall (western) bathroom, containing 15% chrysotile asbestos.
- Approximately 20 square feet of pebble-patterned vinyl floor sheeting (sample 4090-27) observed in the front hallway utility closet containing 15% chrysotile asbestos.
- Approximately 500 square feet of "Aircell" insulation on HVAC ducting (sample 4090-26) observed in the crawl space underneath the residence on approximately 6-8 ducts, containing 15% chrysotile asbestos.
- Approximately 50 square feet of "felt" associated with cove base (sample 4090-22) observed in the southeast bathroom containing 25% chrysotile asbestos, also reported as part of this sample was "compound" containing 2% chrysotile asbestos.

In older houses such as this vacant residence, it was common to "cove" the linoleum in bathrooms a very short length up the walls using metal bars, etc. A past owner of the house most likely removed the former linoleum in the southeast bathroom and some of the underlying "felt" (or backing) from this linoleum remained in place (on the wall) adhering to the mastic associated with the cove base. Fifty feet of this material is estimated because it might be in other areas on the low walls of the southeast bathroom. We are assuming that the 2% asbestos "compound" (as reported by EMSL) is joint/taping compound that similarly adhered to the mastic associated with the cove base.

6.2 Lead-Containing Materials

Six paint chip samples and two ceramic tile samples were collected for analysis of lead content. None of the six paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). The two paint samples collected from the 4099 Walker Avenue outbuilding (WOB-01L and WOB-02L) were reported at 0.27% by weight (or 270 mg/kg) and 0.14% by weight (or 140 mg/kg). the four paint samples collected from the vacant residence at 4090 Walker Avenue samples (4090-01L, 4090-02L, 4090-03L and 4090-04L) were reported to contain lead in concentrations from 0.0085% (or 85 mg/kg) by weight to 0.31% by weight (or 3,100 mg/kg). These paint samples are considered LCP. The two ceramic tile samples (samples 4090-05L and 4090-06L from the 4090 Walker Avenue residence) were reported at less than their associated limits of detection (0.008% by weight, or less than 80 mg/kg). Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix D.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

As stated above, no suspect bulk PCBCM was observed during our site sampling activities.

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 8 fluorescent light bulbs, 4 associated light ballasts and one thermostat were observed during our sampling activities. Please see Table 3.

7 **RECOMMENDATIONS**

Since ACMs have been reported within the identified Walker Avenue structures, the following recommendations and precautions are provided:

The identified ACMs within the identified Walker Avenue structures should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that this ACMs should not be disturbed. Any ACMs in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACMs, a licensed asbestos abatement removal contractor should remove the ACMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. While Ninyo & Moore provided an estimate of the quantity of ACMs present at the identified Walker Avenue structures (Table 1), it is the abatement contractor's responsibility to assess the actual ACM quantity present.

- The identified LCMs reported at the identified Walker Avenue structures should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. While Ninyo & Moore provided an estimate of the quantity of LCMs present at the identified Walker Avenue structures (Table 2), it is the responsibility of abatement contractors to assess the actual LCM quantities present.
- Prior to demolition or renovation activities, potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and FreonTM-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the identified Walker Avenue structures, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 LIMITATIONS

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited sampling and chemical analysis. Further assessment of potential adverse environmental impacts may be accomplished by conducting a

more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the areas evaluated. However, if additional suspect hazardous building materials are encountered during renovation/demolition activities, these materials should be sampled by qualified personnel, and analyzed for content prior to further disturbance. *In addition, please note that the quantities of impacted hazardous building materials are approximate. It is the contractor's responsibility to assess the actual quantities of hazardous building materials present.*

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
4090-01	4090	Barn (Inside)	Concrete	N/A	N/A	N/A	ND
4090-02	4090	Roof/North Area	Roof Assembly	Roof Assembly N/A N/A N		N/A	ND
4090-03	4090	Attic Space	Blown-in Insulation	N/A	N/A	N/A	ND
4090-04	4090	Attic Space	Cloth Electric Line Insulation	N/A	N/A	N/A	ND
4090-05	4090	Back Patio Steps	Concrete	N/A	N/A	N/A	ND
4090-06	4090	Back Patio	Green Surfacing Material	N/A	N/A	N/A	ND
4090-07	4090	Back Patio	Green Surfacing Material	N/A	N/A	N/A	ND
4090-08	4090	Back Patio	Green Surfacing Material	N/A	N/A	N/A	ND
4090-09	4090	Front Patio/ Walk	Concrete	N/A	N/A	N/A	ND
4090-10	4090	Front Entrance Area	Vinyl Floor Sheeting with Diamond/Cross Pattern with Mastic	N/A	N/A	N/A	ND
4090-11	4090	Front Entry (Exterior)	Stone Floor	N/A	N/A	N/A	ND
4090-12	4090	Front Entry (Exterior)	Mortar Associated with 4090-11	N/A	N/A	N/A	ND
4090-13	4090	Front Entry (Interior)	Wallboard/Joint Compound	Y	5,000 SF	Good	Wallboard = ND Joint Compound = 2% CH (<0.25% CH*)
4090-14	4090	Living Room	Wallboard/Joint Compound	Y	See 4090-13	Good	Wallboard = ND Joint Compound = <1% CH (0.5% CH**)
4090-15	4090	Kitchen	Wallboard/Joint Compound	Y	See 4090-13	Good	Wallboard = ND Joint Compound = <1% CH
4090-16	4090	Kitchen	Wallboard/Joint Compound	Y	See 4090-13	Good	Wallboard = ND Joint Compound = <1% CH

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity Condition		Asbestos Content			
4090-17	4090	Wash Room	Wallboard/Joint Compound Y See 4090-13 Good		Wallboard = ND Joint Compound = <1% CH					
4090-18	4090	Bathroom	Wallboard/Joint Compound Y See 4090-13 Good		Wallboard = ND Joint Compound = <1% CH					
4090-19	4090	Bathroom	Vinyl Floor Sheeting with Diamond Sparkle Pattern with Mastic Y 120 SF Good		VFS = 15% CH Mastic = ND					
4090-20	4090	Southeast Bedroom	Black Paper Under Wood Flooring	N/A N/A N/A		ND				
4090-21	4090	Southeast Bedroom	Wallboard/Joint Compound	Y See 4090-13 Good		Wallboard = ND Joint Compound = 2% CH				
4090-22	4090	Southeast Bathroom	Beige Cove Base-4" with Mastic	N 50 SF Good		Cove Base = ND Mastic 1 = ND Felt = 25% CH Mastic 2 = ND Compound = 2% CH				
4090-23	4090	Southeast Bedroom/Bathroom	Ceramic Tile/ Adhesive N/		N/A	N/A	ND			
4090-24	4090	Northeast Bedroom	Wallboard/Joint Compound	Y See 4090-13 Good		Wallboard = ND Joint Compound = 2% CH				
4090-25	4090	North Bedroom	Wallboard/Joint Compound	Y	See 4090-13 Good		Wallboard = ND Joint Compound = 2% CH			
4090-26	4090	Front Hallway (Utility Closet)	"Aircell" Insulation on HVAC Ducting	Y	Y 500 SF Good		15% CH			
4090-27	4090	Front Hallway (Utility Closet)	Pebble Pattern Vinyl Floor Sheeting in Utility Closet	Y	Y 20 SF Good		VFS = 15% CH Mastic = ND			
4090-28	4090	Garage Baseboard	Concrete	N/A N/A N/A		N/A	ND			
4090-29	4090	Garage East Wall	Wallboard/Joint Compound		See 4090-13	God	Wallboard = ND Joint Compound = Not Submitted			
4090-30	4090	Garage South Wall	Vapor Barrier N/A N/A N/A		ND					
WOB-01	4099 OB	Roof, Southeast Corner	Vapor Barrier N/A N/A N/A		ND					
WOB-02	4099 OB	Interior Wall	Vapor Barrier	N/A	N/A	N/A	ND			

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content

NOTES:

Analysis by Polarized Light Microscopy (PLM/EPA 600/R-93/116 Method).

* = re-analysis via PLM 400 Point Quantitation on a composite basis

** = re-analysis via PLM 400 Point Quantitation

NA = Not Applicable ND = None detected

CH = Chrysotile

BOLD indicates sample is an asbestos containing material (> 1% asbestos)

Estimated quantities are not intended for use in bidding calculations.

Table 2 - Lead-Containing Material Sampling Results

Sample I.D.	Building	Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t [SF] or Linear Feet[LF])	Condition	Total Lead	
				Substrate)			Weight Percent	Parts per Million (or mg/kg)
WOB-01L	4099 OB	East Wall Exterior	Wall	White/1/Wood	300 SF	Non-Intact	0.027	270*
WOB-02L	4099 OB	East Trim Exterior	Trim	Blue/1/Wood	50 SF	Non-Intact	0.014	140*
4090-01L	4090	Front Railing	Railing	Black/2/Metal	150 SF	Intact	0.0085	85*
4090-02L	4090	Exterior Trim	Trim	Green/2/Wood	500 SF	Intact	0.023	230*
4090-03L	4090	Exterior Wall	Wall	Green/2/Wood	2,000 SF	Intact	0.31	3,100*
4090-04L	4090	Interior Wall / Kitchen	Trim	White/2/Wood	200 SF	Intact	0.096	960*
4090-05L	4090	Southeast Bedroom/ Bathroom	Ceramic Tile	White Ceramic Wall Tile	50 SF	Intact	< 0.0080	<80
4090-06L	4090	Main Bathroom	Ceramic Tile	White Toilet Ceramic Tile	50 SF	Intact	< 0.0080	<80

NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B).

mg/kg = Milligrams per kilogram

SF = Square feet

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight)

Estimated quantities are not intended for use in bidding calculations.

Table 3 - Miscellaneous	Hazardous	Ruilding N	Asterials	Survey Results
Table 5 - Miscellaneous	11azai uous	Dunuing N	viaterials	Survey Results

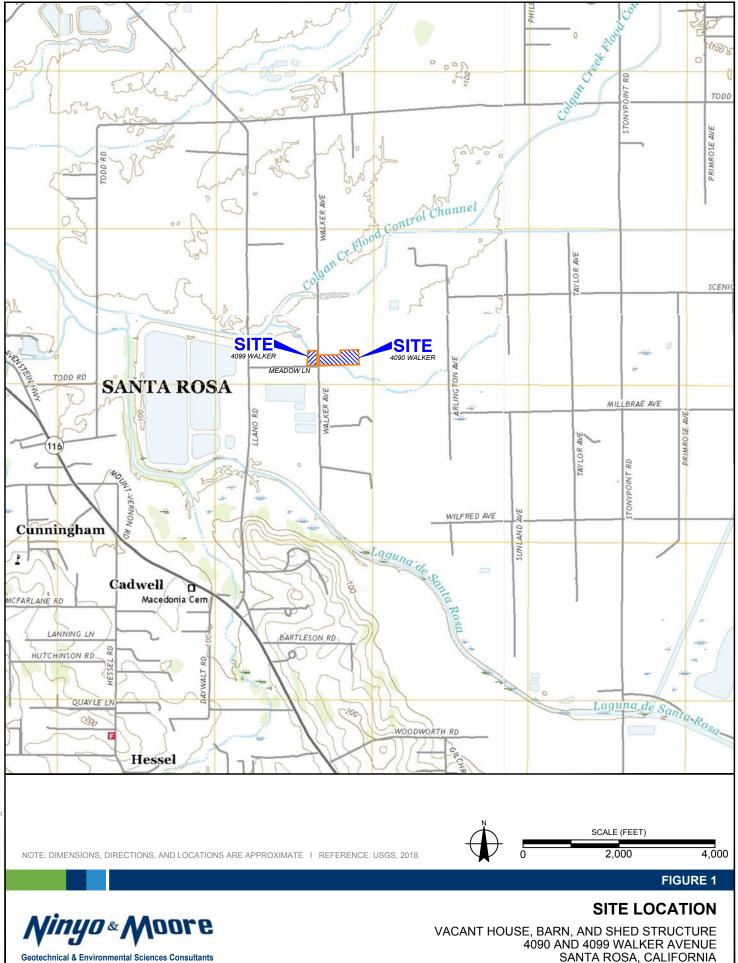
Location	Number of Transformers	Number of Light Ballasts	Mercury	Number of A/C Units	No. of Fluorescent Light Tubes		No. of Freon Refrigerator Systems
Walker Avenue Structures	0	4	1	0	8	0	0

NOTES:

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

FIGURES



403435001.dwg 02/12/2019 AEK

Geotechnical & Environmental Sciences Consultants

403435001 I 02/19 C02162



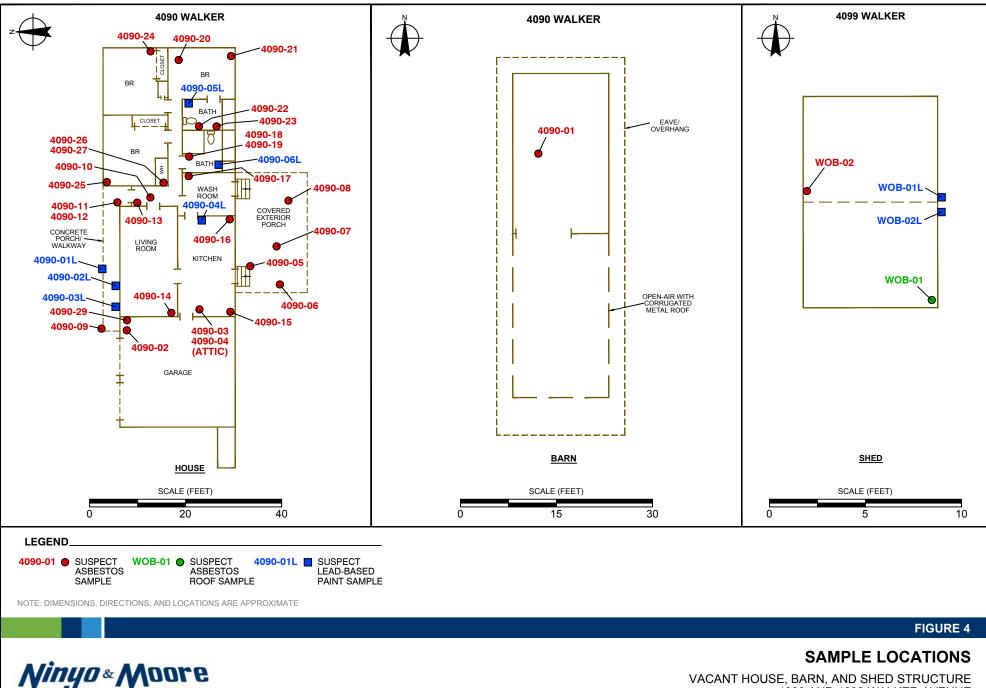
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C02162

AFK



C02162



AEK

19

02/25

dwg

403435001

VACANT HOUSE, BARN, AND SHED STRUCTURE 4090 AND 4099 WALKER AVENUE SANTA ROSA, CALIFORNIA 403435001 I 02/19

APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

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October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

The

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 199-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

EMSL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Shawn Robbins	Phone:	(510) 343-3000
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	02/01/2019 1:30 PM
	Suite 103	Analysis Date:	02/04/2019
	Alameda, CA 94501	Collected Date:	01/29/2019
Project:	403435001 - SANTA ROSA - WPL		

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

			Non-Asbe	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
WOB-01-Vapor Barrier	ROOF, SOUTHEAST CORNER - VAPOR BARRIER	Black Non-Fibrous Homogeneous	85% Cellulose	10% Matrix 5% Non-fibrous (Other)	None Detected
WOB-01-Roofing	ROOF, SOUTHEAST CORNER - VAPOR BARRIER	Black Non-Fibrous Homogeneous		40% Quartz 20% Matrix 40% Non-fibrous (Other)	None Detected
WOB-02 091902776-0002	INTERIOR WALL - VAPOR BARRIER	Brown/Black Fibrous Homogeneous	85% Cellulose	10% Matrix 5% Non-fibrous (Other)	None Detected
4090-01	BARN (INSIDE) - CONCRETE	Tan Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
091902776-0003 4090-02-Shingle 091902776-0004	ROOF/NORTH AREA - ROOF ASSEMBLY	Black/Green Fibrous Homogeneous		25% Quartz 70% Matrix 5% Non-fibrous (Other)	None Detected
4090-02-Tar 091902776-0004A	ROOF/NORTH AREA - ROOF ASSEMBLY	Black Non-Fibrous Homogeneous		98% Matrix 2% Non-fibrous (Other)	None Detected
4090-03	ATTIC SPACE - BLOWN-IN INSULATION	White Fibrous Homogeneous	98% Min. Wool	2% Non-fibrous (Other)	None Detected
991902776-0005 4090-04	ATTIC SPACE - CLOTH ELECTRIC	Brown/Tan/White Fibrous	40% Cellulose	45% Matrix 15% Non-fibrous (Other)	None Detected
991902776-0006 4090-05	LINE INSULATION BACK PATIO STEPS - CONCRETE	Homogeneous Gray Non-Fibrous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
99902776-0007 4090-06	BACK PATIO - GREEN SURFACING MAT'L	Homogeneous Gray Non-Fibrous Homogeneous		5% Quartz 85% Ca Carbonate 10% Non-fibrous (Other)	None Detected
91902776-0008 090-07	BACK PATIO - GREEN SURFACING MAT'L	Gray Non-Fibrous Homogeneous		30% Quartz 60% Ca Carbonate 10% Non-fibrous (Other)	None Detected
91902776-0009 090-08 91902776-0010	BACK PATIO - GREEN SURFACING MAT'L	Gray/Green Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
090-09	FRONT PATIO/WALK - CONCRETE	Gray Non-Fibrous Homogeneous	31.	15% Quartz 50% Ca Carbonate 35% Non-fibrous (Other)	None Detected
91902776-0011 090-10-Vinyl Sheet looring 91902776-0012 his is a composite result of bo	FRONT ENTRANCE AREA - VSF W/ DIAMOND + CROSS PATTERN/MASTIC th vinvl and backing layer	Gray/White Fibrous Homogeneous	15% Cellulose 3% Glass	10% Ca Carbonate 50% Matrix 22% Non-fibrous (Other)	None Detected
090-10-Mastic	FRONT ENTRANCE AREA - VSF W/ DIAMOND + CROSS PATTERN/MASTIC	Yellow Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected



464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902776 Customer ID: NOMO22 Customer PO: 403435001 **Project ID:**

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

			Non-Asbe		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
4090-11	FRONT ENTRY (EXT.) - STONE	Tan Non-Fibrous		40% Quartz 60% Non-fibrous (Other)	None Detected
091902776-0013	FLOOR	Homogeneous			
4090-12	FRONT ENTRY (EXT.) - MORTAR	Gray Non-Fibrous	10% Quartz 60% Ca Carbonate 20% Nas (Braus (Other)		None Detected
		30% Non-fibrous (Other)			
4090-13-Wallboard 091902776-0015	FRONT ENTRY (INT.) - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
4090-13-Joint	FRONT ENTRY	White		80% Ca Carbonate	2% Chrysotile
Compound	(INT.) -	Non-Fibrous		18% Non-fibrous (Other)	
001002776 00154	WALLBOARD/JOINT	Homogeneous			
091902776-0015A 4090-14-Wallboard	LIVING ROOM - WALLBOARD/JOINT	White Non-Fibrous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
091902776-0016	COMP	Homogeneous			
4090-14-Joint	LIVING ROOM -	White		80% Ca Carbonate	<1% Chrysotile
Compound	WALLBOARD/JOINT COMP	Non-Fibrous Homogeneous		20% Non-fibrous (Other)	
091902776-0016A			101 0 - 11 - 1	20% Cuppure	None Detected
4090-15-Wallboard	KITCHEN - WALLBOARD/JOINT	White Non-Fibrous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	NOUE Derected
091902776-0017	COMP	Homogeneous		80% Ca Carbonate	<1% Chrysotile
4090-15-Joint Compound	KITCHEN - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		20% Non-fibrous (Other)	
91902776-0017A					The second sector and the second
1090-16-Wallboard	KITCHEN - WALLBOARD/JOINT	White Non-Fibrous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
91902776-0018	COMP	Homogeneous		80% Ca Carbonate	<1% Chrysotile
1090-16-Joint Compound	KITCHEN - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		20% Non-fibrous (Other)	<1% Onlysome
91902776-0018A	R. With				
090-17-Wallboard	WASH ROOM - WALLBOARD/JOINT	White Non-Fibrous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected
91902776-0019	COMP	Homogeneous			410/ Obarra - 11
090-17-Joint Compound	WASH ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	<1% Chrysotile
1902776-0019A	The first of the f	Nucleon and a		and the plane beauty	New Data
090-18-Wallboard	BATH ROOM - WALLBOARD/JOINT	White Non-Fibrous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1902776-0020	COMP	Homogeneous		80% Ca Carbonate	<1% Chrysotile
090-18-Joint ompound	BATH ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	ST/0 Onrysolile
1902776-0020A	John	. Istitegeneoue			
090-19-Vinyl Sheet	BATH ROOM - VSF	Tan/Beige	10% Cellulose	8% Ca Carbonate	15% Chrysotile
ooring	W/ DIAMOND SPARKLE	Fibrous Homogeneous		50% Matrix 17% Non-fibrous (Other)	
1902776-0021	PATTERN/MASTIC				
	both vinyl and backing layer				
990-19-Mastic	BATH ROOM - VSF W/ DIAMOND	Tan Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected
1902776-0021A	SPARKLE PATTERN/MASTIC	Homogeneous			

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSI

 EMSL Order:
 091902776

 Customer ID:
 NOMO22

 Customer PO:
 403435001

Project ID:

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
4090-20	SE BEDROOM - BLACK PAPER	Brown/Black Fibrous	90% Cellulose	5% Matrix 5% Non-fibrous (Other)	None Detected
091902776-0022	UNDER WOOD FLOORING	Homogeneous	10		
4090-21-Wallboard	SE BEDROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
Service and the service of the servi	SE BEDROOM -	White		80% Ca Carbonate	2% Chrysotile
1090-21-Joint Compound	WALLBOARD/JOINT COMP	Non-Fibrous Homogeneous		18% Non-fibrous (Other)	270 0111730110
091902776-0023A	942033999				
4090-22-Cove Base 991902776-0024	SE BEDROOM -BATHROOM - BEIGE COVE BASE -	Beige Non-Fibrous Homogeneous		15% Ca Carbonate 60% Matrix 25% Non-fibrous (Other)	None Detected
	4" + MASTIC	and designed			N. D. L. M.
4090-22-Mastic 1 091902776-0024A	SE BEDROOM -BATHROOM - BEIGE COVE BASE - 4" + MASTIC	Yellow Non-Fibrous Homogeneous		15% Ca Carbonate 80% Matrix 5% Non-fibrous (Other)	None Detected
4090-22-Felt	SE BEDROOM -BATHROOM -	Brown Fibrous	50% Cellulose	25% Non-fibrous (Other)	25% Chrysotile
091902776-0024B	BEIGE COVE BASE - 4" + MASTIC	Homogeneous			
1090-22-Mastic 2	SE BEDROOM	Tan		80% Matrix	None Detected
91902776-0024C	-BATHROOM - BEIGE COVE BASE - 4" + MASTIC	Non-Fibrous Homogeneous		20% Non-fibrous (Other)	
090-22-Compound	SE BEDROOM	White		80% Ca Carbonate	2% Chrysotile
91902776-0024D	-BATHROOM - BEIGE COVE BASE - 4" + MASTIC	Non-Fibrous Homogeneous		18% Non-fibrous (Other)	
090-23-Ceramic Tile	SE BEDROOM	White		50% Quartz	None Detected
91902776-0025	-BATHROOM - CERAMIC TILE /	Non-Fibrous Homogeneous		50% Non-fibrous (Other)	
	ADHESIVE			70% 0 0 1	None Detected
090-23-Grout	SE BEDROOM -BATHROOM -	White Non-Fibrous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
91902776-0025A	CERAMIC TILE / ADHESIVE	Homogeneous	4.4 ()		
090-23-Adhesive	SE BEDROOM	Tan Non-Fibrous		90% Matrix 10% Non-fibrous (Other)	None Detected
1902776-0025B	-BATHROOM - CERAMIC TILE / ADHESIVE	Homogeneous		1076 Holl-Holdad (online)	
90-23-Compound	SE BEDROOM -BATHROOM -	White Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1902776-0025C	CERAMIC TILE / ADHESIVE	Homogeneous	(e)		
90-24-Wallboard	NE BEDROOM - WALLBOARD/JOINT	White Non-Fibrous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1902776-0026	COMP	Homogeneous			00/ Obstantile
90-24-Joint ompound	NE BEDROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 18% Non-fibrous (Other)	2% Chrysotile
902776-0026A	COWF	nomogeneous			
90-25-Wallboard	N BEDROOM - WALLBOARD/JOINT	White Non-Fibrous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1902776-0027	COMP	Homogeneous			



464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091902776 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe	stos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
4090-25-Joint Compound 091902776-0027A	N BEDROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 18% Non-fibrous (Other)	2% Chrysotile	
4090-26 091902776-0028	FRONT HALLWAY (UTILITY CLOSET) - "AIRCELL" INSULATION HVAC DUCTING	Brown/Silver/Beige Non-Fibrous Homogeneous	15% Cellulose	60% Matrix 10% Non-fibrous (Other)	15% Chrysotile	
4090-27-Vinyl Sheet Flooring 091902776-0029 This is a composite result o	FRONT HALLWAY (UTILITY CLOSET) - PEBBLE-PATTERN VFS IN UTILITY CLOSET of both vinyl and backing layer	Tan Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	15% Chrysotile	
4090-27-Mastic 091902776-0029A	FRONT HALLWAY (UTILITY CLOSET) - PEBBLE-PATTERN VFS IN UTILITY CLOSET	Beige Non-Fibrous Homogeneous	10% Cellulose	70% Matrix 20% Non-fibrous (Other)	None Detected	
4090-28	GARAGE BASEBOARD - CONCRETE	Gray Non-Fibrous Homogeneous	1 .	25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected	
4090-29-Wallboard	GARAGE EAST WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	4% Cellulose <1% Glass	80% Gypsum 16% Non-fibrous (Other)	None Detected	
4090-29-Joint Compound 191902776-0031A	GARAGE EAST WALL - WALLBOARD/JOINT COMPOUND		45 I		Not Submitted	
No joint compound included 1090-30 191902776-0032	in sample. GARAGE SOUTH WALL - VAPOR BARRIER	Brown/Black Fibrous Homogeneous	70% Cellulose	20% Matrix 10% Non-fibrous (Other)	None Detected	

Analyst(s)

Oscar Merino (11) Shane Heisser (42)

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/04/2019 20:00:17

MSL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22 403435001
V	Shawn Robbins	Phone:	(510) 343-3000
	Ninyo & Moore	Fax:	방법에 집에 가 있는 것은 수상에 있다. 가 것은 것은 것을 가지 않는
	2020 Challenger Drive	Received:	02/01/2019 1:30 PM
	Suite 103	Analysis Date:	02/09/2019
	Alameda, CA 94501	Collected:	01/29/2019
Project:	403435001 - SANTA ROSA - WPL		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non-	Aspestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
4090-13-Composite	FRONT ENTRY (INT.) -	White		100.0% Non-fibrous (Other)	<0.25%Chrysotile
091902776-0015	WALLBOARD/JOINT	Non-Fibrous			
	COMP	Homogeneous			
4090-14-Joint	LIVING ROOM -	White		99.50% Non-fibrous (Other)	0.50%Chrysotile
Compound	WALLBOARD/JOINT	Non-Fibrous			
091902776-0016A	COMP	Homogeneous			

Analyst(s)

Shane Heisser (2)

Matthew Batongbacal or other approved signatory

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government . EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/09/2019 11:17:11

ASB_PLMPC_0006_0003 Printed 2/9/2019 11:17:15AM

Page 1 of 1

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S BULK SAN	Caruard, CA 94612 Tel: (510) 633-5646 Far: (510) 633-5646 GHAIN OF GUSTODY INFORMATION:	- B.I.	4090-12 4090-12	40-040-14	40-0694 41-0994 81-0994	15 -0604 15 -0604
ASBESTOS BUI Ninyo & Moore 1956 Webster Street, #400	CHAIN OF CUSTODY 1 Tel: (510) 633-5646 Far: (510) 633-5646 CHAIN OF CUSTODY 1 MACHINES THEREFUT	RUN Jarlym.		294		C02162

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ASBESTOS BULK SAMPLE DATA SHEET Niryo & Moore 1956 Webster Street, #400 Project Name : 54 Oakland, CA 94612 Tet: (510) 633-5646 Far: (510) 633-564	Sample II 4090-2 4090-2 1090-1 1090-1	C02162

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APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

	EMBL	EMSL Analytical, 464 McCormick Street, San Le Phone/Fax: (510) 895-3675 http://www.EMSL.com			EMSL Order: CustomerID: CustomerPO: ProjectID:	091902686 NOMO22
Attn:	Attn: Bill Larkin Ninyo & Moore		Phone: Fax:	(510) 343-3000 (510) 633-5646		
	2020 Cha Suite 103 Alameda,		Received: Collected:	02/01/19 1:30 P 01/29/2019	М	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Des	scription Lab ID Collected Analyzed	Weight	Lead Concentration
WOB-01L	091902686-0001 01/29/2019 02/01/2019	0.2509 g	0.027 % wt
K	Site: OB EAST WALL EXT		
WOB-02L	091902686-0002 01/29/2019 02/01/2019	0.2507 g	0.014 % wt
	Site: OB EAST TRIM EXT		
4090-01L	091902686-0003 01/29/2019 02/01/2019	0.2686 g	0.0085 % wt
	Site: 4090 FRONT RAILING		
4090-02L	091902686-0004 01/29/2019 02/01/2019	0.2565 g	0.023 % wt
	Site: 4090 EXT TRIM		
4090-03L	091902686-0005 01/29/2019 02/01/2019	0.2521 g	0.31 % wt
	Site: 4090 EXT WALL		
1090-04L	091902686-0006 01/29/2019 02/01/2019	0.2675 g	0.096 % wt
	Site: 4090 INT WALL/KITCHEN		
090-05L	091902686-0007 01/29/2019 02/01/2019	0.2682 g	<0.0080 % wt
	Site: 4090 SE BEDROOM/BATHROOM	/	
090-06L	091902686-0008 01/29/2019 02/01/2019	0.2596 g	<0.0080 % wt
	Site: 4090 MAIN BATHROOM		

Julippy

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/01/2019 18:45:12

OrderID: 091902686

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LEAD BASED PAINT BULK SAMPLE DA Ninyo & Moore 1956 Webster Street, Suite 400 Project Name : 0akland, CA 94612 Project Manager: 510-633-5640 fax) Site Address: 510-633-5640 fax) Site Address: CHAIN OF CUSTODY INFORMATION:	BULL Lar Min By [299 CO2162

APPENDIX D

CDPH Form 8552 - Lead Hazard Evaluation Report

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation	1/29/19
Section 2 — Type of Lead Hazard Evaluation (Check one box only)
Lead Inspection Risk assessment	Clearance Inspection Other (specify)
Section 3 — Structure Where Lead Hazard Eva	
Address [number, street, apartment (if applicable)]	City County Zip Code
4090 Walker Avenue	Santa Kosa Sonoma 73901
Construction date (year) Type of structure	Children living in structure?
Multi-unit building	g 🔄 School or daycare 🔄 Yes 📈 No
960s Single family dwe	elling Other Don't Know
Section 4 - Owner of Structure (if business/age	ency, list contact person)
Name DEED	Telephone number
City of Jamla Kosa, Gran	Jan ey Tot 543-4508
Address [number, street, apartment (if applicable)]	City State Zip Code
69 Stony Circle	Janta Kosa CAO 95401
Section 5 - Results of Lead Hazard Evaluation (check all that apply)
No lead-based paint detected Intact le	ead-based paint detected
No lead hazards detected Lead-contaminate	
Section 6 — Individual Conducting Lead Hazard E	
Name I III DI	Telephone number
William F. Lewlen	710/345-3000
ddress [number, street, apartment (if applicable)]	City State Zip Code
20 Mallinger Drive, # 103	Manulda CA 97301
DPH certification number	Signature 11 DA Date
5543	Vallram E. Laukin 2/11/19
ame and CDPH certification number of any other individuals	s conducting sampling or testing (if applicable)
$\wedge / / \wedge$	
ection 7 – Attachments	<u>v</u>
	ating the specifc locations of each lead hazard or presence of
lead-based paint; Each testing method, device, and sampling procedur	e used:
All data collected, including quality control data, labor	ratory results, including laboratory name, address, and phone number.
copy and attachments retained by inspector	Third copy only (no attachments) mailed or faxed to:
ond copy and attachments retained by owner	California Department of Public Health
	Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor
	Richmond, CA 94804-6403 Fax: (510) 620-5656

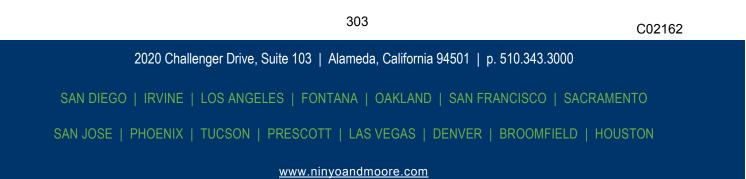
TRANSMISSION VERIFICATION REPORT

TIME	:	02/10/2019 20:01
NAME	:	NINYO AND MOORE
FAX	:	510-633-5646
TEL	:	510-633-5640
SER.#	:	BROD5J252210

02/10 20:01 6205656 00:00:26 02 OK STANDARD ECM

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE





HAZARDOUS BUILDING MATERIALS SURVEY

1370, 1372 and 1400 Burbank Avenue and 1027 McMinn Avenue Roseland Creek Community Park Area Santa Rosa, California

> City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 19, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY 1370, 1372, and 1400 Burbank Avenue and 1027 McMinn Avenue Roseland Creek Community Park Area

Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 19, 2019 | Project No. 403435001

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William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor WPL

Distribution: (1) Addressee (via e-mail)

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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
- 3 Bulk Polychlorinated Biphenyl Sampling Results
- 4 Miscellaneous Hazardous Building Materials Survey Results

FIGURES

- 1 Site Location
- 2 Site Vicinity
- 3 Sample Locations

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A – Certifications

B – Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C – Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

D – Polychlorinated Biphenyl Laboratory Analytical Report and Chain-of-Custody Records

E – CDPH Form 8552 - Lead Hazard Evaluation Report

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1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct hazardous building materials surveys (HBMSs) at eight vacant structures (on three parcels) in the Roseland Creek Community Park (RCCP) area in Santa Rosa, California (Figures 1 and 2). The first parcel is addressed 1370 and 1372 Burbank Avenue; the second parcel is addressed 1400 Burbank Avenue; and the third parcel is addressed 1027 McMinn Avenue. Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the RCCP structures.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the RCCP structures at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 25 and 29, 2019 and February 4, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of these sampling activities is to provide information regarding current conditions at the vacant RCCP structures to assist the City in implementing the planned demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the RCCP structures to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of 102 bulk samples of suspect ACMs at the RCCP structures and submittal of this sample to a certified, independent laboratory for analysis of asbestos content.
- Collection of 41 suspect LCM samples at the RCCP structures and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of two suspect bulk PCBCM samples at the RCCP structures and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The site descriptions of the three RCCP parcels and associated vacant structures involved in this survey are as follows:

1370 and 1372 Burbank Avenue: this parcel incudes two vacant residences (addressed 1370 and 1372 Burbank Avenue), a greenhouse, a water tank (and tower structure) and an outhouse. Ninyo & Moore labeled the "front" (or west) residence (closest to the Burbank Avenue) 1370 Burbank Avenue. Computerized map applications (Google, etc.) label the "front" residence as 1372 Burbank Avenue. For the purposes of this survey, the "front"/west residence is 1370 Burbank Avenue.

Each of these residences encompass approximately 1,500 square feet. In general, building finishes include painted gypsum wallboard walls/ceilings, painted exterior wood walls, ceramic floor tiles, base and carpeted wood floors and built-up roofing assemblies. The greenhouse encompasses approximately 75 square feet. Building finishes include a concrete pad and a roof/ceiling composed of glass windows. The water tank structure/tower encompasses approximately 100 square feet on a concrete pad with wood walls. The approximately 1,000-gallon water tank is painted green and lies on two concrete supports. The outhouse structure encompasses approximately 75 square feet on a concrete pad with wood walls.

1400 Burbank Avenue: this parcel includes a vacant residence and a barn. The residence encompasses approximately 2,000 square feet and building finishes include painted gypsum wallboard walls/ceilings, vinyl floor sheeting, bare and carpeted wood floors, painted exterior wood walls and built-up roofing assemblies. The barn structure encompasses approximately 700 square feet and building finishes include painted and bare wood walls and gypsum wall board walls (in the rear/east area).

1027 *McMinn Avenue*: this parcel includes a vacant residence and an attached garage encompassing approximately 2,100 square feet. Building finishes include interior painted gypsum wallboard walls/ceilings, painted exterior wood walls, vinyl floor sheeting (and associated underlayment), interior wood paneling, wood tile flooring and built-up roof assemblies.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. The crawl spaces under each of the vacant residences were not wholly accessed due to inaccessibility. A flashlight was shined into these areas and no suspect hazardous building materials were observed. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the RCCP structures were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 25 and 29, 2019 and February 4, 2019, the RCCP structures were assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM and LCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

One hundred and two bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

Forty-one bulk suspect LCM samples were collected and analyzed. After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to (or more than) 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the RCCP structures are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

Two suspect PCBCM samples were observed/collected during our site sampling activities. After collection, the two suspect PCBCM samples were transferred to TestAmerica of Pleasanton, California for analysis of PCB content via USEPA Method 8082 and preparation Method 3540C. Currently, the EPA stipulates that the waste characterization level (WCL) for PCBs is 50 mg/kg.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the RCCP structures.

6 FINDINGS

A HBMS was performed at the eight identified RCCP structures to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACMs, ACCMs, LCMs and miscellaneous hazardous building materials are located within the RCCP structures. Miscellaneous hazardous building materials observed at the RCCP structures included fluorescent light tubes and associated light ballasts, and thermostats.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

1370 Burbank Avenue: Based upon the analytical results reported by EMSL, no ACMs were reported in the 1370 Burbank Avenue structure.

1372 Burbank Avenue

• Approximately 10 square feet of gray roof penetration mastic (sample BB-17) observed throughout the roof area, containing 3% chrysotile asbestos.

1400 Burbank Avenue

- Approximately 50 square feet of roof penetration mastic (sample 1400-02) located throughout the roof area, containing 12% chrysotile asbestos.
- Joint compound and texture (samples 1400-11, 1400-17 and 1400-18) located on wallboard throughout the interior of the structure's walls/ceilings, each containing 2% chrysotile asbestos. Both of these materials were re-analyzed via PLM 400-point quantitation and reported to contain <0.25% chrysotile asbestos. These material assemblies (wallboard/joint compound/texture) are considered ACCM.

1027 McMinn Avenue

- Joint compound and texture (samples 1027-03, 1027-08, 1027-09, 1027-20, 1027-21 and 1027-25) located on wallboard throughout the interior of the structure's walls/ceilings. The joint compound was reported to contain from <1% to 2% chrysotile asbestos. The texture material was reported at 2% chrysotile asbestos. Each of these materials were re-analyzed via PLM 400-point quantitation and reported to contain <0.25% chrysotile asbestos. Additionally, the joint compound was re-analyzed via PLM 400-point quantitation on a composite basis with the underlying wallboard and reported to contain <0.25% chrysotile asbestos as well. These material assemblies (wallboard/joint compound/texture) are considered ACCM.
- Approximately 200 square feet of vinyl floor sheeting (VFS) with a geometrical pattern (sample 1027-04) located in the kitchen, containing 15% chrysotile asbestos.
- Approximately 50 square feet of mastic (sample 1027-05) associated with wood paneling on the kitchen's east wall, containing 2% chrysotile asbestos.
- Approximately 50 square feet of mastic associated with pink ceramic tile (sample 1027-30) located in the main restroom of the structure, containing 2% chrysotile asbestos.
 EMSL also described a "compound" in the sample. This "compound" was re-analyzed via PLM 400-point quantitation and reported to contain 1.25% chrysotile asbestos.
- Approximately 20 square feet of gray penetration mastic (sample 1027-35) located in the west roof area of the structure, containing 4% chrysotile asbestos.

- Approximately 20 square feet of black penetration mastic (sample 1027-36) located in the west roof area of the structure, containing 4% chrysotile asbestos.
- Approximately 400 square feet of VFS with a gold pattern (sample 1027-37) located below/under sample 1027-04 on the kitchen floor of the residence, containing <1% chrysotile asbestos. This material was re-analyzed via 400-point quantitation and gravimetric reduction and reported to contain 0.24% chrysotile asbestos. Although an ACCM, this material will be removed as part of the same assembly as sample 1027-04 (an ACM).

The Client provided Ninyo & Moore with reports related to prior hazardous building materials sampling at the 1400 Burbank Avenue and 1027 McMinn Avenue structures. These sampling activities were conducted by GHD in March 2015.

For the 1440 Burbank Avenue structure, GHD reported that ACMs (roof penetration mastic and remnant pieces of a Transite flue) and ACCMs (wallboard/joint compound/texture assemblies) were located there. Through the additional sampling efforts, Ninyo & Moore confirmed the presence of the roof penetration mastic (ACM) and the wallboard/joint compound/texture assemblies (ACCM). While we did not observe the remnant pieces of gray Transite flue in the northeast attic space of the structure, we agree with GHD's conclusions recommendations regarding this material and the other identified ACMs and ACCM.

For the 1027 McMinn Avenue structure, GHD reported that ACMs (wood paneling mastic on kitchen walls, window putty in the garage, VFS and underlying 9-inch by 9-inch vinyl floor tiles in the kitchen, roof penetration mastic, fibrous/woven heat barrier within a wall space in bedroom 1 and ceramic tile mastic in restroom 1) were located there. GHD also reported that ACCMs (wallboard/joint compound/texture assemblies) were located there. Through the additional sampling efforts, Ninyo & Moore confirmed the presence of the identified ACMs and ACCMs; roof penetration mastic, the wood paneling mastic, the ceramic tile mastic in restroom 1, the VFS and the underlying 9-inch by 9-inch VFT in the kitchen (we described the underlying VFT as VFS) and the wallboard/joint compound/texture assemblies (ACCM). EMSL reported that the garage window putty Ninyo & Moore sampled was non-detect for asbestos. We also did not observe or sample the fibrous/woven heat barrier material. The "compound" (as described by EMSL) in our sample 1027-30 is the ceramic tile mastic described by GHD. Although, we did not observe the asbestos-containing fibrous/woven heat barrier described by GHD and the garage window putty sampled by GHD was reported at 2% chrysotile asbestos (our window putty sample [sample 1027-34] was reported as non-detect), we agree with GHD's conclusions and recommendations regarding these materials and the other identified ACMs and ACCM.

6.2 Lead-Containing Materials

Twenty-nine paint chip samples and twelve ceramic samples (ceramic tiles, toilets and sinks, etc.) were collected for analysis of lead content. Nine of the twenty-nine paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). For the 1372 Burbank Avenue residence, white paint from a front exterior eave (sample BB-06P) was reported to contain lead at 0.89% by weight (or 8,900 mg/kg); gray-olive paint from an exterior south wall (sample BB-08P) was reported to contain lead at 4.5% by weight (or 45,000 mg/kg); and gray-olive paint from roof siding (sample BB-09P) was reported to contain lead at 14% by weight (or 140,000 mg/kg). Green paint from the exterior of the water tank (sample BB-19P) was reported to contain lead at 5.5% by weight (or 55,000 mg/kg). For the 1400 Burbank Avenue residence, light brown paint from southeast exterior trim (sample 1400-01L) was reported to contain lead at 7.2% by weight (or 72,000 mg/kg); light brown paint from a southeast exterior wall (sample 1400-02L) was reported to contain lead at 6.2% by weight (or 62,000 mg/kg); and dark brown paint from the southwest exterior trim (sample 1400-03L) was reported to contain lead at 4.1% by weight (or 41,000 mg/kg). Red paint from an exterior wall at the rear of the back barn associated with the 1400 Burbank Avenue residence (sample 1400-05L) was reported to contain lead at 2.7% by weight (or 27,000 mg/kg). For the 1027 McMinn Avenue residence, white paint from northwest exterior corner (sample 1027-04L) was reported to contain lead at 3.5% by weight (or 35,000 mg/kg). These paint samples are considered LBP.

Ten other paint samples (BB-07P, BB-15P, BB-16P, BB-20P, 1400-07L, 1400-08L, 1027-01L, 1027-02L, 1027-03L and 1027-08L) were reported with lead concentrations ranging from 0.0081% by weight (or 81 mg/kg) to 0.36% by weight (or 3,600 mg/kg). These paint samples are considered LCP. The remaining ten paint samples were reported at less than their associated limits of detection.

Eleven of the twelve ceramic samples collected were reported at less than their associated limits of detection. The twelfth ceramic sample (sample 1027-06L, black ceramic tile from the counter of restroom 2 at the 1027 McMinn Avenue residence) was reported to contain lead at 0.022% by weight (or 220 mg/kg). Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the RCCP structures is included in Appendix E.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

Samples PCB-04 (a window putty sample from the north side of the greenhouse associated with 1372 Burbank Avenue) and 0204-01PCB (a window putty sample collected from the west side

of the 1027 McMinn Avenue garage) were reported at less than the 50 mg/kg WCL. PCBCM analytical results are included in Table 3 and Appendix D.

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 24 fluorescent light bulbs and 12 associated light ballasts and three thermostats were observed during our sampling activities. Please see Table 4.

7 RECOMMENDATIONS

Since ACMs and LCMs have been reported within the RCCP structures, the following recommendations and precautions are provided:

- The identified ACMs within the RCCP structures should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that the ACMs/ACCMs should not be disturbed. Any ACMs/ACCMs in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACMs/ACCMs, a licensed asbestos abatement removal contractor should remove the ACMs/ACCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACMs/ACCMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. While Ninyo & Moore provided an estimate of the quantity of ACMs/ACCMs present at the RCCP structures (Table 1), it is the abatement contractor's responsibility to assess the actual ACM quantity present.
- The identified LCMs reported at the RCCP structures should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. *While Ninyo & Moore provided an estimate of the quantity of LCMs present at the RCCP structures (Table 2), it is the*

responsibility of abatement contractors to assess the actual LCM quantities present.

- Prior to demolition or renovation activities, potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the RCCP structures, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs/ACCMs LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 LIMITATIONS

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

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

or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
BB-01	1370	Northeast Roof	Roof Assembly	N/A	N/A	N/A	Shingle = ND Felt = ND
BB-02	1370	2nd Floor Attic Space	Batt Insulation	N/A	N/A	N/A	ND
BB-03	1370	2nd Floor Attic Space	Styrofoam Insulation	N/A	N/A	N/A	ND
BB-04	1370	Exterior South Stairs	Concrete	N/A	N/A	N/A	ND
BB-05	1370	West Concrete Patio	Concrete	N/A	N/A	N/A	ND
BB-06	1370	Living Room - Southwest Corner	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND Texture = ND
BB-07	1370	North Bedroom - Northwest Corner	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-08	1370	Middle Bedroom - Southwest Corner	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-09	1370	2nd Floor-North Wall	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-10	1370	2nd Floor-South Wall	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-11	1370	Kitchen Counter	Levelling Compound/Mortar	N/A	N/A	N/A	Levelling Compound = NE Mortar = ND
BB-12	1370	Living Room - Fireplace	Concrete Fireplace Underlayment	N/A	N/A	N/A	ND
BB-13	1370	Entry Closet	Mortar/Mastic Associated with 12"x12" Green Ceramic Floor Tile	N/A	N/A	N/A	Ceramic Tile = ND Grout = ND Mortar = ND
BB-14	1370	East Roof Area	White Penetration Mastic	N/A	N/A	N/A	ND
BB-15	1372	Attic	Batt Insulation	N/A	N/A	N/A	ND
BB-16	1372	West Roof	Roof Assembly	N/A	N/A	N/A	Shingle 1 = ND Shingle 2 = ND Felt = ND
BB-17	1372	Central Roof	Gray Penetration Mastic	Ν	10 SF	Good	3% CH
BB-18	1372	Front Patio	Concrete	N/A	N/A	N/A	ND
BB-19	1372	Garage Floor	Concrete	N/A	N/A	N/A	ND
BB-20	1372	Garage Wall	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-21	1372	Entry Closet Wall	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-22	1372	Living Room Wall by Fireplace	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
BB-23	1372	Middle Hallway	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-24	1372	Master Bedroom	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-25	1372	Small Bedroom	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
BB-26	1372	Entry Closet	Ceramic Tile with Grout and Leveling Compound	N/A	N/A	N/A	Ceramic Tile = ND Grout 1 = ND Grout 2 = ND Leveling Compound = ND
BB-27	1372	Living Room	Ceramic Tile Adhesive	N/A	N/A	N/A	ND
BB-28	1372	Living Room	Carpet Mastic	N/A	N/A	N/A	ND
BB-29	1372	Kitchen	Ceramic Tile with Adhesive	N/A	N/A	N/A	Ceramic Tile = ND Grout = ND Adhesive = ND
BB-30	1372	Kitchen Tile	Paper/Underlayment Associated with BB-29	N/A	N/A	N/A	ND
BB-31	1372	Bathroom	Ceramic Adhesive	N/A	N/A	N/A	ND
BB-32	Water Tower	Water Tower North Side	Roof Assembly/North Side	N/A	N/A	N/A	Shingle = ND Felt = ND
BB-33	Outhouse	Outhouse	Roof Assembly/South Side	N/A	N/A	N/A	Shingle = ND Shingle 2 = ND Felt = ND
BB-34	Greenhouse	Greenhouse-North Window	Window Putty	N/A	N/A	N/A	ND
BB-35	Water Tower	Water Tank Support	Concrete	N/A	N/A	N/A	ND
BB-36	Water Tower	Southeast Concrete Pad	Concrete	N/A	N/A	N/A	ND
OH-01	Outhouse	Outhouse-Floor	Mortar Associated With Ceramic Floor Tile	N/A	N/A	N/A	ND
OH-02	Outhouse	Outhouse-Wall	Wallboard/Joint Compound	N/A	N/A	N/A	ND
1400-01	1400	Roof/South Side	Roof Assembly	N/A	N/A	N/A	ND
1400-02	1400	Roof/South Side	Roof Penetration Mastic	Ν	50 SF	Good	12% CH
1400-03	1400	Central Roof Chimney	Brick From Chimney	N/A	N/A	N/A	ND
1400-04	1400	Central Roof Chimney	Mortar Associated with 1400-03	N/A	N/A	N/A	ND
1400-05	1400	Front Door Steps	Brick and Mortar	N/A	N/A	N/A	ND
1400-06	1400	Entry Floor	Vinyl Floor Sheeting (Blue/White/Gray)	N/A	N/A	N/A	ND

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
1400-07	1400	Kitchen Wall Refrigerator Area	Wallboard/Joint Compound	Y	See Sample 1400-17	Good	Wallboard - ND Joint Compound - ND
1400-08	1400	Kitchen Near Stove	Wallpaper	N/A	N/A	N/A	ND
1400-09	1400	Living Room Southeast Wall	Wallboard/Joint Compound	Y	See Sample 1400-17	Good	Wallboard - ND Joint Compound - ND
1400-10	1400	Living Room Northwest Wall	Wallboard/Joint Compound	Y	See Sample 1400-17	Good	Wallboard - ND Joint Compound - ND
1400-11	1400	Living Room Fireplace Base	Brick	Y	2,000 SF	Good	Brick = ND Mortar = ND Grout = ND Mastic = ND Texture = 2% CH (<0.25% CH*)
1400-12	1400	Living Room Fireplace Wall	Textured Brick	N/A	N/A	N/A	ND
1400-13	1400	Living Room Floor Near Fireplace	Paper Carpet Underlayment	N/A	N/A	N/A	ND
1400-14	1400	Northwest Bedroom	Wallboard/Joint Compound	Y	See Sample 1400-17	Good	Wallboard - ND Joint Compound - ND
1400-15	1400	Bathroom	Vinyl Floor Sheeting with Mastic	N/A	N/A	N/A	ND
1400-16	1400	Hallway	Wallboard/Joint Compound	Y	See Sample 1400-17	Good	Wallboard - ND Joint Compound - ND
1400-17	1400	Southeast Bedroom	Wallboard/Joint Compound	Y	2,000 SF	Good	Joint Compound 1 = ND Joint Compound 2 = 2% CH (<0.25% CH*) Finish Coat = ND Base Coat = ND
1400-18	1400	Northeast Bedroom	Wallboard/Joint Compound	Y	See Sample 1400-17	Good	Wallboard = ND Joint Compound 1 = ND Joint Compound 2 = 2% CH
1400-19	1400	Kitchen/Stove Area	4" Ceramic Tile Backsplash with Mastic	N/A	N/A	N/A	ND
1400-20	Back Barn	Roof/West Side	Roof Assembly (Under Metal)	N/A	N/A	N/A	ND
1400-21	1400	Attic Space	Blown-In Insulation	N/A	N/A	N/A	ND
1400-22	Back Barn	Back Living Area North	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND Joint Compound - ND

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
1400-23	Back Barn	Back Living Area/East	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND Joint Compound - ND
1400-24	Back Barn	Back Living Area/West	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard - ND Joint Compound - ND
1400-25	Back Barn	North Wall Cavity	Batt Insulation	N/A	N/A	N/A	ND
1400-26	Back Barn	South-Central Interior	Concrete	N/A	N/A	N/A	ND
1027-01	1027	Garage Floor Southwest	Concrete	N/A	N/A	N/A	ND
1027-02	1027	Storage Room North Wall	Wallboard	N/A	N/A	N/A	ND
1027-03	1027 Kitchen Northwest Corner Yellow Batt Insulation		Y	4,500 SF	Good	Wallbard - ND Joint Compound - <1% CH (<0.25% CH*)	
1027-04	1027	Kitchen Floor by Doorway	Vinyl Floor Sheeting, "Geometrical" Pattern	Y	200 SF	Poor	15% CH
1027-05	1027	Kitchen East Wall	Panel Mastic	Y	50 SF	Poor	2% CH
1027-06	1027	Kitchen Counter	Mortar Associated with 1027-05L	N/A	N/A	N/A	ND
1027-07	1027	Kitchen Counter	Grout Associated with 1027-05L	N/A	N/A	N/A	ND
1027-08	1027	Master Bedroom Northwest Corner	Wallboard/Joint Compound	Y	See Sample 1027-03	Good	Wallboard - ND Joint Compound - <1% CH (<0.25% CH*)
1027-09	1027	Master Bedroom Northwest Corner	Texture	Y	See Sample 1027-03	Good	Wallbard - ND Joint Compound - <1% CH Texture - 2% CH (0.25% CH*)
1027-10	1027	Restroom 2 Counter	Mortar Associated with 1027-06L	N/A	N/A	N/A	ND
1027-11	1027	Restroom 2 Shower	Barrier/Tile Adhesive Associated with 1027-07L	N/A	N/A	N/A	ND
1027-12	1027	Restroom 2 Floor	Vinyl Floor Sheeting with Mastic	N/A	N/A	N/A	ND
1027-13	1027	Living Room West Wall	Texture	N/A	N/A	N/A	ND
1027-14	1027	Living Room Fireplace	Brick	N/A	N/A	N/A	ND
1027-15	1027	Living Room Fireplace	Mortar	N/A	N/A	N/A	ND

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
1027-16	1027	Living Room East Wall Cavity	Pink Batt Insulation	N/A	N/A	N/A	ND
1027-17	1027	Living Room East Wall Cavity	Yellow Batt Insulation	N/A	N/A	N/A	ND
1027-18	1027	Living Room East Wall Cavity	Vapor Barrier	N/A	N/A	N/A	ND
1027-19	1027	Living Room East Wall	Texture	N/A	N/A	N/A	ND
1027-20	1027	Hallway Wall Southwest	Wallboard/Joint Compound	Y	See Sample 1027-03	Good	Wallbard - ND Joint Compound - <1% CH (0.50% CH*) Texture - ND
1027-21	1027	Southeast Bedroom Northeast Corner	Southeast Bedroom Northeast Corner Wallboard/Joint Compound		See Sample 1027-03	Good	Wallbard - ND Joint Compound -2% CH (<0.25% CH**) Texture - ND
1027-22	1027	Southeast Bedroom South Wall	Southeast Bedroom South Wall Texture N/A		N/A	N/A	ND
1027-23	1027	Southeast Bedroom Paper Below Wood Tile	Vapor Barrier	N/A	N/A	N/A	ND
1027-24	1027	Southwest Bedroom Floor	Paper Under Wood Tile	N/A	N/A	N/A	ND
1027-25	1027	Southwest Bedroom Wall	Wallboard/Joint Compound	Y	See Sample 1027-03	Good	Wallbard - ND Joint Compound - <1% CH (<0.25% CH*) Texture - ND
1027-26	1027	Southwest Bedroom Wall	Texture	N/A	N/A	N/A	ND
1027-27	1027	Main Restroom Floor	Tan Vinyl Floor Sheeting	N/A	N/A	N/A	ND
1027-28	1027	Main Restroom Floor	(Dark Marbled) Vinyl Floor Sheeting with Mastic	N/A	N/A	N/A	ND
1027-29	1027	Main Restroom Wall	Blue Texture	N/A	N/A	N/A	ND
1027-30	1027	Main Restroom Bath Tile	Pink Ceramic Bath Tile with Mastic	N	50 SF	Good	Tile - ND Mastic - 2% CH "Compound" - 2% CH (1.25% CH*)
1027-32	1027	Front Door Porch Steps	Concrete	N/A	N/A	N/A	ND
1027-33	1027	Roof at East Central	Roof Assembly	N/A	N/A	N/A	ND
1027-34	1027	Garage West Window	Window Putty	N/A	N/A	N/A	ND
1027-35	1027	Roof West	Gray Penetration Mastic	N	20 SF	Good	4% CH
1027-36	1027	Roof West	Black Penetration Mastic	Ν	20 SF	Good	4% CH
1027-37	1027	Kitchen Floor	Vinyl Floor Sheeting with "Gold" Pattern Below 1027- 04	Y	400 SF	Poor	<1% CH (0.25% CH***)

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

February18, 2019 Project No. 403435001

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
1027-38	1027	Kitchen Floor	Fiberboard/Vinyl Floor Sheeting Underlayment	N/A	N/A	N/A	ND
1027-39	1027	Master Bedroom Floor	Paper Vapor Barrier Below 12x12 Wood Tiles	N/A	N/A	N/A	ND

NOTES:

* = re-analysis via PLM 400 Point Quantitation

** = re-analysis via PLM 400 Point Quantitation on on a composite basis

*** = re-analysis via PLM 400 Point Quantitation with gravimetric reduction

NA = Not Applicable

ND = None detected

CH = Chrysotile

BOLD indicates sample is an asbestos containing material (> 1% asbestos)

Estimated quantities are not intended for use in bidding calculations.

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 2 - Lead-Containing Material Sampling Results

Sample	Building	Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t	Condition	Total	Lead
I.D.				Substrate)	[SF] or Linear Feet[LF])		Weight Percent	Parts per Million (or mg/kg)
BB-01P	1370	Storage Across from Bath (1st Floor)	12x12 Green Ceramic Tile	Green Ceramic Tile	100 SF	Intact	< 0.0081	<81
BB-02P	1370	Kitchen Counter	12x12 White Ceramic Tile	White Ceramic Tile	150 SF	Intact	< 0.0080	<80
BB-03P	1370	Exterior Trim	Trim	White/1/Wood	100 SF	Intact	< 0.0080	<80
BB-04P	1370	Exterior Walls			1,500 SF	Intact	< 0.0080	<80
BB-05P	1370	Interior Bannister Rail	Rail	Brown/2/Wood	20 SF	Intact	< 0.0080	<80
BB-06P	1372	Exterior Eave-Front of House	Eave	White/2/Wood	500 SF	Intact	0.89	8,900
BB-07P	1372	Exterior Window Frame-Northeast Corner	Window Frame	White/2/Wood	100 SF	Intact	0.27	2,700*
BB-08P	1372	Exterior South Wall	Wall	Gray-Olive/2/Wood	1,500 SF	Intact	4.5	45,000
BB-09P	1372	Roof Siding	Wall	Gray-Olive/2/Wood	200 SF	Non-Intact	14	140,000
BB-10P	1372	Roof Trim	Wood Trim	White/2/Wood	100 SF	Non-Intact	< 0.0080	<80
BB-11P	1372	Living Room Fireplace	Tile	Tan Ceramic Tile			< 0.0080	<80
BB-12P	1372	Kitchen Counter	Tile	Tan Ceramic Tile	200 SF	Intact	< 0.0080	<80
BB-13P	1372	Bathroom	Tile	Ceramic Sink	5 SF	Intact	< 0.0080	<80
BB-14P	Water Tower	Water Tower Support	Support	Green/2/Wood	200 SF	Intact	< 0.0080	<80
BB-15P	Water Tower	North Water Tank Wall	Wall	Green/2/Wood	200 SF	Intact	0.019	190*
BB-16P	Greenhouse	Greenhouse Northeast Corner	Trim	White/2/Wood	200 SF	Intact	0.0084	84*
BB-17P	Water Tower	Water Tower Interior Wall	Wall	White/2/Wood	200 SF	Intact	< 0.0081	<81
BB-18P	Greenhouse	Greenhouse Exterior Wall, Southeast Corner	Wall	Green/2/Wood	300 SF	Intact	< 0.0080	<80
BB-19P	Water Tower	Water Tank	Tank	Green/2/Metal	400 SF	Intact	5.5	55,000
BB-20P	Water Tower	Water Tower Exterior Wall	Wall	Green/2/Wood	200 SF	Non-Intact	0.0081	81*
BB-21P	1372	South Wall Trim	Wood Trim	White/2/Wood	150 SF	Intact	< 0.0080	<80
OH-01L	Outhouse	Outhouse-Floor	Ceramic Tile	Brown-Beige Ceramic Floor Tile	50 SF	Intact	< 0.0080	<80
OH-02L	Outhouse	Outhouse-Wall	Wall	White/2/Wallboard	100 SF	Intact	< 0.011	<110
OH-03L	Outhouse	Outhouse-Toilet	Ceramic Toilet	White Ceramic Toilet		Intact	< 0.0080	<80
1400-01L	1400	Southeast Exterior Trim	Wood Trim	Light Brown/2/Wood	200 SF	Non-Intact	7.2	72,000
1400-02L	1400	Southeast Exterior Wall	Wall	Light Brown/2/Wood	2,000 SF	Non-Intact	6.2	62,000

Roseland Creek Community Park Area Structures Santa Rosa, California

Table 2 - Lead-Containing Material Sampling Results

Sample	Building	Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t	Condition	Total	Lead
1400-03L	1400	Southwest Exterior Trim	Trim	Dark Brown/2/Wood	200 SF	Non-Intact	4.1	41,000
1400-04L	1400	Kitchen Near Stove	Tile Backsplash	4" Ceramic Tile	200 SF	Intact	< 0.0080	<80
1400-05L	1400	Back Barn Wall/Exterior	Exterior Wall	Red/2/Wood	1,000 SF	Non-Intact	2.7	27,000
1400-06L	1400	Back Barn Wall/ Exterior East	East Wall	Red/2/Wood (older)	500 SF	Non-Intact	< 0.0081	<81
1400-07L	1400	Main House/ Kitchen Door	Trim (Interior)	White-Beige/2/Wood	200 SF	Intact	0.22	2,200*
1400-08L	1400	Main House/ Kitchen Wall	Wall (Interior)	White-Beige/2/Wood	1,000 SF	Intact	0.11	1,100*
1027-01L	1027	Garage Door Exterior	Garage Door	White/2/Wood	600 SF	Non-Intact	0.36	3,600*
1027-02L	1027	Garage Door Exterior	Garage Door Trim	Green/2/Wood	100 SF	Non-Intact	0.095	950*
1027-03L	1027	Garage Access Door	Access Door	White/2/Wood	50 SF	Intact	0.32	3,200*
1027-04L	1027	Northwest Exterior Corner (House)	Wall	White/2/Wood	1,500 SF	Non-Intact	3.5	35,000
1027-05L	1027	Kitchen Counter	Red Ceramic Tile	Ceramic 4"x4" Red/Brown Tile	100 SF	Intact	<0.0080	<80
1027-06L	1027	Restroom 2 Counter	Black Ceramic Tile	Ceramic Black Tile	100 SF	Intact	0.022	220*
1027-07L	1027	Restroom 2 Shower	White Ceramic Tile	Ceramic White Tile	50 SF	Intact	< 0.0080	<80
1027-08L	1027	Restroom 1	Window Sill	White/2/Wood	20 SF	Non-Intact	0.097	970*
1027-09L	1027	Restroom 1	Ceramic Bath Tile	Pink Ceramic Bath Tile	100 SF	Intact	< 0.0080	<80

NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B).

mg/kg = Milligrams per kilogram

SF = Square feet

Bold concentrations indicate lead-based paint, greater than 0.5% by weight (or >5,000 mg/kg)

* indicates lead-containing paint, less than 0.5% by weight (or <5,000 mg/kg)

Estimated quantities are not intended for use in bidding calculations.

Table 3 - Bulk Polychlorinated Biphenyl Sampling Results

Sample I.D.	Building	Date Sampled	Material Location	Sample Description	Quantity	Condition	PCB Content* (milligrams/kilogram)
PCB-04	1372 Burbank Avenue Greenhouse	1/29/2019	North Window	Window Putty	N/A	N/A	0.43
0204- 01PCB	1027 McMinn Avenue Garage	2/4/2019	West Window of Garage	Window Putty	N/A	N/A	Non-Dtetect

NOTES:

Analysis for PCB content via USEPA Method 8082A with preparation Method 3540C

PCB = Polychlorinated Biphenyl

*Lab analytes include Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Aroclor 1262, and Aroclor 1268

Location	Number of Transformers	Number of Light Ballasts	Number of Mercury Thermostats	Number of A/C Units	No. of Fluorescent Light Tubes	Number of Exit Signs	No. of Freon Refrigerator Systems
1370/1372 Burbank Avenue Structures	0	0	1	0	8	0	0
1400 Burbank Avenue Structures	0	0	1	0	8	0	0
1027 McMinn Avenue	0	4	1	0	8	0	0

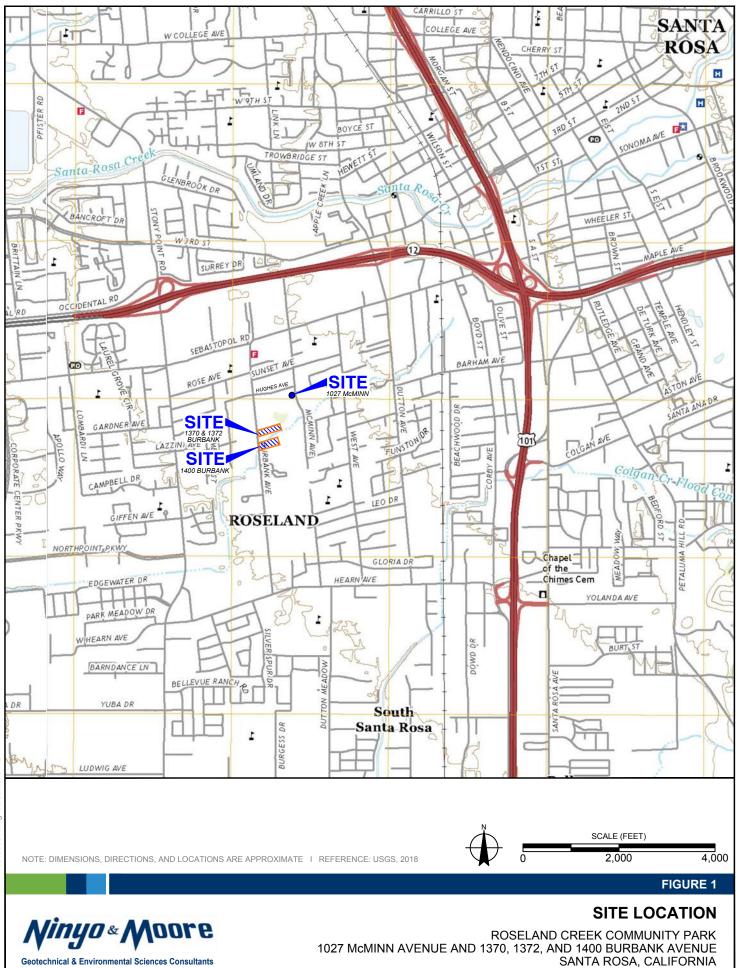
Table 4 - Miscellaneous Hazardous Building Materials Survey Results

NOTES:

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

FIGURES



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403435001 I 02/19

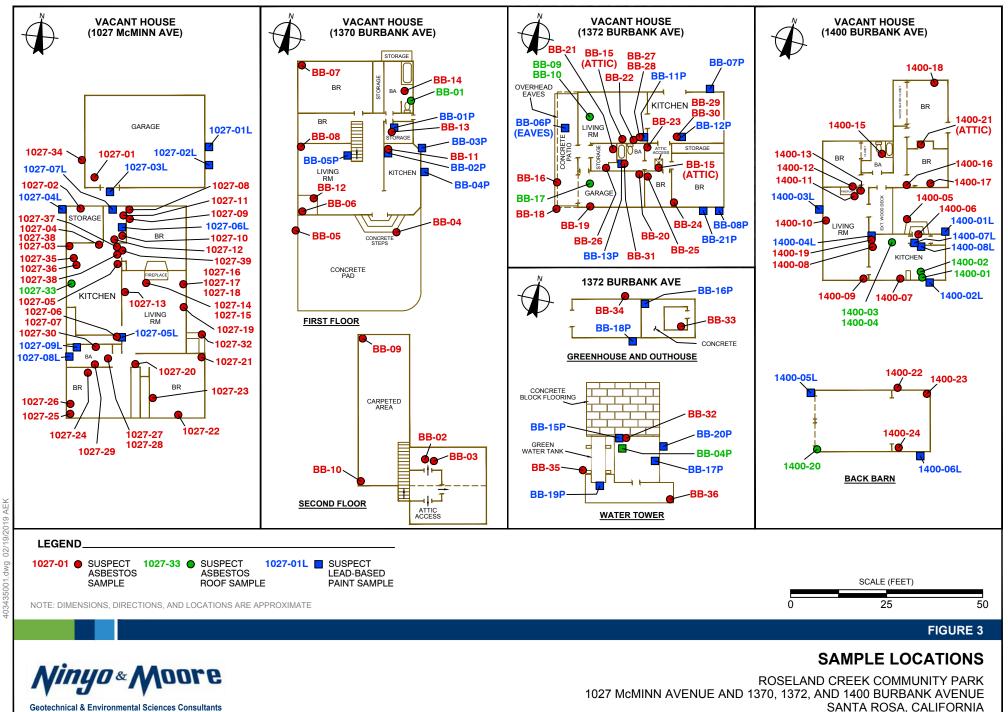
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ROSELAND CREEK COMMUNITY PARK 1027 McMINN AVENUE AND 1370, 1372, AND 1400 BURBANK AVENUE SANTA ROSA, CALIFORNIA 403435001 I 02/19





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APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

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October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

The

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C02162

AMPLE	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22 403435001
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	01/30/2019
	Alameda, CA 94501 403435001 - SANTA ROSA - WPL	Collected Date:	01/25/2019

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

			Non-Asbestos			
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type	
BB-01-Shingle	1370 - NE ROOF - ROOF ASSEMBLY	Black/Green Fibrous Homogeneous	5% Glass	5% Quartz 20% Ca Carbonate 40% Matrix 30% Non-fibrous (Other)	None Detected	
BB-01-Felt	1370 - NE ROOF - ROOF ASSEMBLY	Black Fibrous Homogeneous	20% Cellulose 5% Glass	60% Matrix 15% Non-fibrous (Other)	None Detected	
BB-02	1370 - 2ND FLOOR ATTIC SPACE - BATT INSULATION	Yellow Fibrous Homogeneous	98% Min. Wool	2% Non-fibrous (Other)	None Detected	
BB-03 091902311-0003	1370 - 2ND FLOOR ATTIC SPACE - STYROFOAM INSULATION	White Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected	
BB-04 091902311-0004	1370 - EXT. SOUTH STAIRS - CONCRETE	Gray Non-Fibrous Homogeneous		20% Quartz 25% Gypsum 55% Non-fibrous (Other)	None Detected	
BB-05 091902311-0005	1370 - WEST CONCRETE PATIO - CONCRETE	Gray Non-Fibrous Homogeneous		20% Quartz 25% Gypsum 55% Non-fibrous (Other)	None Detected	
BB-06-Wallboard 091902311-0006	1370 - LIVING ROOM/ SW CORNER - WALLBOARD/JOINT COMP	White Fibrous Homogeneous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected	
BB-06-Joint Compound	1370 - LIVING ROOM/ SW CORNER - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
3B-06-Texture 191902311-0006B	1370 - LIVING ROOM/ SW CORNER - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
3B-07-Wallboard 91902311-0007	1370 - NORTH BEDROOM/NW CORNER - WALLBOARD/JOINT COMP	White Fibrous Homogeneous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected	
8B-07-Joint Compound 91902311-0007A	1370 - NORTH BEDROOM/NW CORNER - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
B-08-Wallboard	1370 - MIDDLE BEDROOM/SW CORNER - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected	

Initial report from: 01/30/2019 14:54:50

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EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091902311 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
BB-08-Joint Compound	1370 - MIDDLE BEDROOM/SW CORNER - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
BB-09-Wallboard 091902311-0009	1370 - 2ND FLOOR - NORTH WALL - WALLBOARD/JOINT COMP	White Fibrous Homogeneous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected
BB-09-Joint Compound 091902311-0009A	1370 - 2ND FLOOR - NORTH WALL - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
BB-10-Wallboard	1370 - 2ND FLOOR - SOUTH WALL - WALLBOARD/JOINT COMP	White Fibrous Homogeneous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected
BB-10-Joint Compound 091902311-0010A	1370 - 2ND FLOOR - SOUTH WALL - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
BB-11-Leveling Compound 191902311-0011	1370 - KITCHEN COUNTER - LEVELING COMPOUND AND MORTAR	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
BB-11-Mortar 191902311-0011A	1370 - KITCHEN COUNTER - LEVELING COMPOUND AND MORTAR	Gray Fibrous Homogeneous	25% Cellulose	20% Quartz 20% Gypsum 35% Non-fibrous (Other)	None Detected
3B-12 91902311-0012	1370 - FIREPLACE FLOOR LIVING ROOM - CONCRETE FIREPLACE UNDERLAYMENT	Black Non-Fibrous Homogeneous		10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected
B-13-Ceramic Tile	1370 - ENTRY CLOSET - MORTAR/MASTIC ASSOCIATED W. 12"X12" GREEN CERAMIC FLOOR TILE	Brown/Green Non-Fibrous Homogeneous		5% Quartz 30% Gypsum 65% Non-fibrous (Other)	None Detected
B-13-Grout 1902311-0013A	1370 - ENTRY CLOSET - MORTAR/MASTIC ASSOCIATED W. 12"X12" GREEN CERAMIC FLOOR TILE	Green Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
B-13-Mortar 1902311-0013B	1370 - ENTRY CLOSET - MORTAR/MASTIC ASSOCIATED W. 12"X12" GREEN CERAMIC FLOOR TILE	Gray Non-Fibrous Homogeneous		10% Quartz 15% Gypsum 75% Non-fibrous (Other)	None Detected

Initial report from: 01/30/2019 14:54:50

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EMSL Analytical, Inc.

EMSL

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902311 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe		Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type	
BB-14 091902311-0014	1370 - EAST ROOF AREA - WHITE PENETRATION MASTIC	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 70% Matrix	None Detected	
BB-15	1372 - ATTIC - BATT INSULATION	Yellow Fibrous	98% Min. Wool	2% Non-fibrous (Other)	None Detected	
091902311-0015		Homogeneous			None Detected	
BB-16-Shingle 1 091902311-0016	1372 - WEST ROOF - ROOF ASSEMBLY	Brown/Tan/Black Fibrous Homogeneous	3% Cellulose	5% Quartz 25% Ca Carbonate 40% Matrix 27% Non-fibrous (Other)	None Detected	
BB-16-Shingle 2 091902311-0016A	1372 - WEST ROOF - ROOF ASSEMBLY	Black/Green Fibrous Homogeneous	5% Glass	5% Quartz 25% Ca Carbonate 40% Matrix 25% Non-fibrous (Other)	None Detected	
BB-16-Felt	1372 - WEST ROOF - ROOF ASSEMBLY	Black Fibrous Homogeneous	50% Cellulose	50% Matrix	None Detected	
BB-17 091902311-0017	1372 - CENTRAL ROOF - GRAY PENETRATION	Gray/White/Black Fibrous Homogeneous	î.	70% Matrix 27% Non-fibrous (Other)	3% Chrysotile	
3B-18	MASTIC 1372 - FRONT PATIO - CONCRETE	Gray Non-Fibrous		15% Quartz 20% Gypsum	None Detected	
091902311-0018		Homogeneous		65% Non-fibrous (Other)		
3B-19 991902311-0019	1372 - GARAGE FLOOR - CONCRETE	Gray Non-Fibrous Homogeneous		20% Quartz 20% Gypsum 60% Non-fibrous (Other)	None Detected	
3B-20-Wallboard	1372 - GARAGE WALL - WALLBOARD/JOINT COMPOUND	White Fibrous Homogeneous	1% Cellulose 1% Glass	80% Gypsum 18% Non-fibrous (Other)	None Detected	
3B-20-Joint Compound 91902311-0020A	1372 - GARAGE WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
3B-21-Wallboard 91902311-0021	1372 - ENTRY CLOSET WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	2% Cellulose 2% Glass	80% Gypsum 16% Non-fibrous (Other)	None Detected	
B-21-Joint Compound	1372 - ENTRY CLOSET WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
B-22-Drywall	1372 - LIVING ROOM WALL BY FIREPLACE - WALLBOARD/JOINT	White Non-Fibrous Homogeneous	2% Cellulose 2% Glass	80% Gypsum 16% Non-fibrous (Other)	None Detected	
B-22-Joint Compound 1802311-0022A	COMPOUND 1372 - LIVING ROOM WALL BY FIREPLACE - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected	
B-23-Drywall	1372 - MIDDLE HALLWAY - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	2% Cellulose 2% Glass	80% Gypsum 16% Non-fibrous (Other)	None Detected	

Initial report from: 01/30/2019 14:54:50

EMSL Analytical, Inc.

EMSL

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091902311 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe	Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
BB-23-Joint Compound	1372 - MIDDLE HALLWAY - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
BB-24-Drywall 091902311-0024	1372 - MASTER BEDROOM - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected	
BB-24-Joint Compound 1372 - MASTER BEDROOM - 091902311-0024A WALLBOARD/JOINT COMPOUND		White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected	
BB-25-Drywall 091902311-0025	BB-25-Drywall 1372 - SMALL BEDROOM -		4% Cellulose	80% Gypsum 16% Non-fibrous (Other)	None Detected	
BB-25-Joint Compound 091902311-0025A	1372 - SMALL BEDROOM - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected	
BB-26-Ceramic Tile 291902311-0028	1372 - ENTRY CLOSET - 12X12 CERAMIC TILE W GROUT AND LEVELING COMPOUND	Brown Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected	
3B-26-Grout 1 191902311-0026A	1372 - ENTRY CLOSET - 12X12 CERAMIC TILE W GROUT AND LEVELING COMPOUND	Brown Non-Fibrous Homogeneous	С	40% Quartz 15% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected	
3B-26-Grout 2 91902311-00268	1372 - ENTRY CLOSET - 12X12 CERAMIC TILE W GROUT AND LEVELING COMPOUND	White Non-Fibrous Homogeneous		45% Quartz 10% Ca Carbonate 10% Gypsum 35% Non-fibrous (Other)	None Detected	
B-26-Leveling compound 01902311-0026C	1372 - ENTRY CLOSET - 12X12 CERAMIC TILE W GROUT AND LEVELING COMPOUND	White Non-Fibrous Homogeneous		30% Quartz 30% Ca Carbonate 40% Non-fibrous (Other)	None Detected	
B-27 1802311-0027	1372 - LIVING ROOM - CERAMIC TILE ADHESIVE	White Non-Fibrous Homogeneous	5% Synthetic 8% Glass	35% Quartz 20% Ca Carbonate 20% Gypsum 12% Non-fibrous (Other)	None Detected	
B28 1902311-0028	1372 - LIVING ROOM - CARPET MASTIC	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 70% Matrix 15% Non-fibrous (Other)	None Detected	
3-29-Ceramic Tile	1372 - KITCHEN - CERAMIC TILE WITH ADHESIVE	Brown Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected	
BB-29-Grout 1372 - KITCHEN - Gray CERAMIC TILE WITH Non-Fibrous 091902311-0029A ADHESIVE Homogeneous			40% Quartz 15% Ca Carbonate 20% Gypsum 25% Non-fibrous (Other)	None Detected		

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Initial report from: 01/30/2019 14:54:50

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EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902311 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe	Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type	
BB-29-Adhesive 091902311-00298	1372 - KITCHEN - CERAMIC TILE WITH ADHESIVE	White Non-Fibrous Homogeneous	т. Т	40% Quartz 10% Ca Carbonate 10% Gypsum 40% Non-fibrous (Other)	None Detected	
BB-30 091902311-0030	1372 - KITCHEN TILE - PAPER/UNDERLAYM ENT ASSOC. W BB-29	Gray Fibrous Homogeneous	70% Cellulose	5% Quartz 10% Ca Carbonate 15% Non-fibrous (Other)	None Detected	
BB-31	1372 - BATHROOM - CERAMIC ADHESIVE	Tan Non-Fibrous Homogeneous	1	70% Matrix 30% Non-fibrous (Other)	None Detected	
BB-32-Shingle 091902311-0032	WT - WATER TOWER NORTH SIDE - ROOF ASSEMBLY NORTH AREA	White/Black Fibrous Homogeneous	5% Glass	5% Quartz 20% Ca Carbonate 40% Matrix 30% Non-fibrous (Other)	None Detected	
BB-32-Felt 091902311-0032A	WT - WATER TOWER NORTH SIDE - ROOF ASSEMBLY NORTH AREA	Black Fibrous Homogeneous	70% Cellulose	30% Matrix	None Detected	
3B-33-Shingle 1902311-0033	OH - OUTHOUSE - ROOF ASSEMBLY SOUTH ROOF AREA	Black/Green Fibrous Homogeneous	5% Glass	5% Quartz 25% Ca Carbonate 40% Matrix 25% Non-fibrous (Other)	None Detected	
3B-33-Shingle 2 91902311-0033A	OH - OUTHOUSE - ROOF ASSEMBLY SOUTH ROOF AREA	Brown/Tan/Black Fibrous Homogeneous	10% Cellulose	5% Quartz 20% Ca Carbonate 40% Matrix 25% Non-fibrous (Other)	None Detected	
3B-33-Felt 91902311-00338	OH - OUTHOUSE - ROOF ASSEMBLY SOUTH ROOF AREA	Black Fibrous Homogeneous	50% Cellulose	50% Matrix	None Detected	
3B-34 91902311-0034	GH - GREENHOUSE NORTH WINDOW - WINDOW PUTTY	Gray Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected	
B-35	WT - WATER TANK SUPPORT - CONCRETE	Gray Non-Fibrous Homogeneous		10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected	
BB-36 WT - SOUTHEAST Gray CONCRETE PAD - Non-Fibrous 2091902311-0036 CONCRETE Homogeneous			10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected		

Analyst(s)

Cecilia Yu (20)

Jared Martin (42)

attic

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 01/30/2019 14:54:50

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ASBESTOS E	1956 Webster Street, #400 Oskland, CA 94612 Tet (510) 633-5640 Fac: (510) 633-5646 Fac: (510) 6435-5646		Mullian P. du	Labio	8			9									Ĭ

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OrderID: 091902311

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11	ASBESTOS BULK SAMPLE DATA SH	共 #400 2	HAIN OF CUSTODY INFORMATION:	Production contaction of the states of the s	Sample ID	BB-13	88-14	BB-15:	88-16	BB-17	127-19	22-22	NU 20	17 00	17-00 RR. 73	12 L- 7 I	LZGA	
DrderID: 091902311	ASBESTOS	1956 Webster Street, #400 Oebland, CA 94612 Tet: (510) 633-5640 Far: (510) 633-5646	CHAIN OF CUSTODY INFORMATION	WWW. RANGE	. Oldel												· · · ·	

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ASBESTOS E	1956 Webster Street, #400 Onkland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646 GHMIN OF CUSTOOY INFORMATION:	Whiten P. A.	. Oldel	The set of the second sec		1.00									1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

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OS BUL Street, #400 M612 5640 5640 5646	A a land a	BB-36				
ASBESTOS BULK SAMPLE DATA SHEET Ninyo & Moore Project Name : SAMA PUS 1956 Webster Street, #400 Oddland, CA 94612 Tel: (S10) 633-5640 Froject Manager. 40343500 / Froject Manager. 40343500 / APN: APN: 40343500 /	William P.					
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EMSL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22 403435001
Attention:	Shawn Robbins	Phone:	(510) 343-3000
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	02/01/2019 1:30 PM
	Suite 103	Analysis Date:	02/02/2019
	Alameda, CA 94501	Collected Date:	01/30/2019
	403435001 - WPL - SANTA ROSA		

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

			Non-A	sbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
OH-01-Ceramic Floor Tile 091902675-0001	OUTHOUSE - FLOOR - MORTAR ASSOC, W/ CERAMIC FLOOR TILE	Brown/Red Non-Fibrous Homogeneous	1	40% Quartz 20% Ca Carbonate 40% Non-fibrous (Other)	None Detected
OH-01-Mortar 091902675-0001A	OUTHOUSE - FLOOR - MORTAR ASSOC. W/ CERAMIC FLOOR TILE	Black Non-Fibrous Homogeneous		35% Quartz 20% Ca Carbonate 45% Non-fibrous (Other)	None Detected
OH-02-Wallboard	OUTHOUSE - WALL - WALLBOARD / JOINT COMP	White Non-Fibrous Homogeneous		80% Gypsum 20% Non-fibrous (Other)	None Detected
OH-02-Joint Compound 091902675-0002A	OUTHOUSE - WALL - WALLBOARD / JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected

Analyst(s)

Van (Rebecca) Huynh (4)

Matthe

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations . Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/02/2019 12:27:15

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Project Nar	MPLE DATA
me: SANT	A SHEET

			*			04-02	DU M	LabID . Sample ID	WMX Way May 1 5:11		CHAIN OF CUSTODY INFORMATION-	1956 Webster Street, #400 Oekland, CA 94612 Tel: (510) 633-5646
					CTT UN MICHANDE - WOM	D 41.	1370 - 10 11 - 0411ple Location		5		Site Address:	Project Name: SAMA RUSA Project No.: 46343500 Project Manager: 46343500 APN:
•			· .	 	Man some Toin Comp 100	Mortar Arrie, W/ LERAMIC 50 D	mple Description		H2 H2		Ter.	Sampled By: Sampled By: Sampled By: Date Sampled
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GMEIG	EMSL Analytical, Inc. 3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	02/01/2019 1:30 PM
	Suite 103	Analysis Date:	02/05/2019 - 02/06/2019
	Alameda, CA 94501	Collected Date:	
Project:	Santa Rosa, 403435001		

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

			Non-Asbestos				
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре		
1400-01-Shingle	Roof assembly, Roof/Southside	Gray/Black Fibrous	15% Glass	5% Quartz 80% Non-fibrous (Other)	None Detected		
511900347-0001		Homogeneous					
1400-01-Shingle	Roof assembly, Roof/Southside	Brown/Black Fibrous Homogeneous	20% Glass	5% Quartz 75% Non-fibrous (Other)	None Detected		
1400-01-Tar Paper			None Detected				
511900347-0001B		Homogeneous					
1400-02	Roof pen. Mastic, Roof/Southside	Gray/Black Non-Fibrous		88% Non-fibrous (Other)	12% Chrysotile		
511900347-0002		Homogeneous			News Performed		
1400-03 511900347-0003	Brick from chimney, Central roof chimney	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected		
1400-04	0-04 Mortar assoc. w/ Gray 20% Quartz		20% Quartz 80% Non-fibrous (Other)	None Detected			
511900347-0004	roof chimney	Homogeneous					
1400-05-Brick	Brick & mortar, Front door steps	Gray/Red Non-Fibrous		100% Non-fibrous (Other)	None Detected		
511900347-0005		Homogeneous			No. Barried		
1400-05-Mortar	Brick & mortar, Front door steps	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected		
400-06-Vinyl Sheet	Vinyl floor sheeting	Gray/White/Blue	45% Cellulose	45% Non-fibrous (Other)	None Detected		
Flooring	blue/white/gray, Entry floor	Fibrous Homogeneous	10% Glass				
11900347-0006							
400-06-Mastic	Vinyl floor sheeting blue/white/gray, Entry	Tan/Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected		
11900347-0006A Result includes a small amo	floor unt of inseparable attached mai	Homogeneous					
400-07-Joint compound	Wallboard/joint compound, Kitchen wall refrig ave	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected		
1900347-0007							
400-07-Finish Coat	Wallboard/joint compound, Kitchen	White Non-Fibrous		100% Non-fibrous (Other)	None Detected		
1900347-0007A	wall refrig ave	Homogeneous		150/ Queda	None Detected		
400-07-Base Coat	Wallboard/joint compound, Kitchen wall refrig ave	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected		
100-08	Wallpaper, Kitchen	White		40% Ca Carbonate	None Detected		
1900347-0008	near stove	Non-Fibrous Homogeneous		60% Non-fibrous (Other)			
00-09-Wallboard	Wallboard/joint compound, Living	Brown/White Fibrous	15% Cellulose	60% Gypsum 25% Non-fibrous (Other)	None Detected		
900347-0009	room Southeast wall	Homogeneous					

(Initial report from: 02/06/2019 13:52:26

EMSL Analytical, Inc.

3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Tel/Fax: (206) 269-6310 / (206) 900-8789

http://www.emsl.com / seattlelab@emsl.com

EMSL

EMSL Order: 511900347 Customer ID: NOMO22 Customer PO:

Project ID:

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

			Non-Asbe	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
1400-09-Joint Compound	Wallboard/joint compound, Living room Southeast wall	White Non-Fibrous Homogeneous		65% Ca Carbonate 35% Non-fibrous (Other)	None Detected
511900347-0009A					
1400-10-Wallboard	Wallboard/joint compound, Living	Brown/White Non-Fibrous	20% Cellulose	60% Gypsum 20% Non-fibrous (Other)	None Detected
511900347-0010	room Northwest wall	Homogeneous		SON Co Contracto	None Detected
1400-10-Joint Compound	Wallboard/joint compound, Living room Northwest wall	White Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	None Delected
511900347-0010A				10% Quartz	None Detected
1400-11-Brick	Brick, Living room fireplace base	Red Non-Fibrous Homogeneous		90% Non-fibrous (Other)	None Detected
	Briek Living room			15% Quartz	None Detected
1400-11-Mortar	Brick, Living room fireplace base	Gray Non-Fibrous Homogeneous		85% Non-fibrous (Other)	None Detector
	Brick, Living room	Gray		3% Quartz	None Detected
1400-11-Grout	fireplace base	Non-Fibrous Homogeneous		97% Non-fibrous (Other)	
400-11-Mastic	Brick, Living room fireplace base	Yellow Non-Fibrous	³	100% Non-fibrous (Other)	None Detected
11900347-0011C		Homogeneous			
400-11-Texture	Brick, Living room fireplace base	White Non-Fibrous		20% Ca Carbonate 78% Non-fibrous (Other)	2% Chrysotile
11900347-0011D		Homogeneous		100000	N. Data dad
400-12-Brick	Textured brick, Living room fireplace wall	Tan Non-Fibrous Hemogeneour		10% Quartz 90% Non-fibrous (Other)	None Detected
11900347-0012	Technical Indata I folian	Homogeneous		15% Quartz	None Detected
400-12-Mortar	Textured brick, Living room fireplace wall	Beige Non-Fibrous Homogeneous		85% Non-fibrous (Other)	None Detector
400-13	Paper carpet	Gray/White/Black	60% Cellulose	5% Ca Carbonate	None Detected
1900347-0013	underlayment, Livingroom floor near	Fibrous Homogeneous	20% Synthetic	15% Non-fibrous (Other)	
esult includes a small amo	fireplace unt of inseparable attached ma	terial			
separable paint / coating l		D	200/ Callulana	60% Gypsum	None Detected
400-14-Wallboard	Wallboard/joint compound, NW bedroom	Brown/White Fibrous Homogeneous	20% Cellulose	20% Non-fibrous (Other)	None Detected
100-14-Joint	Wallboard/joint	White		60% Ca Carbonate	None Detected
ompound	compound, NW bedroom	Non-Fibrous Homogeneous		40% Non-fibrous (Other)	
1900347-0014A					No
00-15-Vinyl Sheet ooring	Vinyl floor sheeting w/ mastic, Bathroom	Gray Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	None Detected
900347-0015					
00-15-Mastic	Vinyl floor sheeting w/ mastic, Bathroom	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
900347-0015A	TERRITOR STREET	Homogeneous			
00-16-Joint mpound	Wallboard/joint compound, Hallway	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
000347-0016					
0-16-Finish Coat	Wallboard/joint compound, Hallway	Beige Non-Fibrous		10% Quartz 90% Non-fibrous (Other)	None Detected
900347-0016A		Homogeneous			

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EMSL Order: 511900347 Customer ID: NOMO22 **Customer PO:**

Project ID:

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

			Non-Asb	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
1400-16-Base Coat	Wallboard/joint compound, Hallway	Gray Non-Fibrous		15% Quartz 85% Non-fibrous (Other)	None Detected
511900347-0016B		Homogeneous			
1400-17-Joint Compound 1	Wallboard/joint compound, SE bedroom	White Non-Fibrous Homogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
511900347-0017	bedroom				
1400-17-joint	Wallboard/joint	Gray		15% Ca Carbonate	2% Chrysotile
Compound 2	compound, SE bedroom	Non-Fibrous Homogeneous		83% Non-fibrous (Other)	
511900347-0017A					
1400-17-Finish Coat	Wallboard/joint compound, SE	Beige Non-Fibrous		15% Quartz 85% Non-fibrous (Other)	None Detected
511900347-0017B	bedroom	Homogeneous		00% 0	Nene Detected
1400-17-Base Coat	Wallboard/joint compound, SE bedroom	Gray Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
		Brown/White	20% Cellulose	65% Gypsum	None Detected
1400-18-Wallboard	Wallboard/joint compound, NE bedroom	Fibrous Homogeneous	20% Cellulose	15% Non-fibrous (Other)	Hole Deceted
1400-18-Joint	Wallboard/joint	White		55% Ca Carbonate	None Detected
Compound 1	compound, NE bedroom	Non-Fibrous Homogeneous		45% Non-fibrous (Other)	
11900347-0018A					TUNKE AND A MANY MANY
400-18-Joint Compound 2	Wallboard/joint compound, NE	Tan Non-Fibrous		25% Ca Carbonate 73% Non-fibrous (Other)	2% Chrysotile
	bedroom	Homogeneous			
11900347-0018B	d" tile beekeeleeb	White		100% Non-fibrous (Other)	None Detected
400-19-Ceramic Tile	4" tile backsplash ceramic w/ mastic, Kitchen stove area	Non-Fibrous Homogeneous			Hole Delotes
400-19-Mastic	4" tile backsplash ceramic w/ mastic,	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
11900347-0019A	Kitchen stove area	Homogeneous			
400-19-Mortar	4" tile backsplash ceramic w/ mastic,	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
11900347-0019B nseparable paint / coating la	Kitchen stove area ver included in analysis	Homogeneous			
100-20	Roof assembly (under metal), Roof/West	Black Fibrous	60% Cellulose 20% Synthetic	20% Non-fibrous (Other)	None Detected
1900347-0020	side	Homogeneous			New Detected
100-21	Blown-in insulation, Attic space	Tan Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
1900347-0021	Mellhe and linint		15% Cellulose	65% Gypsum	None Detected
00-22-Wallboard	Wallboard/joint compound, Back "living area"/North	Brown/Beige Fibrous Homogeneous	15% Cellulose	20% Non-fibrous (Other)	None Detected
00-22-Joint	Wallboard/joint	White		65% Ca Carbonate	None Detected
mpound	compound, Back "living area"/North	Non-Fibrous Homogeneous		35% Non-fibrous (Other)	
900347-0022A	ana daga d a i ng panan di Kabupatén di				
00-23-Wallboard	Wallboard/joint compound, Back	Brown/White Fibrous	15% Cellulose 5% Glass	65% Gypsum 15% Non-fibrous (Other)	None Detected
900347-0023	"living area"/ East	Homogeneous			
00-23-Joint mpound	Wallboard/joint compound, Back	White Non-Fibrous		65% Ca Carbonate 35% Non-fibrous (Other)	None Detected
	"living area"/ East	Homogeneous			

(Initial report from: 02/06/2019 13:52:26

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EMSL Order: 511900347 Customer ID: NOMO22 **Customer PO:** Project ID:

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

			Non-Asbe	stos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
1400-24-Wallboard	Wallboard/joint compound, Back "living area"/West	Brown/White Fibrous Homogeneous	15% Cellulose 3% Glass	65% Gypsum 17% Non-fibrous (Other)	None Detected	
1400-24-Joint Compound	Wallboard/joint compound, Back "living area"/West	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected	
511900347-0024A				Products a first the solution of the solution of the		
1400-25-Insulation	Batt insulation, North wall cavity	White Fibrous	97% Min. Wool	3% Non-fibrous (Other)	None Detected	
511900347-0025		Homogeneous				
1400-25-Wrap	Batt insulation, North wall cavity	Brown/Black Fibrous	90% Cellulose	10% Non-fibrous (Other)	None Detected	
511900347-0025A	WERE CONTRACTOR	Homogeneous				
1400-26	Concrete, South central interior	Gray Non-Fibrous		25% Quartz 75% Non-fibrous (Other)	None Detected	
511900347-0026		Homogeneous				

Analyst(s)

Ehrin Baul (54)

Lauren Kerber, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations . Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA NVLAP Lab Code 200613, CA 2733

Initial report from: 02/06/2019 13:52:26

Provide State	EMSL Analytical, Inc. 3317 3rd Ave S, Suite D 2nd floor Seattle, WA 98134 Phone/Fax: (206) 269-6310 / (206) 900-8789 http://www.emsl.com / seattlelab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
V	Bill Larkin	Phone:	(510) 385-5054
000000000000000000000000000000000000000	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received:	02/01/2019 1:30 PM
	Suite 103	Analysis Date:	02/08/2019
	Alameda, CA 94501	Collected:	
Project:	Santa Rosa, 403435001		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non-	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
1400-11-Texture	Brick, Living room	White		100.0% Non-fibrous (Other)	<0.25% Chrysotile
511900347-0011D	fireplace base	Non-Fibrous			
		Homogeneous			
1400-17	Wallboard/joint	Various		100.0% Non-fibrous (Other)	<0.25% Chrysotile
511900347-0017D	compound, SE	Fibrous			
	bedroom	Heterogeneous			
			This is a composite point count res	ult of jt. compound, and finish, base coat plaste	r

Analyst(s)

Jason Stuhr (2)

0) a Ten

Lauren Kerber, Laboratory Manager or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government . EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Seattle, WA

Initial report from: 02/08/2019 13:10:00

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Page 1 of 1

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ASBESTOS BULK SAMPLE DATA SHEET Ninyo & Moore 1956 Webster Street, #400 Oakland, CA 94612 Tel: 1510) 633-5646 Far: (510) 633-5	er fra					j
ASBESTO Ninyo & Moore 1956 Webster St Oakland, CA 94 Tel: (510) 633-56 Far: (510) 633-56 Far: (510) 633-56	Child and Child		•	.		
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MELS	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com		EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Shawn Robbins		Phone:	(510) 343-3000
	Ninyo & Moore		Fax:	(510) 633-5646
	2020 Challenger Drive		Received Date:	02/06/2019 11:45 AM
	Suite 103	ā	Analysis Date:	02/10/2019
Project:	Alameda, CA 94501 403435001 - SANTA ROSA - 1027 MCMINN	۵.	Collected Date:	02/04/2019

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

		stos	<u>Asbestos</u>		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
1027-01	GARAGE FLOOR SW - CONCRETE	Gray Non-Fibrous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
091903222-0001		Homogeneous	EN Only land	80% Ca Carbonate	None Detected
1027-02	STORAGE ROOM NORTH WALL - WALLBOARD	White Non-Fibrous Homogeneous	5% Cellulose	15% Non-fibrous (Other)	None Detected
	KITCHEN NW -	White	4% Cellulose	80% Gypsum	None Detected
1027-03-Wallboard	WALLBOARD/JOINT	Non-Fibrous Homogeneous	<1% Glass	16% Non-fibrous (Other)	
1027-03-Joint	KITCHEN NW -	White		80% Ca Carbonate	<1% Chrysotile
Compound	WALLBOARD/JOINT COMPOUND	Non-Fibrous Homogeneous		20% Non-fibrous (Other)	
091903222-0003A					
1027-04	KITCHEN FLOOR BY DOORWAY - VINYL	Tan Fibrous	10% Cellulose	10% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	15% Chrysotile
091903222-0004	SHEET FLOORING	Homogeneous		15% Non-Indious (Other)	
and the second se	of both vinyl and backing layer	-		80% Matrix	2% Chrysotile
1027-05 091903222-0005	KITCHEN EAST WALL - PANEL MASTIC	Tan Non-Fibrous Homogeneous		18% Non-fibrous (Other)	276 Onlysour
Internet and the second se	KITCHEN COUNTER	Gray		25% Quartz	None Detected
1027-06 091903222-0006	- MORTAR ASSOCIATED WITH 1027-05L	Non-Fibrous Homogeneous	e	60% Ca Carbonate 15% Non-fibrous (Other)	
1027-07	KITCHEN COUNTER	Gray		10% Quartz	None Detected
091903222-0007	- GROUT ASSOCIATED WITH	Non-Fibrous Homogeneous		70% Ca Carbonate 20% Non-fibrous (Other)	
	1027-O5L		4% Cellulose	80% Gypsum	None Detected
1027-08-Wallboard	MASTER BEDROOM NORTHWEST	White Non-Fibrous	4% Cellulose	16% Non-fibrous (Other)	None Detested
991903222-0008	CORNER - WALL BOARD/JOINT COMPOUND	Homogeneous			
027-08-Joint	MASTER BEDROOM	White		80% Ca Carbonate	<1% Chrysotile
Compound	NORTHWEST	Non-Fibrous		20% Non-fibrous (Other)	
91903222-0008A	CORNER - WALL BOARD/JOINT COMPOUND	Homogeneous			
027-09	MASTER BEDROOM	White		80% Ca Carbonate 18% Non-fibrous (Other)	2% Chrysotile
91903222-0009	NORTHWEST CORNER - TEXTURE	Non-Fibrous Homogeneous			
027-10	RESTROOM 2	Gray		15% Quartz 60% Ca Carbonate	None Detected
91903222-0010	COUNTER - MORTAR ASSOCIATED WITH 1027-O6L	Non-Fibrous Homogeneous		60% Ca Carbonate 25% Non-fibrous (Other)	

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EMSL Order: 091903222 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
1027-11-Barrier 091903222-0011	RESTROOM 2 SHOWER - BARRIER / TILE ADHESIVE ASSOCIATED WITH 1027-07L	Brown/Gray Non-Fibrous Homogeneous		10% Quartz 50% Matrix 40% Non-fibrous (Other)	None Detected
1027-11-Adhesive 091903222-0011A	RESTROOM 2 SHOWER - BARRIER / TILE ADHESIVE ASSOCIATED WITH 1027-07L	Brown/Tan Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1027-12-Vinyl Sheet Flooring 091903222-0012 This is a composite result o	RESTROOM 2 FLOOR - VINYL SHEET FLOORING WITH MASTIC of both vinyl and backing layer	Beige Fibrous Homogeneous	4% Glass	25% Ca Carbonate 60% Matrix 11% Non-fibrous (Other)	None Detected
1027-12-Mastic	RESTROOM 2 FLOOR - VINYL SHEET FLOORING WITH MASTIC	Tan Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
1027-13	LIVING ROOM WEST WALL - TEXTURE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1027-14	LIVING ROOM FIREPLACE - BRICK	Red Non-Fibrous Homogeneous		15% Quartz 50% Ca Carbonate 15% Gypsum 20% Non-fibrous (Other)	None Detected
027-15	LIVING ROOM FIREPLACE - MORTAR	Gray Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
027-16-Wrap 91903222-0016	LIVING ROOM EAST WALL CAVITY - PINK BATT INSULATION	Brown/Black Fibrous Homogeneous	65% Cellulose	20% Matrix 15% Non-fibrous (Other)	None Detected
027-16-Insulation	LIVING ROOM EAST WALL CAVITY - PINK BATT INSULATION	Pink Fibrous Homogeneous	95% Min. Wool	5% Non-fibrous (Other)	None Detected
027-17-Wrap	LIVING ROOM EAST WALL CAVITY - YELLOW BATT INSULATION	Silver Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
027-17-Insulation	LIVING ROOM EAST WALL CAVITY - YELLOW BATT INSULATION	Yellow Fibrous Homogeneous	95% Min. Wool	5% Non-fibrous (Other)	None Detected
D27-18 1903222-0018	LIVING ROOM EAST WALL CAVITY - VAPOR BARRIER	Black Non-Fibrous Homogeneous	40% Cellulose	40% Matrix 20% Non-fibrous (Other)	None Detected
)27-19	LIVING ROOM EAST WALL CAVITY - TEXTURE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1903222-0039 1903222-0020	HALLWAY WALL SOUTHWEST - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
27-20-Joint ompound 903222-00204	HALLWAY WALL SOUTHWEST - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	ie . A	80% Ca Carbonate 20% Non-fibrous (Other)	<1% Chrysotile

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EMSL Order: 091903222 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
1027-21-Wallboard 091903222-0021	SOUTHEAST BEDROOM NE CORNER - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
1027-21-Joint Compound 091903222-0021A	SOUTHEAST BEDROOM NE CORNER - WALLBOARD/JOINT COMPOUND	Beige Non-Fibrous Homogeneous		80% Ca Carbonate 18% Non-fibrous (Other)	2% Chrysotile
1027-21-Texture 091903222-00218	SOUTHEAST BEDROOM NE CORNER - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	a.	80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1027-22	SOUTHEAST BEDROOM SOUTH WALL - TEXTURE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1027-23 091903222-0023	SOUTHEAST BEDROOM PAPER BELOW WOOD TILE - VAPOR BARRIER	Brown/Black Fibrous Homogeneous	80% Cellulose	8% Matrix 12% Non-fibrous (Other)	None Detected
1027-24 091903222-0024	SOUTHWEST BEDROOM FLOOR - PAPER UNDER WOOD TILE	Brown/Black Fibrous Homogeneous	80% Cellulose	6% Matrix 14% Non-fibrous (Other)	None Detected
027-25-Wallboard	SOUTHWEST BEDROOM WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	5% Cellulose	80% Gypsum 15% Non-fibrous (Other)	None Detected
027-25-Joint Compound 91903222-0025A	SOUTHWEST BEDROOM WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	<1% Chrysotile
027-25-Texture 91903222-00258	SOUTHWEST BEDROOM WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
027-26	SOUTHWEST BEDROOM WALL - TEXTURE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
027-27 11903222-0027	MAIN RESTROOM FLOOR - VINYL SHEET FLOORING TAN	Tan Fibrous Homogeneous	4% Glass	30% Ca Carbonate 50% Matrix 16% Non-fibrous (Other)	None Detected
027-28-Vinyl Sheet ooring 1903222-0028	both vinyl and backing layer MAIN RESTROOM FLOOR - (DARK MARBLED) WITH MASTIC FLOORING both vinyl and backing layer	Gray Fibrous Homogeneous	30% Cellulose 5% Synthetic	50% Matrix 15% Non-fibrous (Other)	None Detected
027-28-Mastic 1903222-0028A	MAIN RESTROOM FLOOR - (DARK MARBLED) WITH MASTIC FLOORING	Brown Non-Fibrous Homogeneous	25% Cellulose	70% Matrix 5% Non-fibrous (Other)	None Detected
927-29	MAIN RESTROOM WALL - BLUE TEXTURE	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected

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EMSL Order: 091903222 Customer ID: NOMO22 Customer PO: 403435001

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Project ID:

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

			Non-Asb	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
1027-30-Ceramic Tile 091903222-0030	MAIN RESTROOM BATH TILE - PINK CERAMIC BATH TILE WITH MASTIC	Pink Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (Other)	None Detected
1027-30-Mastic 091903222-0030A	MAIN RESTROOM BATH TILE - PINK CERAMIC BATH TILE WITH MASTIC	Brown Non-Fibrous Homogeneous	6	80% Matrix 18% Non-fibrous (Other)	2% Chrysotile
1027-30-Compound 091903222-00308	MAIN RESTROOM BATH TILE - PINK CERAMIC BATH TILE WITH MASTIC	White Non-Fibrous Homogeneous		80% Ca Carbonate 18% Non-fibrous (Other)	2% Chrysotile
1027-32 091903222-0031	FRONT DOOR PORCH STEPS - CONCRETE	Gray Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1027-33-Shingle	ROOF AT EAST CENTRAL - ROOF ASSEMBLY	Gray/Black Fibrous Homogeneous	15% Glass	10% Quartz 50% Matrix 25% Non-fibrous (Other)	None Detected
1027-33-Felt	ROOF AT EAST CENTRAL - ROOF ASSEMBLY	Black Fibrous Homogeneous	15% Glass	60% Matrix 25% Non-fibrous (Other)	None Detected
1027-34	GARAGE WEST WINDOW - WINDOW PUTTY	Gray Non-Fibrous Homogeneous	3	30% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected
1027-35	ROOF WEST - GRAY PENETRATION MASTIC	Black Non-Fibrous Homogeneous		80% Matrix 16% Non-fibrous (Other)	4% Chrysotile
027-36 91903222-0035	ROOF WEST - BLACK PENETRATION MASTIC	Black Non-Fibrous Homogeneous		80% Matrix 16% Non-fibrous (Other)	4% Chrysotile
027-37-Vinyl Floor Tile 91903222-0036	KITCHEN FLOOR - VINYL SHEET FLOORING WITH "GOLD" BELOW 1027-04	White Non-Fibrous Homogeneous	5	70% Ca Carbonate 5% Matrix 25% Non-fibrous (Other)	<1% Chrysotile
027-37-Mastic	KITCHEN FLOOR - VINYL SHEET FLOORING WITH "GOLD" BELOW 1027-04	Tan Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
027-38 1903222-0037	KITCHEN FLOOR - FIBERBOARD VINYL FLOOR SHEETING UNDERLAYMENT	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Olher)	None Detected
027-39 1903222-0038	MASTER BEDROOM FLOOR - PAPER BARRIER BELOW WOOD TILES	Brown/Black Fibrous Homogeneous	80% Cellulose	8% Matrix 12% Non-fibrous (Other)	None Detected



464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091903222 Customer ID: NOMO22 Customer PO: 403435001 Project ID:

Analyst(s) Shane Heisser (54)

Matthe nythe

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations . Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/10/2019 14:14:45

ASB_PLM_0008_0001 - 1.78 Printed: 2/10/2019 11:14 AM

Page 5 of 5

	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577	EMSL Order: Customer ID: Customer PO:	NOMO22
	Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	Project ID:	
Attention:	Shawn Robbins	Phone: Fax:	(510) 343-3000 (510) 633-5646
	Ninyo & Moore 2020 Challenger Drive	Received:	02/06/2019 11:45 AM
	Suite 103	Analysis Date:	02/14/2019
	Alameda, CA 94501 403435001 - SANTA ROSA - 1027 MCMINN	Collected:	02/04/2019

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

			Non	-Asbestos	Asbestos
Sample	Description	Appearance .	% Fibrous	% Non-Fibrous	% Туре
1027-03-Joint Compound <i>091903222-0003A</i>	KITCHEN NW - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<0.25% Chrysotile
1027-08-Joint Compound <i>091903222-0008A</i>	MASTER BEDROOM NORTHWEST CORNER - WALL BOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<0.25% Chrysotile
1027-09 <i>091903222-0009</i>	MASTER BEDROOM NORTHWEST CORNER - TEXTURE	White Non-Fibrous Homogeneous		99.75% Non-fibrous (Other)	0.25% Chrysotile
1027-20-Joint Compound 091903222-0020A	HALLWAY WALL SOUTHWEST - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous		99.50% Non-fibrous (Other)	0.50% Chrysotile
1027-21-DW/JC Composite 091903222-0021A	SOUTHEAST BEDROOM NE CORNER - WALLBOARD/JOINT COMPOUND	White/Beige Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<0.25% Chrysotile
1027-25-Joint Compound 091903222-0025A	SOUTHWEST BEDROOM WALL - WALLBOARD/JOINT COMPOUND	White Non-Fibrous Homogeneous	0	100.0% Non-fibrous (Other)	<0.25% Chrysotile
027-30-Compound 991903222-0030B	MAIN RESTROOM BATH TILE - PINK CERAMIC BATH TILE WITH MASTIC	White Non-Fibrous Homogeneous		98.8% Non-fibrous (Other)	1.25% Chrysotile

Analyst(s)

Cecilia Yu (7)

atte

Matthew Batongbacal or other approved signatory

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government . EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/14/2019 18:36:38

ASB_PLMPC_0008_0003 Printed 2/14/2019 6:36:42PM

Page 1 of 1

EMSL	EMSL Analytical, Inc 464 McCormick Street, San Leandro, C/ Phone/Fax: (510) 895-3675 / (510) 896 http://www.EMSL.com		EMSL Order: CustomerID: CustomerPO: ProjectID:	091903222 NOMO22 403435001
Attn: Shawn Ro	bhins	Phone:	(510) 343-3000	1
Ninyo & M		Fax:	(510) 633-5646	
		Received:	02/06/19 11:45 AM	
2020 Chai	enger Drive	Analysis Date:	2/13/2019	

Collected:

2/4/2019

Project: 403435001 - SANTA ROSA - 1027 MCMINN

Alameda, CA 94501

Suite 103

Test Report: Polarized Light Microscopy (PLM) - Point Count Performed by EPA 600/R-93/116 Method with Gravimetric Reduction and 400 Point Count

SAMPLE ID	DESCRIPTION	APPEARANCE		Matrix ic Acid	NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES	
1027-37-Vinyl	KITCHEN	White	27.5	62.1		10.4 Non-fibrous (other)	<0.25 Chrysotile	
Floor Tile 091903222-0036	FLOOR - VINYL SHEET	Fibrous						
	FLOORING WITH "GOLD" BELOW 1027- 04	Homogeneous						

Analyst(s)

Cecilia Yu (1)

Matthew Batongbacal or other approved signatory

Disclaimers: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc. suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical Inc.. This report must not be used to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc. bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layer samples. EMSL Analytical Inc. liability is limited to the cost of sample analysis. The test results contained within this report must not encound of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Initial report from 02/13/2019 17:59:41

Test Report PLMPCGrav-7.26.0 Printed: 2/13/2019 5:59:41 PM

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#091903222	Laboratory: GMS2 Tet Fac		2/10/19		Cuantity (SFILFIEA)	450 ^{5F}	1005	3005	200 SF	50 SF	Morbar Associated 102705, 10051	10 SF	300 SF	70051	50	50 54	4051
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BULK	ес #400 12 6			Sample ID	10-1-201	- 60- LL al	1027-03	107-1-04	50-1201	1027-06	1027-07	80-1701	1027-09	1027-10	-1201	1021	-
ASBESTOS BULK SAMPLE DATA SHEET	1956 Webster Street, #400 Oekland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646 CHAIN OF GUISTODY INFORMATION		- A town	LabiD								0					
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2	Laboratory. Tet	發展	113	Quantity	SFILFIEA	150 51	4055	3005F	30054	3005	SOOF	~ 3	2005F	30055	300 SF	300 FF
#091903222	Sampled By: : Sampled By: Sampled By: R+C Date Sampled: 2/4/19		84 - 2/6/	Sample Description	Texture	· Brick	MORTAR	PINK BATT INSULATION	YELLOW. BATT INSUATION	VAPOR BARRIER		Burleymon	WALLWARD (OMANUN)	TEXTURE	VAROK BARACR	MAREKUNDER WOOD
	Sou I Sou I Mc Minu	1 / 1 / 0		g sample Location	[LIVING LOOM West wall	LIVING ROOM FIREPLACE	Room	LIVING ROOM CANTY		0	2	Somethicket Removed NE	1000	II II PAPER BELOW	0	1 = = U IWEST BEDROIN .
ASBESTOS BULK SAMPLE DATA SHEET		BULLAND 'BULLING'S CONTRACTION	1	1		10//.4	SI 1500	01-1-1-C01	85-1-201	1027-19	1027-20	17-1-207	1027-22	1027-23	1027-24	
ASBESTOS Nitryo & Moore	1956 Webster Street, #400 Oaldand, CA 94612 Tel: (510) 633-5640 Fax: (510) 633-5646 Fax: (510) 633-5646 CHAIN OF CUSTOOV INFORMATION	BULLIN.		LabiD .												

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#091903222		Sampled By: Sampled By: Sampled By: KAC Date Sampled: 7 J.L.1. 9	611417	「「おおいて、」のおおようななな行うなのには、自然にはないには、	A CONTRACTOR OF CONTRACTOR OF CONTRACTOR	SA 121	1	Sample Description	WAUBUARD Soint	TEXTURE	VINY'S HEET FLORING	VARE MARRICHINITH	VINYL SHEET Hasing	TCXTU/	PLUK CERANC BATH TILE		Concre Pe	ROOF ASSEMBLY	WINDOW PUHA	STAY PONE TEATION	ALALK RENETRA TRUN
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PI E DATA	Project Name :	Project No.: 40 Project Manager. APN: Sthe Advisor	Stainny		an line .	Stand.	Building	Ind 7	71-		1 Muli					1		+			
ASBESTOS BULK SAMPI F DATA CUERT		cect,#400 512 40 46	Y INFORMATION:	duction by support	12 Billi Car		Sample ID	1017-25	11 1601	07-17-11	17-1701	1027-28.	1027-29	1017-3D	1027-31	162-1-20	1027-33	1017-2 A	i	1. 1	
ASBESTO:	Ninyo & Moore	1200 Webster Street, #400 Oakland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646	CHAIN OF CUSTODY INFORMATION	「「「「「「「」」」」	Bullder		. Didel			.		•					ļ				

Page 3 Of Þ

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	E DATA SH			Warpetwood		Building Number	1027 Kith	1 Kitcher	Mach									-	
	ASBESTOS BULK SAMPLE DATA SHEET		PRINTER ANATION	and I R'II' on Last		Sample ID	1027-37	1027-3.8.	1127-39				States -		×	-			
	ASBESTOS Ninyo & Moore	1956 Webster Street, #400 Oakland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646	CHANN OF CUSTODY INFORMATION	Kill Stalton		. didel			•••										

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APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

		EMSL Analytical, Inc 464 McCormick Street, San Leandro, Phone/Fax: (510) 895-3675 / (510) 8		EMSL Ord Customeri CustomerF	D: NOMO22
			sanleandrolab@emsl.com	ProjectID:	
Attn:	Suite 103 Alameda,	Moore Ilenger Drive CA 94501	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/25/2019	
Projec	et: SANTA RO	DSA; 403435001			

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample 1	Description Lab ID Collected Analyzed	Weight	Lead Concentration
BB-01P	091902314-0001 01/25/2019 01/29/2019	0.2478 g	<0.0081 % wt
	Site: 1370: STORAGE ACROSS FROM BATH (1ST FLOOR)		
BB-02P	091902314-0002 01/25/2019 01/29/2019	0.2581 g	<0.0080 % wt
	Site: 1370: KITCHEN COUNTER		
BB-03P	091902314-0003 01/25/2019 01/29/2019	0.265 g	<0.0080 % wt
	Site: 1370: EXT TRIM		
BB-04P	091902314-0004 01/25/2019 01/29/2019	0.2511 g	<0.0080 % wt
	Site: 1370: EXT WALLS		
BB-05P	091902314-0005 01/25/2019 01/29/2019	0.2528 g	<0.0080 % wt
	Site: 1370: INTERIOR BANNISTER RAIL		
BB-06P	091902314-0006 01/25/2019 01/29/2019	0.2611 g	0.89 % wt
	Site: 1372: EXT EAVE FRONT OF HOUSE		
3B-07P	091902314-0007 01/25/2019 01/29/2019	0.2488 g	0.27 % wt
	Site: 1372: EXT WINDOW FRAME NE CORNER		
3B-08P	091902314-0008 01/25/2019 01/29/2019	0.2591 g	4.5 % wt
	Site: 1372: EXT SOUTH WALL		
3B-09P	091902314-0009 01/25/2019 01/29/2019	0.2551 g	14 % wt
	Site: 1372: ROOF SIDING		
3B-10P	091902314-0010 01/25/2019 01/29/2019	0.2489 g	<0.0080 % wt
	Site: 1372: ROOF TRIM		
3B-11P	091902314-0011 01/25/2019 01/29/2019	0.2601 g	<0.0080 % wt
	Site: 1372: LIVING ROOM FIREPLACE		
3B-12P	091902314-0012 01/25/2019 01/29/2019	0.267 g	<0.0080 % wt
	Site: 1372: KITCHEN COUNTER		
3B-13P	091902314-0013 01/25/2019 01/29/2019	0.2669 g	<0.0080 % wt
	Site: 1372: BATHROOM		
B-14P	091902314-0014 01/25/2019 01/29/2019	0.2533 g	<0.0080 % wt
	Site: WT: WATER TOWER SUPPORT		
3B-15P	091902314-0015 01/25/2019 01/29/2019	0.2623 g	0.019 % wt
	Site: WT: NORTH WATER TANK WALL		

which -

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/29/2019 19:18:02

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 01/29/2019 7:18:02 PM

Page 1 of 2

EMEL	EMSL Analytical, Inc 464 McCormick Street, San Leandro, CA Phone/Fax: (510) 895-3675 / (510) 895- http://www.EMSL.com sar	Sector and the sector	EMSL C Custome Custome Projectil	erID: NOMO22 erPO:
Suite 103 Alameda	Moore allenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/25/2019	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample D	escription Lab ID Collected Analyzed	Weight	Lead Concentration
BB-16P	091902314-0016 01/25/2019 01/29/2019	0.2592 g	0.0084 % wt
	Site: GH: GREENHOUSE NE CORNER		
BB-17P	091902314-0017 01/25/2019 01/29/2019	0.2478 g	<0.0081 % wt
	Site: WT: WATER TOWER INTERIOR WALL		
BB-18P	091902314-0018 01/25/2019 01/29/2019	0.2539 g	<0.0080 % wt
	Site: GH: GREENHOUSE EXTERIOR WALL		
BB-19P	091902314-0019 01/25/2019 01/29/2019	0.2529 g	5.5 % wt
	Site: WT: WATER TANK		
BB-20P	091902314-0020 01/25/2019 01/29/2019	0.2542 g	0.0081 % wt
	Site: WT: WATER TOWER EXT WALL		
BB-21P	091902314-0021 01/25/2019 01/29/2019	0.2614 g	<0.0080 % wt
	Site: 1372: SOUTH WALL TRIM		

luph

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/29/2019 19:18:02

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 01/29/2019 7:18:02 PM

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	Sam Sam	Ninparty Date Date Nine Date Nine Date Nine Nine 1/25/14 15/10	Sample Location	Storady Parloce From Ruth (15t		12	Ext. walls wall	1- terior Baumisser RAIL RAIL	Ext Eave/Frondog House	Ext. Winlow Frans / NElmin		, (d	12	I wood fining loom		Page 1 Of
902314	PAINT BUL	Manal Reinquisties Br. (significity)	Sample ID Building Number		BB-02P 1	BB-03 P	B8-04P	BB-05P	BB-06P 1372	BB-07P 1372	BB-68P "	BB -09P 4	1 401-2A	11-28	88-12P 1	
UrderID: 091902314	LEAD BASED Ninys & Moore 1956 Webster Street Oakland, CA 94612 510-633-5640 510-633-5646 (fax) 510-633-5646 (fax)	William R	LabiD			371				•				C021	62	

1) Province Good 2 Condition 2005F G00D Trin White/2/wood 2005F GOOD Tank Bleen/2/meta/ 400SF 600D GOOD 300 SF 600D 600 700 r G000 Sheet 2 of EWEL 150 SF Z405F WALL GREA 2/ WOOD 2005F Surface Area Laboratory: 7005F Estimated SSF 1 AN Tel: Faxo 1/06D White/2/14/00 Wall White 2 Nuss D WALL GREEN/2/WOOD chestan Wall BRen/2/Wa0D FUPART DIEV/2/WOOD Ceranic Sink Layers /Substrate) 1 EUWBL 125/19 WOL (LACK MY toc Date Sampled: Building Component the Sampled By: Sampled By: Sampled By: 4-1⁴ . (1) N internet in the second s Greenhause ME WATER TOWER SUPPERT WT WATER TOWER WAN GN Greenhave exterior wall WATE Town to is rug ? 1548 Page 2 Of WORTH WALL WALL 1372 South Wall Tim Water tank Sample Location LEAD BASED PAINT BULK SAMPLE DATA SHEET 1/25/10 Project Manager: 403435001 Project Name : SANTA BOSA Bathroon Company ----Ninyo&Moste Site Address: Project No.: BB-13P 1372 Alla. Building WT WT Number 7 BH 1W1 971-88 7 Reinquished By (significant) 88-20 P Alle molt Take. Un White BB-14P BB-15P 38-19 P BR-210 BB-18P BB-16P 1956 Webster Street, Suite 400 CHAIN OF CUSTODY INFORMATION: Sample ID Oakland, CA 94612 510-633-5646 (fax) Niavo & Moore 510-633-5640 Clabic

OrderID: 091902314

C02162

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EMSL	EMSL Analytical, Inc 464 McCormick Street, San Leandro, C Phone/Fax: (510) 895-3675 / (510) 89 http://www.EMSL.com		EMSL Order: 091902688 CustomerID: NOMO22 CustomerPO: ProjectID:
Suite 103 Alameda	Moore allenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 02/01/19 1:30 PM 01/29/2019

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample De	escription Lab ID Collected Analyzed	Weight	Lead Concentration
1400-01L	091902688-0001 01/29/2019 02/01/2019	0.2545 g	7.2 % wt
	Site: SE EXT TRIM		
1400-02L	091902688-0002 01/29/2019 02/01/2019	0.2583 g	6.2 % wt
	Site: SE EXT WALL		
1400-03L	091902688-0003 01/29/2019 02/01/2019	0.2617 g	4.1 % wt
	Site: SW EXT TRIM		
1400-04L	091902688-0004 01/29/2019 02/01/2019	0.2522 g	<0.0080 % wt
	Site: KITCHEN NEAR STOVE	2.	
400-05L	091902688-0005 01/29/2019 02/01/2019	0.2526 g	2.7 % wt
	Site: BACK BARN WALL/EXT		
400-06L	091902688-0006 01/29/2019 02/01/2019	0.248 g	<0.0081 % wt
	Site: BACK BARN WALL EXT EAST		
400-07L	091902688-0007 01/29/2019 02/01/2019	0.2499 g	0.22 % wt
	Site: MAIN HOUSE KITCHEN DOOR		
400-08L	091902688-0008 01/29/2019 02/01/2019	0.2576 g	0.11 % wt
	Site: MAIN HOUSE KITCHEN HALL		

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Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/01/2019 18:47:19

Non Intod Non-Inford Non Infeel 1: 30gn conser Intered Condition 123407 2 Non 2 1 17 Received Bys (sign/point) Sheet 1 of 5 EWSL Surface Area Laboratory: I 000 (Juleo 200 I Light Brown/ 2/ World 2,000 0 Estimated White Bude / 2/West 1,000 0 Murk & rown/2/wass 200 7 4" CERAMIC'TILE 200 D N000 1 Red 2/ WOO (Aley Son IS Witz Buen /2/ W006 200 A 2/1/19 년 다 Sample Description (Color /# A MAR ... Layers /Substrate) Red/2/Wood 61/62/ Sullar 1dm Date Sampled: Sampled By: Building R.M. Sampled By: Sampled By; TRIM Tille Est. WooD I TUT the sta Unell d. (Ews.) 091902688 Jar I MAN M Page 1 Of 129/19/1500 Back Barn Well/Ext. Kitchen near shore Main Have / Kitchen / Kuth Nutur Back Barren Werld Sample Location SANTA ROSA ··· Company ···· Safe ···· LEAD BASED PAINT BULK SAMPLE DATA SHEET SW EXT Trim SE Ext. Trinn SE Eat Wall Project Manager, 432435601 MPL 2 NinyoSMoore Project Name : Site Address: Project No.: -Building Number x 1400 Mr Cur APN: 11 1. 0 -1400-042 したいしのよう 140-051 428-066 140000 1956 Webster Street, Suite 400 1400-031 CHAIN OF CUSTODY INFORMATION: 1400-04L 1400-03L aution B. Sample ID OrderID: 091902688 Oakland, CA 94612 510-633-5646 (fax) Ninyo & Moore 510-633-5640 Clide

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C02162

EMISI	EMSL Analytical, 464 McCormick Street, San L		. Ci	MSL Order: ustomerID: ustomerPO:	091902967 NOMO22
	Phone/Fax: (510) 895-3675 http://www.EMSL.com	/ (510) 895-3680 sanleandrolab@emsl.com		ojectID:	
2020 C Suite	& Moore Challenger Drive 103	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 02/06/19 11:45 AM 02/04/2019		
	da, CA 94501 A ROSA; 403435001	5		1	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample De	scription Lab ID Collected Analyzed	Weight	Lead Concentration
027-01L	091902967-0001 02/04/2019 02/07/2019	0.2464 g	0.36 % wt
	Site: GARAGE DOOR EXTERIOR One or more QC samples associated with this batch was out side the control limits; results provided are valid.		
1027-02L	091902967-0002 02/04/2019 02/07/2019	0.2515 g	0.095 % wt
	Site: GARAGE DOOR EXTERIOR	14140004 0 Mil	
1027-03L	091902967-0003 02/04/2019 02/07/2019	0.255 g	0.32 % wt
	Site: GARAGE ACCESS DOOR		
1027-04L	091902967-0004 02/04/2019 02/07/2019	0.2498 g	3.5 % wt
	Site: NW EXTERIOR HOUSE CORNER	1 m 1 m 1 m 1	
027-05L	091902967-0005 02/04/2019 02/07/2019	0.2551 g	<0.0080 % wt
	Site: KITCHEN COUNTER RED CERAMIC TILE		
027-06L	091902967-0006 02/04/2019 02/07/2019	0.2505 g	0.022 % wt
	Site: RESTROOM 2 COUNTER CERAMIC TILE		
027-07L	091902967-0007 02/04/2019 02/07/2019	0.2509 g	<0.0080 % wt
	Site: RESTROOM 2 SHOWER CERAMIC TILE		
027-08L	091902967-0008 02/04/2019 02/07/2019	0.2549 g	0.097 % wt
	Site: RESTROOM 1 WINDOW SILL		
27-09L	091902967-0009 02/04/2019 02/07/2019	0.2579 g	<0.0080 % wt
š.	Site: RESTROOM 1 CERAMIC BATH TILE		

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Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/07/2019 13:06:23

Test Report ChmSnglePrm/nQC-7.32.3 Printed: 02/07/2019 1:06:23 PM

	Sheet 1 of			oratory.	W	oner	Condition	- How	Nov Lor	(NTACT	rect	1 71.50	In Infect	() MAC/	1N. 79CF	NON- TUTACT	TUTACT				
	04/402467	Laboratory: Lin S (Toi:	Fax		11:45AM		Estimated Surface Area	600SF	/00 SF	50 SF	1500 SF	100)SF	1001 CF-	1001	50-SF	205F	100 5F				
	J.	Kog v t: 214		Received by tsignooning the second	, 2/6/19	· · · · · ·	Sample Description (Color # Layers /Substrate)	WHITE/2/ WOOD	6REW/2/wood	WH 176 /2 / W000	1		. (CRANIC	21-3	CENANIC TILE	WHITE (2/ WOOD	VINK CERAMIC DATH TICE	-			
-	18-M-	Sampled By: Sampled By: Sampled By: Date Sample	+		FS.		Building Component	GARAGE	GANKG Puer TRIM	Acess. Dove	MALL.	RED	BUKEDan	SULHIM STILE	1 TILE	WINDOW	CERSANC BATH TILE		•		
	IPLEE DIAMA-SHEET	ame: SAWTA Port o.: 403 435 ou 1 anager: WPL ess:		Comparty Dale	MANTERNOOLO 3/4/19 15M		. Sample	DARAGE DOOR	GARAGE DOOR EXTERIOR	GAMBE Access DUOR	NW Exterior Hause Corner	KITCHEN CONTER	RESTRIMM 2. COUNTRR		Barrow SHOUER	. 1	KESIROON I.				. Paqe 1 Of
1	IEKISM	Project Name : Project No.: · <i>f</i> Project Manager APN: Site Address:			allia	Building	Number	1701					· ·			+	4	·	_	<u> </u>	
12967	LEADERSEDIERINGEBUERSAMPLEE	Ninyo & Moore 1956 Webster Street, Suite 400 Oakland, CA 94612 510-633-5640 510-633-5646 (fax)	HAIN OF CUSTODY INFORMATION:	(juliduidie) ka matema	X ' Dillication			710-1701	70-1701	780-17.01	1027-046	750-170	790-170	710-1701	107-991	102-201	71/1-1-70/				Ì
orderID: 091902967	LIENDIERS	Nirryo & Moore 1956 Webster Street Oakland, CA 94612 510-633-5640 510-633-5646 (fax)	CHAIN OF CUSTODY INFORMATION:	Della T	DIMONNAN					376			,	·							*

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EMSL	EMSL Analytical, Inc 464 McCormick Street, San Leandro, CA Phone/Fax: (510) 895-3675 / (510) 895	ad blef an Militer 1977	CustomerID: NO CustomerPO:	1902687 MO22
Suite 103 Alameda,	n Moore Ilenger Drive	Phone: Fax: Received: Collected:	ProjectID: (510) 343-3000 (510) 633-5646 02/01/19 1:30 PM 01/30/2019	

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Lab ID	Collected	Analyzed	Weight	Lead Concentration
OH-01L	091902687-0001	01/30/2019	02/01/2019	0.2502 g	<0.0080 % wt
	Site: OUTHOUS	E FLOOR			
OH-02L	091902687-0002	01/30/2019	02/01/2019	0.1814 g	<0.011 % wt
	Site: OUTHOUS	E WALL			
OH-03L	091902687-0003	01/30/2019	02/01/2019	0.2614 g	<0.0080 % wt
	Site: OUTHOUS	E TOILET			

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Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 02/01/2019 18:46:16

Condition Inter F. T. Received By: (significant) 1- 200m Courier 21 1 Sheet 1 of Cinst Surface Area Laboratory: Estimated Almite/2/Wellboard 100 ft RAR .. . Farc Farc Sample Description (Color # White Commictulet Brinn-burn bran bran in 12/2 Layers /Substrate) 124-in TAV 1/36/19 Sampled By: WPL Sampled By: Date Sampled: Suilding Sampled By: Certaine -Horm Celannit ··· Company ···· Date ···· ··· Date ···· ··· Page 1 Of 09/902.687 es! 1376-24 Owthere Poilet 1370-04 - Duthmen Wall Sample Location 137004 Outhener - Floor LEAD BASED PAINT BULK SAMPLE DATA SHEET 1/36/14 ANTH POSA 40343500.1 UUPL Ninyasikkane Project Manager: Project Name : Site Address: Project No.: Building Number APN: arthur 1956 Webster Street, Suite 400 0H-01L JEONHO 2H-036 CHAIN OF CUSTODY INFORMATION: Sample ID OrderID: 091902687 Oakland, CA 94612 510-633-5646 (fax) Ninyo & Moore Sw 510-633-5640 Clicic) a

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C02162

APPENDIX D

Polychlorinated Biphenyl Laboratory Analytical Report and Chain-of-Custody Records



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Pleasanton 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-91037-1 Client Project/Site: Santa Rosa

For: Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, California 94501

Attn: Bill Larkin

Athenef Sal)

LINKS

Review your project results through

Total Access

Have a Question?

Ask

The Expert

www.testamericainc.com

Visit us at:

Authorized for release by: 2/5/2019 4:06:10 PM Afsaneh Salimpour, Senior Project Manager (925)484-1919 afsaneh.salimpour@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary	3
Case Narrative	4
	5
Client Sample Results	6
Surrogate Summary	10
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Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	8

Definitions/Glossary

Client: Ninyo & Moore

Project/Site: Santa Rosa

TestAmerica Job ID: 720-91037-1

3

Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
n	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
OD	Limit of Detection (DoD/DOE)	
oq	Limit of Quantitation (DoD/DOE)	
IDA	Minimum Detectable Activity (Radiochemistry)	
IDC	Minimum Detectable Concentration (Radiochemistry)	
DL	Method Detection Limit	
L	Minimum Level (Dioxin)	
С	Not Calculated	
D	Not Detected at the reporting limit (or MDL or EDL if shown)	
2L	Practical Quantitation Limit	
c	Quality Control	
R	Relative Error Ratio (Radiochemistry)	
	Reporting Limit or Requested Limit (Radiochemistry)	
סי	Relative Percent Difference, a measure of the relative difference between two points	
F	Toxicity Equivalent Factor (Dioxin)	
à	Toxicity Equivalent Quotient (Dioxin)	

Client: Ninyo & Moore Project/Site: Santa Rosa

Job ID: 720-91037-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-91037-1

Comments

No additional comments.

Receipt

The samples were received on 1/28/2019 1:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC Semi VOA

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: PCB-01/952-NORTH WINDOW PUTTY (720-91037-1), PCB-02/952-WEST WINDOW PUTTY (720-91037-2), PCB-03/CARETAKER-EAST WINDOW PUTTY (720-91037-3), PCB-04/GREENHOUSE-NORTH WINDOW PUTTY (720-91037-4), (LCS 720-259677/2-A), (LCSD 720-259677/3-A) and (MB 720-259677/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

This Detection Summary does not include radiochemical test results.

Page 5 of 18

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TestAmerica Pleasanton

2/5/2019

C02162

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY

No Detections.

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY

No Detections.

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW PUTTY

No Detections.

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW PUTTY

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	430		290		ug/Kg	1	-	8082	Total/NA

Detection Summary

Lab Sample ID: 720-91037-2

5

Lab Sample ID: 720-91037-3

Lab Sample ID: 720-91037-4

Lab Sample ID: 720-91037-1

TestAmerica Job ID: 720-91037-1

Client: Ninyo & Moore

Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY Date Collected: 01/24/19 10:05 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-1

TestAmerica Job ID: 720-91037-1

Matrix: Solid

6

Method: 8082 - Polychlorina Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1242	ND	10.11.100	290	$\mathbf{r}:\mathbf{c} = [\mathbf{r},\mathbf{r}] + [\mathbf{r},\mathbf{r}]$	ug/Kg	100.000	02/01/19 14:53	02/05/19 12:09	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1260 .	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
Surrogate	%Recoverv	Qualifier	Limits				Prepared	Analyzed	Dil Fac
etrachloro-m-xylene	69		32 - 112				02/01/19 14:53	02/05/19 12:09	1
CB Decachlorobiphenyl	100		2 - 122				02/01/19 14:53	02/05/19 12:09	1

Client: Ninyo & Moore

Project/Site: Santa Rosa

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY Date Collected: 01/24/19 10:15 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-2

TestAmerica Job ID: 720-91037-1

Matrix: Solid

Method: 8082 - Polychlorinat Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1221	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1232	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1242	ND	er og konstandet	280	1.1.11.1.1.1.1.1.1	ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1248	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1254	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1260	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		32 - 112				02/01/19 14:53	02/05/19 12:26	1
DCB Decachlorobiphenyl	83		2 - 122				02/01/19 14:53	02/05/19 12:26	1

TestAmerica Pleasanton

2/5/2019 C02162

Client: Ninyo & Moore

Project/Site: Santa Rosa

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW

PUTTY

Date Collected: 01/24/19 13:05 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-3

TestAmerica Job ID: 720-91037-1

Matrix: Solid

Method: 8082 - Polychlorina Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1260	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Fetrachloro-m-xylene			32 - 112				02/01/19 14:53	02/05/19 12:43	1
CB Decachlorobiphenyl	99		2 - 122				02/01/19 14:53	02/05/19 12:43	1

Client: Ninyo & Moore

Project/Site: Santa Rosa

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW

PUTTY

Date Collected: 01/24/19 14:10 Date Received: 01/28/19 13:35

TestAmerica Job ID: 720-91037-1
Lab Sample ID: 720-91037-4

Matrix: Solid

Method: 8082 - Polychlorina Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	马角
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	1.1.100
PCB-1260	430		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1	服的
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
etrachloro-m-xylene	87		32 - 112			30	02/01/19 14:53	02/05/19 13:00	1	
CB Decachlorobiphenyl	110		2 - 122				02/01/19 14:53	02/05/19 13:00	1	

Client: Ninyo & Moore

Project/Site: Santa Rosa

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography Matrix: Solid Prep Type: Total/NA Percent Surrogate Recovery (Acceptance Limits) TCY1 DCRP1

		TCX1	DCBP1
Lab Sample ID	Client Sample ID	(32-112)	(2-122)
720-91037-1	PCB-01/952-NORTH WINDOW PU1	69	100
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	87	83
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	90	99
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	87	110
LCS 720-259677/2-A	Lab Control Sample	59	93
LCSD 720-259677/3-A	Lab Control Sample Dup	61	95
MB 720-259677/1-A	Method Blank	59	87

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job ID: 720-91037-1

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Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 720-25967 Matrix: Solid	7/1-A									Clie	P	e ID: Meth rep Type: Prep Batcl	Total/I
Analysis Batch: 259796		MB	MB										
Analyte			Qualifier		RL	MDL	Unit		D	Prepare	d /	Analyzed	Dil F
PCB-1016		ND	1		50		ug/Kg		-	02/01/19 1	4:53 02/0	05/19 11:18	
PCB-1010		ND			50		ug/Kg			02/01/19 1	4:53 02/0	05/19 11:18	
PCB-1221 PCB-1232		ND			50		ug/Kg			02/01/19 1	4:53 02/0	5/19 11:18	
PCB-1232 PCB-1242		ND	1	10 3 - 1 2 2	50	2 2 1 1 1 N	ug/Kg	al (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	e a e 19	02/01/19 14	4:53 02/0	5/19 11:18	(**) * I
PCB-1242 PCB-1248		ND			50		ug/Kg			02/01/19 14	4:53 02/0	5/19 11:18	
PCB-1248 PCB-1254		ND			50		ug/Kg			02/01/19 14	1:53 02/0	5/19 11:18	
PCB-1254 PCB-1260		ND			50		ug/Kg			02/01/19 14	:53 02/0	5/19 11:18	
PCB-1260							8.9						
	2 / D	1000000	MB Qualifier	Limits						Prepared	A A	nalyzed	DII F
Surrogate	%Re	covery 59	Quanner	32 - 11	2				17	02/01/19 14	distant in the local division of	5/19 11:18	
Tetrachloro-m-xylene				2 - 12						02/01/19 14		5/19 11:18	
DCB Decachlorobiphenyl		87		2 - 12	2					A	10021 1022000		
Analyte PCB-1016	_	-		Added	Resul 93.7	t Qualifi		Unit ug/Kg	-	D %Rec 70	Limits 55 - 11		
PCB-1260	*			133	114	f.		ug/Kg		85	65 - 12	D	
	LCS	LCS											
Surrogate	%Recovery	Qualif	ier	Limits									
etrachloro-m-xylene	59	1919 Contractor		32-112									
CB Decachlorobiphenyl	93			2 - 122									
ab Sample ID: LCSD 720-25967 latrix: Solid nalysis Batch: 259796	7/3-A			Spilka		LCSD		Clie	nt Sa	ample ID:	Prep	trol Samp o Type: To p Batch: 3	otal/NA
				Spike Added	Result		r U	nit	C	> %Rec	Limits	RPD	Limit
nalyte				133	102		<u>0 3 22</u>	g/Kg		76	55 - 112		20
CB-1016				133	120			g/Kg		90	65 - 120	6	20
CB-1260								ences 20 0 0					
		1000											
	LCSD			-									
rrogate	%Recovery	Qualifie	<u> </u>	Limits									
trogate ?				Limits 32 - 112 2 - 122									

QC Association Summary

Client: Ninyo & Moore

Project/Site: Santa Rosa

GC Semi VOA

Prep Batch: 259677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Total/NA	Solid	3550B	1
MB 720-259677/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 720-259677/2-A	Lab Control Sample	Total/NA	Solid	3550B	
LCSD 720-259677/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
nalysis Batch: 259796					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Total/NA	Solid	8082	259677
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Total/NA	Solid	8082	259677
20-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Total/NA	Solid	8082	259677
20-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Total/NA	Solid	8082	259677
/B 720-259677/1-A	Method Blank	Total/NA	Solid	8082	259677
CS 720-259677/2-A	Lab Control Sample	Total/NA	Solid	8082	259677
CSD 720-259677/3-A	Lab Control Sample Dup	Total/NA	Solid	8082	259677

TestAmerica Job ID: 720-91037-1

Lab Chronicle

Lab Sample ID: 720-91037-1

Lab Sample ID: 720-91037-2

Lab Sample ID: 720-91037-3

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Client: Ninyo & Moore

Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY

Date Collected: 01/24/19 10:05 Date Received: 01/28/19 13:35

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B		- · · · · ·	259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:09	DCH	TAL PLS

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY Date Collected: 01/24/19 10:15

Date Received: 01/28/19 13:35

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:26	DCH	TAL PLS

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW PUTTY Date Collected: 01/24/19 13:05

Date Received: 01/28/19 13:35

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		. 1	259796	02/05/19 12:43	DCH	TAL PLS

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW PUTTY

Lab Sample ID: 720-91037-4

Date Collected: 01/24/19 14:10 Date Received: 01/28/19 13:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082	4	1	259796	02/05/19 13:00	DCH	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

湎

Client: Ninyo & Moore Project/Site: Santa Rosa

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Program EPA Region Ide	cation Number Expiration Date
California State Program 9 245	01-31-20

Method Summary

Client: Ninyo & Moore

Project/Site: Santa Rosa

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Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
3550B	Ultrasonic Extraction	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Solid	01/24/19 10:05	01/28/19 13:35
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Solid	01/24/19 10:15	01/28/19 13:35
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Solid	01/24/19 13:05	01/28/19 13:35
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Solid	01/24/19 14:10	01/28/19 13:35

Es, Inc.	81512018
THE FANER IN EXAMPLICO	nontra 1 month) nontra 1 month) herm ID No D2511 9 D2511 9 Attentime: Attentime: MI-002, Rev. 4.18, dated
THE LEADER IN ENVIRE THE LEADER IN ENVIRE TestAmerica La Sampler: Job / SDG No.: Job / SDG No.:	ody
K E	of Custody amples are retain any. Form No. C
# 1881 X	720-91037 Chain of Custody 7 be assessed if samples are 7 Company RG company.
<u>طّات</u>	sposal (A fee may be assesses sposal (A fee may be assesses polent
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hain of Cust Perform MS / MSD (Y/ N) Perform MSD	
	Lunknown Date/Time: 1/251/19
Regulatory Program: Dw Regulatory Program: Dw Project Manager: U/P1 TeliFax: Analysis Turnaround Time CuteNDAR DAYS D wORGING DA TAT if different from Below TAT if different from Below Date Below Date Date Sample Cocom, Matri Date Date Date Date Date Date Date Date	
	S=NaOH; 6= Other See List any EPA We Company: Company:
> Select a Laboratory < Client contact Company Mame Trans Client Contact Company Mame Trans Client Contact Client Contact Company Mame Trans Client Contact Company Mame Trans Client Contact Client Contact Client Contact Client Contact Client Contact Company Mame Trans Client Contact Client Contact Company Mame Trans Client Contact Client Contact <td>1= Ice, 2= HCi; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Initification: n a lacted EPA Hazardous Waste? Please List any EPA Waster is to dispose of the sample. Defammable Defammable Commands: S M M M M M M M M Company: Company: Company: Company:</td>	1= Ice, 2= HCi; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Initification: n a lacted EPA Hazardous Waste? Please List any EPA Waster is to dispose of the sample. Defammable Defammable Commands: S M M M M M M M M Company: Company: Company: Company:
Laboratory <<<	Preservation Used: 1= Ice, 2= HCI; 3= H2SO4; 4=H1 Possible Hazard identification: Possible Hazard identification: Are any samples from a listed EPA Hazardous Waste? Comments Section if the lab is to dispose of the sample. Comments Section if the lab is to dispose of the sample. Dispetial Instructions/OC Requirements & comments: Special Instructions/OC Requirements & comments: Special Instructions/OC Requirements & comments: Special Instructions/OC Requirements & comments: Special Instructions/OC Requirements & comments: Relinquished by. What the second structure is the second
>>> Select a Laboratory <<< r> KINA RIVA ANA Client Contact FUNA ANA Client Contact ANA Client Contact ANA ANA ANA ANA ANA ANA ANA ANA ANA AN	Preservation Used: 1= Ice, 2= Possible Hazard Identification. Are any samples from a lasted El Are any samples from a lasted El Are any samples from a lasted El Are any samples from a lasted El Donor-Hazard Special Instructions/OC Requi Special Instructions/OC Requi Special Instructions/OC Requi Special Instructions/OC Requi Special Instructions/OC Requi
>>> Select a Laboratory <<< #VIA #VIA #VIA #VIA #VIA #VIA #VIA #VIA	the second se

Page 17 of 18 396

Client: Ninyo & Moore

Job Number: 720-91037-1

List Source: TestAmerica Pleasanton

Login Number: 91037 List Number: 1 Creator: Perry, Janae R

Question	Answer	Comment	M
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td> <td><u>(</u>13)</td>	N/A		<u>(</u> 13)
The cooler's custody seal, if present, is intact.	N/A		
Sample custody seals, if present, are intact.	N/A		
The cooler or samples do not appear to have been compromised or tampered with.	True	X	
Samples were received on ice.	True	(F	
Cooler Temperature is acceptable.	True		
Cooler Temperature is recorded.	True		
COC is present.	True		
COC is filled out in ink and legible.	True		- 17
COC is filled out with all pertinent information.	True		masali
s the Field Sampler's name present on COC?	True		
There are no discrepancies between the containers received and the COC.	True		8100228 21.1
Samples are received within Holding Time (excluding tests with immediate ITs)	True		1007950
Sample containers have legible labels.	True		15
Containers are not broken or leaking.	True		DOLLEGAS
ample collection date/times are provided.	True		
ppropriate sample containers are used.	True		
ample bottles are completely filled.	True		
ample Preservation Verified.	N/A	45	
here is sufficient vol. for all requested analyses, incl. any requested S/MSDs	True		
ontainers requiring zero headspace have no headspace or bubble is Smm (1/4").	True		
ultiphasic samples are not present.	True		
mples do not require splitting or compositing.	True		
sidual Chlorine Checked.	N/A		

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Pleasanton 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-91210-1 Client Project/Site: 2020 Challenger #103

For:

Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, California 94501

Attn: Bill Larkin

Authorized for release by: 2/13/2019 4:28:04 PM Brittney Abril, Project Management Assistant I (925)484-1919 brittney.abril@testamericainc.com

Designee for

Afsaneh Salimpour, Senior Project Manager (925)484-1919 afsaneh.salimpour@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



1

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Chain of Custody	14
	15

Definitions/Glossary

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

TestAmerica Job ID: 720-91210-1

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
OD	Limit of Detection (DoD/DOE)
.OQ	Limit of Quantitation (DoD/DOE)
ADA	Minimum Detectable Activity (Radiochemistry)
NDC	Minimum Detectable Concentration (Radiochemistry)
NDL	Method Detection Limit
AL.	Minimum Level (Dioxin)
IC	Not Calculated
ID	Not Detected at the reporting limit (or MDL or EDL if shown)
QL	Practical Quantitation Limit
C	Quality Control
ER	Relative Error Ratio (Radiochemistry)
L	Reporting Limit or Requested Limit (Radiochemistry)
PD	Relative Percent Difference, a measure of the relative difference between two points
EF	Toxicity Equivalent Factor (Dioxin)
EQ	Toxicity Equivalent Quotient (Dioxin)

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

Job ID: 720-91210-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-91210-1

Comments

No additional comments.

Receipt

The samples were received on 2/6/2019 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.1° C, 1.2° C and 2.5° C.

GC Semi VOA

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 0204-01PCB (720-91210-1), (LCS 720-260237/2-A), (LCSD 720-260237/3-A) and (MB 720-260237/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3550B: 8082_3550: Due to sample matrix an LCS/LCSD was performed in place of matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 720-260237.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica Job ID: 720-91210-1

Detection Summary

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

Client Sample ID: 0204-01PCB

No Detections.

Lab Sample ID: 720-91210-1

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

Client Sample ID: 0204-01PCB

Date Collected: 02/04/19 00:00 Date Received: 02/06/19 16:00

Lab Sample ID: 720-91210-1 Matrix: Solid

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Method: 8082 - Polychlor Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
PCB-1221	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
PCB-1232	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
PCB-1242	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
PCB-1248	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
PCB-1254	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
PCB-1260	ND		74		ug/Kg		02/12/19 16:13	02/13/19 13:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	85		32-112				02/12/19 16:13	02/13/19 13:00	1
DCB Decachlorobiphenyl	94		2 - 122				02/12/19 16:13	02/13/19 13:00	1

Surrogate Summary

Client: Ninyo & Moore

Project/Site: 2020 Challenger #103

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography Matrix: Solid

Prep Type: Total/NA

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TestAmerica Job ID: 720-91210-1

			Percent S	surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TCX1 (32-112)	DCBP1 (2-122)	
720-91210-1	0204-01PCB	85	94	
LCS 720-260237/2-A	Lab Control Sample	53	82	
LCSD 720-260237/3-A	Lab Control Sample Dup	69	80	
MB 720-260237/1-A	Method Blank	59	83	

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 720-2 Matrix: Solid Analysis Batch: 260263	260237/1-A	MD	мв							СІ	ient Sam	Prep T	Methoo ype: T Batch:	otal/N/
Analuta	F		Qualifier		RL	MDI	Unit		D	2	Prepared	Ana	lyzed	Dil Fa
Analyte PCB-1016		ND	quanner		50	MIDE	ug/K	a	-	0.012	/12/19 16:13	-	9 11:51	
PCB-1016 PCB-1221		ND			50		ug/K				12/19 16:13			
양 오랫 것은 것이다.		ND			50		ug/K	50			/12/19 16:13			8
PCB-1232		ND			50		ug/Kg				12/19 16:13			
PCB-1242		ND			50		ug/Kg	5			12/19 16:13			
PCB-1248		ND			50		ug/Kg				12/19 16:13			,
PCB-1254		1000000			50		ug/Kg				12/19 16:13			
PCB-1260		ND		3	50		uginį	3		021	12/19 10.13	02/13/1	511.51	
		102425	МВ									8 4		12311722
Surrogate	%Reco	overy	Qualifier								Prepared		yzed	Dil Fac
Tetrachloro-m-xylene		59		32 - 112							12/19 16:13			1
DCB Decachlorobiphenyl		83		2 - 122	?					02/	12/19 16:13	02/13/1	9 11:51	1
Analysis Batch: 260263 Analyte PCB-1016 PCB-1260		LCS		Spike Added 133 133			ifier	Unit ug/Kg ug/Kg		D	%Rec 71 82	%Rec. Limits 55 - 112 65 - 120		1
Surrogate	%Recovery		ifier	Limits										
Tetrachloro-m-xylene	53	quan		32 - 112										
DCB Decachlorobiphenyl	82			2 - 122										
Lab Sample ID: LCSD 720 Matrix: Solid Analysis Batch: 260263	-260237/3-A			Spike	LCSD	LCSE		lient Sa	amp	ole		Control Prep Ty Prep B %Rec.	pe: Tot	tal/NA
Analyte				Added	Result	Quali	fier	Unit		D	%Rec	Limits	RPD	Limit
PCB-1016				133	102			ug/Kg	_	-	76	55 - 112	7	20
PCB-1260				133	110			ug/Kg			82	65 - 120	0	20
	LCSD	LCSD	l .											
Surrogate		Qualit		Limits										
etrachloro-m-xylene	69		_	32-112										
CB Decachlorobiphenyl	80			2-122										

TestAmerica Job ID: 720-91210-1

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TestAmerica Pleasanton

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2/13/2019 C02162

QC Association Summary

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

GC Semi VOA

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91210-1	0204-01PCB	Total/NA	Solid	3550B	
MB 720-260237/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 720-260237/2-A	Lab Control Sample	Total/NA	Solid	3550B	
0000 700 000007/0 A	Lab Control Sample Dup	Total/NA	Solid	3550B	
LCSD 720-260237/3-A nalysis Batch: 2602		TOTAWNA	Solid	33305	
nalysis Batch: 2602	63		Matrix	Method	Prep Batch
nalysis Batch: 2602 Lab Sample ID		Prep Type Total/NA			Prep Batch 260237
nalysis Batch: 2602 Lab Sample ID 720-91210-1	Client Sample ID	Prep Type	Matrix	Method	the second s
	Client Sample ID 0204-01PCB	Prep Type Total/NA	Matrix Solid	Method 8082	260237

TestAmerica Job ID: 720-91210-1

Lab Chronicle

TestAmerica Job ID: 720-91210-1

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

Client Sample ID: 0204-01PCB

Lab Sample ID: 720-91210-1 Matrix: Solid

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Date Collected: 02/04/19 00:00 Date Received: 02/06/19 16:00

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B		-	260237	02/12/19 16:13	NDU	TAL PLS
Total/NA	Analysis	8082		1	260263	02/13/19 13:00	DCH	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Ninyo & Moore

TestAmerica Job ID: 720-91210-1

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Project/Site: 2020 Challenger #103

Laboratory: TestAmerica Pleasanton Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20
The following analytes the agency does not o	are included in this report, but the la ffer certification.	pratory is not certified by the	e governing authority. This	list may include analytes for whic

Method Summary

Client: Ninyo & Moore

Project/Site: 2020 Challenger #103

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
3550B	Ultrasonic Extraction	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

TestAmerica Job ID: 720-91210-1

Client: Ninyo & Moore Project/Site: 2020 Challenger #103

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-91210-1	0204-01PCB	Solid	02/04/19 00:00	02/06/19 16:00

TestAmerica Pleasanton

13

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THE LLADER IN ENVIRONMENTAL TESTING Cedar Falls, IA Laboratory 704 Enterprise Drive Cedar Falls, IA 50613 Ph: 1-800-750-2401 or (319) 277-2401 Fax: (319) 277-2425 www.testamericainc.com Page: of Sampler: Project Name: Lob Dato Sample Number: Sampled Identification	20-91210 Send Report To: BIL I LAPPINI Send Involce To: SMAL Company: NINYO + MOOR E Address: 2020 MARMagar #703, Allerand, NA 94501 City, State, Zip: Fax: 343-3341 Phone. 512/32(-5.34) Fax: 343-3341 Email Address: With Gue Project No.: Nodia Type Analysis Media Type Analysis Project No.: P.O. #:	
$\frac{((nternal)}{(use Only))} = \frac{2/4/19}{2/4/19} = \frac{2}{100} = \frac{1000}{100}$	BULK PLES/CRARUEZ JAA N/A	9
		13 14
Sample Receipt Temperature*C Sample Seals: YesNo Sample Seals Intact: YesNo Total # of Samples:	GIE 2.52, 1.22 Reporting/Deliverables TurnyAround Time Requested Hardcopy Results. Yes No Ne Next Day by 6pm 2 Business Days E-Mail Results. Yes No Standard 5 Business Days EDD: Yos No Type Data Package: Standard Level II	
Instructions / Special Requirements:	Level III Level IV Subject to scheduling and availability (RUSH surcharges apply) F.y.n. (U.Y 5 - 0 G.W. TAT Shimples Rellinguisheck By, The factor of the factor	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-91210-1

Login Number: 91210 List Number: 1 Creator: Perry, Janae R

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Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey<br meter.	/ N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	9 E
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested //S/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is 6mm (1/4").	True	
Aultiphasic samples are not present.	True	
amples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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APPENDIX E

CDPH Form 8552 - Lead Hazard Evaluation Report

California Department of Public Health

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

	1/29/19
Section 1 — Date of Lead Hazard Evaluation Section 2 — Type of Lead Hazard Evaluation	(Check one box only)
Lead Inspection Risk assessment	Clearance Inspection Other (specify)
Section 3 — Structure Where Lead Hazard Eva	
Address [number, street, apartment (if applicable)]	Santa Rosa Sonoma 25401
Construction date (year) Type of structure	Children living in structure?
Multi-unit buildir Multi-unit buildir Single family dw	
Section 4 — Owner of Structure (if business/ag	jency, list contact person)
Name City of Santa Rosa (Arm Address [number, street, apartment (if applicable)] 69 Stony Civele	nt Bailey 707/543-4508 City Santa Rosa CA 210 Code Santa Rosa CA 25401
Section 5 - Results of Lead Hazard Evaluation	(check all that apply)
No lead-based paint detected 🛛 🗹 Intact	lead-based paint detected
No lead hazards detected	
Section 6 — Individual Conducting Lead Hazard	Evaluation
	Telephone number
William P. Larlan	510/343-3000
ddress [number, street, apartment (if applicable)]	City Alameta CA Zip Code 14501
DPH certification number 5543	Signature Date 2/15/19
ame and CDPH certification number of any other individua	Is conducting sampling or testing (if applicable)
ction 7 — Attachments	
lead-based paint; Each testing method, device, and sampling procedu	icating the specifc locations of each lead hazard or presence of ure used; oratory results, including laboratory name, address, and phone number.
t copy and attachments retained by inspector	Third copy only (no attachments) mailed or faxed to:
cond copy and attachments retained by owner	California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656

ţ,

TRANSMISSION VERIFICATION REPORT

TIME	:	02/14/2019 01:14
NAME	:	NINYO AND MOORE
FAX	:	510-633-5646
TEL	:	510-633-5640
SER.#	:	BROD5J252210

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE 02/14 01:14 6205656 00:00:21 01 OK STANDARD ECM



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HAZARDOUS BUILDING MATERIALS SURVEY

Various Structures Doyle Park 700 Doyle Park Drive Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 12, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY

Various Structures Doyle Park 700 Doyle Park Drive Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 12, 2019 | Project No. 403435001

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
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FIGURES

- 1 Site Location
- 2 Site Vicinity
- 3 Sample Locations

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- A Certifications
- B Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C – Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

D - CDPH Form 8552 - Lead Hazard Evaluation Report

1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at five structures located within Doyle Park located at 700 Doyle Park Drive in Santa Rosa, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the Doyle Park structures.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the Doyle Park structures at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 24, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the former liquor store building to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the site structures to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of 41 bulk samples of suspect ACMs and submittal of this sample to a certified, independent laboratory for analysis of asbestos content.

- Collection of 22 suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of suspect bulk PCB sample (if any) and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The five structures surveyed as part of this HBMS included: a storage building (D1) in the eastern portion of Doyle Park just south of the Hearn Avenue entrance, encompassing approximately 880 square feet; a concession stand (CS) located along the right field line (west) of the baseball field which, encompassing approximately 625 square feet; a structure called the "Log Cabin" (LC) located in the northern area of Doyle Park near the Doyle Park Drive entrance, encompassing approximately 275 square feet; and two additional storage buildings (both designated S1 in Table 1) located at the end of the right field line of the baseball field in the southern area of Doyle Park, encompassing approximately 3,260 and 100 square feet, respectively. All of these structures are vacant. In general, building finishes include bare and painted wood walls and ceilings, gypsum wallboard walls, painted and bare concrete floors, textured concrete masonry unit (CMU) walls, Transite sheeting, vinyl floor sheeting (VFS) and associated mastic and built-up roofing materials.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 24, 2019, the five Doyle Park structures were assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM and LCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. The Doyle Park structures were sampled on the same day as the Caretaker's House in Howarth Park. As such, some of the reported asbestos and lead analytical results and associated chains-of-custody related to the Caretaker's House/Howarth Park sampling activities have been edited (x'd out), leaving only the asbestos and lead analytical results related to the Doyle Park structures as valid for this report. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Forty-one bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000-point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of

the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

Twenty-two bulk suspect LCM samples were collected and analyzed. After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the buildings are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C. Sample locations are shown on Figure 3.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

No suspect PCBCM were observed during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the five Doyle Park structures.

6 FINDINGS

A HBMS was performed at the five Doyle Park structures to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACMs and LCMs are located within the surveyed Doyle Park structures. Miscellaneous

hazardous building materials observed at the Doyle Park structures included fluorescent light tubes and associated light ballasts.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

- Approximately 10 square feet of roof penetration mastic (sample D1-11) located on the roof of the D1 structure, containing 2% chrysotile asbestos.
- Approximately 20 square feet of roof penetration mastic (sample D1-16) located on the roof of the CS structure, containing 4% chrysotile asbestos.
- Approximately 250 square feet of vinyl floor sheeting (sample D1-32) located in the northwest area of the larger S1 structure, containing 25% chrysotile asbestos.
- Approximately 1,500 square feet of Transite siding (sample D1-33) observed in the bathroom and eastern storage areas of the larger S1 structure, containing 30% chrysotile asbestos.
- Approximately 20 square feet of roof penetration mastic (sample D1-41) observed on the roof area of the LC structure, containing 8% chrysotile asbestos.

Additionally, three concrete samples collected from the D1 structure were sampled and reported at <1% asbestos. This material was re-analyzed via PLM 1,000-point quantitation and reported at <0.1% asbestos.

6.2 Lead-Containing Materials

Twenty-one paint chip samples and one roof cladding sample were collected for analysis of lead content. Six of the twenty-one paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). Yellow paint from an entry step of Building D1 (sample D1-05P) was reported at 2.8% by weight (or 28,000 mg/kg); yellow paint from an exterior steel cabinet cover on the northwest side of Building D1 (sample D1-06P) was reported at 9.6% by weight (or 96,000 mg/kg); beige paint from the west exterior wall of Building D1 (sample D1-08P) was reported at 4.5% by weight (or 45,000 mg/kg); brown paint from the south exterior wall of the LC building (sample D1-21P) was reported to contain lead at 0.78% by weight (or 7,800 mg/kg); and brown paint from the east exterior wall of the LC building (sample D1-22P) was reported to contain lead at 1.6% by weight (or 16,000 mg/kg). These paint samples are considered LBP.

Seven other paint samples (D1-01P, D1-03P, D1-04P, D1-07P, D1-15P, D1-17P, and D1-20P) were reported with lead concentrations ranging from 0.028% by weight (or 280 mg/kg) to 0.48%

by weight (or 4,800 mg/kg). These paint samples are considered LCP. The remaining nine samples were reported at less than their associated reporting limits. Cladding (sample D1-16P) associated with nails/nail holes holding the metal corrugated roofing down on the larger S1 building was reported at 36% by weight (or 360,000 mg/kg).

Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed. A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix D.

6.3 **Potential Polychlorinated Biphenyl-Containing Materials**

As stated above, no suspect bulk PCBCM was observed during our site sampling activities.

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 58 fluorescent light bulbs and 29 associated light ballasts were observed during our sampling activities. Please see Table 3.

7 **RECOMMENDATIONS**

Since ACMs and LCMs have been reported within the Doyle Park structures, the following recommendations and precautions are provided:

- The identified ACMs at the Doyle Park structures should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that this ACMs should not be disturbed. Any ACMs in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACMs, a licensed asbestos abatement removal contractor should remove the ACMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACMs. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. While Ninyo & Moore provided an estimate of the quantity of ACMs present at the Doyle Park structures (Table 1), it is the abatement contractor's responsibility to assess the actual ACM quantity present.
- The identified LCMs reported at the Doyle Park structures should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor

should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. *While Ninyo & Moore provided an estimate of the quantity of LCMs present at the Doyle Park structures (Table 2), it is the responsibility of abatement contractors to assess the actual LCM quantities present.*

- Prior to demolition renovation activities. potential mercury-containing or thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and FreonTM-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the Doyle Park structures, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 **LIMITATIONS**

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

hazardous building materials are approximate. It is the contractor's responsibility to assess the actual quantities of hazardous building materials present.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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

Doyle Park Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
D1-01	D1	Exterior Northwest Corner	Concrete Masonry Units with Texture	N/A	N/A	N/A	Texture = ND Concrete = ND
D1-02	D1	Exterior Southeast Corner	Concrete Masonry Units with Texture	N/A	N/A	N/A	Texture = ND Concrete = ND
D1-03	D1	Exterior Northeast Corner	Concrete Masonry Units with Texture	N/A	N/A	N/A	Texture = ND Concrete = ND
D1-04	D1	Exterior Southwest Corner	Concrete Masonry Units with Texture	N/A	N/A	N/A	Texture = ND Concrete = ND
D1-05	D1	Exterior Northeast Corner	Mortar	N/A	N/A	N/A	Mastic = ND Mortar = ND
D1-06	D1	Exterior Southwest Corner	Caulking	N/A	N/A	N/A	ND
D1-07	D1	Exterior Southwest Corner	Mortar	N/A	N/A	N/A	ND
D1-08	D1	Exterior Northeast Corner	Mortar	N/A	N/A	N/A	Mastic = ND Mortar = ND
D1-09	D1	Main Doorway Step	Concrete	N/A	N/A	N/A	Texture = ND Concrete = ND
D1-10	D1	North Roof Area	Roof Assembly	N/A	N/A	N/A	Shingle = ND Tar = ND Felt = ND
D1-11	D1	Northeast Roof Area	Roof Penetration Mastic	N	10 SF	Good	2 % CH
D1-12	D1	East Area Concrete Pad	Concrete	N/A	N/A	N/A	ND
D1-13	CS	Above Doorway	Mortar Fill	N/A	N/A	N/A	ND
D1-14	CS	Exterior Northwest Corner of Building	Cinder Block	N/A	N/A	N/A	ND
D1-15	CS	Exterior Northwest Corner of Building	Mortar Associated with D1-14	N/A	N/A	N/A	ND
D1-16	CS	Roof, Northwest	Penetration Mastic	N	20 SF	Good	Mastic = 4% CH Shingle = ND Tar = ND Felt = ND
D1-17	CS	Roof, Northwest	Roof Pebbles	N/A	N/A	N/A	ND
D1-18	CS	Roof, Northwest	Paper Assembly	N/A	N/A	N/A	Tar = ND Paper = ND
D1-19	CS	Under West Eave	Patch Mortar	N/A	N/A	N/A	ND
D1-20	CS	Under Southwest Eave	Patch Mortar	N/A	N/A	N/A	Mortar = ND Mortar 2 = ND Mortar 3 = ND

Doyle Park Structures Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
D1-21	CS	Exterior Southwest Corner of Building	Cinder Block	N/A	N/A	N/A	ND
D1-22	CS	Exterior Southwest Corner of Building	Mortar Associated with D1-21	N/A	N/A	N/A	ND
D1-23	CS	Southeast Corner Support Beam	Cinder Block	N/A	N/A	N/A	ND
D1-24	S1	Northwest Roof Section	Roof Assembly	N/A	N/A	N/A	ND
D1-25	S1	West Roof/ Tar and Gravel	Roof Assembly	N/A	N/A	N/A	Shingle = ND Felt = ND Paper = ND
D1-26	S 1	East Roof (Covered by Metal)	Roof Assembly	N/A	N/A	N/A	ND
D1-27	S1	East Roof (Covered by Metal)	Black Penetration Mastic	N/A	N/A	N/A	ND
D1-28	S1	East Roof (Covered by Metal)	Silver Nail Head Mastic	N/A	N/A	N/A	ND
D1-29	S1	Interior Northwest Room (Interior Wall)	Vapor Barrier	N/A	N/A	N/A	ND
D1-30	S1	North Roof Area	Roof Assembly	N/A	N/A	N/A	Shingle = ND Shingle 2 = ND Felt = ND
D1-31	S1	Interior Hallway	Chalkboard	N/A	N/A	N/A	ND
D1-32	S1	Interior Northwest Room Floor	Vinyl Floor Sheeting and Mastic	Y	250 SF	Poor	VFS = 25% CH Mastic = <1% CH Pendin
D1-33	S1	Bathroom	Transite Siding	Ν	1,000 SF	Good	30% CH
D1-34	S1	North Room Ceiling	Ceiling Material	N/A	N/A	N/A	ND
D1-35	S1	Bathroom Entry	Concrete Curb	N/A	N/A	N/A	Concrete = <1% CH (<0.1% CH*) Skim Coat = ND
D1-36	S1	Work Area	Concrete Floor	N/A	N/A	N/A	<1% CH (<0.1% CH*)
D1-37	S1	Work Area	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
D1-38	S1	Work Area	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
D1-39	LC	Middle of Floor	Concrete	N/A	N/A	N/A	<1% CH (<0.1% CH*)
D1-40	LC	Roof/Southeast Corner	Roof Assembly	N/A	N/A	N/A	ND

Doyle Park Structures

Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

Sample I.D.	Building	Material Location	Sample Description	Friable Y/N	Quantity	Condition	Asbestos Content
D1-41	LC	Roof/Southeast Corner	Roof Penetration Mastic	N	20 SF	Good	8% CH

Notes:

Analysis via EPA Method 600/R-93/116

* = re-analysis via PLM 1,000-Point Quantitation

NA = Not Applicable

ND = None detected

CH = Chrysotile

BOLD indicates sample is an asbestos containing material (> 1% asbestos)

Estimated quantities are not intended for use in bidding calculations.

Doyle Park Structures Santa Rosa, California

Table 2 - Lead-Containing Material Sampling Results

Sample I.D. Building		Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t	Condition	Total Lead	
1.D.				Substrate)	[SF] or Linear Feet[LF])		Weight Percent	Parts per Million (or mg/kg)
D1-01P	D1	Base of North Exterior Wall	Wall	Tan/2/Concrete Masonry Units	500 SF	Non-Intact	0.48	4,800*
D1-02P	D1	North Exterior Window Screen	Screen	Brown-Red/2/Steel	100 SF	Non-Intact	< 0.0080	<80
D1-03P	D1	Exterior Northwest Corner	Wall	Beige/1/Concrete Masonry Units	1,000 SF	Non-Intact	0.089	890*
D1-04P	D1	Exterior Southwest Corner	Wall	Beige/1/Concrete Masonry Units	Same as D1-03P	Non-Intact	0.081	810*
D1-05P	D1	Entry Step	Floor	Yellow/1/Concrete	6 SF	Intact	2.8	28,000
D1-06P	D1	Exterior Steel Cabinet/Northwest	Cover	Yellow/2/Metal	10 SF	Intact	9.6	96,000
D1-07P	D1	Exterior Steel Cabinet/Northwest	Cover	White/2/Metal	20 SF	Intact	0.028	280*
D1-08P	D1	Exterior Wall/West	Wall	Beige/2/Wood	150 SF	Intact	4.5	45,000
D1-09P	D1	Exterior Trim/ Rollup Door/West	Trim	Brown/2/Wood	30 SF	Intact	< 0.0080	<80
D1-10P	CS	Door Frame	Frame	Green/2/Metal	60 SF	Non-Intact	< 0.0080	<80
D1-11P	CS	East Window Cover	Cover	Green/2/Steel	150 SF	Non-Intact	< 0.0080	<80
D1-12P	CS	Interior Walls	Wall	White/2/Wood	600 SF	Intact	< 0.0080	<80
D1-13P	S1	Work Area	Curb	Yellow/1/Concrete	20 SF	Intact	< 0.0080	<80
D1-14P	S1	Exterior Northwest Corner Trim	Trim	Brown/2/Wood	100 SF	Intact	< 0.0097	<97
D1-15P	S1	Exterior North Siding	Wall	Tan/2/Wood	1,000 SF	Intact	0.01	100*
D1-16P	S 1	North Roof	Cladding	Cladding Around Nail Holes	20 SF	Good	36	360,000
D1-17P	S1	North Roof Facia	Facia	Beige-Olive/2/Wood	200 SF	Intact	0.18	1,800*
D1-18P	S2	Near Door/East Side	Wood Trim	Brown/1/Wood	100 SF	Intact	< 0.011	<110
D1-19P	S2	South Side Wall	Wall	Beige/1/Wood	500 SF	Intact	< 0.0080	<80
D1-20P	LC	Interior South Wall	Wall	White/1/Wood	100 SF	Intact	0.27	2,700*
D1-21P	LC	Exterior South Wall	Wall	Brown/2/Wood	1,000 SF	Non-Intact	0.78	7,800
D1-22P	LC	Exterior East Wall	Wall	Brown/2/Wood	1,000 SF	Non-Intact	1.6	16,000

NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B).

mg/kg = Milligrams per kilogram

SF = Square feet

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight)

Bold concentrations indicate lead-based materials

Estimated quantities are not intended for use in bidding calculations.

Doyle Park Structures Santa Rosa, California

Table 3 - Miscellaneous	Hazardous	Building	Materials	Survey F	Results
i ubic o miliocentaneous	iiuzui uous	Dunung	Triater faib	Sur veg r	courto

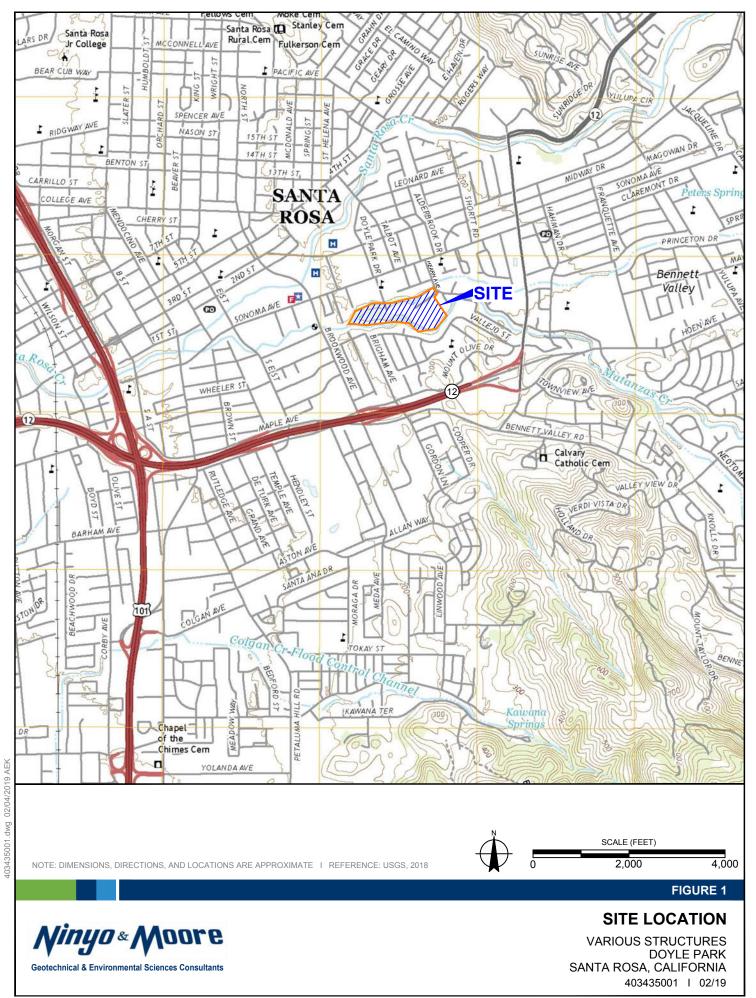
Location	Number of Transformers	Number of Light Ballasts	Number of Mercury Thermostats	Number of A/C Units	No. of Fluorescent Light Tubes	Number of Exit Signs	No. of Freon Refrigerator Systems
Doyle Park Structures	0	29	0	0	58	0	0

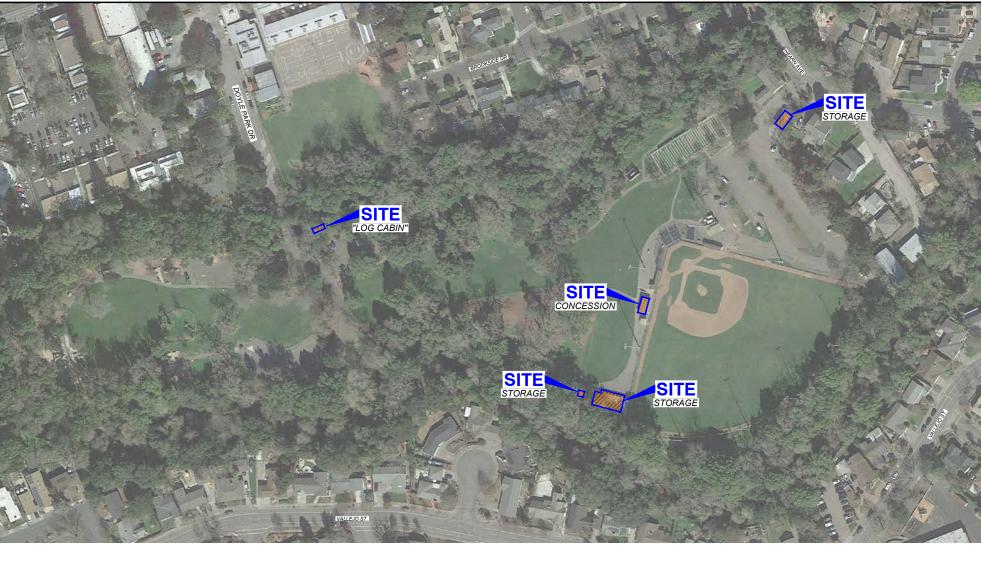
NOTES:

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

FIGURES





NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE | REFERENCE: GOOGLE EARTH, 2018

Ninyo & Moore

Geotechnical & Environmental Sciences Consultants

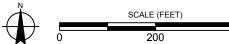


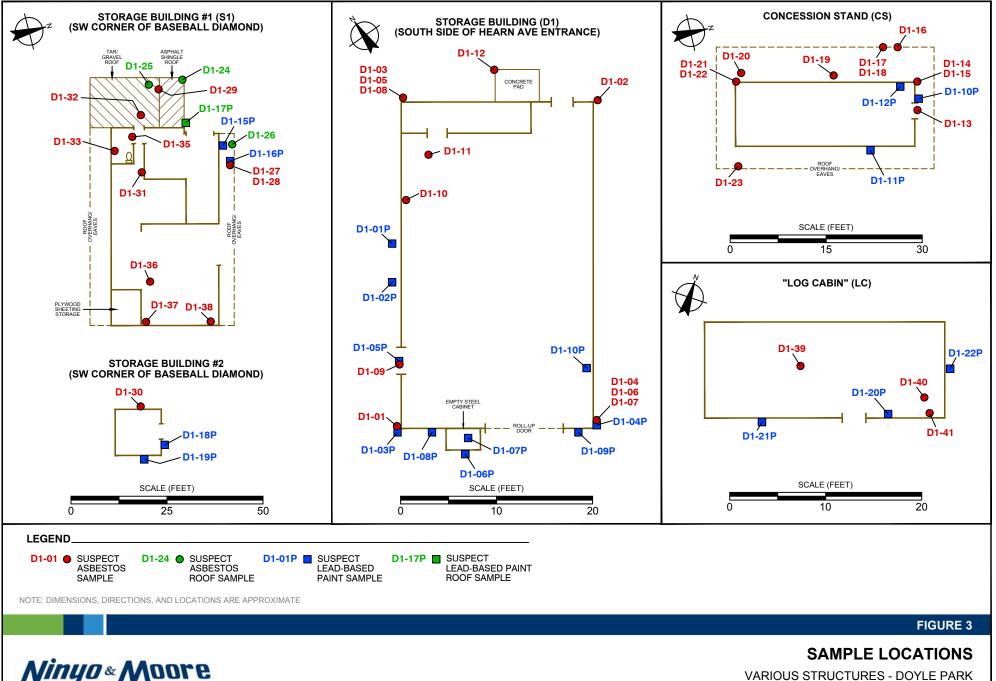
FIGURE 2

400

SITE VICINITY

VARIOUS STRUCTURES - DOYLE PARK 700 DOYLE PARK DRIVE SANTA ROSA, CALIFORNIA 403435001 I 02/19





2019 AEK

dwg

403435001

Geotechnical & Environmental Sciences Consultants

ARIOUS STRUCTURES - DOYLE PARK 700 DOYLE PARK DRIVE SANTA ROSA, CALIFORNIA 403435001 I 02/19

APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

193

October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Ifin

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



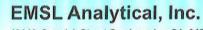
APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

HMELE	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	01/31/2019
	Alameda, CA 94501	Collected Date:	01/24/2019
Project:	SANTA ROSA 403435001		

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

Sample	Description	Appearance	<u>Non-Asbest</u> % Fibrous	os % Non-Fibrous	<u>Asbestos</u> % Type
D1-01-Texture	D1 - EXTERIOR NORTHWEST CORNER	Green Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
091902469-0001 D1-01-Concrete 091902469-0001A	D1 - EXTERIOR NORTHWEST CORNER	Homogeneous Gray/Black Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-fibrous (Other)	None Detected
D1-02-Texture	D1 - EXTERIOR SOUTHEAST CORNER	Green Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
D1-02-Concrete	D1 - EXTERIOR SOUTHEAST CORNER	Gray/Black Non-Fibrous Homogeneous		35% Quartz 40% Ca Carbonate 25% Non-fibrous (Other)	None Detected
D1-03-Texture	D1 - EXTERIOR NORTHEAST CORNER	Green Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
D1-03-Concrete	D1 - EXTERIOR NORTHEAST CORNER	Gray/Black Non-Fibrous Homogeneous		35% Quartz 40% Ca Carbonate 25% Non-fibrous (Other)	None Detected
D1-04-Texture	D1 - EXTERIOR SOUTHWEST CORNER	Green Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
D1-04-Concrete	D1 - EXTERIOR SOUTHWEST CORNER	Gray/Black Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-fibrous (Other)	None Detected
D1-05-Mastic	D1 - EXTERIOR NORTHEAST CORNER	White Non-Fibrous Homogeneous		10% Quartz 40% Matrix 50% Non-fibrous (Other)	None Detected
01-05-Mortar	D1 - EXTERIOR NORTHEAST CORNER	Gray/White Non-Fibrous Homogeneous		25% Quartz 30% Ca Carbonate 45% Non-fibrous (Other)	None Detected
01902489-0006	D1 - EXTERIOR SOUTHWEST CORNER	White Non-Fibrous Homogeneous	10% Fibrous (Other)	50% Matrix 40% Non-fibrous (Other)	None Detected
11-07	D1 - EXTERIOR SOUTHWEST CORNER	Gray/White Non-Fibrous Homogeneous		25% Quartz 40% Ca Carbonate 35% Non-fibrous (Other)	None Detected
1-08-Mastic	D1 - EXTERIOR NORTHEAST CORNER	White Non-Fibrous Homogeneous		15% Quartz 60% Matrix 25% Non-fibrous (Other)	None Detected
1-08-Mortar	D1 - EXTERIOR NORTHEAST CORNER	Gray Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1-09-Texture	D1 - MAIN DOORWAY STEP	Green Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
1-09-Concrete	D1 - MAIN DOORWAY STEP	Gray Non-Fibrous Homogeneous		45% Quartz 30% Ca Carbonate 25% Non-fibrous (Other)	None Detected



EMSL

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902469 Customer ID: NOMO22 **Customer PO: Project ID:**

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

			Non-Asbestos			
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
D1-10-Shingle	D1 - NORTH ROOF AREA	Black Fibrous Homogeneous	15% Glass	15% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected	
D1-10-Tar	D1 - NORTH ROOF AREA	Black Non-Fibrous		10% Ca Carbonate 70% Matrix	None Detected	
091902469-0010A		Homogeneous		20% Non-fibrous (Other)		
D1-10-Felt	D1 - NORTH ROOF AREA	Black Non-Fibrous	30% Cellulose	50% Matrix 20% Non-fibrous (Other)	None Detected	
091902469-0010B		Homogeneous		10% Ca Carbonate	2% Chrysotile	
D1-11 091902469-0011	D1 - NE ROOF AREA	Black Non-Fibrous Homogeneous		70% Matrix 18% Non-fibrous (Other)	2% Citrysolie	
D1-12	D1 - EAST AREA CONCRETE PAD	Gray Non-Fibrous		25% Quartz 30% Ca Carbonate	None Detected	
091902469-0012		Homogeneous		45% Non-fibrous (Other)		
D1-13 091902469-0013	CS - ABOVE DOORWAY	Brown Non-Fibrous Homogeneous		30% Quartz 35% Ca Carbonate 35% Non-fibrous (Other)	None Detected	
D1-14	CS - EXT NW CORNER OF	Gray Non-Fibrous		25% Quartz 50% Ca Carbonate	None Detected	
091902469-0014	BUILDING	Homogeneous		25% Non-fibrous (Other)	Neno Detected	
D1-15 091902469-0015	CS - EXT NW CORNER OF BUILDING	Gray Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-fibrous (Other)	None Detected	
D1-16-Mastic	CS - ROOF, NORTHWEST	Gray/Black Non-Fibrous		10% Ca Carbonate 70% Matrix	4% Chrysotile	
91902469-0016	, j.	Homogeneous		16% Non-fibrous (Other)		
01-16-Shingle	CS - ROOF, NORTHWEST	Black Fibrous	15% Glass	10% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected	
91902469-0016A	00 0005	Homogeneous		80% Matrix	None Detected	
01-16-Tar 91902469-0016B	CS - ROOF, NORTHWEST	Black Non-Fibrous Homogeneous		20% Non-fibrous (Other)	None Deletted	
01-16-Felt	CS - ROOF, NORTHWEST	Black Fibrous	15% Glass	70% Matrix 15% Non-fibrous (Other)	None Detected	
91902469-0016C		Homogeneous				
11-17 01902469-0017	CS - ROOF, NORTHWEST	Brown/Black Non-Fibrous Homogeneous		50% Quartz 15% Ca Carbonate 35% Non-fibrous (Other)	None Detected	
an antina anna	CS POOF	Black		80% Matrix	None Detected	
1-18-Tar 1902469-0018	CS - ROOF, NORTHWEST	Non-Fibrous Homogeneous		20% Non-fibrous (Other)		
1-18-Paper	CS - ROOF, NORTHWEST	Black Fibrous	15% Glass	70% Matrix 15% Non-fibrous (Other)	None Detected	
1902469-0018A		Homogeneous				
1-19 1902469-0019	CS - UNDER WEST EAVE	Brown Non-Fibrous Homogeneous		25% Quartz 60% Ca Carbonate 15% Non-fibrous (Other)	None Detected	
	CS - UNDER SW	Gray		20% Quartz	None Detected	
1-20-Mortar	EAVE	Non-Fibrous Homogeneous		20% Gypsum 60% Non-fibrous (Other)		
ark Gray		Brown	- Ann	20% Quartz	None Detected	
-20-Mortar 2	CS - UNDER SW EAVE	Brown Non-Fibrous Homogeneous		20% Quartz 20% Gypsum 60% Non-fibrous (Other)	HOLE DEFENDED	



464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902469 Customer ID: NOMO22 **Customer PO:**

Project ID:

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

S 11			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
D1-20-Mortar 3 091902469-0020B Light Gray	CS - UNDER SW EAVE	Gray Non-Fibrous Homogeneous	1 3	10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected
D1-21	CS - EXT SW CORNER OF BUILDING	Brown/Gray Non-Fibrous Homogeneous	4	5% Quartz 20% Gypsum 75% Non-fibrous (Other)	None Detected
D1-22	CS - EXT SW CORNER OF BUILDING	Gray Non-Fibrous Homogeneous		10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected
D1-23	CS - SOUTHEAST CORNER SUPPORT BEAM	Brown/Gray/Black Non-Fibrous Homogeneous		20% Quartz 25% Gypsum 55% Non-fibrous (Other)	None Detected
091902469-0023 D1-24	S1 - NW ROOF SECTION	Black Fibrous	4% Cellulose	80% Matrix 16% Non-fibrous (Other)	None Detected
091902469-0024 D1-25-Shingle 091902469-0025	S1 - WEST ROOF TAR AND GRAVEL	Homogeneous White/Black/Green Fibrous Homogeneous	5% Cellulose	5% Quartz 30% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected
D1-25-Felt	S1 - WEST ROOF TAR AND GRAVEL	Black Fibrous	40% Cellulose	20% Ca Carbonate 40% Matrix	None Detected
991902469-0025A D1-25-Paper	S1 - WEST ROOF TAR AND GRAVEL	Homogeneous Black Fibrous	50% Cellulose	50% Matrix	None Detected
91902469-0025B D1-26	S1 - EAST ROOF (COVERED BY METAL)	Homogeneous Black Fibrous Homogeneous	50% Cellulose	50% Matrix	None Detected
91902469-0026)1-27 91902469-0027	S1 - EAST ROOF (COVERED BY METAL)	Black Non-Fibrous Homogeneous	5% Cellulose	30% Ca Carbonate 60% Matrix 5% Non-fibrous (Other)	None Detected
01-28	S1 - EAST ROOF (COVERED BY METAL)	Silver Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
1-29	S1 - INT NW ROOM (INT WALL)	Brown/Black Fibrous Homogeneous	60% Cellulose	40% Matrix	None Detected
1-30-Shingle 1902469-0030	S2 - NORTH ROOF AREA	Brown/Black Fibrous Homogeneous	5% Cellulose	5% Quartz 30% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected
1-30-Shingle 2	S2 - NORTH ROOF AREA	Black Fibrous Homogeneous	20% Glass	30% Ca Carbonate 40% Matrix 10% Non-fibrous (Other)	None Detected
1-30-Felt	S2 - NORTH ROOF AREA	Black Fibrous Homogeneous	60% Cellulose	40% Matrix	None Detected
-31	S1 - INT HALLWAY	Green Non-Fibrous Homogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
902469-0031 -32-Vinyl Sheet poring	S1 - INT NW ROOM FLOOR	Tan Fibrous Homogeneous	5% Cellulose	40% Matrix 30% Non-fibrous (Other)	25% Chrysotile

Initial report from: 01/31/2019 18:09:21

EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

EMSL

Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com EMSL Order: 091902469 Customer ID: NOMO22 Customer PO:

Project ID:

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

			Non-Asbe	stos	Asbestos
ample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
01-32-Mastic	S1 - INT NW ROOM FLOOR	Brown Non-Fibrous	2% Cellulose	70% Matrix 28% Non-fibrous (Other)	<1% Chrysotile
091902469-0032A	unt of inconcepts attached	Homogeneous			
Result includes a small amo	ount of inseparable attached m				
D1-33	S1 - BATHROOM	Gray Fibrous		60% Ca Carbonate 10% Non-fibrous (Other)	30% Chrysotile
091902469-0033		Homogeneous			
D1-34 091902469-0034	S1 - NORTH ROOM CEILING	Brown Fibrous Homogeneous	100% Cellulose		None Detected
provide a second second second second	OI DATUDOON	Homogeneous		20% Quartz	<1% Chrysotile
D1-35-Concrete	S1 - BATHROOM ENTRY	Gray/Black Non-Fibrous Homogeneous		80% Non-fibrous (Other)	CT/0 Chrysome
a fan an de ser an d	DA BATUDOOM	Contraction of the second state of the second		20% Quartz	None Detected
D1-35-Skim Coat	S1 - BATHROOM ENTRY	Gray Non-Fibrous Homogeneous		80% Non-fibrous (Other)	None Delected
	S1 - WORK AREA	Gray/Black		20% Quartz	<1% Chrysotile
D1-36 91902469-0036	ST- WORK AREA	Non-Fibrous Homogeneous		80% Non-fibrous (Other)	stra oni young
D1-37-Wallboard	S1 - WORK AREA	White	2% Cellulose	80% Gypsum	None Detected
91902469-0037	ST- WORKAREA	Fibrous Homogeneous	2 // Ositibat	18% Non-fibrous (Other)	
01-37-Joint Compound	S1 - WORK AREA	White		80% Ca Carbonate	None Detected
91902469-0037A	ST- HUMMAN	Non-Fibrous Homogeneous	8	20% Non-fibrous (Other)	
01-38-Wallboard	S1 - WORK AREA	White	3% Cellulose	80% Gypsum	None Detected
91902469-0038	2015 (2012)00/00/00/00/00/00	Fibrous Homogeneous		17% Non-fibrous (Other)	
1-38-Joint Compound	S1 - WORK AREA	White Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
91902469-0038A		Homogeneous			
1-39	LC - MIDDLE OF FLOOR	Gray Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	<1% Chrysotile
01902469-0039		Homogeneous			News Deleated
1-40	LC - ROOF/SE CORNER	Black Fibrous	25% Cellulose	75% Matrix	None Detected
1902469-0040	10 0005/05	Homogeneous		70% Matrix	8% Chrysotile
1-41 1902459-0041	LC - ROOF/SE CORNER	White/Black Fibrous Homogeneous		22% Non-fibrous (Other)	o a o nysoue
	HP - LAUNDRY	White	25% Cellulose	40% Matrix	None Detected
1-42 Vinyl Sheet ooring	ROOM	Fibrous Homogeneous	5% Glass	30% Non-fibrous (Other)	Hone Deletion
1902469-0042 his is a composite result of bo	th vinyl and backing layer	er sona herritek internetien en er	14.		
-42-Mastic	HP - LAUNDRY ROOM	Tan Non-Fibrous		70% Matrix 30% Non-fibrous (Other)	None Detected
902469-0042A	W08233400	Homogeneous			
-43-Cove Base	HP - LAUNDRY ROOM	Tan Non-Fibrous	X	40% Ca Carbonate 60% Matrix	None Detected
902469-0043	West Control	Homogeneous			
-43-Mastic	HP - LAUNDRY ROOM	Ten Non-Fibrous	ħ	60% Ca Carbonate 40% Matrix	None Detected
902469-0043A		Homogeneous			
-43-Mastic 2	HP - LAUNDRY ROOM	Brown Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected
Q02169-0043B		Homogeneous			

Initial report from: 01/31/2019 18:09:21

ASB_PLM_0008_0001 - 1.78 Printed: 1/31/2019 3:09 PM

EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

AVE

EMSL Order: 091902469 Customer ID: NOMO22 Customer PO: Project ID:

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

			Non-Asbe	stos	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре	
91902469-0044	HP - CARETAKER'S CABIN ATTIC	Gray Non-Fibrous Homogeneous		10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected	
)1-45 91902469-0045	HP - CARETAKER'S CABIN ATTIC	Gray Non-Fibrous Homogeneous	46 -	10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected	
)1-46 1902469-0046	HP - CARETAKER'S CABIN ATTIC	Gray Non-Fibrous Homogeneous	<i>H</i>	10% Quartz 20% Oypsum 70% Non-fibrous (Other)	None Detected	
1-47-Shingle 1902469-0047	HP - NE ROOF	Red/Black Fibrous Homogeneous	10% Glass	5% Quartz 25% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected	
1-47-Shingle 2 1902469-0047A	HP - NE ROOF	Black Fibrous Homogeneous	10% Glass	5% Quartz 25% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected	
1-47-Vapor Barrier	HP - NE ROOF	White Fibrous Homogeneous	90% Synthetic	10% Non-fibrous (Other)	None Detected	
1-48	HP - CARETAKER'S CABIN WINDOW	White Non-Fibrous Homogeneous	1 2	70% Ca Carbonate 30% Non-fibrous (Other)	None Detected	

Analyst(s)

Jared Martin (44) Van (Rebecca) Huynh (32)

attri

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 01/31/2019 18:09:21

2.14

MEL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577	EMSL Order: Customer ID: Customer PO:	
	Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	Project ID:	
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	02/09/2019
	Alameda, CA 94501	Collected:	01/24/2019
Destant	SANTA ROSA 403435001		

Test Report: Asbestos Analysis of Bulk Material via EPA 600/R-93/116. Quantitation using the 1,000 Point Count Procedure

			Non-	Asbestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
D1-35-Concrete 091902469-0035	S1 - BATHROOM ENTRY	Gray/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<0.1%Chrysotile
D1-36 091902469-0036	S1 - WORK AREA	Gray/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<0.1%Chrysotile
D1-39 091902469-0039	LC - MIDDLE OF FLOOR	Gray Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	<0.1%Chrysotile

Analyst(s)

Shane Heisser (3)

Matthew Batongbacal or other approved signatory

Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.1%. EMSL Analytical Inc suggests that samples reported as <0.1% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government . EMSL Analytical Inc. bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 02/09/2019 11:05:49

ASB_PLMPC_0006_0003 Printed 2/9/2019 11:05:52AM

Page 1 of 1

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24- Wr That	Sampled Byr. Sampled Byr. Date Sampled:			: : ;; 		- }}	
he a	15661	005/ 61/hz/	Sample Location Northwest Correct Southeast Correct	Extribr Northeast Corner Exterior Southwest Corner	Exterior Northeost Coiner Exterior South Lest control Exterior Houest rocher	Exterio Contract corner Main doorway step North Roof Area	Aren Crinedo
5	ег. 403	Margaretican	Exterior Northus Exterior Northus	kin, North	Exterior Northe Exterior Northe Southerst C Southerst C Southerst	North Ronthe	NE Roof East Area
Project Name : Lew A	Project Manager. APN: Site Address:	随時	Number Number		X S S X	X V	
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ASBESTOS BULK SAMPLE DATA SHEET Ninyo & Moore 1956 Webster Street Hold	Oukland, CA 94612 Tel: (510) 633-5640 Far: (510) 633-5646 CHAIN OF CUSTODY INFORMATION	ALMun PJu	Labit · · ·	000			Scheller Connector
AS Nurry N	Tet Tet Far						

OrderID: 091902469

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OrderID: 091902469

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- UFW	1956 Webster Street, #400 Onkland, CA 94612 Tet: (510) 633-5640 Fac: (510) 633-5646	eet,#400 12 16	Project Name : Project No.: Project Manager APN: Sile Address	·· · · · · · · · · · · · · · · · · · ·	Host Pace	605A 3 500 1	S S S C	Sampled By: :W Sampled By: Sampled By: Date Sampled:	-1/4×(1)-	Laboratory 6	Chill		
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HEET SAUTA POG	(cosstreet	1/24/14	Sample Location	-	•	.					Page 5
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ASBESTOS BULK SAMPLE DATA SHEET Ninyo & Moore 1956 Webster Street, #400 Project No.:	Tet (510) 633-5646 Fac: (510) 633-5646 APN: CHAIN OF CUSTODY INFORMATION: Site Address: Site Address:	Willen P.	Sample ID								
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ASBESTOS BUL Minyo & Moore 1956 Webster Street, #400 Outland CA occord	Tet (510) 633-5646 Far: (510) 633-5646 CHAIN OF GUSTODY INFORMATION	Williami	LabiD		· .	·				Aductor	
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OrderID: 091902469

APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

4		EMSL Analytical, 464 McCormick Street, San Le Phone/Fax: (510) 895-3675 http://www.EMSL.com	andro, CA 94577	EMSL Order: 091902310 CustomerID: NOMO22 CustomerPO: ProjectID:
Attn:	Bill Larkin	n	Phone:	(510) 343-3000
	Ninyo & N	loore	Fax:	(510) 633-5646
		llenger Drive	Received:	01/29/19 12:00 PM
	Suite 103	-	Collected:	01/24/2019
	Alameda,	CA 94501		
Projec	t: SANTA RO	SA; 403435001		

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample D	escription Lab ID Collected Analyzed	Weight	Lead Concentration
D1-01P	091902310-0001 01/24/2019 01/30/2019	0.2604 g	0.48 % wt
	Site: D1: BASE OF NORTH EXTERIOR WALL		
D1-02P	091902310-0002 01/24/2019 01/30/2019	0.2543 g	<0.0080 % wt
	Site: D1: NORTH EXTERIOR WINDOW SCREEN		
D1-03P	091902310-0003 01/24/2019 01/30/2019	0.2521 g	0.089 % wt
	Site: D1: EXT NORTHWEST CORNER		
D1-04P	091902310-0004 01/24/2019 01/30/2019	0.2592 g	0.081 % wt
	Site: D1: EXT SOUTHWEST CORNER		
D1-05P	091902310-0005 01/24/2019 01/30/2019	0.2556 g	2.8 % wt
	Site: D1: ENTRY STEP FLOOR		
D1-06P	091902310-0006 01/24/2019 01/30/2019	0.2642 g	9.6 % wt
	Site: D1: EXT STEEL CABINET NW		
D1-07P	091902310-0007 01/24/2019 01/30/2019	0.1615 g	0.028 % wt
	Site: D1: EXT STEEL CABINET NW		
D1-08P	091902310-0008 01/24/2019 01/30/2019	0.2535 g	4.5 % wt
L POLISTO - 1991	Site: D1: EXT WALL WEST		
01-09P	091902310-0009 01/24/2019 01/30/2019	0.2617 g	<0.0080 % wt
	Site: D1: EXT TRIM ROLLUP DOOR WEST		
01-10P	091902310-0010 01/24/2019 01/30/2019	0.2582 g	<0.0080 % wt
	Site: CS: DOOR FRAME		
01-11P	091902310-0011 01/24/2019 01/30/2019	0.2581 g	<0.0080 % wt
	Site: CS: EAST WINDOW COVER		
01-12P	091902310-0012 01/24/2019 01/30/2019	0.2523 g	<0.0080 % wt
	Site: CS: INTERIOR WALLS		
01-13P	091902310-0013 01/24/2019 01/30/2019	0.2618 g	<0.0080 % wt
	Site: S1: WORK AREA		
)1-14P	091902310-0014 01/24/2019 01/30/2019	0.2071 g	<0.0097 % wt
	Site: S1: EXT NW CORNER TRIM		
01-15P	091902310-0015 01/24/2019 01/30/2019	0.2568 g	0.010 % wt
	Site: S1: EXT NORTH SIDING		

putty

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/30/2019 12:38:38

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EMEL	EMSL Analytical, 464 McCormick Street, San L Phone/Fax: (510) 895-3675 http://www.EMSL.com		EMSL Order: 091902310 CustomerID: NOMO22 CustomerPO: ProjectID:
Attn: Bill Lark	in	Phone:	(510) 343-3000
Ninyo &		Fax:	(510) 633-5646
	allenger Drive	Received	d: 01/29/19 12:00 PM
Suite 103	-	Collected	d: 01/24/2019
Alameda	, CA 94501		
Project: SANTA R	OSA; 403435001		

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample	Description Lab ID Collected Analyzed	Weight	Lead Concentration
D1-16P	091902310-0016 01/24/2019 01/30/2019	0.2665 g	36 % wt
	Site: S1: NORTH ROOF		
D1-17P	091902310-0017 01/24/2019 01/30/2019	0.2519 g	0.18 % wt
	Site: S1: NORTH ROOF FACIA		
D1-18P	091902310-0018 01/24/2019 01/30/2019	0.1841 g	<0.011 % wt
	Site: S2: NEAR DOOR EAST SIDE		
01-19P	091902310-0019 01/24/2019 01/30/2019	0.2638 g	<0.0080 % wt
	Site: S2: SOUTH SIDE WALL		
01-20P	091902310-0020 01/24/2019 01/30/2019	0.241 g	0.27 % wt
	Site: LC: INTERIOR SOUTH WALL		
01-21P	091902310-0021 01/24/2019 01/30/2019	0.2575 g	0.78 % wt
	Site: LC: EXTERIOR SOUTH WALL		
01-22P	091902310-0022 01/24/2019 01/30/2019	0.257 g	1.6 % wt
	Site: LC: EXTERIOR EAST WALL	TRACTORY STOR	
1-23P	091902310-0023 01/24/2019 01/30/2019	0.2515 g	1.2 % wt
	Site: HP: NORTHEAST CORNER OF HOUSE EXTERIOR		
1-24P	091902310-0024 01/24/2019 01/30/2019	0.2512 g	0.98 % wt
	Site: HP. DECK FLOOR FRONT		
1-25P	091902310-0025 01/24/2019 01/30/2019	0.2486 g	0.19 % wt
	Site: HP: FRONT PORCH RAIL		
1-26P	091902310-0026 01/24/2019 01/30/2019	0.2601 g	2.0 % wt
	Site: HP: CARETAKER HOUSE SW WINDOW		
1-27P	091902310-0027 01/24/2019 01/30/2019	0.2535 g	13 % wt
	Site: HP: CARETAKER HOUSE SUN ROOM WALL		
1-28P	091902310-0028 01/24/2019 01/30/2019	0.2635 g	1.8 % wt
2411 540	Site: HP: CARETAKERS BATHROOM		
1-29P	091902310-0029 01/24/2019 01/30/2019	0.258 g	8.4 % wt
	Site: HP: CARETAKER HOUSE EXT FRONT WINDOW TRIM		
1-30P	091902310-0030 01/24/2019 01/30/2019	0.2504 g	1.6 % wt
	SIte: HP: CARETAKER HOUSE EXT FRONT WINDOW METAL CAP		

Julippy

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/30/2019 12:38:38

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	Ninyo & Moore 1956 Webster Street Oakland CA 94612	Ninyo & Moore 1956 Webster Street, Suite 400 Oskland CA 94612	Project Name : Project No.:	\$		Sampled By: Sampled By:	JAM	Laboratory:	-	
an an tha	510-633-5640 510-633-5646 (fax)	(fax)	Project manager. APN: Site Address:	anager yujyssigh)	Sampled By: Date Sampled:	1/24/19	5	EMSL	
1 1 1	CHAIN OF CUSTODY INFORMATION:	Y INFORMATION:	innu print					Fax		•
	Contraction of Refin		:	- Company - Date -		The second s	Received By: (signified)	11.0		
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		1				, , ,				
	Clób	Sample ID	Building Number	Sample Location		Building Component	Sample Description (Color # 1 avers /Surhetered	Estimated	Condition	
		D1-01P	17	Base of North Exterior	exterior :		TAND 1CMD	SUITACE Area	12	
		01-02P		North Exterior Window Science	ANU SCIEPA	10	Brown /2 / STECT		0.0	
456		01-03.P		Ext. Northwest Corner	5				Vorl	san anara
		940-1a		Ext, Southwest co	COLAR	Τ.			1001	
		71-059		FNTRY STED		T	Marin 1.1 C. Marin			
				10. 11. 1.		Yook	Yellow / 1./ Conscrete		(500D	
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		N2-07P				Cruer	Wite 2/ undel		1	
		D1-08P		Est. Well West	'	1 July 1	-			
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20216		DI-11 P	5	EAST WINDOW COVER	K.	Cover . (Green 12 /steel	1500	Paris	000000
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Sh Laboratory: Tel: Tel:	bet	Estimated Surface Area	20 SF			100SF 500SF	10001	1000j	30055 Poor	
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24- Whith This		and the second sec	1 - 2 B	Underly C	Unon , Bu	TRIM Br	Wall W	Vall.	1100 H	
DATA SHEET 4031435001 5AWF12A.R	Comparty Dato	Sample Location	5	Ext North Siding North Rock	Horder Rock Forcus	Side What	Exterior South wall.	Exterior East wall	Exterior Deckfloor	Page 2 Of
LK SAMIPLE Project Name : Project No.: Project Manager. APN: Site Address:		Building Number	5	51	27	S.S.	107	77	d []	
LEAD BASED PAINT BULK SAMPLE Ninyo & Moore 1956 Webster Street, Suite 400 Project No.: 510-633-5640 510-633-5646 (fax) Site Address: CHAIN OF CUSTODY INFORMATION	Bill Levelon . P. 1 Un Jun.	Sample ID	D1-14 P	D1-10P	01-17P	Di-19P	402-Id	D1-22P	-1-1	
LEAD BASED FAINT Nimpe & Moore 1956 Webster Street, Suite 4 Oakland, CA 94612 510-633-5640 510-633-5646 (fax)	Bill Tenthum	Dida								

OrderID: 091902310

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APPENDIX D

CDPH Form 8552 - Lead Hazard Evaluation Report

California Department of Public Health

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

	1/24/14
Section 1 — Date of Lead Hazard Evaluation	
Section 2 – Type of Lead Hazard Evaluation	Clearance Inspection Other (specify)
Lead Inspection Risk assessment	Clearance inspection Sectory
Section 3 — Structure Where Lead Hazard Ev	valuation Was Conducted
Address [number, street, apartment (if applicable)]	City County Zip Code
700 Doulo Hark Drive	Janta Kosa Jonoma 95401
Construction date (year) Type of structure	Children living in structure?
Multi-unit build	
1960s Single family de	welling Don't Know
Section 4 — Owner of Structure (if business/a	gency, list contact person)
Name LO D D.	Telephone number
City of Janla Kosa, CAN	and Darley 107/543-7500
Address [number, street, apartment (if applicable)]	City P State Zip Code
69 Stony Circle	Santa losa CA 95401
Section 5 - Results of Lead Hazard Evaluation	n (check all that apply)
No lead-based paint detected	t lead-based paint detected Deteriorated lead-based paint detected
No lead hazards detected Lead-contamina	
Section 6 — Individual Conducting Lead Hazard	
William P. Larki	η Telephone number 510/343-3000
Address [number, street, apartment (if applicable)]	City State Zip Code
20 Cha Manage Drive, # 103	Algenedia CA 94301
DPH certification number	Signature Date
5543	Milliam & Laillin 2/11/19
ame and CDPH certification number of any other individu	als conducting sampling or testing (if applicable)
N/A	
ection 7 - Attachments	
A foundation diagram or sketch of the structure ind	licating the specifc locations of each lead hazard or presence of
lead-based paint;	
Each testing method, device, and sampling proced All data collected, including quality control data, lab	lure used; poratory results, including laboratory name, address, and phone number.
st copy and attachments retained by inspector	Third copy only (no attachments) mailed or faxed to:
cond copy and attachments retained by owner	California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656

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TRANSMISSION VERIFICATION REPORT

:	02/10/2019 20:01
1	NINYO AND MOORE
:	510-633-5646
	510-633-5640
÷	BROD5J252210

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE	s s	02/10 20:01 6205656 00:00:26 02 OK STANDARD ECM		
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HAZARDOUS BUILDING MATERIALS SURVEY

Caretaker's House Howarth Park 630 Summerfield Road Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 8, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants



HAZARDOUS BUILDING MATERIALS SURVEY Caretaker's House

Howarth Park 630 Summerfield Road Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 8, 2019 | Project No. 403435001

II P. Loukn

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

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- 2 Site Vicinity
- 3 Sample Locations

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- B Asbestos Laboratory Analytical Report and Chain-of-Custody Records
- C Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records
- D Polychlorinated Biphenyl Laboratory Analytical Report and Chain-of-Custody Records
- E CDPH Form 8552 Lead Hazard Evaluation Report

1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at the Caretaker's House in the western portion of Howarth Park located at 630 Summerfield Road in Santa Rosa, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the Caretaker's House.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the Caretaker's House at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 24, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the Caretaker's House to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the site structure to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of seven bulk samples of suspect ACMs and submittal of these samples to a certified, independent laboratory for analysis of asbestos content.

- Collection of eight suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of one suspect bulk PCB sample and submittal of this sample to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The Caretaker's House is vacant and encompasses approximately 1,500 square feet on two stories. Building finishes include painted wood walls and ceilings, carpeted and bare-wood floors, vinyl floor sheeting (VFS) and associated mastic and built-up roofing materials.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 24, 2019, the vacant Caretaker's House was assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM, LCM and PCBCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below. The Caretaker's House was sampled on the same day as some of the structures in Doyle Park. As such, some of the reported asbestos and lead analytical results and associated chains-of-custody related to the Doyle Park sampling activities have been edited (x'd out), leaving only the asbestos and lead analytical results related to the Caretaker's House as valid for this report.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Seven bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by

weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the building are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

One suspect PCBCM was observed and sampled during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and Freon[™]-containing refrigeration systems was performed at the Caretaker's House.

6 FINDINGS

A HBMS was performed at the Caretaker's House to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, LCMs and miscellaneous hazardous building materials are located within the Caretaker's House.

6.1 Asbestos-Containing Materials

Seven suspect ACM samples were collected (samples D1-42 through D1-48). All of the samples were reported as non-detect for asbestos.

6.2 Lead-Containing Materials

Eight paint chip samples were collected for analysis of lead content. Seven of the eight paint chip samples were reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg). Tan paint from a northeast corner exterior wall of the Caretaker's House (sample D1-23P) was reported at 1.2% by weight (or 12,000 mg/kg); gray-tan paint from the front deck floor (sample D1-24P) was reported at 0.98% by weight (or 9,800 mg/kg); white paint from an interior southwest window frame (sample D1-26P) was reported to contain lead at 2.0% by weight (or

20,000 mg/kg); pink paint from the sunroom wall (sample D1-27P) was reported to contain lead at 13% by weight (or 130,000 mg/kg); white paint from bathroom trim (sample D1-28P) was reported to contain lead at 1.8% by weight (or 18,000 mg/kg); brown paint from exterior front window trim (sample D1-29P) was reported to contain lead at 8.4% by weight (or 84,000 mg/kg); and tan-olive paint from an exterior front window metal cap (sample D1-30P) was reported to contain lead at 1.6% (or 16,000 mg/kg). These paint samples are considered LBP.

The other paint sample (D1-25P) was reported at 0.19% by weight (or 1,900 mg/kg). This paint sample is considered LCP. Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix E.

6.3 Potential Polychlorinated Biphenyl-Containing Materials

One suspect bulk PCBCM sample was collected during our site sampling activities. Sample PCB-03 (window putty taken from an east window sill) was reported as non-detect for PCBs (Table 3/Appendix D).

6.4 Miscellaneous Hazardous Building Materials Survey

Two fluorescent light bulbs, one associated light ballast and one thermostat were observed during our sampling activities (Table 4).

7 **RECOMMENDATIONS**

Since LCMs and miscellaneous hazardous building materials have been reported within the Caretaker's House, the following recommendations and precautions are provided:

• The identified LCMs reported at the Caretaker's House should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. While Ninyo & Moore provided an estimate of the quantity of LCMs present at the Caretaker's House (Table 2), it is the

responsibility of abatement contractors to assess the actual LCM quantities present.

- Prior to demolition or renovation activities, potential mercury-containing thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the Caretaker's House, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 LIMITATIONS

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

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

or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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



Howarth Park/Caretaker's House Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

February 7, 2019 Project #403435001

			Superv Surday				
Sample LD.	Building	Material Location	Sample Description	Friable	Quantity	Condition	Asbestos Content
D1-42	Ηŀ	Laundry Room	Vinyl Sheet Flooring and Mastic	N		Good	Vinyl Sheet Flooring = ND Mastic = ND
D1-43	ΗP	Laundry Room	Cove Base with Mastic	N		Good	Cove Base = ND Mastic = ND
D1-44	ΗΡ	Caretaker's Cabin-Attic	Plaster	Y		Good	MASUC Z = ND
D1-45	Η	Caretaker's Cabin-Attic	Plaster	γ		Good	£
D1-46	ΗP	Caretaker's Cabin-Attic	Plaster	7		Good	9
D1-47	ΗP	Northeast Roof	Roof Assembly	z		Good	Shingle = ND Shingle 2 = ND
D1-48	田	Caretaker's Cabin-Window	Window Putty	Z		Good	Vapor Barrier = ND
NA = Not Applicable				:		2000	ND
ND = None detected							

CH = Chrysotile BOLD indicates sample is an asbestos containing material (> 1% asbestos) Estimated quantities are not intended for use in bidding calculations.

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How	Santa

February 8, 2019 Project No. 403435001

Table 2 - Lead-Based Paint Sampling Results

ead	Parts per Million	(or mg/kg)	12.000	0000	9,800	1 900	000 00	20,000	130 000	00001	18,000	84,000	T	16.000	
Total Lead	Weight Percent		12	0.00	0.70	0.19	c	7	13	10	1.0	8.4		1.6	1000
Condition		AND A DESCRIPTION	Non-Intact	Non-Intact	INDII-IIIIACI	Non-Intact	Intact	IIIIdut	Intact	Intact	Intert	IIIIaci		Intact	0
Estimated Surface Arca (Square Fee+t ISFI or Linear	Feet[LF])	「「「「「「「「「」」」」	3,000 SF	400 SF	10 001	200 SF	150 SF	10 021	300 SF	SO SF	150 SF	10 001		50 SF	-
Sample Description (Color / # of Layers /	Substrate)		Tan/1/Metal	Grav-Tan/2/Wood	Down T-MMI	D00 M /7 /IIP I -IIM010	White/2/Wood	Dinl///Wood	LIIN/2/ WOOD	White/2/Wood	Brown/2/Wood			Tan-Olive/2/Metal	
Substrate/Surface		ur n	Wall	Floor	Deck Dail	TIMU VAA	Interior Window Frame	Wall	ITD AL	Trim	Trim			Corner Metal Cap	
Sample Location		Northeast Corner of House Exterior	Dell Field	Deck Floor Front	Front Porch Rail	Cambre 11 0 11 111	Caretaker House Southwest Window	Caretaker House Sunroom Wall		Caretakers Bathroom	Caretaker House Exterior Front Window		Caretaker House Exterior Front Window	Metal Cap	
Building		dH		III	Ð	an	н	HP	an	JII	HP		НР	1	
Sample LD.		D1-23P	D1_2AP	11-7-17	D1-25P	D1.76P	107-17	D1-27P	09C 1U	107-17	D1-29P		D1-30P		NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B). mg/kg = Milligrams per kilogram

SF = Square feet 475

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight) Estimated quantities are not intended for use in bidding calculations.

Caretaker's House/Howarth Park Santa Rosa, California

February 8, 2019 Project No. 403435001

Table 3 - Bulk Polychlorinated Biphenyl Sampling Results

ample L.D.	Building	Date Sampled	Material Location	Sample Description	Quantity	Condition	PCB Content* (milliorams/Lilooram)
R-03	an	1/24/2010	Part III AM				(mailer and and and
CN_00	111	112412013	East window Sill	Window Putty	N/A	N/A	VIN
NOTES:					4 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	UNI	IND

Analysis for PCB content via USEPA Method 8082A with preparation Method 3540C PCB = Polychlorinated Biphenyl

*Lab analytes include Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Aroclor 1262, and Aroclor 1268

•

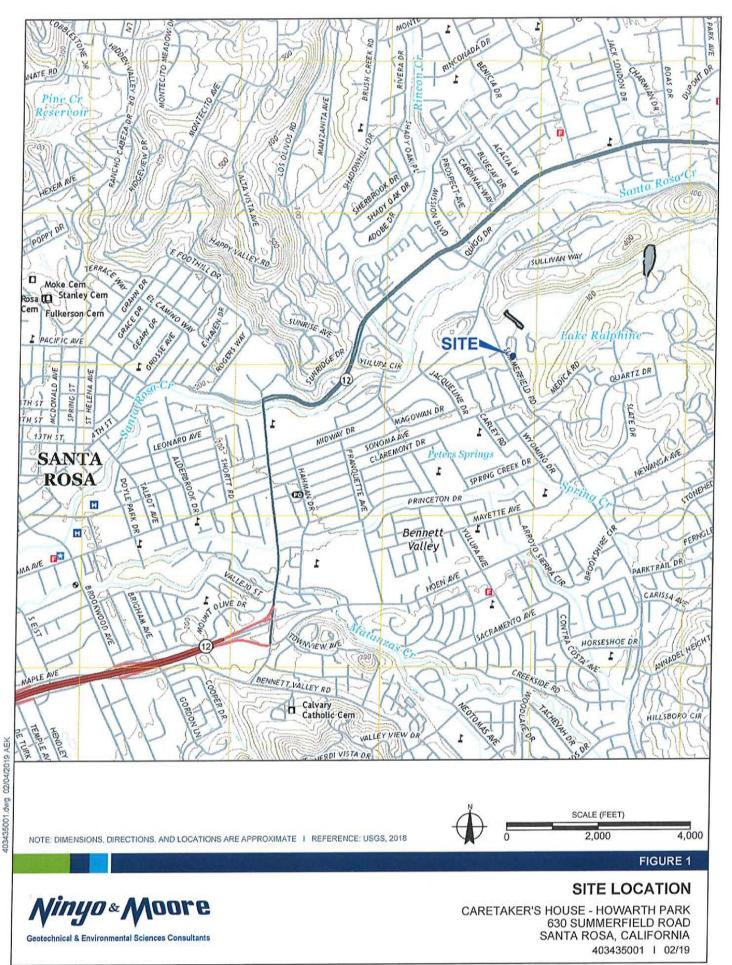
Caretaker's House/Howarth Park Santa Rosa, California

Location	Number of Transformers	mber of Number of Isformers Light Ballasts	Number of Mercury Thermostats	Number of Mercury Number of A/C No. of Fluorescent N Thermostats Units Light Tubes E	No. of Fluorescent Light Tubes	Number of Exit Signs	No. of Freon Refrigerator Sustance
Howarth Caretaker's House	0	1	1	0	2	0	0
NOTES:							

Table 4 - Miscellaneous Hazardous Building Materials Survey Results

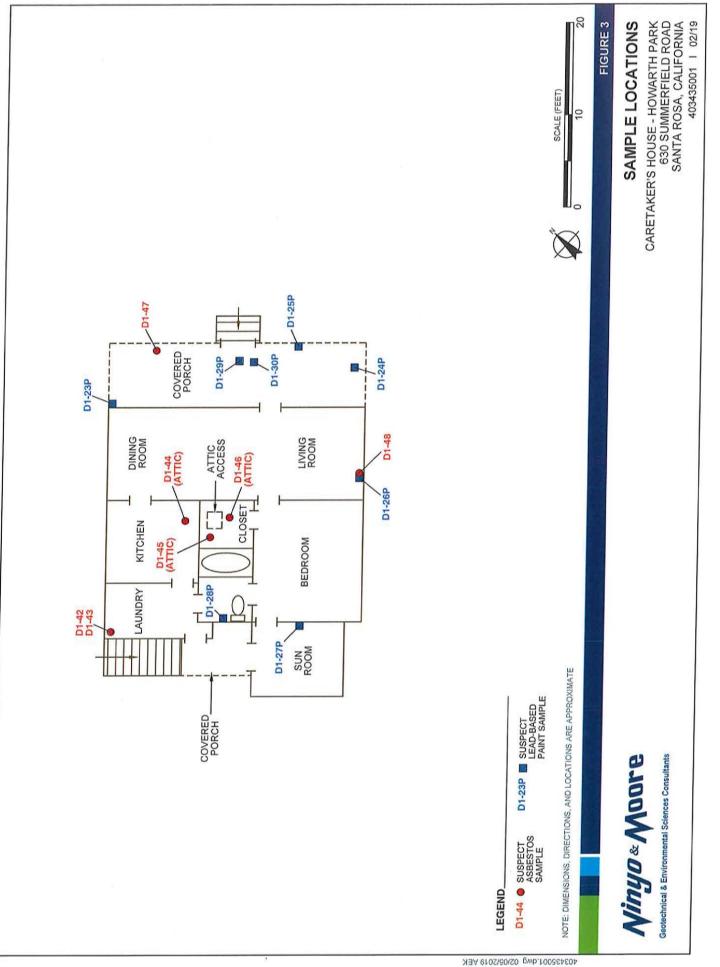
PCB = Polychlorinated biphenyl A/C = Air Conditioning

FIGURES





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APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

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October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Ifin

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

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

RECEIVED JUN 14 2018 NINYO & MOORE Oakland Office

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501



APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

EMISL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
Attention:	Bill Larkin	Phone:	(510) 385-5054
	Ninvo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	01/31/2019
	Alameda, CA 94501	Collected Date:	01/24/2019
	SANTA ROSA 403435001	e	

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

			Non-Asbes	tos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
D1-01-Texture	D1 - EXTERIOR NORTHWEST	Green Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
091902469-0001	CORNER	Homogeneous		30% Quartz	None Detected
D1-01-Concrete	D1 - EXTERIOR NORTHWEST CORNER	Gray/Black Non-Fibrous Homogeneous		40% Ca Carbonate 30% Non-fibrous (Other)	None Dealered
D1-02-Texture	D1 - EXTERIOR SOUTHEAST	Green Non-Fibrous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
091902469-0002	CORNER	Homogeneous			
D1-02-Concrete	D1 - EXTERIOR SOUTHEAST	Gray/Black Non-Fibrous		35% Quartz 40% Ca Carbonate 25% Non-fibrous (Other)	None Detected
091902469-0002A	CORNER	Homogeneous			None Detected
D1-03-Texture	D1 - EXTERIOR NORTHEAST CORNER	Green Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Delected
091902469-0003 D1-03-Concrete	D1 - EXTERIOR NORTHEAST	Gray/Black Non-Fibrous		35% Quartz 40% Ca Carbonate 25% Non-fibrous (Other)	None Detected
091902469-0003A	CORNER	Homogeneous		80% Ca Carbonate	None Detected
D1-04-Texture	D1 - EXTERIOR SOUTHWEST CORNER	Green Non-Fibrous Homogeneous		20% Non-fibrous (Other)	
D1-04-Concrete	D1 - EXTERIOR SOUTHWEST	Gray/Black Non-Fibrous Homogeneous	$\overline{\mathbf{V}}$	30% Quartz 40% Ca Carbonate 30% Non-fibrous (Other)	None Detected
91902469-0004A D1-05-Mastic	D1 - EXTERIOR NORTHEAST	White Non-Fibrous	\wedge	10% Quartz 40% Matrix 50% Non-fibrous (Other)	None Detected
91902469-0005	CORNER	Homogeneous		25% Quartz	None Detected
01-05-Mortar	D1 - EXTERIOR NORTHEAST CORNER	Gray/White Non-Fibrous Homogeneous		30% Ca Carbonate 45% Non-fibrous (Other)	
1902469-0005A 1-06	D1 - EXTERIOR SOUTHWEST	White Non-Fibrous	10% Fibrous (Other)	50% Matrix 40% Non-fibrous (Other)	None Detected
1902469-0006	CORNER	Homogeneous			None Detected
1-07	D1 - EXTERIOR SOUTHWEST CORNER	Gray/White Non-Fibrous Homogeneous		25% Quartz 40% Ca Carbonate 35% Non-fibrous (Other)	NOUR Delected
-08-Mastic	D1 - EXTERIOR NORTHEAST	White Non-Fibrous		15% Quartz 60% Matrix	None Detected
902469-0008	CORNER	Homogeneous		25% Non-fibrous (Other)	
-08-Mortar	D1 - EXTERIOR NORTHEAST	Gray Non-Fibrous		25% Quartz 50% Ca Carbonate	None Detected
902469-0008A	CORNER	Homogeneous		25% Non-fibrous (Other)	
-09-Texture	D1 - MAIN DOORWAY STEP	Green Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected
902469-0009		Gray		45% Quartz	None Detected
-09-Concrete	D1 - MAIN DOORWAY STEP	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 25% Non-fibrous (Other)	

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EMSL Order: 091902469 Customer ID: NOMO22 **Customer PO:**

Project ID:

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

		A.	Light Microscop		
	8 13		Non-Ast	<u>vestos</u> % Non-Fibrous	<u>Asbestos</u> % Type
Sample	Description	Appearance	% Fibrous		None Detected
D1-10-Shingle	D1 - NORTH ROOF AREA	Black Fibrous	15% Glass	15% Ca Carbonate 60% Matrix	None Detected
091902469-0010	ANEA	Homogeneous		10% Non-fibrous (Other)	
D1-10-Tar	D1 - NÓRTH ROOF	Black		10% Ca Carbonate	None Detected
	AREA	Non-Fibrous		70% Matrix	
091902469-0010A		Homogeneous		20% Non-fibrous (Other)	None Detected
D1-10-Felt	D1 - NORTH ROOF	Black Non-Fibrous	30% Cellulose	50% Matrix 20% Non-fibrous (Other)	None Detected
091902469-0010B	AREA	Homogeneous		2010 (01110) 000 (0110)	
D1-11	DI - NE ROOF AREA			10% Ca Carbonate	2% Chrysotile
bi-ii		Non-Fibrous		70% Matrix	
091902469-0011		Homogeneous		18% Non-fibrous (Other)	
D1-12	D1 - EAST AREA	Gray		25% Quartz	None Detected
	CONCRETE PAD	Non-Fibrous Homogeneous		30% Ca Carbonate 45% Non-fibrous (Other)	
091902469-0012	CS - ABOVE	Brown		30% Quartz	None Detected
D1-13	DOORWAY	Non-Fibrous		35% Ca Carbonate	
091902469-0013		Romogeneous		35% Non-fibrous (Other)	Concept Description addresses or
D1-14	CS - EXT NW	Gray		25% Quartz	None Detected
	CORNER OF	Non-Fibrous		50% Ca Carbonate 25% Non-fibrous (Other)	
91902469-0014	BUILDING	Homogeneous		30% Quartz	None Detected
01-15	CS - EXT NW CORNER OF	Gray Non-Fibrous		40% Ca Carbonate	None Detected
91902469-0015	BUILDING	Homogeneous		30% Non-fibrous (Other)	
01-16-Mastic	CS - ROOF,	Gray/Black		10% Ca Carbonate	4% Chrysotile
	NORTHWEST	Non-Fibrous		70% Matrix	
91902469-0016		Homogeneous		16% Non-fibrous (Other)	News Detected
1-16-Shingle	CS - ROOF,	Black	15% Glass	10% Ca Carbonate 60% Matrix	None Detected
1902469-0016A	NORTHWEST	Fibrous Homogeneous		15% Non-fibrous (Other)	
1-16-Tar	CS - ROOF,	Black		80% Matrix	None Detected
1-10-1ai	NORTHWEST	Non-Fibrous		20% Non-fibrous (Other)	
1902469-0016B		Homogeneous			
1-16-Felt	CS - ROOF,	Black	15% Glass	70% Matrix	None Detected
	NORTHWEST	Fibrous		15% Non-fibrous (Other)	*
1902469-0016C	00 0005	Homogeneous Brown/Black		50% Quartz	None Detected
1-17	CS - ROOF, NORTHWEST	Non-Fibrous		15% Ca Carbonate	
902469-0017		Homogeneous		35% Non-fibrous (Other)	
-18-Tar	CS - ROOF,	Black		80% Matrix	None Detected
	NORTHWEST	Non-Fibrous		20% Non-fibrous (Other)	
902469-0018		Homogeneous		70% Matrix	None Detected
-18-Paper	CS - ROOF, NORTHWEST	Black Fibrous	15% Glass	15% Non-fibrous (Other)	
002469-0018A	NORTHWEDT	Homogeneous			
.19	05 - UNDER WEST	Brown		25% Quartz	None Detected
	EAVE	Non-Fibrous	ę	60% Ca Carbonate	
02469-0019	STATE STATES AND STATES	Homogeneous		15% Non-fibrous (Other)	Name Detected
20-Mortar		Gray		20% Quartz 20% Gypsum	None Detected
02469-0020	And Contraction of the Contracti	Non-Fibrous Homogeneous	(#)	60% Non-fibrous (Other)	
02469-0020 C Gray	1	i entogeneous			
20-Mortar 2	CS - UNDER SW	Brown	0.1.1	20% Quartz	None Detected
	EAVE	Non-Fibrous		20% Gypsum	
2469-0020A		lomogeneous		60% Non-fibrous (Other)	



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EMSL Order: 091902469 Customer ID: NOMO22 **Customer PO: Project ID:**

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

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1 A		19 ⁴	<u>Non-Asb</u>		Asbestos % Turce
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type None Detected
D1-20-Mortar 3	CS - UNDER SW	Gray Non-Fibrous	· ·	10% Quartz 20% Gypsum	None Deletion
091902469-00208	EAVE	Homogeneous		70% Non-fibrous (Other)	
Light Gray					
D1-21	CS - EXT SW	Brown/Gray		5% Quartz	None Detected
	CORNER OF	Non-Fibrous	¥.	20% Gypsum	
091902469-0021	BUILDING	Homogeneous		75% Non-fibrous (Other)	New Detected
D1-22	CS - EXT SW	Gray		10% Quartz 20% Gypsum	None Detected
	CORNER OF BUILDING	Non-Fibrous Homogeneous		70% Non-fibrous (Other)	
	CS - SOUTHEAST	Brown/Gray/Black		20% Quartz	None Detected
D1-23	CORNER SUPPORT			25% Gypsum	
091902469-0023	BEAM	Homogeneous		55% Non-fibrous (Other)	
D1-24	S1 - NW ROOF	Black	4% Cellulose	80% Matrix	None Detected
	SECTION	Fibrous		16% Non-fibrous (Other)	
091902469-0024		Homogeneous			None Detected
D1-25-Shingle	S1 - WEST ROOF	White/Black/Green	5% Cellulose	5% Quartz 30% ©a Carbonate	None Delected
	TAR AND GRAVEL	Fibrous Homogeneous		40% Matrix	
91902469-0025		Homogeneous		20% Non-fibrous (Other)	
01-25-Felt	S1 - WEST ROOF	Black	40% Cellulose	20% Ca Carbonate	None Detected
7-25-Peit	TAR AND GRAVEL	Fibrous		40% Matrix	
91902469-0025A		Homogeneous			
1-25-Paper	S1 - WEST ROOF	Black	50% Cellulose	50% Matrix	None Detected
SALES ALL ALL ALL ALL ALL ALL ALL ALL ALL AL	TAR AND GRAVEL	Fibrous			
01902469-0025B		Homogeneous		50% Matrix	None Detected
1-26	S1 - EAST ROOF	Black Fibrous	50% Cellulose	50% Matrix	Hone Bereter
1902469-0026	(COVERED BY METAL)	Homogeneous			
1-27	S1 - EAST ROOF	Black	5% Cellulose	30% Ca Carbonate	None Detected
1-27	(COVERED BY	Non-Fibrous		60% Matrix	
1902469-0027	METAL)	Homogeneous		5% Non-fibrous (Other)	
1-28	S1 - EAST ROOF	Silver		90% Mátrix	None Detected
	(COVERED BY	Non-Fibrous		10% Non-fibrous (Other)	
1902469-0028	METAL)	Homogeneous	60% Cellulose	40% Matrix	None Detected
-29	S1 - INT NW ROOM (INT WALL)	Brown/Black Fibrous	60% Cellulose	a mann	
902469-0029		Homogeneous			
-30-Shingle	S2 - NORTH ROOF	Brown/Black	5% Cellulose	5% Quartz	None Detected
-00-01111816	AREA	Fibrous		30% Ca Carbonate	
902469-0030		Homogeneous		40% Matrix 20% Non-fibrous (Other)	
The second second second second			0001 01	30% Ca Carbonate	None Detected
-30-Shingle 2	S2 - NORTH ROOF	Black	20% Glass	40% Matrix	
902469-0030A	AREA	Fibrous Homogeneous		10% Non-fibrous (Other)	
-30-Felt	S2 - NORTH ROOF	Black	60% Cellulose	40% Matrix	None Detected
-30-Feit	AREA	Fibrous			
02469-0030B		Homogeneous		1	
31	S1 - INT HALLWAY	Green		80% Matrix	None Detected
		Non-Fibrous		20% Non-fibrous (Other)	
02469-0031		Homogeneous	FOL Collulate	40% Matrix	25% Chrysotile
32-Vinyl Sheet	S1 - INT NW ROOM	Tan . Fibrous	5% Cellulose	30% Non-fibrous (Other)	2010 Shirt Shirt
oring		Homogeneous			
2469-0032					
	oth vinyl and backing layer				



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Project ID:

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

			Non-Asb	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
D1-32-Mastic	S1 - INT NW ROOM FLOOR	Brown Non-Fibrous Homogeneous	2% Cellulose	70% Matrix 28% Non-fibrous (Other)	<1% Chrysotile
D1-33	S1 - BATHROOM	Gray Fibrous		60% Ca Carbonate 10% Non-fibrous (Other)	30% Chrysotile
091902469-0033 D1-34	ST NORTH ROOM CEILING	Homogeneous Brown Fibrous Homogeneous	100% Cellulose		None Detected
091902469-0034 D1-35-Concrete	S1 - BATHROOM ENTRY	Gray/Black Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	<1% Chrysotile
091902469-0035 01-35-Skim Coat	S1 - BATHROOM ENTRY	Homogeneous Gray Non-Fibrous		20% Quartz 80% Non-fibrous (Other)	None Detected
991902469-0035A D1-36	S1 - WORK AREA	Homogeneous Gray/Black Non-Fibrous	//	20% Quartz 80% Non-fibrous (Other)	<1% Chrysotile
91902469-0036 01-37-Wallboard	S1 - WORK AREA	Homogeneous White Fibrous	2% Cellulose	80% Gypsum 18% Non-fibrous (Other)	None Detected
91902469-0037 01-37-Joint Compound	S1 - WORK AREA	Homogeneous White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1902469-0037A 1-38-Wallboard	S1 - WORK AREA	White Fibrous	3% Cellulose	80% Gypsum 17% Non-fibrous (Other)	None Detected
1-38-Joint Compound	S1 - WORK AREA	Homogeneous White Non-Fibrous	- 14 - 14 - 14 - 14 - 14 - 14 - 14 - 14	80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
1902469-0038A 1-39	LC - MIDDLE OF	Homogeneous Gray Non-Fibrous	÷.	20% Quartz 80% Non-fibrous (Other)	<1% Chrysotile
1902469-0039	LC - ROOF/SE CORNER	Homogeneous Black Fibrous	25% Cellulose	75% Matrix	None Detected
-41	LC - ROOF/SE CORNER	Homogeneous White/Black Fibrous Homogeneous	1	70% Matrix 22% Non-fibrous (Other)	8% Chrysotile
902469-0041 -42-Vinyl Sheet oring	HP - LAUNDRY ROOM	Homogeneous White Fibrous Homogeneous	25% Cellulose 5% Glass	40% Matrix 30% Non-fibrous (Other)	None Detected
002469-0042 s is a composite result of bo	th vinyl and backing layer				
42-Mastic	HP - LAUNDRY ROOM	Tan Non-Fibrous Homogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
43-Cove Base	HP - LAUNDRY ROOM	Tan Non-Fibrous Homogeneous		40% Ca Carbonate 60% Matrix	None Detected
92469-0043 43-Mastic	1.1.00 00 111	Tan Non-Fibrous		60% Ca Carbonate 40% Matrix	None Detected
13-Mastic 2	HP - LAUNDRY	Homogeneous Brown Non-Fibrous		80% Matrix 20% Non-fibrous (Other)	None Detected

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Project ID:

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

			Non-Asbe	estos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
D1-44 091902469-0044	HP - CARETAKER'S CABIN ATTIC	Gray Non-Fibrous Homogeneous		10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected
D1-45	HP - CARETAKER'S CABIN ATTIC	Gray Non-Fibrous Homogeneous	Tr.	10% Quarlz 20% Gypsum 70% Non-fibrous (Other)	None Detected
D1-46	HP - CARETAKER'S CABIN ATTIC	Gray Non-Fibrous Homogeneous	25. 68	10% Quartz 20% Gypsum 70% Non-fibrous (Other)	None Detected
D1-47-Shingle 091902469-0047	HP - NE ROOF	Red/Black Fibrous Homogeneous	10% Glass	5% Quartz 25% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected
D1-47-Shingle 2 091902469-0047A	HP - NE ROOF	Black Fibrous Homogeneous	10% Glass	5% Quartz 25% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected
D1-47-Vapor Barrier	HP - NE ROOF	White Fibrous Homogeneous	90% Synthetic	10% Non-fibrous (Other)	None Detected
D1-48 91902469-0048	HP - CARETAKER'S CABIN WINDOW	White Non-Fibrous Homogeneous		70% Ca Carbonate 30% Non-fibrous (Other)	None Detected

Analyst(s)

Jared Martin (44) Van (Rebecca) Huynh (32)

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 01/31/2019 18:09:21

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pg469	Laboratory: EMS7	EMNST 120179	Cuantity Friable (SFRF/EA) (MAD) 3,020 9 M	N 1000'		
091902469	41.9	D. EWR	FLOOR 3		Marster FLOORIDE MASTIC	
AT.	Sampled By: $W \not\models L$ Sampled By: $W \not\models L$ Sampled By: $ / 2 \not+ / 9$ Date Sampled: $ / 2 \not+ / 9$		Sample Description KONCRETE FLOOR	University Juir Tears Concrete Roof Assembly	Katt Kun Munsta Vinue SHEET FLOORING WITH MASTIC COUE BASE WITH	V V V Koof Assembly
24-W-TAT	Sarr Sarr Dati	500				·····································
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E DATA SHEE	t No.: t Manager. ddress:	Kin Westerley	WOR	Will H		V NE R
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ASBESTOS BULK SAMPLE DATA SHEE	1956 Webster Street, #400 Oaldand; CA 94612 Tek 1510) 633-5640 Far: (510) 633-5646 Far: (510) 633-5646 GHAIN OF CUSTODY INFORMATION		2-10	1-1-5 1-1-10 10-11-5	D1-41	的-10
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24- hr TAN 091902464 led By: WPL Laboratory: led By: V/19 Laboratory: Sampled: 1/24/19 Tret Sampled: 1/24/19 Free	EUVING 100		
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ASBESTOS BULK S/ Ninyo & Moore 1956 Webster Street, #400 00kland, CA, 94612 Tete (510) 633-5646 Fee: (510) 633-5646 Fee: (510) 633-5646 Fee: (510) 633-5646	MUMMINI P	495	C02162

APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

EMEL	EMSL Analytical, 464 McCormick Street, San Le Phone/Fax: (510) 895-3675 / http://www.EMSL.com	andro, CA 94577	EMSL Order: CustomerID: CustomerPO: ProjectID:	091902310 NOMO22
Suite 10	a Moore nallenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/24/2019	8
Project: SANTA	ROSA; 403435001			

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

		Weight	Lead Concentration
Client Sample .			
D1-01P	091902310-0001 01/24/2019 01/30/2019	0.2604 g	0.48 % wt
	Site: D1: BASE OF NORTH EXTERIOR WALL		10.0000 01.14
D1-02P	091902310-0002 01/24/2019 01/30/2019	0.2543 g	<0.0080 % wt
	Site: D1: NORTH EXTERIOR WINDOW SCREEN		0.000 N/
D1-03P	091902310-0003 01/24/2019 01/30/2019	0.2521 g	0.089 % wt
	Site: D1: EXT NORTHWEST CORNER		2 001 W 1
D1-04P	091902310-0004 01/24/2019 01/30/2019	0.2592 g	0.081 % wt
	Site: D1: EXT SOUTHWEST CORNER		~ ~ ~ · · ·
D1-05P	091902310-0005 01/24/2019 01/30/2019	0.2556 g	2.8 % wt
	Site: D1: ENTRY STEP FLOOR		0.0.4/1
01-06P	091902310-0006 01/24/2019 01/30/2019	0.2642 g	9.6 % wt
	Site: D1: EXT STEEL CABINET NW		a ana 4/ 1
01-07P	091902310-0007 01/24/2019 01/30/2019	0.1615 g	0.028 % wt
	Site: D1: EXT STEEL CABINET NW		1 5 01
01-08P	091902310-0008 01/24/2019 01/30/2019	0.2535 g	4.5 % wt
	Site: D1: EXT WALL WEST		a aaaa at
01-09P	091902310-0009 01/24/2019 01/30/2019	0.2617 g	<0.0080 % wt
	Site: D1: EXT TRIM ROLLUP DOOR WEST		0.0000 M
1-10P	091902310-0010 01/24/2019 01/30/2019	0.2582 g	<0.0080 % wt
	Site: CS: DOOR FRAME		
1-11P	091902310-0011 01/24/2019 01/30/2019	0.2581 g	<0.0080 % wt
	Site: CS: EAST WINDOW COVER		
1-12P	091902310-0012 01/24/2019 01/30/2019	0.2523 g	<0.0080 % wt
	Site: CS: INTERIOR WALLS		0.0000.0//
1-13P	091902310-0013 01/24/2019 01/30/2019	0.2618 g	<0.0080 % wt
	Site: S1: WORK AREA		-0.0007 M
1-14P	091902310-0014 01/24/2019 01/30/2019	0.2071 g	<0.0097 % wt
	Site: S1: EXT NW CORNER TRIM		
1-15P	091902310-0015 01/24/2019 01/30/2019	0.2568 g	0.010 % wt
	Site: S1: EXT NORTH SIDING		

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Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/30/2019 12:38:38

EMEL	EMSL Analytical, Inc 464 McCormick Street, San Leandro, C Phone/Fax: (510) 895-3675 / (510) 89 http://www.EMSL.com		EMSL Order: CustomerID: CustomerPO ProjectID:	NOMO22
Suite 103	Moore allenger Drive	Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 PM 01/24/2019	
Project: SANTA R	OSA; 403435001			

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample 1	Description Lab ID Collected Analyzed	Weight	Lead Concentration
D1-16P	091902310-0016 01/24/2019 01/30/2019	0.2665 g	36 % wt
	Site: S1: NORTH ROOF		
D1-17P	091902310-0017 01/24/2019 01/30/2019	0.2519 g	0.18 % wt
	Site: S1: NORTH ROOF FACIA		~
D1-18P	091902310-0018 01/24/2019 01/30/2019	0.1841 g	<0.011 % wt
	Site: S2: NEAR DOOR EAST SIDE		2000
D1-19P	091902310-0019 01/24/2019 01/30/2019	0.2638 g	<0.0080 % wt
	Site: S2: SOUTH SIDE WALL	<u> </u>	
D1-20P	091902310-0020 01/24/2019 01/30/2019	. 0.241 g	0.27 % wt
	Site: LC: INTERIOR SOUTH WALL		
D1-21P	091902310-0021 01/24/2019 01/30/2019	0.2575 g	0.78 % wt
	Site: LC: EXTERIOR SOUTH WALL		
D1-22P	091902310-0022 01/24/2019 01/30/2019	0.257 g	1.6 % wt
	Site: LC: EXTERIOR EAST WALL		10.01.1
D1-23P	091902310-0023 01/24/2019 01/30/2019	0.2515 g	1.2 % wt
	Site: HP: NORTHEAST CORNER OF HOUSE EXTERIOR		
D1-24P	091902310-0024 01/24/2019 01/30/2019	0.2512 g	0.98 % wt
	Site: HP: DECK FLOOR FRONT		0.40.01.1
D1-25P	091902310-0025 01/24/2019 01/30/2019	0.2486 g	0.19 % wt
	Site: HP: FRONT PORCH RAIL		
01-26P	091902310-0026 01/24/2019 01/30/2019	0.2601 g	2.0 % wt
	Site: HP: CARETAKER HOUSE SW WINDOW	0.0505	10.0/
01-27P	091902310-0027 01/24/2019 01/30/2019	0.2535 g	13 % wt
	Site: HP: CARETAKER HOUSE SUN ROOM WALL		10.0/
1-28P	091902310-0028 01/24/2019 01/30/2019	0.2635 g	1.8 % wt
	Site: HP: CARETAKERS BATHROOM		0.4.0/
1-29P	091902310-0029 01/24/2019 01/30/2019	0.258 g	8.4 % wt
	Site: HP: CARETAKER HOUSE EXT FRONT WINDOW TRIM		4.0.0/
1-30P	091902310-0030 01/24/2019 01/30/2019	0.2504 g	1.6 % wt
	SIte: HP: CARETAKER HOUSE EXT FRONT WINDOW METAL CAP		

putting

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/30/2019 12:38:38

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LEAD BASED PAINT BULK SAMPLE DATA Ninye & Moore Project Name: 5AM Ninye & Moore Project Name: 5AM 1956 Webster Street, Suite 400 Project Namager: 405 20.633-5640 Project Namager: 405 210.633-5640 Project Manager: 405 210.633-5640 APN: 210.633-5640 Site Address: 20.633-5640 Minuper, North College Name 210.633-5640 Site Address: 0.041.05 Site Address: 0.053-5640 Site Address: 0.063-5640 Site Address: 0.063-5640 Site Address: 0.063-5640 Site Address: 0.063-5640 Number 0.07-03-P D.1 0.1<03-P	0)87	1500	all is		mar	
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	ILK SAMPLE Project Name : Project No.: Project Manage APN:		and a state of the			CCS
	2310 ED PAINT BL e treet, Suite 400 4612	fact) INFORMATTION: Mished By (signifient)	Sample 10 - Sample 10 - Sample 10 - 0.19	D1-04 P	D1-10	
	OrderID: 0919(LEAD BASI Ninyo & Moor 1956 Webster S Oakland, CA 9, 510-633-5640	BUNDER	499			C02162

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LEAD BASED PAINT BULK SAMPLE DATA SHEET Ningre & Moore Project Name: V0314750 V Sampled By: WPU Laboratory: 1956 Webster Street, Suite 400 Project No.: V0314750 V Sampled By: WPU Laboratory: 0akkand, CA 94612 Project Manager SAWTA-R0SA Sampled By: WPU Laboratory: 510-633-5640 And Sampled By: WPU Laboratory: 510-633-5646 (fax) Site Addressi Sampled By: I/24 //L MSU Sampled By: I/24 //L	Company in Date Transporting Received By (synthesis)	Estimated Surface Area 20 57 60	Cladding Cladding	PLCEXPERIENTSOLH PLCEXPERIENTSOLH HP Northeost corner or HP Deck Floor HP Deck Floor

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OrderID: 091902310

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Sheet3 of 3 Laboratory: EMSC Fax	VOR 19 V2 Mulium Estimated Condition		
2 H- J. T. T. T. Sampled By: WMA Labo Sampled By: WMA Labo Sampled By: (24/)19 Tet Date Sampled: (24/)19 Tet	Building Sample Description (Color # Stimated Component Layers /Substrate) Surface Area Conc	Frence Whyte/2/hoo) Frence Whyte/2/hoo) Whyte/2/hood - Bour/2/Wod - I Tan-Olive/2/metal	
DATA SHEET SAWA POSA YO3 Y3500]	1200	Caretaker House-SW Window : Int Caretaker Hause -Swar Robur Mul Caretaker's Extherion, Hill Caretaker's Extransion, Hill Caretaker's Ext Front Window Hill Mul	Page 3 Of 3.
BULK SAM Project No Project Ma APN: Site Addre	Pan	-266 HP HP -287 HP HP -287 HP	
LEAD BASED PAINT BULK S Ninryo & Moore 1956 Webster Street, Suite 400 Proje 0akland, CA 94612 Proje 510-633-5646 (fax) Site A 510-633-5646 (fax) Site A 510-633-5646 (fax) Site A cHAIN OF CUSTODY INFORMATION:	EM Joulhan .	501	C02162

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OrderID: 091902310

EMEL	EMSL Analytical, 464 McCormick Street, San Lo Phone/Fax: (510) 895-3675 http://www.EMSL.com		EMSL Order: CustomerID: CustomerPO: ProjectID:	091902310 NOMO22
Attn: Bill Larkir	1	Phone:	(510) 343-3000	
Ninyo & Moore		Fax:	(510) 633-5646	
		Received:	01/29/19 12:00 PM	
	lenger Drive	Collected:	01/24/2019	
Suite 103				
Alameda,	CA 94501			
Project: SANTA RO	SA; 403435001			

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample 2	Description Lab ID Collected Analyzed	Weight	Lead Concentration
D1-01P	091902310-0001 01/24/2019 01/30/2019	0.2604 g	0.48 % wt
	Site: D1: BASE OF NORTH EXTERIOR WALL		
D1-02P	091902310-0002 01/24/2019 01/30/2019	0.2543 g	<0.0080 % wt
	Site: D1: NORTH EXTERIOR WINDOW SCREEN		
01-03P	091902310-0003 01/24/2019 01/30/2019	0.2521 g	0.089 % wt
	Site: D1: EXT NORTHWEST CORNER		
01-04P	091902310-0004 01/24/2019 01/30/2019	0.2592 g	0.081 % wt
	Site: D1: EXT SOUTHWEST CORNER		
1-05P	091902310-0005 01/24/2019 01/30/2019	0.2556 g	2.8 % wt
	Site: D1: ENTRY STEP FLOOR		
1-06P	091902310-0006 01/24/2019 01/30/2019	0.2642 g	9.6 % wt
	Site: D1: EXT STEEL CABINET NW		
1-07P	091902310-0007 01/24/2019 01/30/2019	0.1615 g	0.028 % wt
	Site: D1: EXT STEEL CABINET NW		
1-08P	091902310-0008 01/24/2019 01/30/2019	0.2535 g	4.5 % wt
	Site: D1: EXT WALL WEST		
1-09P	091902310-0009 01/24/2019 01/30/2019	0.2617 g	<0.0080 % wt
	Site: D1: EXT TRIM ROLLUP DOOR WEST		
1-10P	091902310-0010 01/24/2019 01/30/2019	0.2582 g	<0.0080 % wt
	Site: CS: DOOR FRAME		
1-11P	091902310-0011 01/24/2019 01/30/2019	0.2581 g	<0.0080 % wt
	Site: CS: EAST WINDOW COVER		10.0000 M
-12P	091902310-0012 01/24/2019 01/30/2019	0.2523 g	<0.0080 % wt
	Site: CS: INTERIOR WALLS		
-13P	091902310-0013 01/24/2019 01/30/2019	0.2618 g	<0.0080 % wt
	Site: S1: WORK AREA		10 0007 N 1
-14P	091902310-0014 01/24/2019 01/30/2019	0.2071 g	<0.0097 % wt
	Site: S1: EXT NW CORNER TRIM		0.040.0/4
-15P	091902310-0015 01/24/2019 01/30/2019	0.2568 g	0.010 % wt
	Site: S1: EXT NORTH SIDING		

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Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/30/2019 12:38:38

¢	IMSL	EMSL Analytical, 464 McCormick Street, San Lee Phone/Fax: (510) 895-3675 / http://www.EMSL.com	andro, CA 94577	com		EMSL Order: CustomerID: CustomerPO: ProjectID:	091902310 NOMO22
	Bill Larkin Ninyo & Mc 2020 Challe Suite 103 Nameda, C	enger Drive		Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 F 01/24/2019	2M	(8)
Project:	SANTA ROS	A; 403435001					

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample D	Description Lab ID Collected Analyzed	Weight	Lead Concentration
D1-16P	091902310-0016 01/24/2019 01/30/2019	0.2665 g	36 % wt
	Site: S1: NORTH ROOF		
D1-17P	091902310-0017 01/24/2019 01/30/2019	0.2519 g	0.18 % wt
	Site: S1: NORTH ROOF FACIA		
D1-18P	091902310-0018 01/24/2019 01/30/2019	0.1841 g	<0.011 % wt
	Site: S2: NEAR DOOR EAST SIDE		
01-19P	091902310-0019 01/24/2019 01/30/2019	0.2638 g	<0.0080 % wt
	Site: S2: SOUTH SIDE WALL		
01-20P	091902310-0020 01/24/2019 01/30/2019	. 0.241 g	0.27 % wt
	Site: LC: INTERIOR SOUTH WALL	and the second se	
)1-21P	091902310-0021 01/24/2019 01/30/2019	0.2575 g	0.78 % wt
	Site: LC: EXTERIOR SOUTH WALL		
1-22P	091902310-0022 01/24/2019 01/30/2019	0.257 g	1.6 % wt
	Site: LC: EXTERIOR EAST WALL		
1-23P	091902310-0023 01/24/2019 01/30/2019	0.2515 g	1.2 % wt
	Site: HP: NORTHEAST CORNER OF HOUSE EXTERIOR	-	
1-24P	091902310-0024 01/24/2019 01/30/2019	0.2512 g	0.98 % wt
	Site: HP: DECK FLOOR FRONT		
1-25P	091902310-0025 01/24/2019 01/30/2019	0.2486 g	0.19 % wt
	Site: HP: FRONT PORCH RAIL		
-26P	091902310-0026 01/24/2019 01/30/2019	0.2601 g	2.0 % wt
	Site: HP: CARETAKER HOUSE SW WINDOW		10.01
-27P	091902310-0027 01/24/2019 01/30/2019	0.2535 g	13 % wt
	Site: HP: CARETAKER HOUSE SUN ROOM WALL		
-28P	091902310-0028 01/24/2019 01/30/2019	0.2635 g	1.8 % wt
	Site: HP: CARETAKERS BATHROOM		
-29P	091902310-0029 01/24/2019 01/30/2019	0.258 g	8.4 % wt
	Site: HP: CARETAKER HOUSE EXT FRONT WINDOW TRIM		
-30P	091902310-0030 01/24/2019 01/30/2019	0.2504 g	1.6 % wt
	Site: HP: CARETAKER HOUSE EXT FRONT WINDOW METAL CAP		

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Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/30/2019 12:38:38

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HS 2 mil		Wall Frank Frank
K SAMPLE Project Name : Project No.: Project Manager: APN: Site Address: Site Address:	Building Number DJ Base North Ext. 1 CNT	CCS ESTER
Linu	semple 10 semple 10 semple 10 DZ-02P D1-02P D1-04P D1-06P D2-07P	D1-100 01-100 01-120
rderID: 091902310 LEAD BASED PAINT B Ninyo & Moore 1956 Webster Street, Suite 400 Oakland, CA 94612 510-633-5640 510-633-5640 510-633-5640 510-633-5640 510-633-5640 finaushed by (signipin CHAIN OF CUSTODY INFORMATION:	D D D D D San	AZOCA
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	14	Received By; (signification)	/ Sample Description (Color /# Layers /Substrate)	Kellow / 1/ Concrete Brown /2/WOOD	TAN 12/WORD	Bong-Onvie /2/Wood	Nod	White /1/ Was	Brewn/2/Wear) TAN/1/Neta/ GRAY 19/10	10011/2
	WPL 1/ey/19	Swurdt (minelicies)	/ ole Description (Co Layers /Substrate)	n/2	2 2 / 2 /	Olivie /	Benger 1/ Wood	te/1	2/ Jun /2	N/C
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K SAMPL Project Name	Project No.: Project Manager, APN: Site Address:		Building Number		54	মন্ত	1		H D L	1
BULK		Un lun.						24		
AINT	Suite 40	Br (signiti	Sample ID	1-120	D1-16P	D1-13P	D1-20P	112-14	1-23P	
SED P	94612 94612 5 (fax) DV INFOF	inquished	Sear		A	ZZ	<u>A</u> A	AC	<u>a</u> <u>a</u>	
LEAD BASED PAINT BULK SAMPLE DATA SHEET Ninye & Moore Volucion Project Name: VO 31475-01	Oakland, CA 94612 510-633-5640 510-633-5640 510-633-5646 (fax) 6HAIN OF CUSTODY INFORMATION:	Bill Turk hun P. 11 Um Jun.	Dida	. .						
LEA Nimy	S10-6 S10-6	B			<u> </u>					

OrderID: 091902310

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Winoput on 101/1201 Condition Intert Nr for Po al. M. IMP/ Infland sheet3 of 3 Title Received Bys (significant) EMARIE Surface Area 500SF 360 JF Laboratory: 150 55 Estimated 50 SF Soft 150.07 d Tel: Fax Sample Description (Color /# White a hobod -18MMA Doon! Tam-Olive/2/metal Pink A holo Layers /Substrate) That when the to 12/100 Bown/2/word 124/19 Brown 2/ all with Date Sampled: Conversion Con Sampled By: Sampled By: Sampled By: Component Building Peck M MM the w Trim Corretation House-SW Window Canedulur House -Seven Robur JO ŝ Page 3 Curvetaley's Esti Front Window 2 Cauretakon's -Burly room Sample Location . Company - Date -Frant porch rai Project Name: SAMA POSA 124/19 LEAD BASED PAINT BULK SAMPLE DATA SHEET Project Manager: 403 43500 ~ 1 Nunya6Micard APN: Site Address: Ŧ Project No.: Building Number D1-25P |HP AF × AP AH Reinquished By (sign/print) : 'Ryl Linha 1956 Webster Street, Suite 400 DI-26P D1-29P 12-27-20 M-30P CHAIN OF CUSTODY INFORMATION: M-28P Sample ID Oakland, CA 94612 510-633-5646 (fax) Ninyo & Moore d Cullum 510-633-5640 Cloe,

OrderID: 091902310

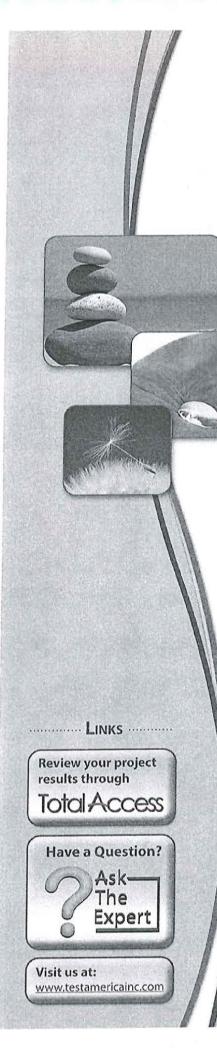
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APPENDIX D

Polychlorinated Biphenyl Laboratory Analytical Report and Chain-of-Custody Records

Ninyo & Moore | Howarth Park, 630 Summerfield Road, Santa Rosa, California | 403435001 | February 8, 2019



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Pleasanton 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-91037-1 Client Project/Site: Santa Rosa

For: Ninyo & Moore 2020 Challenger Drive Suite 103 Alameda, California 94501

Attn: Bill Larkin

Akenef Sal D

Authorized for release by: 2/5/2019 4:06:10 PM

Afsaneh Salimpour, Senior Project Manager (925)484-1919 afsaneh.salimpour@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

TestAmerica Job ID: 720-91037-1

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Definitions/Glossary

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job ID: 720-91037-1

3

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
u	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
.OD	Limit of Detection (DoD/DOE)
_OQ	Limit of Quantitation (DoD/DOE)
ADA	Minimum Detectable Activity (Radiochemistry)
NDC	Minimum Detectable Concentration (Radiochemistry)
NDL	Method Detection Limit
ЛL	Minimum Level (Dioxin)
1C	Not Calculated
1D	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
2C	Quality Control
ER	Relative Error Ratio (Radiochemistry)
tL.	Reporting Limit or Requested Limit (Radiochemistry)
PD	Relative Percent Difference, a measure of the relative difference between two points
EF	Toxicity Equivalent Factor (Dioxin)
EQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Pleasanton

2/5/2019 C02162

Client: Ninyo & Moore Project/Site: Santa Rosa

Job ID: 720-91037-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-91037-1

Comments

No additional comments.

Receipt

The samples were received on 1/28/2019 1:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC Semi VOA

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: PCB-01/952-NORTH WINDOW PUTTY (720-91037-1), PCB-02/952-WEST WINDOW PUTTY (720-91037-2), PCB-03/CARETAKER-EAST WINDOW PUTTY (720-91037-3), PCB-04/GREENHOUSE-NORTH WINDOW PUTTY (720-91037-4), (LCS 720-259677/2-A), (LCSD 720-259677/3-A) and (MB 720-259677/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

TestAmerica Job ID: 720-91037-1

TestAmerica Pleasanton

2/5/2019 C02162

Lab Sample ID: 720-91037-1 Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY No Detections. Lab Sample ID: 720-91037-2 Client Sample ID: PCB-02/952-WEST WINDOW PUTTY No Detections. Lab Sample ID: 720-91037-3 Client Sample ID: PCB-03/CARETAKER-EAST WINDOW PUTTY No Detections.

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW PUTTY

Client: Ninyo & Moore Project/Site: Santa Rosa

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	430		290		ug/Kg	1	676	8082	Total/NA

Detection Summary

TestAmerica Job ID: 720-91037-1

Lab Sample ID: 720-91037-4

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Client Sample Results

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY Date Collected: 01/24/19 10:05 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-1 Matrix: Solid

TestAmerica Job ID: 720-91037-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
PCB-1260 .	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69	-	32 - 112				02/01/19 14:53	02/05/19 12:09	1
DCB Decachlorobiphenyl	100		2 - 122				02/01/19 14:53	02/05/19 12:09	1

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Client Sample Results

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY Date Collected: 01/24/19 10:15 Date Received: 01/28/19 13:35

Lab Sample ID: 720-91037-2 Matrix: Solid

TestAmerica Job ID: 720-91037-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1221	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1232	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1242	ND		280	6	ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1248	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1254	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
PCB-1260	ND		280		ug/Kg		02/01/19 14:53	02/05/19 12:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		32 - 112				02/01/19 14:53	02/05/19 12:26	1
DCB Decachlorobiphenyl	83		2 - 122				02/01/19 14:53	02/05/19 12:26	1

Client Sample Results

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW

PUTTY

Date Collected: 01/24/19 13:05 Date Received: 01/28/19 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	-	290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
PCB-1260	ND		290		ug/Kg		02/01/19 14:53	02/05/19 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		32 - 112				02/01/19 14:53	02/05/19 12:43	1
DCB Decachlorobiphenyl	99		2 - 122				02/01/19 14:53	02/05/19 12:43	1

Lab Sample ID: 720-91037-3

Matrix: Solid

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Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW

PUTTY

Date Collected: 01/24/19 14:10 Date Received: 01/28/19 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1221	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1232	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1242	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1248	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1254	ND		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
PCB-1260	430		290		ug/Kg		02/01/19 14:53	02/05/19 13:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene			32 - 112				02/01/19 14:53	02/05/19 13:00	1
DCB Decachlorobiphenyl	110		2 - 122				02/01/19 14:53	02/05/19 13:00	1

Lab Sample ID: 720-91037-4

Matrix: Solid

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Surrogate Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job-ID: 720-91037-1

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Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

				Percent Surrogate Recovery (Acceptance Limits)
		TCX1	DCBP1	
Lab Sample ID	Client Sample ID	(32-112)	(2-122)	
720-91037-1	PCB-01/952-NORTH WINDOW PU1	69	100	
720-91037-2	PCB-02/952-WEST WINDOW	87	83	
	PUTTY			
720-91037-3	PCB-03/CARETAKER-EAST	90	99	
	WINDOW PUTTY			
720-91037-4	PCB-04/GREENHOUSE-NORTH	87	110	
	WINDOW PUTTY	221		
LCS 720-259677/2-A	Lab Control Sample	59	93	
LCSD 720-259677/3-A	Lab Control Sample Dup	61	95	
MB 720-259677/1-A	Method Blank	59	87	
Surrogate Legend				

DCBP = DCB Decachlorobiphenyl

Client: Ninyo & Moore Project/Site: Santa Rosa

TestAmerica Job ID: 720-91037-1

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Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 720-259677/1-/ Matrix: Solid Analysis Batch: 259796	Ą										Client S		Methoo ype: To Batch:	otal/NA
		мв	мв											
Analyte	R	tesult	Qualifier	RL		MDL	Unit		D	F	Prepared	Analyz		Dil Fac
PCB-1016		ND		50			ug/Kg			02/0	01/19 14:53	02/05/19	11:18	
PCB-1221		ND		50			ug/Kg			02/0	01/19 14:53	02/05/19	11:18	1
PCB-1232		ND		50			ug/Kg			02/0	01/19 14:53	02/05/19	11:18	1
PCB-1242		ND		50			ug/Kg			02/0	01/19 14:53	02/05/19	11:18	1
PCB-1248		ND		50			ug/Kg			02/0	01/19 14:53	02/05/19	11:18	1
PCB-1254		ND		50			ug/Kg			02/0	1/19 14:53	02/05/19	11:18	1
PCB-1260		ND		50			ug/Kg			02/0	1/19 14:53	02/05/19	11:18	1
		ΜВ	MB											
Surrogate	%Reco	overy	Qualifier	Limits						P	repared	Analyz		Dil Fac
Tetrachloro-m-xylene		59	1.111	32 - 112						02/0	1/19 14:53	02/05/19	11:18	1
DCB Decachlorobiphenyl		87		2 - 122						02/0	1/19 14:53	02/05/19	11:18	1
Analyte PCB-1016 PCB-1260	i.			Added 133 133	Result 93.7 114	Quali	fier	Unit ug/Kg ug/Kg		<u>D</u>	%Rec 70 85	Limits 55 - 112 65 - 120		
	LCS	LCS												
Surrogate %/	Recovery	Quali	fier	Limits										
Tetrachloro-m-xylene	59			32 - 112										
DCB Decachlorobiphenyl	93			2 - 122										
													Camal	e Dun
Matrix: Solid	-A			Spike	LCSD	LCSD	(Clie	ent S	Sam	ple ID: L	ab Control Prep Ty Prep B %Rec.		tal/NA
Matrix: Solid Analysis Batch: 259796	8-A			Spike Added				Clie	ent S	Sam D	ple ID: L	Prep Ty Prep B	pe: To	tal/NA 59677
Matrix: Solid Analysis Batch: 259796 Malyte	B-A			Added	Result	LCSD Qualit	ler	Unit	ent S			Prep Ty Prep B %Rec.	/pe: To latch: 2	tal/NA 59677 RPD
Matrix: Solid Analysis Batch: 259796 Analyte PCB-1016	I-A						lier		ent S		%Rec	Prep Ty Prep B %Rec. Limits	pe: To atch: 2 RPD	tal/NA 59677 RPD Limit
Matrix: Solid Analysis Batch: 259796 Analyte PCB-1016				Added 133	Result 102		lier	Unit ug/Kg	ent \$		%Rec	Prep Ty Prep B %Rec. Limits 55 - 112	pe: To atch: 2 RPD 8	tal/NA 59677 RPD Limit 20
Lab Sample ID: LCSD 720-259677/3 Matrix: Solid Analysis Batch: 259796 Analyte PCB-1016 PCB-1260	LCSD	LCSD Qualit		Added 133	Result 102		lier	Unit ug/Kg	ent \$		%Rec	Prep Ty Prep B %Rec. Limits 55 - 112	pe: To atch: 2 RPD 8	tal/NA 59677 RPD Limit 20
Matrix: Solid Analysis Batch: 259796 Analyte PCB-1016 PCB-1260	LCSD			Added 133 133	Result 102		lier	Unit ug/Kg	ent S		%Rec	Prep Ty Prep B %Rec. Limits 55 - 112	pe: To atch: 2 RPD 8	tal/NA 59677 RPD Limit 20

QC Association Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

GC Semi VOA

Prep Batch: 259677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Total/NA	Solid	3550B	
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Total/NA	Solid	3550B	
MB 720-259677/1-A	Method Blank	Total/NA	Solid	3550B	
.CS 720-259677/2-A	Lab Control Sample	Total/NA	Solid	3550B	
_CSD 720-259677/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
nalysis Batch: 25979(Madalu	Method	Pren Batch
	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
ab Sample ID		Prep Type Total/NA	Solid	8082	259677
nalysis Batch: 25979(ab Sample ID /20-91037-1 /20-91037-2	Client Sample ID			a constant of the second	259677 259677
ab Sample ID 20-91037-1	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY	Total/NA	Solid	8082	259677
ab Sample ID 20-91037-1 20-91037-2 20-91037-3	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY PCB-02/952-WEST WINDOW PUTTY	Total/NA Total/NA	Solid Solid	8082 8082	259677 259677 259677 259677
ab Sample ID 20-91037-1 20-91037-2	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY PCB-02/952-WEST WINDOW PUTTY PCB-03/CARETAKER-EAST WINDOW PUTTY	Total/NA Total/NA Total/NA	Solid Solid Solid	8082 8082 8082	259677 259677 259677
ab Sample ID 20-91037-1 20-91037-2 20-91037-3 20-91037-4	Client Sample ID PCB-01/952-NORTH WINDOW PUTTY PCB-02/952-WEST WINDOW PUTTY PCB-03/CARETAKER-EAST WINDOW PUTTY PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8082 8082 8082 8082	259677 259677 259677 259677

TestAmerica Job ID: 720-91037-1

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Lab Chronicle

Client: Ninyo & Moore Project/Site: Santa Rosa

Client Sample ID: PCB-01/952-NORTH WINDOW PUTTY

Date Collected: 01/24/19 10:05 Date Received: 01/28/19 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:09	DCH	TAL PLS

Client Sample ID: PCB-02/952-WEST WINDOW PUTTY

Date Collected: 01/24/19 10:15 Date Received: 01/28/19 13:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:26	DCH	TAL PLS

Client Sample ID: PCB-03/CARETAKER-EAST WINDOW PUTTY Date Collected: 01/24/19 13:05

Date Received: 01/28/19 13:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082		1	259796	02/05/19 12:43	DCH	TAL PLS

Client Sample ID: PCB-04/GREENHOUSE-NORTH WINDOW PUTTY

Lab Sample ID: 720-91037-4

TestAmerica Job ID: 720-91037-1

Lab Sample ID: 720-91037-1

Lab Sample ID: 720-91037-2

Lab Sample ID: 720-91037-3

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Date Collected: 01/24/19 14:10 Date Received: 01/28/19 13:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			259677	02/01/19 14:53	NDU	TAL PLS
Total/NA	Analysis	8082	<u>*</u>	1	259796	02/05/19 13:00	DCH	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

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Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program		EPA Region	Identification Number	Expiration Date		
California	State Program	1	9	2496	01-31-20		
The following analytes	are included in this report, but the	laboratory is not ce	rtified by the governir	g authority. This list may incl	ude analytes for which		
The following analytes the agency does not of	are included in this report, but the er certification.	laboratory is not ce	rtified by the governir	g authority. This list may incl	ude analytes for which		

Method Summary

Client: Ninyo & Moore Project/Site: Santa Rosa

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Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
3550B	Ultrasonic Extraction	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

2/5/2019 C02162

Sample Summary

Client: Ninyo & Moore Project/Site: Santa Rosa TestAmerica Job ID: 720-91037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-91037-1	PCB-01/952-NORTH WINDOW PUTTY	Solid	01/24/19 10:05	01/28/19 13:35
720-91037-2	PCB-02/952-WEST WINDOW PUTTY	Solid	01/24/19 10:15	01/28/19 13:35
720-91037-3	PCB-03/CARETAKER-EAST WINDOW PUTTY	Solid	01/24/19 13:05	01/28/19 13:35
720-91037-4	PCB-04/GREENHOUSE-NORTH WINDOW PUTTY	Solid	01/24/19 14:10	01/28/19 13:35

TestAmerica Pleasanton

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TectAmonia	THE LEADED IN ENVIROIMMENTAL TESTING	TestAmerica Laboratories, Inc.	of COCs		Valk-in Client	Lab Sampling.	Job / SDG No.:		Sample Specific Notes,					-					ed longer than 1 month)	Months		Them (D No	Date/Time:	1.78/19 B3S	Date/Time	Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018	5
ecord	he1881 #	(da 1/11 Date: 1/27/10	Carrier:												720-91037 Chain of Custody	-			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	Disposal by Lab DArchive for		Cooler Temp. (°C): Obs'd Corr'd:	Comp	A Cart	U Company:	+ 7 C FOIT NO. C	8
Chain of Custody Record		Site Contact: R°//	Lab Contact:	GNG DAYS		N/A) əlqm	Matrix Cont. 6 Pontoron Mi Cont. 7 Pontoron Mi Cono			8	X								own DReturn to Client			Date/Time: 9 Received by:	Deletimes 1 Received by		i,	14
	20-91051 Regulatory Program: Dow	Project Manage	Tel/Fax:	D CALENDAR DAYS I UNDAROUND I IMP	TAT if differe	\¢	0 2005 Refuilan	Sample Sample Type Date Time G-Graph	R, HU 11/24/19/10:45 BULK	1 SI:01 / 1/1/	11	18/11 V 114:10 V	-		 			VO3; 5=NaOH; 6= Other	Please List any EPA Waste Codes for t	C Poison B CUnknown	TAT	Custody Seal No	CORDENIA	Company: TAPTICS 1	- Condensor		
>>> Select a Laboratory <<< #NA		Client Contact	Address 2020 1/11/ Prints 4.63	ALAMPAA		Project Name: S.A.N.H.A. ROSA	PO# 403435001	Sample Identification	1952 - North Window	POB-U2/452-11/85t Window 1	Flandoker. East Window	PCB coy / Green house-Northy Window					Presentation [[sad: 1= na] 2= 1101; 3= 1100011; 4=11	Preservation used: 1=10e, 2= htul; 3= htts:04; 4=HNO3; 5=NaOH; 6= Other Possible Hazard Identification:	Are any samples from a listed EPA Hazardous Waste ² Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.	Shon-Hazard Drammable Shon Imfant Special Instructions/QC Requirements & Comments:	5 day / regular	Custody Seals Intact: D Yes D No	Polinarished by M. Man Man	Relinquested by:			

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Client: Ninyo & Moore

Job Number: 720-91037-1

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List Source: TestAmerica Pleasanton

Login Number: 91037 List Number: 1 Creator: Perry, Janae R

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX E

CDPH Form 8552 - Lead Hazard Evaluation Report

State of California-Health and Human Services Agency

LEAD HAZARD EVALUATION REPORT

	154/19		
Section 1 — Date of Lead Hazard Evaluation	[2][]		
Section 2 — Type of Lead Hazard Evaluation (Chec		- Olita	C 1.
Lead Inspection Risk assessment	Clearance Inspection	Other (specify)	samping.
Section 3 — Structure Where Lead Hazard Evaluati	on Was Conducted		
Address [number, street, apartment (if applicable)]	City	County	Zip Code
630 Summerfield Road	Janta Ros	a Jonoma	95401
Construction date (year) Type of structure		Children living in structure	92
10 C	School or daycare	🗌 Yes 🛛 No	
Single family dwelling	Other	Don't Know	
Section 4 — Owner of Structure (if business/agency	v, list contact person)		
Name City of Santa Rosa, Give Address [number, street, apartment (if applicable)]	mt Bailey	Telephone number 707 543 - L State	+508 Zip Code
69 Stony Civele	Santa Rosa	CA	95401
Section 5 - Results of Lead Hazard Evaluation (che	ck all that apply)		
No lead-based paint detected	based paint detected	Deteriorated lead-base	ad paint detected
No lead hazards detected Lead-contaminated du	Ist found Lead-conta	minated soil found Othe	r
Section 6 — Individual Conducting Lead Hazard Eval	uation		
Jame Allam P. Landan		Telephone number 510/343-300	0
ddress [number, street, apartment (if applicable)]	City	State	Zip Code
1020 Manager Dr. #103	Aameda	CA	9540
DPH certification number Sign	nature 11 A	1 1	Date /
5543	Arlelliam P. T	as kin	2/4/19
ame and CDPH certification number of any other individuals co	nducting sampling or testing (if applicable)	741
N/A			
ection 7 – Attachments			
A ferre distance development of the state of	· · · · · · · · · · · · · · · · · · ·		
A foundation diagram or sketch of the structure indicatin lead-based paint;	g the specific locations of	each lead hazard or presence	e of
Each testing method, device, and sampling procedure u			
All data collected, including quality control data, laborato	ory results, including labora	atory name, address, and pho	one number.
st copy and attachments retained by inspector	Third copy only (no atta	chments) mailed or faxed to:	
cond copy and attachments retained by owner			
and only and automnonic relation by owner	California Department of Childhood Lead Poison 850 Marina Bay Parkwa Richmond, CA 94804-6 Fax: (510) 620-5656	ing Prevention Branch Reports y, Building P, Third Floor	9.

CDPH 8552 (6/07)

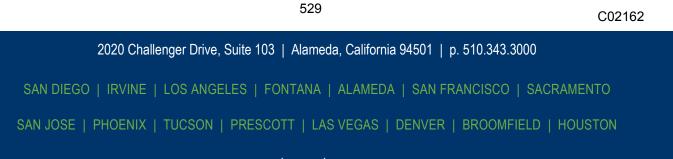
527

TRANSMISSION VERIFICATION REPORT

TIME	:	02/04/2019 20:31
NAME	:	NINYO AND MOORE
FAX	:	510-633-5646
TEL	1	510-633-5640
SER. #	:	BROD5J252210

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE 02/04 20:30 6205656 00:00:32 00 OK STANDARD ECM





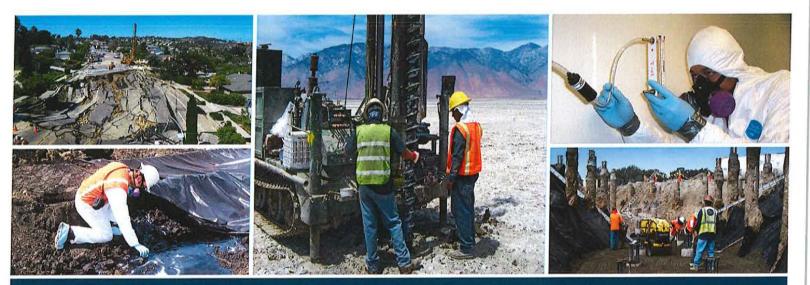
www.ninyoandmoore.com

HAZARDOUS BUILDING MATERIALS SURVEY

Julliard Park Restroom Building 227 Santa Rosa Avenue Santa Rosa, California

City of Santa Rosa Transportation & Public Works Department 69 Stony Circle Santa Rosa, California 95401

February 5, 2019 | Project No. 403435001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS



Geotechnical & Environmental Sciences Consultants

C02162



HAZARDOUS BUILDING MATERIALS SURVEY

Julliard Park Restroom Building 227 Santa Rosa Avenue Santa Rosa, California

Mr. Grant Bailey, P.E. Associate Civil Engineer City of Santa Rosa Transportation & Public Works Department 69 Stony Circle | Santa Rosa, California 95401 February 1, 2019 | Project No. 403435001

Mian Rauhn

William P. Larkin Principal Environmental Scientist DOSH Certified Asbestos Consultant (No. 99-2688) DPH Certified Lead Inspector/Assessor and Project Monitor (No. 5543)

WPL

Distribution: (1) Addressee (via e-mail)

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- 1 Bulk Asbestos Sampling Results
- 2 Lead-Containing Material Sampling Results
- 3 Miscellaneous Hazardous Building Materials Survey Results

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- 2 Site Vicinity
- 3 Sample Locations

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A – Certifications

B – Asbestos Laboratory Analytical Report and Chain-of-Custody Records

C – Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

D - CDPH Form 8552 - Lead Hazard Evaluation Report

1 INTRODUCTION

Ninyo & Moore was retained by the City of Santa Rosa (City/Client) to conduct a hazardous building materials survey (HBMS) at the restroom building in Julliard Park, located at 227 Santa Rosa Avenue in Santa Rosa, California (Figures 1 and 2). Our services included the performance of suspect asbestos-containing materials (ACMs), suspect lead-containing materials (LCMs) and suspect bulk poly chlorinated biphenyl-containing materials (PCBCMs) surveys, and a review and quantification of miscellaneous hazardous building materials (potential mercury-containing thermostats/switches, PCB-containing items [transformers, light ballasts, etc.], fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems) at the bathroom building.

The survey sampling activities were performed in accordance with established guidelines for the assessment of ACM, LCM and PCBCM, and are based upon conditions at the restroom building at the time of the surveying/assessment activities. Our objective and scope of work for the sampling activities are presented below.

1.1 Involved Parties

The sampling activities were performed on January 25, 2019, by Mr. William Larkin. Mr. Larkin also provided principal-level oversight and quality review and is a Department of Occupational Safety and Health (DOSH)-Certified Asbestos Consultant (No. 99-2688) and a California Department of Public Health (DPH)-certified Lead Inspector/Assessor and Project Monitor (No. 5543). Mr. Larkin's professional certifications are presented in Appendix A.

1.2 User Reliance

This report may be relied upon and is intended exclusively for use by the City. Any use or re-use of the findings, conclusions, and/or recommendations of this report by parties other than the City is undertaken at said parties' sole risk.

2 OBJECTIVE AND SCOPE OF SERVICES

The purpose of this study is to provide information regarding current conditions within the restroom building to assist the City in implementing proposed building demolition/renovation activities. Ninyo & Moore personnel performed the following services including:

- Visual reconnaissance of the site structure to document homogeneous areas of hazardous building materials and locate suspect ACM and LCMs.
- Collection of 15 bulk sample of suspect ACMs and submittal of this sample to a certified, independent laboratory for analysis of asbestos content.

- Collection of three suspect LCM samples and submittal of these samples to a certified, independent laboratory for analysis of lead content.
- Observation and collection of suspect bulk PCB sample (if any) and submittal of these samples to a certified, independent laboratory for analysis of PCB content.
- Visual assessment and quantification of potential mercury-containing thermostats/switches, PCB-containing items, fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and FreonTM-containing refrigeration systems.
- Preparation of this HBMS report, which presents our data and summarizes the assessed building materials. The report includes a site description, laboratory testing information, findings, conclusions, and recommendations, sample/site location maps, tables summarizing the building materials assessed, and the estimated quantities of identified materials.

3 SITE DESCRIPTION

The restroom building in Julliard Park is located in the southeast area of Julliard Park near the northwest corner of Santa Rosa Avenue and Julliard Park Way and encompasses approximately 550 square feet. Building finishes include unpainted interior concrete floors and walls, exterior stucco wall assemblies, gypsum wallboard interior walls (in the central janitor's room) and built-up roofing materials.

4 PHYSICAL LIMITATIONS

No physical limitations were encountered during the site visit. Underground utilities, such as suspect cementitious water lines or suspect insulated/coated gas or electrical lines were not assessed during these survey activities. If additional suspect materials and/or surfaces are encountered during site building demolition/renovation activities that have not been assessed, they should be assumed to be asbestos and/or lead-containing and handled accordingly, or should be sampled and analyzed to assess whether they are hazardous (asbestos and/or lead-containing, etc.). As-built diagrams of the site buildings were not provided for review.

5 SAMPLE COLLECTION AND ANALYSES

On January 25, 2019, the restroom building was assessed for the presence of ACMs, LCMs, PCBCMs and miscellaneous hazardous building materials. The ACM, LCM and PCBCM surveys followed United States Environmental Protection Agency (EPA) guidelines, or industry standards, within the limitations of the scope of this assessment. Survey activities are discussed below.

5.1 Asbestos Survey

A preliminary visual assessment and bulk sampling survey of suspect ACMs were performed by a CAC. Representative samples of suspect ACMs were collected after identification of homogeneous sampling areas (areas in which the materials are consistent in color, texture, construction or application date, and general appearance). Each homogeneous area was observed for material type, location, condition, and friability. Representative samples were collected from each area using EPA-recommended sampling procedures.

Fifteen bulk suspect asbestos samples were collected and analyzed. Building materials that were sampled and analyzed for the presence of asbestos are presented in Table 1.

After collection, the suspect ACM samples were transferred to EMSL Analytical, Inc., (EMSL) of San Leandro, California for analysis. EMSL is a laboratory accredited in the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis. The samples were analyzed for the presence and quantification of asbestos fibers, using polarized light microscopy with dispersion staining (PLM/ds), in general accordance with EPA Method 600/R-93/116. The lower limit of reliable detection for asbestos using the PLM method is approximately 1 percent by volume. Currently, the EPA and the State of California stipulate that materials containing more than 1% asbestos constitute an ACM and the State of California stipulates that a material containing greater than 0.1% asbestos constitutes an asbestos-containing construction material (ACCM). Building materials that were sampled and analyzed for the presence of asbestos are presented in the attached Table 1, and the locations from which bulk asbestos samples were collected are shown on Figure 3. Materials in which no asbestos was detected are defined in Table 1 as "ND" (for "None Detected") in the "Asbestos Content" column. PLM 400 and/or 1,000 point quantitations were used (as-needed) to confirm some ACMs' asbestos content. Copies of the laboratory analytical reports and chain-of-custody records for suspect ACMs are presented in Appendix B. ACMs reported in the Ninyo & Moore survey are listed in Section 6.1 below.

5.2 Lead-Containing Materials Survey

After collection, the suspect LCM samples were also transferred to EMSL for analysis of total lead content by Flame Atomic Absorption Spectroscopy (Flame AAS/SW 846 3050B/7000B). EMSL is an American Industrial Hygiene Association accredited Environmental Lead Laboratory (AIHA ELLA). Currently, the EPA stipulates what concentrations of lead in non-volatile components of surface coatings or materials indicate whether a material is considered to be lead-containing. The EPA stipulates that paint containing an amount equal to or in excess of 1 milligram per square centimeter (1.0 mg/cm²), or more than half of one percent (0.5%) by

weight (or 5,000 milligrams per kilogram [mg/kg]), constitute a lead-based paint (LBP). Coatings with any detectable amount of reported lead would be considered lead-containing paint (LCP).

Paint that is chipping or peeling, or that may be readily removed from surfaces, and has a lead content equal to or more than 1,000 mg/kg, would require handling as a California Title 22 hazardous waste. The analytical results associated with paint chip samples collected from the building are summarized in Table 2 and copies of the laboratory analytical report and chain-of-custody record are presented in Appendix C.

5.3 Polychlorinated Biphenyl-Containing Materials Survey

No suspect PCBCMs were observed during our site sampling activities.

5.4 Miscellaneous Hazardous Building Materials Survey

A visual assessment of potential mercury-containing thermostats/switches, PCB-containing items (transformers, light ballasts, etc.), fluorescent light tubes, exit signs, smoke detectors, air conditioning units, and FreonTM-containing refrigeration systems was performed at the restroom building.

6 FINDINGS

A HBMS was performed at the Julliard Park restroom building to ascertain if ACMs, LCMs, PCBCMs and/or mercury-containing thermostats, potential PCB-containing items, fluorescent light tubes, exit signs with radioactive sources, and Freon[™]-containing refrigeration systems) may exist.

Based upon the analytical results of bulk samples collected and observations made during this survey, ACCMs and LCMs are located within the restroom building. Miscellaneous hazardous building materials observed at the restroom building included fluorescent light tubes and associated light ballasts.

6.1 Asbestos-Containing Materials

Materials that were found to be asbestos-containing through Ninyo & Moore's sampling activities include the following:

Approximately 1,000 square feet of exterior stucco assemblies (samples JP-02, JP-03 and JP-04), located on the exterior walls of the building, containing less than 1% (<1%) chrysotile asbestos. This material assembly was re-analyzed via PLM 400-point quantitation and was reported to contain from <0.1% to 0.2% chrysotile asbestos. Based upon these reported results, this material assembly is considered an ACCM.

6.2 Lead-Containing Materials

Three paint chip samples were collected for analysis of lead content. One of the three paint chip samples was reported with lead concentrations greater than 0.5% by weight (or 5,000 mg/kg); Brown paint from an interior door frame in the men's restroom area was reported at 0.52% by weight (or 5,200 mg/kg) (sample JP-01P). This paint is considered LBP.

Another paint sample (sample JP-03P, brown paint from an exterior door) was reported at 0.013% by weight (or 130 mg/kg). This paint sample is considered LCP.

The third paint sample (JP-02P) was reported at less than (<) 0.008% by weight (or <80 mg/kg), its associated detection limit. Occupational Health and Safety Administration (OSHA) regulations apply whenever materials with any detectable amounts of lead are disturbed.

A copy of the CDPH form 8552 "Lead Hazard Evaluation Report" for the site structure is included in Appendix D.

6.3 Potential Polychlorinated Biphenyl-Containing Materials

As stated above, no suspect bulk PCBCMs were observed during our site sampling activities.

6.4 Miscellaneous Hazardous Building Materials Survey

Approximately 16 fluorescent light bulbs and 8 associated light ballasts were observed during our sampling activities (Table 3).

7 RECOMMENDATIONS

Since ACCMs and LCMs have been reported within the restroom building, the following recommendations and precautions are provided:

The identified ACCM within the restroom building should be incorporated into a building-specific Operations and Maintenance (O&M) Plan. This O&M Plan should emphasize that the ACCM should not be disturbed. Any ACMs/ACCMs in damaged condition should be promptly repaired or abated. Prior to renovation or demolition work that would disturb the ACCM, a licensed asbestos abatement removal contractor should remove the ACCM in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of ACCM. The removal work scope and requirements should be included in a work plan/specification developed by a California Certified Asbestos Consultant (CAC). It is also recommended that all abatement activities should be conducted under the observation of a CAC. While Ninyo & Moore provided an estimate of the quantity of ACCM present at the

restroom building (Table 1), it is the abatement contractor's responsibility to assess the actual ACCM quantity present.

- The identified LCMs reported at the restroom building should be incorporated into a building-specific O&M Plan and should not be disturbed. Any LCMs found in a damaged or non-intact condition should be abated and/or stabilized. Prior to renovation or demolition work that would disturb the identified LCMs, a licensed lead abatement removal contractor should stabilize and/or remove the identified LCMs in compliance with the most recent applicable federal, state, and local laws, regulations, standards, and/or codes governing abatement, transport, and disposal of LCMs. All lead waste must be properly characterized prior to disposal to determine waste classification, packaging, transportation, and disposal requirements. While Ninyo & Moore provided an estimate of the quantity of LCMs present at the restroom building (Table 2), it is the responsibility of abatement contractors to assess the actual LCM quantities present.
- potential mercury-containing activities, demolition renovation Prior to or . thermostats/switches, PCB-containing items (light ballasts, transformers, etc.), fluorescent light tubes, exit signs, air conditioning units, and Freon[™]-containing refrigeration systems should be removed and properly recycled or disposed of by a licensed contractor according to applicable federal, state, and local laws/regulations. Light fixtures should be visually inspected, prior to disposal, to determine if they contain PCBs (checked for stickers stating "No PCBs" or "PCB free"). While Ninyo & Moore provided an estimate of the quantity of miscellaneous hazardous building materials present in the restroom building, it is the abatement contractor's responsibility to confirm the quantities of items present.
- There is a possibility that additional suspect ACMs, ACCMs, LCMs, PCBCMs or other miscellaneous hazardous building materials may be discovered during building renovation and/or demolition activities. Therefore, Ninyo & Moore recommends that, should additional suspect materials not sampled or assessed in this report be uncovered during demolition/renovation activities, (a) samples of suspect materials should be collected for laboratory analysis and activities that may impact the materials should cease until laboratory analytical results are reviewed or (b) the materials should be assumed to be hazardous and handled as such.

8 LIMITATIONS

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

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard of care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

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

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

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

Julliard Park/Restroom Building Santa Rosa, California

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Table 1 - Bulk Asbestos Sampling Results

February 5, 2019 Project No. 403435001

Sample I.D.	Building	Material Location	Sample Description	Friable	Ouantity	Condition	Achaetae Contant
10-91	đ	West Roof Area	Roof Assembly	N/A	N/A	N/A	Shingle = ND Shingle 2 = ND Tar = ND
JP-02	đ	Exterior Northwest Corner (Low)	Stucco Assembly	z	1,000 SF	Good	Text - ND Stucco = ND Texture/Paint = <1% CH (0.2% CH)*
JP-03	ąŗ	Exterior Northeast Corner (Low)	Stucco Assembly	Z	See sample JP-02	Good	Stucco = ND Texture/Paint = <1% CH (<0.1% CH)*
JP-04	Ъ	Exterior Southeast Corner (Low)	Stucco Assembly	z	See sample JP-02	Good	Stucco = ND Texture/Paint = <1% CH (0.2% CH)* Mastic = ND
JP-05	dſ	Janitor's Room	Concrete with Black Floor Covering	N/A	N/A	N/A	Concrete = ND Felt = ND Mastic = ND
JP-06	đſ	Janitor's Room	Concrete with Black Floor Covering	N/A	N/A	N/A	Concrete = ND Felt = ND Marria - ND
JP-07	ſſ	Janitor's Room	Concrete Patch	N/A	N/A	N/A	ND ND
JP-08	ď	Janitor's Room	Black Floor Covering	N/A	N/A	N/A	QN
JP-09	ď	Janitor's Room	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND
JP-10	ď	Janitor's Room	Wallboard/Joint Compound	N/A	N/A	N/A	Vallboard = ND Vallboard = ND
JP-11	ď	Janitor's Room	Wallboard/Joint Compound	N/A	N/A	N/A	Wallboard = ND Joint Compound = ND
JP-12	đ	Janitor's Room	Entryway Concrete	N/A	N/A	N/A	Concrete = ND Concrete 2 = ND
JP-13	Чſ	Men's Restroom	Beige Wall Covering	N/A	N/A	N/A	Mastic = ND ND
JP-14	đſ	Women's Restroom	Gray Skim Coat on Concrete	N/A	N/A	N/A	Skim Coat = ND
JP-15	ď	Men's Restroom	Gray Skim Coat on Concrete	N/A	N/A	N/A	DN ON

Julliard Park/Restroom Building Santa Rosa, California

Table 1 - Bulk Asbestos Sampling Results

February 5, 2019 Project No. 403435001

Sample I.D.	Building	Material Location	Sample Description	Friable	Quantity	Condition	Ashestas Content
NOTES:				N/T			
Analysis by Polarize	ed Light Microsc	00v (PI M/FPA 600/P-03/116 Method)					

Altarysis by rotatized Ligiti instroscopy (FLANIERA UUVIK-22) 110 methou). NA = Not Applicable ND = None detected CH = Chryste detected CH = Chryste detected BOLD indicates sample is an asbestos containing material (> 1% asbestos) Estimated quantities are not intended for use in bidding calculations.

Julliard Park/Restroom Building Santa Rosa, California

February 5, 2019 Project No. 403435001

	-		0	Company Guidant			
Sample I.D.	Building	Sample Location	Substrate/Surface	Sample Description (Color / # of Layers /	Estimated Surface Area (Square Fee+t [SF] or I inear	Condition	Total
				Substrate)	Feet[LF])		Weight Percent
JP-01P	đ	Men's Room Door Frame	Frame	1			
acu ai	E		1 I GUILO	brown/2/Metal	30 SF	Intact	0.52
170-Jf	JL	Men's Kestroom Door	Door	Rrown/D/Matol	20.05		
JP-03P	đ	Men's Restroom Exterior Door Examo		IMATHEMILLOIG	20 JF	Intact	<0.0080
NOTEG		TTAL STANDARD FAILURE FOR THE FOR	Door Frame	Brown/2/Wood	10 SF	Intact	0.013
							010.0

Parts per

Fotal Lead

(or mg/kg) Million

5,200 <80

130*

Table 2 - Lead-Containing Material Sampling Results

NOTES:

Total lead analyzed in paint chipos by Flame Atomic Absorption Spectroscopy/Flame AAS (EPA Test Method EPA SW-846 3050B/7000B).

mg/kg = Milligrams per kilogram

Bold concentrations indicate lead-based paint

SF = Square feet

* indicates lead-containing paint that is less than 5,000 mg/kg (or less than 0.5% by weight) Estimated quantities are not intended for use in bidding calculations.

Santa Rosa, California 2810 4th Street

February 5, 2019 Project No. 403435001

Table 3 - Miscellaneous Hazardous Building Materials Survey Results

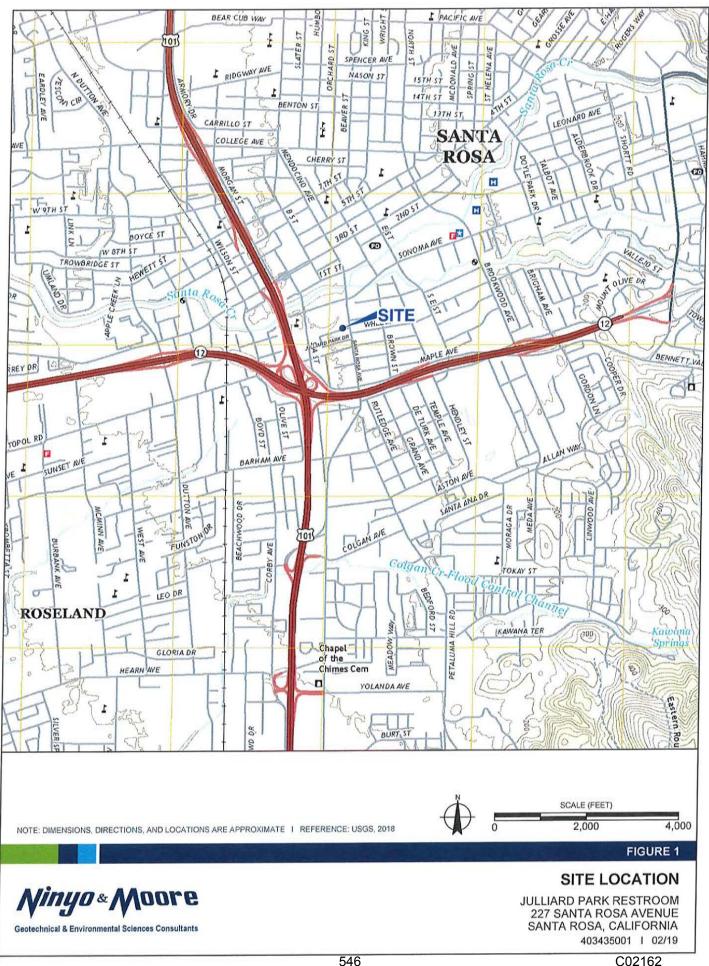
Location Transf	ber of formers	Number of Light Ballasts	Number of Mercury Thermostats	Number of A/C Units	No. of Fluorescent Light Tubes	Number of Exit Signs	No. of Freon Refrigerator
Julliard Park Restroom	0	8	0	0	16	0	0

PCB = Polychlorinated biphenyl

A/C = Air Conditioning

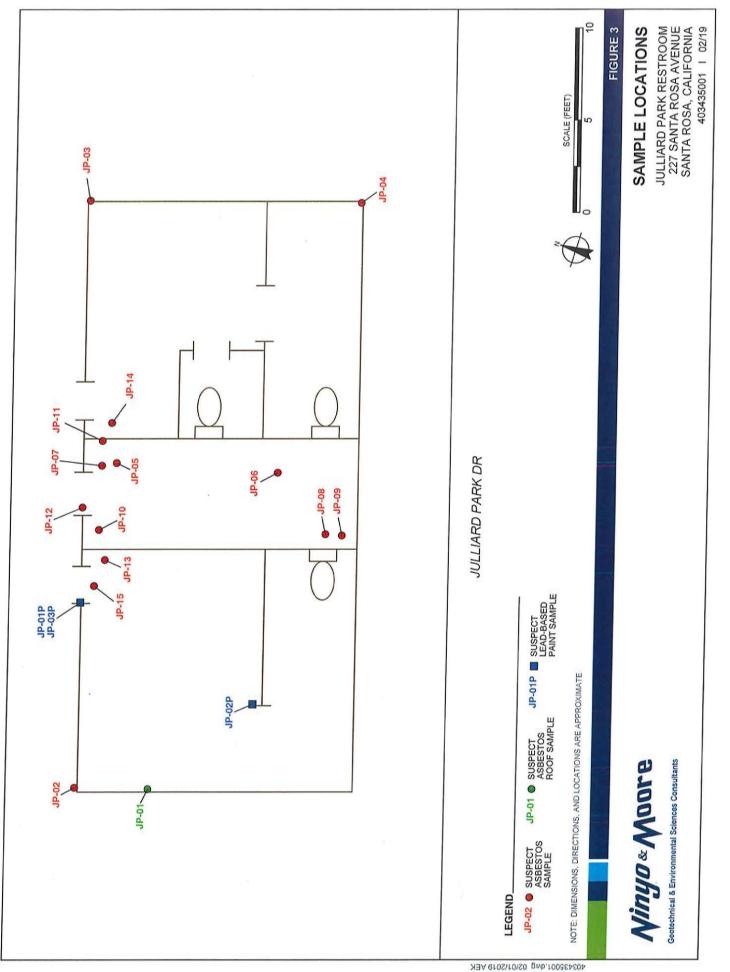
FIGURES

545



403435001.dwg 02/01/2019 AEK





APPENDIX A

Certifications

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS Division of Occupational Safety and Health Asbestos Unit 2424 Arden Way, Suite 495 Sacramento, CA 95825-2417 (916) 574-2993 Office (916) 483-0572 Fax http://www.dir.ca.gov/dirdatabases.html actu@dir.ca.gov Edmund G. Brown, Jr. Governor



911222688C

193

October 29, 2018

William P Larkin 4 Miramonte Road Orinda CA 94563

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. To maintain your certification, you must abide by the rules printed on the back of the certification card.

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days <u>before</u> the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address, fax number or email; of any changes in your contact/mailing information within 15 days of the change.

Sincerely,

In

Jeff Ferrell Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal - Card Attached (Revised 10/24/2012)

State of California Division of Occupational Safety and Health Certified Asbestos Consultant

William P Larkin



Certification No. 99-2688 Expires on 12/08/19

This certification was issued by the Division of Occupational Settery and Health as authorized by Sections 7180 at set, of the Business and Professions Code.

RECRIVED JUN 14 2018 NINYO & MOORE Oakland Office

 State of California Department of Public Health

 Lead-Related
 Exercise

 Construction
 Exercise

 Inspector/Assessor
 07/03/2019

 Project Monitor
 07/03/2019

 Willfam P. Larkin
 ID #: 5543

Mr. William P. Larkin Ninyo + Moore 2020 Challenger Drive, Suite 103 Alameda, California 94501

APPENDIX B

Asbestos Laboratory Analytical Report and Chain-of-Custody Records

EMISL	EMSL Analytical, Inc. 464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	NOMO22
Attention:	Bill Larkin	Phone:	(510) 385-5054
,	Ninyo & Moore	Fax:	(510) 633-5646
	2020 Challenger Drive	Received Date:	01/29/2019 12:00 PM
	Suite 103	Analysis Date:	01/30/2019
	Alameda, CA 94501	Collected Date:	01/25/2019
Project:	SANTA ROSA 403435001		

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
JP-01-Shingle	JP - WEST ROOF AREA - ROOF ASSEMBLY	Black Non-Fibrous Homogeneous	10% Glass	5% Quartz 50% Matrix 35% Non-fibrous (Other)	None Detected
JP-01-Shingle 2 091902317-0001A	JP - WEST ROOF AREA - ROOF ASSEMBLY	Various/Black/Gree n Non-Fibrous Homogeneous	12% Glass	7% Quartz 60% Matrix 21% Non-fibrous (Other)	None Detected
JP-01-Tar	JP - WEST ROOF AREA - ROOF ASSEMBLY	Black Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
JP-01-Felt 091902317-0001C	JP - WEST ROOF AREA - ROOF ASSEMBLY	Black Fibrous Homogeneous	35% Cellulose	50% Matrix 15% Non-fibrous (Other)	None Detected
JP-02-Stucco 091902317-0002	JP - EXT. NW CORNER (LOW) - STUCCO ASSEMBLY	Gray Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
JP-02-Texture Paint 091902317-0002A	JP - EXT. NW CORNER (LOW) - STUCCO ASSEMBLY	Tan Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	<1% Chrysotile
JP-03-Stucco 091902317-0003	JP - EXT. NE CORNER (LOW) - STUCCO ASSEMBLY	Gray Non-Fibrous Homogeneous		25% Quartz 60% Ca Carbonate 15% Non-fibrous (Other)	None Detected
JP-03-Texture Paint 091902317-0003A	JP - EXT. NE CORNER (LOW) - STUCCO ASSEMBLY	Tan Non-Fibrous Homogeneous		50% Ca Carbonate 50% Non-fibrous (Other)	<1% Chrysotile
JP-04-Stucco 091902317-0004	JP - EXT. SE CORNER (LOW) - STUCCO ASSEMBLY	Gray Non-Fibrous Homogeneous		20% Quartz 50% Ca Carbonate 30% Non-fibrous (Other)	None Detected
JP-04-Texture Paint	JP - EXT. SE CORNER (LOW) - STUCCO ASSEMBLY	Tan Non-Fibrous Homogeneous		45% Ca Carbonate 55% Non-fibrous (Other)	<1% Chrysotile
IP-04 Mastic	JP - EXT. SE CORNER (LOW) - STUCCO ASSEMBLY	Black Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
JP-05-Concrete	JP - JANITOR'S ROOM - CONCRETE W/BLACK FLOOR COVERING	Gray/Tan Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
IP-05-Felt 191902317-0005A	JP - JANITOR'S ROOM - CONCRETE W/BLACK FLOOR COVERING	·Black Fibrous Homogeneous	25% Cellulose	50% Matrix 25% Non-fibrous (Other)	None Detected

Initial report from: 01/30/2019 14:41:40

EMSL Analytical, Inc.

EMSL

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com

EMSL Order: 091902317 Customer ID: NOMO22 Customer PO: 403435001

Project ID:

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

			Non-Asbe	stos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
JP-05-Mastic 091902317-0005B	JP - JANITOR'S ROOM - CONCRETE W/BLACK FLOOR COVERING	Black Non-Fibrous Homogeneous		60% Matrix 40% Non-fibrous (Other)	None Detected
JP-06-Concrete 091902317-0006	JP - JANITOR'S ROOM - CONCRETE W/BLACK FLOOR COVERING	Gray Non-Fibrous Homogeneous		25% Quartz 50% Ca Carbonate 25% Non-fibrous (Other)	None Detected
JP-06-Felt 091902317-00064	JP - JANITOR'S ROOM - CONCRETE W/BLACK FLOOR COVERING	Brown Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
JP-06-Mastic 091902317-00068	JP - JANITOR'S ROOM - CONCRETE W/BLACK FLOOR COVERING	Black Non-Fibrous Homogeneous		50% Matrix 50% Non-fibrous (Other)	None Detected
JP-07 091902317-0007	JP - JANITOR'S ROOM - CONCRETE PATCH	Gray Non-Fibrous Homogeneous		15% Quartz 60% Ca Carbonate 25% Non-fibrous (Other)	None Detected
JP-08 091902317-0008	JP - JANITOR'S ROOM - BLACK FLOOR COVERING	Black Fibrous Homogeneous	35% Cellulose	40% Matrix 25% Non-fibrous (Other)	None Detected
JP-09-Wallboard	JP - JANITOR'S ROOM - WALLBOARD/JOINT	Brown Non-Fibrous Homogeneous	2% Glass	60% Gypsum 38% Non-fibrous (Other)	None Detected
JP-09-Joint Compound	COMP JP - JANITOR'S ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
JP-10-Wallboard	JP - JANITOR'S ROOM - WALLBOARD/JOINT COMP	Brown Non-Fibrous Homogeneous	<1% Glass	70% Gypsum 30% Non-fibrous (Other)	None Detected
JP-10-Joint Compound	JP - JANITOR'S ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		80% Ca Carbonate 20% Non-fibrous (Other)	None Detected
IP-11-Wallboard	JP - JANITOR'S ROOM - WALLBOARD/JOINT COMP	Brown Non-Fibrous Homogeneous	2% Glass	65% Gypsum 33% Non-fibrous (Other)	None Detected
P-11-Joint Compound 91902317-0011A	JP - JANITOR'S ROOM - WALLBOARD/JOINT COMP	White Non-Fibrous Homogeneous		75% Ca Carbonate 25% Non-fibrous (Other)	None Detected
P-12-Concrete	JP - JANITOR'S ROOM - ENTRY WAY CONCRETE	Gray Non-Fibrous Homogeneous		5% Quartz 60% Ca Carbonate 35% Non-fibrous (Other)	None Detected
P-12-Concrete 2	JP - JANITOR'S ROOM - ENTRY WAY CONCRETE	Gray/White Non-Fibrous Homogeneous		15% Quartz 50% Ca Carbonate 35% Non-fibrous (Other)	None Detected
P-12-Mastic	JP - JANITOR'S ROOM - ENTRY WAY CONCRETE	Black Non-Fibrous Homogeneous	2% Cellulose	60% Matrix 38% Non-fibrous (Other)	None Detected
P-13	JP - MEN'S RESTROOM - BEIGE WALL COVERING	White/Beige Non-Fibrous Homogeneous	5% Glass	50% Ca Carbonate 45% Non-fibrous (Other)	None Detected

Initial report from: 01/30/2019 14:41:40

EMISL

EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577 Tel/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com / sanleandrolab@emsl.com
 EMSL Order:
 091902317

 Customer ID:
 NOMO22

 Customer PO:
 403435001

Project ID:

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

			Non-A	bestos	Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
JP-14-Skim Coat	JP - WOMEN'S RESTROOM - GRAY	Gray Non-Fibrous		25% Quartz 50% Ca Carbonate	None Detected
091902317-0014	SKIM COAT ON CONCRETE	Homogeneous		25% Non-fibrous (Other)	
JP-14-Concrete	JP - WOMEN'S RESTROOM - GRAY	Gray/White Non-Fibrous		20% Quartz 50% Ca Carbonate	None Detected
091902317-0014A	SKIM COAT ON CONCRETE	Homogeneous		30% Non-fibrous (Other)	
JP-15	JP - MEN'S RESTROOM - GRAY	Gray/White/Black Non-Fibrous	1	50% Matrix 50% Non-fibrous (Other)	None Detected
091902317-0015	SKIM COAT ON CONCRETE	Homogeneous			
Result includes a small am	nount of inseparable attached mat	erial			

Analyst(s)

Beheshta Ahadi (32)

atthic

Matthew Batongbacal or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 01/30/2019 14:41:40

ASB_PLM_0008_0001 - 1.78 Printed: 1/30/2019 11:41 AM



EMSL Analytical, Inc 464 McCormick Street, San Leandro, CA 94577 Phone/Fax: (510) 895-3675 / (510) 895-3680 http://www.EMSL.com sanleandrolab@emsl.com EMSL Order: 0919 CustomerID: NOM CustomerPO: 4034 ProjectID:

091902317 NOMO22 403435001

Attn:	Bill Larkin	Phone:	(510) 343-3000	
	Ninyo & Moore	Fax:	(510) 633-5646	
	이렇게 정말 목 사 지경 사람이 지 않았다. 그 그 이 가지 않는 것 같아. 것	Received:	01/29/19 12:00 PM	
	2020 Challenger Drive	Analysis Date:	2/2/2019	
	Suite 103	Collected:	1/25/2019	
	Alameda, CA 94501			
Project	SANTA ROSA 403435001			

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

SAMPLE ID	DESCRIPTION	APPEARANCE	(%) M Organic		NON- ASBESTOS % Fibrous	NON- ASBESTOS % NON-FIBROUS	ASBESTOS % TYPES
JP-02-Texture Paint 091902317-0002A	JP - EXT. NW CORNER (LOW) - STUCCO ASSEMBLY	Tan Fibrous Homogeneous	41.3	21.4		37.0 Non-fibrous (other)	0.2 Chrysotile
JP-03-Texture Paint 091902317-0003A	JP - EXT. NE CORNER (LOW) - STUCCO ASSEMBLY	Tan Fibrous Homogeneous	18.5	35.9		45.6 Non-fibrous (other)	<0.1 Chrysotile
JP-04-Texture Paint 091902317-0004A	CORNER (LOW) -	Tan Fibrous Homogeneous	39.1	20.4		40.4 Non-fibrous (other)	0.2 Chrysotile

Analyst(s)

Jared Martin (3)

Matthew Batongbacal or other approved signatory

Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.1%. EMSL Analytical Inc suggests that samples reported as <0.1% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc. bears no esponsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted.

Initial report from 02/02/2019 15:19:58

Test Report PLMPCGrav-7.26.0 Printed: 2/2/2019 3:19:58 PM

THIS IS THE LAST PAGE OF THE REPORT.

C02162

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ct o			Condition	(100)		(John)	N.	(CODE)	(Trop)	A	(gout)
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091902317	Laboratory: Tet: Fac	R	Cuantity (SFLF/EA)	1000 A		Dec 1	ST.	2 N 100	Alos du	>	100 D
Tat	WPL .	Right Strategy and	Sample Description	ALGANDELIA		Black Floo	1 ". 170	12101 Calenny	Dein Camp	М.	ywan concrote
24-in Da	Sampled By: , Sampled By: Sampled By: Date Sampled:		Sample C	Stucio		Concrete w/ Black Floor	+	Black Fl	Merl Barred	5 N	Entryway
旧日	rect,#400 Project No.: 5ANTA Rosh 812 Project Manager. 403435001 46 APN: WP2 AN: WP2 216 Address: WP2	PLAUM. BULL. BULL. MAN. MATCHING AND	Labit Sample ID Building Building TP+01 TP NAAAF AAF		Thot I Ext. NE Corner (Law)	Jew. for's Room	JP407 11 11 11 11 11	1 11 11	. //		2

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24 hot TAT Oglgorst 2 of 2	Sampled By: MPL Laboratory: Sampled By: Date Sampled: $\frac{1}{2s/19}$ Tet $EMSL$		SEALETAN Friable SEALETAN (YAN) 300 V V	Grand Rhunfort concurre 200 25 N Guil		
HEET	rect, #400 Project Name: SAWTA R0SA 812 Project No.: SAWTA R0SA 40 Project Manager. 403435001 46 Site Address: 403435001 70 INFORMATION-	Birthur I Rill Larler Herding	JP. 13	JP-15 UP MM 2 Ristroom		

APPENDIX C

Lead-Containing Material Laboratory Analytical Report and Chain-of-Custody Records

	ISL	EMSL Analytical, 464 McCormick Street, San L Phone/Fax: (510) 895-3675 http://www.EMSL.com			EMSL Order: CustomerID: CustomerPO: ProjectID:	091902297 NOMO22
Nir 202 Su	ite 103		Phone: Fax: Received: Collected:	(510) 343-3000 (510) 633-5646 01/29/19 12:00 F 01/25/2019	РМ	
Project: S	SANTA RO	SA; 403435001				

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample De	escription Lab ID Collected Analyzed	Weight	Lead Concentration
JP-01P	091902297-0001 01/25/2019 01/29/2019	0.2493 g	0.52 % wt
	Site: MENS ROOM DOOR FRAME		
JP-02P	091902297-0002 01/25/2019 01/29/2019	0.2528 g	<0.0080 % wt
	Site: MENS RESTROOM DOOR		
IP-03P	091902297-0003 01/25/2019 01/29/2019	0.1684 g	0.013 % wt
	Site: MENS RESTROOM EXT DOOR FR	AME	

Inh/h

Julian Neagu, Lead Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 01/29/2019 19:01:17

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Sheet 1 of	etory: EMSL	Labo	1191				12										-
18220	Laboratory: EA		SQ.	or /# Estimated	1		1		 		. 			<u> </u>			
TREED NIPO	25/19	Received By: (significant)	FUNIC	Sample Description (Color /# Layers /Substrate)	Browin/2/Ind	Benun/2/mital	Baulon/2/whop	*					-				
24-Wr DAT	Sampled By: WPL Sampled By: Sampled By: Date Sampled: 1/25/19	Received By	A			Q	14	, ,							 		-
24-1hr	Rampled By: Sampled By: Sampled By: Date Sample			l Component			AME			 							of 1
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ILK SAN	Project Name : Project No.: Project Manager APN: Site Address:		m pm	Building Number	7	6	5		۰						<u></u>		
LEAD BASED PAINT BULK SAMPLE DATA SHEET	Ninyo & Moore 1956 Webster Street, Suite 400 Oakland, CA 94612 510-633-5646 (fax)	Reinquished By (signipaint)	in Pulli	Sample ID	JP-01P	TP-01P	172-030										
LEAD BAS	Niryo & Moore 1956 Webster Street Oakland, CA 94612 510-633-5640 510-633-5646 (fax)	Reinquished By (signification)	OUN KON	LabID													ì
							561							C	02162	<u>'</u>	

OrderID: 091902297

APPENDIX D

CDPH Form 8552 - Lead Hazard Evaluation Report

State of California—Health and Human Services Agency

California Department of Public Health

LEAD HAZARD EVALUATION REPORT

Section 1 — Date of Lead Hazard Evaluation	1/25/19.		
Section 2 — Type of Lead Hazard Evaluation (Che	ck one box only)		V
	Clearance Inequation	Other (specify)	Same Linn
Lead Inspection Risk assessment	Clearance Inspection	Other (specify)	Save pring
Section 3 – Structure Where Lead Hazard Evaluat	ion Was Conducted		
Address [number, street, apartment (if applicable)]	City	County	Zip Code
227 Santa Kosa Avenue	Senta Rosa	Sonoma	95404
Construction date (year) Type of structure		Children living in structure	9?
Multi-unit building	School or daycare	Yes No	
☐ 9 +0 ₃ Single family dwellin	g Other Public Res	rook Don't Know	
Section 4 – Owner of Structure (if business/agend	y, list contact person)		
Name City of Santa Rosa, Gran	t Banley	Telephone number 707/543	- 4508
Address [number, street, apartment (if applicable)]	City	State	Zip Code
69 Stony Circle	Jointo Rosa	CA	45401
Section 5 - Results of Lead Hazard Evaluation (ch	eck all that apply)		
No lead-based paint detected	d-based paint detected	Deteriorated lead-bas	sed paint detected
			A
No lead hazards detected Lead-contaminated	bust found Lead-contain	inated soil found Oth	er
Section 6 — Individual Conducting Lead Hazard Ev	aluation		
Name		Telephone number	
William & Larlan		510 343-3	000
Address [number, street, apartment (if applicable)]	City	State	Zip Code
2020 Challenger Drive, #103	Alguneda	CA	94501
CDPH certification number (/	Signature 11 NO	1 / 1	Date
5543	allamon to d	as Mar	2/4/19
Name and CDPH certification number of any other individuals	conducting sampling or testing (i	f applicable)	11/**
N/A			
Section 7 — Attachments	3		
A. A foundation diagram or sketch of the structure indica lead-based paint;	ating the specifc locations of e	each lead hazard or preser	nce of
B. Each testing method, device, and sampling procedur	e used;		
C. All data collected, including quality control data, labo	atory results, including labora	atory name, address, and p	phone number.
First copy and attachments retained by inspector	Third copy only (no atta	achments) mailed or faxed to:	
Second copy and attachments retained by owner	California Department	of Public Health	

California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656

TRANSMISSION VERIFICATION REPORT

TIME	:	02/02/2019 23:57
NAME		NINYO AND MOORE
FAX	:	510-633-5646
TEL	:	510-633-5640
SER.#	:	BROD5J252210

DATE,TIME FAX NO./NAME DURATION PAGE(S) RESULT MODE 02/02 23:57 6205656 00:00:18 01 OK STANDARD ECM



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 C02162

 2020 Challenger Drive, Suite 103 | Alameda, California 94501 | p. 510.343.3000

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 www.ninyoandmoore.com

BID FORMS

<u>CITYOFSANTA ROSA</u>

STATE OF CALIFORNIA

BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

The work to be performed and referred to herein is in the City of Santa Rosa, California and consists of improvements to be constructed in accordance with the provisions of the Invitation for Bids, containing the Notice to Bidders, the Special Provisions, the Project Plan(s), the Bid Forms and the Contract, all of which are by reference incorporated herein, and each Addendum, if any is issued, to any of the above which is also incorporated by reference herein.

TO THE AWARD AUTHORITY OF THE CITY OF SANTA ROSA

The undersigned, as bidder, declares that the only person or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any other person, firm, or corporation; that Contractor has carefully examined the Project Plans, Invitation for Bids and conditions therefor, and is familiar with all bid requirements, that Contractor has examined this Contract and the provisions incorporated by reference herein, and Contractor hereby proposes, and agrees that if its bid is accepted by the City, Contractor will provide all necessary machinery, tools, apparatuses, and other means of construction, and to do all the work and furnish all the materials and services required to complete the construction in accordance with the Contract, the Special Provisions, the Project Plan(s), and Addenda to any of the above as incorporated by reference, in the time stated herein, for the unit prices and/or lump sum prices as follows:

Item No.	Description	Quantity	Units	Unit Price	Total Price
1	TRAFFIC CONTROL	1	LS	\$	\$
2	WATER POLLUTION CONTROL	1	LS	\$	\$
3	CHAIN LINK FENCE	70	LF	\$	\$
4	TYPE K TEMPORARY RAILING	70	LF	\$	\$
5	2810 FOURTH ST DEMOLITION	1	LS	\$	\$
6	952 SONOMA AVE DEMOLITION	1	LS	\$	\$
7	7630 & 7650 LAKEVILLE HWY DEMOLITION	1	LS	\$	\$
8	1595 MEADOW LN DEMOLITION	1	LS	\$	\$
9	4090 WALKER AVE DEMOLITION	1	LS	\$	\$
10	4099 WALKER AVE DEMOLITION	1	LS	\$	\$
11	1027 MCMINN AVE DEMOLITION	1	LS	\$	\$
12	1370 & 1372 BURBANK AVE DEMOLITION	1	LS	\$	\$
13	1400 BURBANK AVE DEMOLITION	1	LS	\$	\$
14	DOYLE PARK DEMOLITION	1	LS	\$	\$
15	HOWARTH PARK DEMOLITION	1	LS	\$	\$
16	JULLIARD PARK DEMOLITION	1	LS	\$	\$
17	ABANDON SEPTIC SYSTEM	1	EA	\$	\$
	GRAND TOTAL BID				\$

CITY OF SANTA ROSA SCHEDULE OF PRICES BUILDING DEMOLITION - VARIOUS CITY LOCATIONS

In the case of any discrepancy between the unit price and the total set forth for the item, the unit price shall prevail; provided, however, that if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any reason, or is omitted, or in the case of lump sum items, is not the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

- 1. As to lump sum items, the amount set forth in the "Total" column shall be the unit price;
- 2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

The Total Base Bid shall be the sum of the "Total" column. In case of discrepancy between the sum of the "Total" column and the amount entered as Total Base Bid, the sum of the "Total" column shall prevail. The bid comparison will be based on the sum of the "Total" column for each bidder.

If this Contract Bid is accepted by the City and the undersigned fails to execute the Contract and to give all the bonds required under the Contract, with a surety satisfactory to the Award Authority of the City of Santa Rosa, within ten calendar days after bidder has received the Notice of Award from the Engineer, then the Award Authority may, at its option, determine that the bidder has abandoned the Contract, and thereupon this bid and the acceptance thereof shall be null and void, and the forfeiture of the security accompanying this bid shall be in accordance with California Public Contract Code section 20172.

The undersigned understands and agrees that the City is not responsible for any error or omissions on the part of the undersigned in making this bid.

The bidder to whom the Contract is awarded agrees to execute the Contract in favor of the City, in the form attached, and to deliver any and all required bond(s) and insurance certificates within ten calendar days from the date of Contractor's receipt of the Notice of Award. Following the award of the Contract, Contractor shall commence work within ten calendar days from the day authorized in the Notice to Proceed and diligently prosecute the same to completion in accordance with Section 8-1.04.

LIST OF SUBCONTRACTORS

NAME OF BIDDER:

The following is a list of each subcontractor who will perform work or labor or render services to the undersigned for the construction of the project in an amount in excess of ½ of 1% of the total amount of this bid.

The undersigned agrees that any portion of the work in excess of ½ of 1% of the total amount of this bid and for which no subcontractor is designated herein will be performed by the undersigned.

SUBCONTRACTOR NAME	SUBCONTRACTOR LICENSE NUMBER	SUBCONTRACTOR DIR REGISTRATION NUMBER	SUBCONTRACTOR BUSINESS ADDRESS	DESCRIPTION OF WORK (ITEM NO.)

LIST OF PREVIOUS SIMILAR JOBS

NAME OF BIDDER:

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _______ of _______, the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

NOTE: The above Noncollusion Declaration is part of the Contract Bid. Signing this Bid on the signature portion thereof shall also constitute signature of this Noncollusion Declaration.

BID BOND AFFIDAVIT AND BIDDER'S SIGNATURE PAGE

Accompanying this bid is a guaranty in the form of (Notice: Insert the words "cash \$," "Cashier's Check," "Certified Check," or "Bidder's Bond" as the case may be):

in an amount equal to at least ten percent of the total of this bid.

The undersigned further agrees that if Contractor does not execute the Contract and deliver the necessary bonds to the City within the period of time specified in this Invitation for Bids, the proceeds of the security accompanying this bid shall become the property of the City of Santa Rosa, California, and this bid and the acceptance thereof may, at the option of the City, be considered null and void.

The undersigned is licensed in accordance with an act providing for the registration of Contractors, License No. _____, Class _____, expiration date _____.

The undersigned in registered with the Department of Industrial Relations, Registration No.

IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager of the corporation; if a partnership, state true name of partnership, also the names of all partners in the partnership; if the bidder is a sole proprietor, state the business name and the proprietor's name in full.

Secretary of State Business Entity Number: ______

Business Address

Telephone Number

I declare under penalty of perjury that the foregoing is true and correct.

BIDDER'S SIGNATURE:

TITLE:

DATE:

CONTRACT

CITY OF SANTA ROSA

CALIFORNIA

CONTRACT NO. C02162 BUILDING DEMOLITION – VARIOUS CITY LOCATIONS

This Contract is made and entered into as of date to be added upon award at Santa Rosa, California, between the City of Santa Rosa ("City") and ______ of _____ ("Contractor").

ARTICLE I - For and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the required bonds hereunto annexed, Contractor agrees that for the benefit of City, at its own cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the Special Provisions to be furnished by City, necessary to construct and complete the work herein described in a good, workmanlike, and substantial manner. The work embraced herein shall be done in accordance with the Standard Specifications of the State of California Department of Transportation, dated 2010, insofar as the same may apply (Standard Specifications); in accordance with the City of Santa Rosa Design and Construction Standards, (City Standards); in accordance with the State of California Department of Transportation emitted the State of California Department of Transportation standard plans, (collectively, "Contract Documents") and in accordance with the Special Provisions hereinabove set forth, all of which are hereby incorporated into and made part of this Contract.

ARTICLE II - Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and doing all the work contemplated and embraced in this Contract; also for all loss or damages arising out of the nature of the work aforesaid, or from the acts of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by City and for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work, and the whole thereof in the manner and according to the Project Plans and Invitation for Bids therefor, and the requirements of the Engineer under them to wit:

ITEM NUMBER	QUANTITY	DESCRIPTION	ι	JNIT PRICE	TOTAL
			\$		\$

TOTAL BASE BID (SUM OF "TOTAL" COLUMN) \$

BID ITEMS IN THIS SECTION WILL BE INSERTED UPON AWARD OF THE CONTRACT AND SHALL BE THE SAME AS THOSE BID UPON.

ARTICLE III - City and Contractor hereby promise and agree that Contractor shall provide the materials and do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and City hereby agrees to pay for the same at the time, in the manner, and upon the conditions set forth; and the parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein stated.

ARTICLE IV - By execution of this Contract, Contractor hereby represents and certifies that Contractor is aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor hereby agrees to comply with such provisions before commencing the performance of the work of this Contract.

ARTICLE V - It is further expressly agreed by and between the parties hereto that the Invitation for Bids, containing the Notice to Bidders including any required Bonds, the Contract Documents, and any Addenda are all essential parts of this Contract and are specially referred to and by such reference made a part hereof. In the event of any conflict in the provisions thereof, the terms of said documents shall control each over the other, in the following order:

- 1. Special Provisions
- 2. City Standards
- 3. City Specifications
- 4. Standard Specifications
- 5. Standard Plans

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ARTICLE VI - Contractor agrees to commence work pursuant to this Contract within ten calendar days from the date authorized in the Notice to Proceed and to diligently prosecute the same to completion in accordance with Section 8-1.04C of the Special Provisions.

This Contract shall not be transferred or assigned without the prior written consent of City, which may be withheld by City in its sole and absolute discretion.

If Contractor is a corporation, two corporate officers of Contractor, one from each of the following two groups shall execute this Contract: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The name and title of the corporate officers shall be printed under the signature.

In witness whereof, the parties hereto have executed this Contract as of the date first written above.

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City:	Contractor:
City of Santa Rosa, a Municipal corporation	Name of Contractor, Type of entity
Ву:	Ву:
Title:	Name:
ATTEST:	Title:
By: Title:	Ву:
Approved as to form:	Name:
By: Office of City Attorney	Title: