

**PARADISE HIGH SCHOOL –
KITCHEN FLOORING & ELECTRICAL**

**5911 MAXWELL DRIVE
PARADISE, CA 95969**

PARADISE UNIFIED SCHOOL DISTRICT

APRIL 7, 2026

PROJECT #26007

Studio W Architects



SEALS PAGE

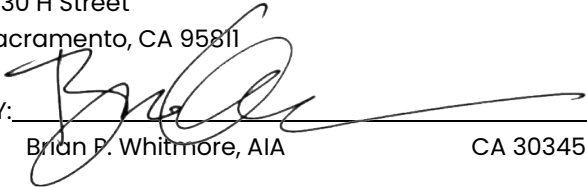
PARADISE UNIFIED SCHOOL DISTRICT PARADISE HIGH SCHOOL – KITCHEN FLOORING & ELECTRICAL

OWNER:

PARADISE UNIFIED SCHOOL DISTRICT
5911 MAXWELL DRIVE PARADISE, CA 95969

ARCHITECT:

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Dated Aug 5-12, 2020 by National Analytical Laboratories, Inc.

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SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Work covered by the Contract Documents.
2. Type of the Contract.
3. Work phases.
4. Use of premises.
5. Work restrictions.
6. Specification formats and conventions.
7. Pollution Control.
8. Storm Water Pollution Prevention Plan.
9. Asbestos & Lead-Containing materials removal.

B. Related Sections include the following:

1. Division 1 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. Division 1 Section "Closeout Procedures" for mechanical and electrical Title 24 Certificate of Acceptance requirements.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Paradise High School – Kitchen Flooring & Electrical.

B. Project Location: 5911 Maxwell Drive, Paradise, CA 95969.

C. Architect: Studio W Architects.

D. The Work consists of the following:

1. The Work includes renovation of kitchen flooring and electrical as indicated on Drawings.

1.3 TYPE OF CONTRACT

A. Project will be constructed under a single prime contract.

1.4 WORK PHASES

A. The Work shall be conducted in single phases as indicated on Drawings.

1.5 USE OF PREMISES

- A. General: Contractor shall have limited use of premises for construction operations as indicated on Drawings by the Contract limits.
- B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1.6 WORK RESTRICTIONS

- A. On-Site Work Hours: Consult with City of Stockton regarding exterior noise standards.

1.7 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 49-division format and CSI's MasterFormat 2004 numbering system.
 - 1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
 - 2. Division 1: Sections in Division 1 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

1.8 POLLUTION CONTROL

- A. Provide positive methods, means and facilities required to prevent contamination of the soil, water or atmosphere by the discharge of noxious substances from the construction operations.

1.9 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- A. The contractor shall submit a Storm Water Pollution Prevention Plan for approval by the City's Public Works and Community Development Departments. The plan shall show erosion control measures and indicate locations of staging, fueling, equipment and employee parking, and storage/stockpile locations. Locations for concrete washout shall be shown, as well as gravel site entrances and/or metal grates to keep soil from being deposited on City streets. The plan shall note that street sweeping shall occur as often as necessary, to ensure that no dirt or dust will remain on City streets. Drip pans shall be used under parked equipment and visqueen shall be shown on the plan to protect the soil in the fueling area. Only minor vehicle maintenance shall occur on-site. Maintenance shall occur in the fueling area and soil shall be protected by drip pans and visqueen.
- B. Prepare a Storm Water Pollution Prevention Plan (SWPPP) and file a Notice of Intent with the State Water Resources Control Board for this project. The SWPPP will provide Best Management Practice (BMP) methods and controls for wet weather grading activities and erosion control for both onsite and offsite improvements, in accordance with the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction Activity. The SWPPP shall include an erosion control plan.

1.10 MISCELLANEOUS PROVISIONS

- A. General: Comply with the Project Conditions of Approval for both noise and dust control. If there is any conflict between drawings and specifications and the Project Conditions of Approval regarding noise and dust control, the Project Conditions of Approval shall govern.
- B. Noise Control:
 - 1. The Contractor shall install noise reducing devices on construction equipment. Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction Equipment noise at the Site shall be limited and only as permitted by applicable law, rule or regulation.
 - 2. Contractor shall schedule the performance of all such Work around normal hours or make other arrangements so that the Work does not cause such disruption or disturbance.
 - 3. In no event shall such arrangements result in adjustment of the Contract Price or the Contract Time.
- C. Dust Control. The Contractor shall be fully and solely responsible for maintaining and upkeeping all areas of the Site and adjoining areas, outdoors and indoors, free from flying debris, grinding powder, sawdust, dirt and dust as well as any other product, product waste or work waste, that by becoming airborne may cause respiratory inconveniences to persons, particularly to students and Owner's personnel. Additionally, the Contractor shall take specific care to avoid deposits of airborne dust or airborne elements. Such protection devices, systems or methods shall be in accordance with the regulations set forth by the EPA and OSHA, and other applicable law, rule or regulation. Additionally, the Contractor shall be the sole party responsible to regularly and routinely clean up and remove any and all deposits of dust and other elements. Damage and/or any liability derived from the Contractor's failure to comply with these requirements shall be exclusively at the cost of the Contractor, including, without limitation, any and all penalties that may be incurred for violations of applicable law, rule or regulation, and any amounts expended by the Owner to pay such damages shall be due and payable to the Owner on demand. Contractor shall replace any damages property or part thereof and professionally clean any and all items that

become covered or partially covered to any degree by dust or other airborne elements. If classes are in session at any point during the progress of Work, and, in the Owner's reasonable discretion, flying debris, grinding powder, sawdust, dirt or dust from any Work disrupts or disturbs the students or faculty or the normal operation of the college, at the Owner's request, the Contractor shall schedule the performance of all such Work around normal college hours and make other arrangements so that the Work does not cause such disruption or disturbance. In no event shall such arrangements result in adjustment of the Contract Price or the Contract Time.

1.11 LEAD-CONTAINING MATERIALS

- A. Asbestos & Lead removal is part of work. Asbestos & Lead Survey Report for this project can be found in appendix.
- B. It is the Contractor's responsibility to handle and dispose of these materials in accordance with the regulations. If failure to comply with these regulations results in a site or worker contamination, the Contractor will be held solely responsible for all costs involved in any required corrective action.
- C. Lead-based paint should be removed only by professionals trained in hazardous material removal. A trained professional must follow very detailed procedures to minimize, control and contain lead dust generated by the removal process.
 - 1. The room should be sealed from the rest of the building. All furniture, carpets and drapes should be removed.
 - 2. Workers should wear respirators designed to avoid inhaling lead.
 - 3. No eating or drinking should be allowed in the work area. All food and eating utensils should be removed from the room. All cabinets as well as food contact surfaces should be covered and sealed.
 - 4. Occupants should be kept out of the room until the job is completed.
 - 5. Clothing worn in the room should be disposed of after working. The work clothing should not be worn in other areas of the building.
 - 6. Debris should be cleaned up using special vacuum cleaners with HEPA (high efficiency particle absorption) filters. A wet mop should be used after vacuuming.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

3.1 APPENDIX

- A. Asbestos & Lead Survey Report is attached at end of specification.

END OF SECTION 011000

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for sub-contractor's bid alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE

- A. As indicated on Drawings.

END OF SECTION 012300

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
 - 1. Division 1 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.2 MINOR CHANGES IN THE WORK

- A. Architect may issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, or Changes not affecting the Structural Safety, Access Compliance or Fire & Life Safety portions of the work, on AIA Document G710, "Architect's Supplemental Instructions" or an equivalent form acceptable to Owner.

1.3 PROPOSAL REQUESTS (BULLETIN)

- A. Owner-Initiated Proposal Requests: Architect may issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

1.4 PROPOSED COST CHANGE FORMAT

- A. As specified in General Conditions.

1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect may issue a Change Order for signatures of Owner and Contractor.

1.6 CONSTRUCTION (FIELD) CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
 - 1. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Division 1 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - c. Contractor's Construction Schedule.
 - 2. Submit the Schedule of Values to Architect at earliest possible date but no later than 7 days before the date scheduled for submittal of initial Applications for Payment.
 - 3. No payment applications will be signed by the Architect prior to the Contractor submitting, and the Architect reviewing, a schedule of values.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. Architect's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Submit draft of AIA Document G703 Continuation Sheets.
 - 3. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.

- g. Dollar value.
 - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
- 4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
- 5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
- 6. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.
- 7. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times:
 - 1. The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit 3 signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit Application for Payment electronically with a transmittal form listing attachments and recording appropriate information about application. No hard copies required.
- F. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of Values.
 3. Contractor's Construction Schedule (preliminary if not final).
 4. Products list.
 5. Schedule of unit prices.
 6. Submittals Schedule (preliminary if not final).
 7. List of Contractor's staff assignments.
 8. List of Contractor's principal consultants.
 9. Copies of building permits.
 10. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 11. Initial progress report.
 12. Report of preconstruction conference.
 13. Certificates of insurance and insurance policies.
 14. Data needed to acquire Owner's insurance.
 15. Initial settlement survey and damage report if required.
- G. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- H. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 6. AIA Document G707, "Consent of Surety to Final Payment."
 7. Evidence that claims have been settled.
 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 9. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Project meetings.
 - 2. Requests for Interpretation (RFIs).
- B. Related Sections include the following:
 - 1. Division 1 Section "Submittal Procedures" for electronic submittals.
 - 2. Division 1 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
 - 3. Division 1 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 4. Division 1 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.2 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
 - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Construction Schedule.
 - 2. Preparation of the Schedule of Values.

3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.
8. Startup and adjustment of systems.
9. Project closeout activities.

- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.3 SUBMITTALS

- A. Submit electronic submittals directly to extranet specifically established for Project.

1.4 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
 4. Frequency of Attendance by Architect: Limited by Architect/Owner Contract.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing, if any.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.

- j. Submittal procedures.
 - k. Preparation of Record Documents.
 - l. Use of the premises.
 - m. Work restrictions.
 - n. Owner's occupancy requirements.
 - o. Responsibility for temporary facilities and controls.
 - p. Construction waste management and recycling.
 - q. Parking availability.
 - r. Office, work, and storage areas.
 - s. Equipment deliveries and priorities.
 - t. First aid.
 - u. Security.
 - v. Progress cleaning.
 - w. Working hours.
3. Minutes: Record and distribute meeting minutes electronically.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
- 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. The Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility problems.
 - k. Time schedules.
 - l. Weather limitations.
 - m. Manufacturer's written recommendations.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - t. Testing and inspecting requirements.
 - u. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. Protection of construction and personnel.
 - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.

4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at regular intervals. Coordinate dates of meetings with preparation of payment requests.
1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
 3. Minutes: Record the meeting minutes electronically.
 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

1.5 RFIs:

A. General:

1. Contractor may submit a RFI to the Architect seeking clarification or interpretation of the contract documents. If in the Contractor's opinion the nature of the RFI requires a discussion, rather than simply an answer, the Contractor shall call the Architect to have such a discussion. The results of that discussion as well as all other RFI's must be presented in writing on a form approved in advanced by the Architect along with any supporting information or data, as well as the Contractor's recommended resolution. An oral RFI or a RFI presented on an unapproved form, or without adequate supporting information and Contractor's recommended solution, will be attributed solely to the contractor. Architect's review of or responses to RFI's shall not constitute an approval, direction, or procedure related to the construction means, methods, techniques, sequences, or procedures of the Contractor.
2. Architect's review of or responses to RFI's shall not constitute an approval, direction, or procedure related to the construction site safety precautions, procedures, or methodology of the Contractor.
3. The use of a RFI is limited to clarification of the contract documents. Contractor will limit each RFI to a single issue. Information which is discernable from the contract documents; construction means and methods; product substitution submittals; product submittals; and construction site safety will not be addressed by the Architect in responding to a RFI.
4. Architect's response to a RFI is not a change order or directive authorizing an increase in construction cost or time.

B. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.

1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

C. Frivolous or Unnecessary RFIs: Cost of design professional's time will be billed or deducted from progress payment.

D. Electronic RFIs: Follow vendor's instruction.

1. Attachments shall be electronic files in Adobe Acrobat PDF format.

E. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow 21 days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.

1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect's actions on submittals.
 - f. Incomplete RFIs or RFIs with numerous errors.
2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.

3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

F. RFI Log: Prepare, maintain, and submit as instructed by electronic submittal vendor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 FORMS

- A. Electronic versions of attached forms will be provided upon request.
 1. RFI Form.

END OF SECTION 013100

RFI FORM

Project:	RFI No:
Project No:	
To:	Date:
From:	

Subject:	Category	
Discipline:		
Specification Section Title:		
Section Number:	Page:	Article/Paragraph:
Sheet Number:		Detail:

Question:

Suggestion:

Attachment:

Undersigned certifies:

- Both drawings and specification sections were thoroughly reviewed.
- Processing time for frivolous RFIs will be charged back to Contractors at A/E billable rates.

Desired Response Date:	(However, A/E still have specified days to respond.)
Cost Impact: \$	Schedule Impact: days
Drawing Impact:	Submitted by:
Signed:	Date:

Answer:

Answered by:

Signed: Date:

Copies: Owner Consultants

File

1. A/E review of or responses to RFI's shall not constitute an approval, direction, or procedure related to the construction site safety precautions, procedures, or methodology of the Contractor.
 2. The use of a RFI is limited to clarification of the contract documents. Contractor will limit each RFI to a single issue. Information that is discernable from the contract documents; construction means and methods; product substitution submittals; and construction site safety will not be addressed by the A/E in responding to a RFI.
 3. A/E response to a RFI is not a change order or directive authorizing an increase in construction cost or time.
-

End of RFI Form

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Submittals Schedule.
 - 3. Three Week Look-Ahead Schedule.
 - 4. Daily construction reports.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for submitting the Schedule of Values.
 - 2. Division 1 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
 - 3. Division 1 Section "Submittal Procedures" for submitting schedules and reports.
 - 4. Division 1 Section "Quality Requirements" for submitting a schedule of tests and inspections.

1.2 SUBMITTALS

- A. Submittals Schedule: Submit electronic copy of schedule. Arrange the following information in a tabular format:
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor.
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's final release or review.
- B. Contractor's Construction Schedule: Submit electronic copy of schedule, large enough (minimum 11 x 17) to show entire schedule for entire construction period.
- C. Daily Construction Reports: Submit electronic copy at weekly intervals.

1.3 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Concurrent with the development of the Contractor's construction schedule, prepare a complete schedule of submittals. Submit the submittal schedule with the Contractor's construction schedule described above.
 1. Coordinate submittal schedule with the list of subcontracts, schedule of values and the list of products as well as the Contractor's construction schedule.
 2. The Architect will review the schedule and indicate which submittals may be deleted from the submission requirement. The deletion of the submittal requirement for an item does not release the Contractor from any requirements of the Construction Contract, General Conditions or Plans and Specifications.
- B. Prepare the schedule in chronological order; include submittals required during the first 90 days of construction. Provide the following information:
 1. Scheduled date for the first submittal.
 2. Related Section number.
 3. Submittal category.
 4. Name of subcontractor.
 5. Description of the part of the Work covered.
 6. Scheduled date for resubmittal.
 7. Scheduled date the Architect's final release or review.
- C. Distribution: Following response to initial submittal, distribute copy electronically to the Architect, Owner, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the project meeting room and field office.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- D. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart type Contractor's construction schedule. Submit within 15 days of the date established for "Commencement of the Work". The Construction Schedule must be submitted and accepted prior to approval of first pay application.
 1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as identified in the "Schedule of Values".

2. Within each time bar indicate estimated completion percentage in 10 percent increments. As work progresses, place a contrasting mark in each bar to indicate Actual Completion.
 3. Prepare the schedule on a sheet, or series of sheets, of stable reproducible media, of sufficient width to show data for the entire construction period.
 4. Secure time commitments for performing critical elements of the Work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the Work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the Work.
 5. Coordinate the Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.
 6. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Architect's procedures necessary for certification of Substantial Completion.
- B. Phasing: Provide notations on the schedule to show how the sequence of the Work is affected by requirements for phased completion to permit work by separate Contractors and partial occupancy by the Owner prior to Substantial Completion.
- C. Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.
- D. Area Separations: Provide a separate time bar to identify each major construction area for each major portion of the Work. Indicate where each element in an area must be sequenced or integrated with other activities.
- E. Cost Correlation: At the head of the schedule, provide a two item cost correlation line, indicating "pre-calculated" and "actual" costs. On the line show dollar-volume of work performed as of the dates used for preparation of payment requests.
1. Milestone Construction schedule.

2.3 THREE WEEK LOOK-AHEAD SCHEDULE

- A. Prepare weekly (or as determined by scheduled meeting times), prior to Project meetings, a computer-generated 3-week look-ahead schedule (bar chart) which is consistent with the Contractors schedule and depicts daily labor activities. The schedule will consist of the prior week, current week and the following 3 weeks.

2.4 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
 2. List of separate contractors at Project site.
 3. Approximate count of personnel at Project site.
 4. Equipment at Project site.
 5. Material deliveries.
 6. High and low temperatures and general weather conditions.
 7. Accidents.

8. Meetings and significant decisions.
9. Unusual events (refer to special reports).
10. Stoppages, delays, shortages, and losses.
11. Meter readings and similar recordings.
12. Emergency procedures.
13. Orders and requests of authorities having jurisdiction.
14. Change Orders received and implemented.
15. Construction Change Directives received and implemented.
16. Services connected and disconnected.
17. Equipment or system tests and startups.
18. Partial Completions and occupancies.
19. Substantial Completions authorized.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates changes, including, but not limited to, changes in durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of reviewed schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

3.2 FORMS

- A. Contractor's Submittals Schedule Form as approved by Architect.

END OF SECTION 013200

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for electronically submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Consult individual sections of specifications for specific submittals required under those sections and for further details and descriptions of requirements.
- C. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
 - 2. Division 1 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
 - 3. Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
 - 4. Division 1 Section "Quality Requirements" for submitting test and inspection reports.
 - 5. Division 1 Section "Closeout Procedures" for submitting warranties.
 - 6. Other Sections for specific requirements for submittals in those Sections.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. Processing: All costs for electronic submittal, printing, preparing, packaging, mailing, or delivering submittals for initial submittals and all costs for re-printing, re-drawing, re-drafting, re-packaging, re-submitting, and re-mailing or re-delivering as required for all re-submittals shall be included in Contract Sum.
- B. Sequence: Transmit each submittal in sequence which will not result in Architect's approval having to be later modified or rescinded by reason of subsequent submittals which should have been processed earlier or concurrently for coordination.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- D. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- E. Multiple Reviews: The Contractor shall also be responsible for all costs to Architect or Architect consultants for reviews requiring more than 2 reviews for same specification section.
- F. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 1. Review: Allow 21 days for review of each submittal. Architect will request for more time if needed.
- G. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked "Approved" or "Furnish as Noted".
- I. Distribution: Furnish electronic copy of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating approval by Architect.

PART 2 - PRODUCTS

2.1 ELECTRONIC SUBMITTALS

- A. General: Prepare and submit Submittals required by individual Specification Sections.
 1. Submit electronic submittals directly to extranet specifically established for Project.
 2. Vendor:
 - a. Submittal Exchange (Basis of Design)
 - b. Or equal.
 3. Contractor shall pay for all-inclusive use of Submittal Exchange by all project team members; data storage, security, and backup; setup, training, and support; and archiving once construction is complete.
 - a. Documentation processed, housed and archived shall include but not limited to: Submittals, Addendum, Plans, Specs, Field Reports, Photos, Weekly Reports,

Notice of deviations, Punch List, RFI's RFP's ASI's, CCD's, Cost Proposals, Test Reports, Meeting Notes., and Close Out.

2.2 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - a. Circle items applicable.
 - b. Cross-out items not applicable.
 - c. Select item number if required.
 - 3. Submittal data must include complete documentation relating to all the specified features
 - 4. Include the following information, as applicable:
 - a. Manufacturer's Submittal Form with all the options selected when available.
 - b. Manufacturer's written recommendations.
 - c. Manufacturer's product specifications.
 - d. Manufacturer's installation instructions.
 - e. Standard color charts.
 - f. Manufacturer's catalog cuts.
 - g. Wiring diagrams showing factory-installed wiring.
 - h. Printed performance curves.
 - i. Operational range diagrams.
 - j. Mill reports.
 - k. Standard product operation and maintenance manuals.
 - l. Compliance with specified referenced standards.
 - m. Testing by recognized testing agency.
 - n. Application of testing agency labels and seals.
 - o. Notation of coordination requirements.
 - 5. Submit Product Data before or concurrent with Samples.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Do not use words "by others." Identify exactly who is responsible for the work.
 - c. Identification of products.
 - d. Fabrication and installation drawings.
 - e. Roughing-in and setting diagrams.
 - f. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - g. Shopwork manufacturing instructions.
 - h. Templates and patterns.
 - i. Schedules.
 - j. Design calculations.
 - k. Compliance with specified standards.

- l. Notation of coordination requirements.
 - m. Notation of dimensions established by field measurement.
 - n. Relationship to adjoining construction clearly indicated.
 - o. Seal and signature of professional engineer if specified.
 - p. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
 3. Number of Copies: Submit 4 sets of prints and one electronic copy.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of appropriate Specification Section.
 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit 1 full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

- E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Type of product. Include unique identifier for each product.
 - 2. Number and name of room or space.
 - 3. Location within room or space.
- F. Submittals Schedule: Comply with requirements specified in Division 1 Section "Construction Progress Documentation."
- G. Application for Payment: Comply with requirements specified in Division 1 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 1 Section "Payment Procedures."

2.3 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
 - 1. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - 2. Test and Inspection Reports: Comply with requirements specified in Division 1 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 1 Section "Project Management and Coordination."
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- D. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- E. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- F. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- G. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- H. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

- I. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- J. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- K. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.
 - 4. Product and manufacturers' names.
 - 5. Description of product.
 - 6. Test procedures and results.
 - 7. Limitations of use.
- L. Schedule of Tests and Inspections: Comply with requirements specified in Division 1 Section "Quality Requirements."
- M. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- N. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment.
- Q. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
 - 1. Preparation of substrates.

2. Required substrate tolerances.
 3. Sequence of installation or erection.
 4. Required installation tolerances.
 5. Required adjustments.
 6. Recommendations for cleaning and protection.
- S. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

2.4 DEFERRED APPROVALS AND DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit 3 copies of a statement, signed and sealed by Structural Engineer Licensed in California, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
1. Coordinate the work; do not delegate responsibility for coordination to any subcontractor.

2. Anticipate the interrelationship of all subcontractors and their relationship with the total work.
 3. Resolve differences or disputes between subcontractors and materials suppliers concerning coordination, interference, or extent of work between sections.
 4. Trade submittals with “By Others”, “By General Contractor”, or similar coordination and work scope are not allowed. Identify, acknowledge, and resolve scope of work prior to submittal by Contractor. No extras will be allowed. Provide complete and coordinated submittals.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.
- F. Architect's and Consultant's review shall neither be construed as complete check nor relieve the Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract unless the Contractor has, in writing, called the Architect's attention to the deviations at the time of submission as specified.

END OF SECTION 013300

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections include the following:
 - 1. Division 1 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
 - 2. Other Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Shall be "in-place" type.
 - 1. Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
 - 2. Comprehensive, completely integrated mockups of separate trades showing interface conditions, transitions, and relationships between materials and finishes.

- D. **Product Testing:** Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- E. **Source Quality-Control Testing:** Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- F. **Field Quality-Control Testing:** Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- G. **Testing Agency:** An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. **Installer/Applicator/Erector:** Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- I. **Experienced:** When used with an entity, "experienced" means having successfully completed a minimum of 5 previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

- A. **General:** If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. **Minimum Quantity or Quality Levels:** The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.4 SUBMITTALS

- A. **Qualification Data:** For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. **Schedule of Tests and Inspections:** Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Description of test and inspection.

3. Identification of applicable standards.
4. Identification of test and inspection methods.
5. Number of tests and inspections required.
6. Time schedule or time span for tests and inspections.
7. Entity responsible for performing tests and inspections.
8. Requirements for obtaining samples.
9. Unique characteristics of each quality-control service.

C. Reports: Prepare and submit certified written reports that include the following:

1. Date of issue.
2. Project title and number.
3. Name, address, and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making tests and inspections.
6. Description of the Work and test and inspection method.
7. Identification of product and Specification Section.
8. Complete test or inspection data.
9. Test and inspection results and an interpretation of test results.
10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting and reinspecting.

D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.5 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A licensed professional engineer who is legally qualified to practice in California and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system,

assembly, or product that are similar to those indicated for this Project in material, design, and extent.

- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.
- G. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.6 QUALITY CONTROL

- A. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 1 Section "Submittal Procedures."
- B. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- C. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- D. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- E. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit schedule within 30 days of date established for commencement of the Work.
 - 1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes list of references.

1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "AHJ": Agency having jurisdiction.
- C. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- D. "Approved equal" or "or equal" means as determined by Architect.
- E. "Compatible": When used for products, it shall comply with requirements including products recommended/ required by the manufacturer for warrantee acceptance.
- F. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."
- G. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- H. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- I. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- J. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- K. "Owner": As defined in Division 1 section "Summary".
- L. "Provide": Furnish and install, complete and ready for the intended use.

- M. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.
 - 2. Copies of standards and applicable building codes shall be kept on-site during construction.
- D. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations.
- E. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized names.
- F. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized names.
- G. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized names.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Sections include the following:
 - 1. Division 1 Section "Summary" for limitations on utility interruptions and other work restrictions.
 - 2. Division 1 Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
 - 3. Division 1 Section "Execution Requirements" for progress cleaning requirements.
 - 4. Other Sections for temporary heat, ventilation, and humidity requirements for products in those Sections.

1.2 DEFINITIONS

- A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.3 USE CHARGES

- A. General: Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.
- B. Sewer Service:
 - 1. Pay sewer service use charges for sewer usage by all entities for construction operations.
- C. Water Service:
 - 1. Pay water service use charges for water used by all entities for construction operations.
- D. Electric Power Service:
 - 1. Pay electric power service use charges for electricity used by all entities for construction operations.
 - 2. connections and extensions of services as required for construction operations.
- E. Sanitary Facilities:
 - 1. Pay sanitary service use charge for temporary toilets, wash facilities, and drinking water for use of construction personnel.

1.4 SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Portable Chain-Link Fencing: Minimum 2-inch, 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide galvanized steel bases for supporting posts.
- B. Wind Screen Fabric: Green.

2.2 TEMPORARY FIELD OFFICES

- A. No required.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 SUPPORT FACILITIES INSTALLATION

- A. **Parking:** Provide temporary or use designated areas of Owner's existing parking areas if approved for construction personnel.
- B. **Waste Disposal Facilities:** Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. **Site Enclosure Fence:** Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
 - 1. **Extent of Fence:** As required to enclose entire Project site or portion determined sufficient to accommodate construction operations or as indicated on Drawings.
 - 2. **Maintain security** by limiting number of keys and restricting distribution to authorized personnel.
- B. **Security Enclosure and Lockup:** Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- C. **Barricades, Warning Signs, and Lights:** Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- D. **Temporary Enclosures:** Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- E. **Temporary Partitions:** Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner and tenants from fumes and noise.
 - 1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.

2. Construct dustproof partitions with 2 layers of 3-mil polyethylene sheet on each side. Cover floor with 2 layers of 3-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant plywood.
 - a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.
 3. Insulate partitions to provide noise protection to occupied areas.
 4. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
 5. Protect air-handling equipment.
 6. Weather strip openings.
 7. Provide walk-off mats at each entrance through temporary partition.
- F. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses.
1. Prohibit smoking in construction areas.
 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.4 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 1 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and product substitutions.
- B. Related Sections include the following:
 - 1. Division 1 Section "References" for applicable industry standards for products specified.
 - 2. Division 1 Section "Closeout Procedures" for submitting warranties for Contract closeout.
 - 3. Other Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor. Proposed products by manufacturers not listed in Manufacturers list.
- C. Basis-of-Design: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating "or equal" products of other named manufacturers.

1.3 SUBMITTALS

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
 - 2. Form: Tabulate information for each product under the following column headings:

- a. Specification Section number and title.
 - b. Generic name used in the Contract Documents.
 - c. Proprietary name, model number, and similar designations.
 - d. Manufacturer's name and address.
 - e. Supplier's name and address.
 - f. Installer's name and address.
 - g. Projected delivery date or time span of delivery period.
 - h. Identification of items that require early submittal approval for scheduled delivery date.
3. Completed List: Submit 3 copies of completed product list within days specified in General Conditions. Include a written explanation for omissions of data and for variations from Contract requirements.
 4. Architect's Action: Architect will respond in writing to Contractor within 21 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Substitution Request Form: Use form provided at end of Section.
 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, environmental, and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - j. Cost information, including a proposal of change, if any, in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.

1. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
 3. Architect's Action: Architect will notify Contractor of acceptance or rejection of proposed substitution within 21 days of receipt of request.
 - a. Form of Acceptance: Change Order.
 - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
- C. Named Product and Basis-of-Design Product Specification Submittal: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- C. Storage:
1. Store products to allow for inspection and measurement of quantity or counting of units.
 2. Store materials in a manner that will not endanger Project structure.
 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 4. Store cementitious products and materials on elevated platforms.
 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 7. Protect stored products from damage and liquids from freezing.
 8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
 - 3. Refer to other sections for specific content requirements and particular requirements for submitting special warranties.
- C. Warranty Period: Warranty period specified in each sections are minimum requirements. Do not modify manufacturer's standard warranty period if the manufacturer's warranty has longer warranty period.
- D. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
 - 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
 - 1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.

2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
5. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or an equal product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with "or equal".
6. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in Part 2 "Product Substitutions" Article to obtain approval by Architect for use of an unnamed product.
7. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
8. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include custom or premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes standard, custom, and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within 35 days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 2. Requested substitution does not require extensive revisions to the Contract Documents.
 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 4. Substitution request is fully documented and properly submitted.
 5. Requested substitution will not adversely affect Contractor's Construction Schedule.

6. Requested substitution has received necessary approvals of authorities having jurisdiction and has paid any fees.
7. Requested substitution is compatible with other portions of the Work.
8. Requested substitution has been coordinated with other portions of the Work.
9. Requested substitution provides specified warranty.
10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
11. Furnish samples upon requested by Architect.
12. Attached Request for Substitution Form shall used for substitution requests.

PART 3 - EXECUTION

3.1 FORMS

- A. Electronic versions of attached forms will be provided upon request.
 1. Product List Form.
 2. Similar Installation List Form.
 3. Substitution Request Form.

END OF SECTION 016000

SUBSTITUTION REQUEST FORM

Substitutions are only allowed within number of days specified. Use this form for requesting "or equal" products and materials.

Project:	Substitution Request Number:
	From:
To:	Date:
	Project Number:

Specification Section Title:		
Section Number:	Page:	Article/Paragraph:
Specified Item:		

Proposed Substitution:	
Manufacturer:	Address:
Contact Name:	Phone Number:
<input type="checkbox"/> Comparison between proposed substitution and specified product is attached. Note all differences.	

Reason for not using specified item:

- Specified product is no longer available.
- Substitution will improve lead time by _____ days
- Substitution will save Owner \$ _____
- Other:

List 3 similar installations including project name, address, owner, and date installed is attached.
Proposed substitution affects other parts of Work: No Yes; explanation attached.

Supporting Data Attached:

- Product Data (indicate any options to be included)
- Drawings Test Reports Samples Color Chart Other:

Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable is available.
- Proposed substitution will not affect or delay Construction Progress Schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including architectural or engineering design, detailing, and construction costs caused by the requested substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

- Substitutions for products or systems involving structural, fire/life safety and access compliance will require AHJ approval. This will add time required to review those substitutions requiring AHJ approval. Contractor is solely responsible for all documentation, cost, and time required to obtain AHJ approval.

Submitted by:	Firm:
Signature:	Date:
Comments:	

A/E Review:

- Approve Substitution.
- Approve Substitution as Noted.
- Reject Substitution. Use specified product.
- Reject Substitution. Use specified product. Substitution request received too late.

Signed by:	Date:
Comments:	

Owner's Review and Action (Approval of substitution is not valid without Owner's signature)

- Substitution approved.
- Substitution approved as Noted.
- Substitution rejected. Use specified product.

Signed by:	Date:
Comments:	

End of Substitution Request Form

SIMILAR INSTALLATION LIST FORM

Provide minimum 5 similar installations within last 3 years.

Project: _____ From: _____

To: _____ Date: _____

	Date of Installation	Project Name	Owner Info	GC Info	Architect info
1					
2					
3					
4					
5					
6					
7					
8					

End of Previous Project List Form

SECTION 017300 - EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. General installation of products.
 - 2. Progress cleaning.
 - 3. Starting and adjusting.
 - 4. Protection of installed construction.
 - 5. Correction of the Work.

- B. Related Sections include the following:
 - 1. Division 1 Section "Project Management and Coordination" for procedures for coordinating field engineering with other construction activities.
 - 2. Division 1 Section "Submittal Procedures" for submitting surveys.
 - 3. Division 1 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
 - 1. Before construction, verify the location and points of connection of utility services.

- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
 - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, gas, and water-service piping; and underground electrical services.
 - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.3 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
 - 4. Maintain minimum headroom clearance of 8 feet in spaces without a suspended ceiling.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.4 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.5 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements."

3.6 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Provide protection against weather, rain, wind, storms, frost and heat so as to maintain all work and materials free from injury or damage.
- C. Comply with manufacturer's written instructions for temperature and relative humidity.

3.7 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous demolition and construction waste.
 - 2. Recycling nonhazardous demolition and construction waste.
 - 3. Disposing of nonhazardous demolition and construction waste.
- B. Related Sections include the following:
 - 1. Division 1 Section "Temporary Facilities and Controls" for environmental-protection measures during construction.

1.2 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.3 PERFORMANCE REQUIREMENTS

- A. General: Develop waste management plan that results in end-of-Project rates for salvage/recycling of 50 percent by weight of total waste generated by the Work.
 - 1. Submit waste management plan and waste log.

1.4 QUALITY ASSURANCE

- A. Waste Management Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to waste management including, but not limited to, the following:
 - 1. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
 - 2. Review requirements for documenting quantities of each type of waste and its disposition.
 - 3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 - 4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - 5. Review waste management requirements for each trade.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 RECYCLING CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.2 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off Owner's property and legally dispose of them.

END OF SECTION 017419

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Extra Materials.
 - 4. Final cleaning.
 - 5. City project closeout and Final Certification of Construction.

- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Division 1 Section "Execution Requirements" for progress cleaning of Project site.
 - 3. Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 4. Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 5. Division 1 Section "Demonstration and Training" for requirements for instructing Owner's personnel.
 - 6. Other Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBMITTALS

- A. Submit a copy of Title 24 Certificate of Acceptance forms submitted to enforcement agency.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.

6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
8. Complete startup testing of systems.
9. Submit test/adjust/balance records.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Inspection: Submit a written request for IOR's inspection for Substantial Completion. On receipt of request, Architect will either proceed with IOR's inspection process or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final IOR's inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
 2. Submit certified copy of Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 4. Submit pest-control final inspection report and warranty.
 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final IOR's inspection process for acceptance. On receipt of request, Architect will either proceed with inspection process or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use form attached.
 - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect.
 - d. Name of Contractor.
 - e. Page number.

1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date specified in General Conditions.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Include Table of Contents.
 - 3. Identify content with specification section number and title.
 - 4. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 5. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

1.7 EXTRA MATERIALS

- A. Deliver to Owner's facility manager extra materials specified in each section.
- B. Organize submitted materials in orderly sequence based on the table of contents of the Project Manual.
 - 1. Itemize each material and quantity in 8-1/2 by 11-inch paper.
- C. Label each items for easy identification.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - h. Sweep concrete floors broom clean in unoccupied spaces.
 - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - k. Remove labels that are not permanent.
 - l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.

- m. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- n. Replace parts subject to unusual operating conditions.
- o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- q. Clean ducts, blowers, and coils if units were operated without filters during construction.
- r. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- s. Leave Project clean and ready for occupancy.

3.2 CITY PROJECT CLOSEOUT AND FINAL CERTIFICATION OF CONSTRUCTION

- A. See General Conditions.

3.3 FORMS

- A. Electronic versions of attached forms will be provided upon request.
 - 1. Punch-List Form.

END OF SECTION 017700

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Emergency manuals.
 - 3. Operation manuals for systems, subsystems, and equipment.
 - 4. Maintenance manuals for the care and maintenance of products, materials, and finishes.

- B. Related Sections include the following:
 - 1. Division 1 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
 - 2. Division 1 Section "Closeout Procedures" for submitting operation and maintenance manuals.
 - 3. Division 1 Section "Project Record Documents" for preparing Record Drawings for operation and maintenance manuals.
 - 4. Other Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.2 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.3 SUBMITTALS

- A. Initial Submittal: Submit 2 draft copies of each manual at least 15 days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Architect will return 1 copy of draft and mark whether general scope and content of manual are acceptable.

- B. Final Submittal: Submit 1 copy of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.
 - 1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

1.4 COORDINATION

- A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address, and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.

- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
 - 4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
 - 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
 - 1. Type of emergency.
 - 2. Emergency instructions.
 - 3. Emergency procedures.

- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
 - 1. Fire.
 - 2. Flood.
 - 3. Gas leak.
 - 4. Water leak.
 - 5. Power failure.

6. Water outage.
 7. System, subsystem, or equipment failure.
 8. Chemical release or spill.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
1. Instructions on stopping.
 2. Shutdown instructions for each type of emergency.
 3. Operating instructions for conditions outside normal operating limits.
 4. Required sequences for electric or electronic systems.
 5. Special operating instructions and procedures.

2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
1. System, subsystem, and equipment descriptions.
 2. Performance and design criteria if Contractor is delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
1. Product name and model number.
 2. Manufacturer's name.
 3. Equipment identification with serial number of each component.
 4. Equipment function.
 5. Operating characteristics.
 6. Limiting conditions.
 7. Performance curves.
 8. Engineering data and tests.
 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Instructions on stopping.
 6. Normal shutdown instructions.
 7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.

9. Special operating instructions and procedures.

- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.5 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product,

list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

- C. **Manufacturers' Maintenance Documentation:** Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard printed maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.

- D. **Maintenance Procedures:** Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training videotape, if available.

- E. **Maintenance and Service Schedules:** Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. **Scheduled Maintenance and Service:** Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. **Maintenance and Service Record:** Include manufacturers' forms for recording maintenance.

- F. **Spare Parts List and Source Information:** Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

- G. **Maintenance Service Contracts:** Include copies of maintenance agreements with name and telephone number of service agent.

- H. **Warranties and Bonds:** Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. **Operation and Maintenance Documentation Directory:** Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

- B. **Emergency Manual:** Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared Record Drawings in Division 1 Section "Project Record Documents."
- G. Comply with Division 1 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.

1.2 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit 1 set of marked-up Record Prints.
- B. Record Specifications: Submit 1 copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit 1 copy of each Product Data submittal.
 - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
 - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations below first floor.
 - d. Locations and depths of underground utilities.

- e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order.
 - k. Changes made following Architect's written orders.
 - l. Details not on the original Contract Drawings.
 - m. Field records for variable and concealed conditions.
 - n. Record information on the Work that is shown only schematically.
3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize Record Prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.
 5. Note related Change Orders, Record Product Data, and Record Drawings where applicable.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.
4. Assemble in single binder with table of contents.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839

SECTION 017900 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.
- B. Related Sections include the following:
 - 1. Division 1 Section "Project Management and Coordination" for requirements for preinstruction conferences.
 - 2. Other Sections for specific requirements for demonstration and training for products in those Sections.

1.2 SUBMITTALS

- A. Instruction Program: Submit 2 copies of outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. At completion of training, submit 1 complete training manual(s) for Owner's use.
- B. Qualification Data: For instructor.
- C. Attendance Record: For each training module, submit list of participants and length of instruction time.
- D. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.3 QUALITY ASSURANCE

- A. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Division 1 Section "Quality Requirements," experienced in operation and maintenance procedures and training.

1.4 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.
- B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner, through Architect, with at least 7 days' advance notice.
- D. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a written performance-based test.
- E. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

END OF SECTION 017900

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of selected portions of building or structure.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 SUBMITTALS

- A. Qualification Data: For demolition firm.
- B. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's building manager's on-site operations are uninterrupted.
 - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Use of elevator and stairs.
 - 5. Locations of proposed dust- and noise-control temporary partitions and means of egress.
 - 6. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
 - 7. Means of protection for items to remain and items in path of waste removal from building.
- C. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.

1.4 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.

- B. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with ANSI A10.6 and NFPA 241.
- E. Pre-demolition Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

- A. Storage or sale of removed items or materials on-site is not permitted.
- B. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
 - 1. Comply with requirements for existing services/systems interruptions specified in Division 1 Section "Summary."
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Arrange to shut off indicated utilities with utility companies.
 - 2. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
 - a. Where entire wall is to be removed, existing services/systems may be removed with removal of the wall.

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
 - 5. Maintain adequate ventilation when using cutting torches.
 - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 - 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

- B. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Cut concrete to a depth of at least 3/4 inch at junctures with construction to remain, using power-driven saw. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete indicated for selective demolition. Neatly trim openings to dimensions indicated. Patch and repair with similar materials.
- B. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts. Patch and repair with similar materials.
- C. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.
 - 1. Patch and repair with similar materials.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 - 4. Comply with requirements specified in Division 1 Section "Construction Waste Management."
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.7 CLEANING

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

END OF SECTION 024119

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes joint sealants.

1.2 PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

1.3 SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Product Certificates: For each type of joint sealant and accessory, signed by product manufacturer.
- D. SWRI Validation Certificate: For each elastomeric sealant specified to be validated by SWRI's Sealant Validation Program.
- E. Qualification Data: For Installer.
- F. Compatibility and Adhesion Test Reports: From sealant manufacturer, indicating the following:
 - 1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
 - 2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.
- G. Product Test Reports: Based on comprehensive testing of product formulations performed by a qualified testing agency, indicating that sealants comply with requirements.
- H. Warranties: Special warranties specified in this Section.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized Installer who is approved or licensed for installation of elastomeric sealants required for this Project.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.

- C. Mockups: Build mockups incorporating sealant joints, as follows, to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution:
 - 1. Joints in mockups of assemblies specified in other Sections that are indicated to receive elastomeric joint sealants, which are specified by reference to this Section.
- D. Preinstallation Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.6 WARRANTY

- A. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: 2 years.
- B. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:
 - 1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
 - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.
- C. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: 2 years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Joint Sealants: Subject to compliance with requirements, provide either the named product or an equal product by one of the other manufacturers specified.
1. Sika Corporation
 2. Pecora Corporation.
 3. Bostik.
 4. Dow Corning Corp.
 5. GE Plastics.
 6. Sonneborn Building Products, ChemRex, Inc.
 7. Tremco, Inc.
 8. The Sherwin-Williams Company.
 9. Or equal.

2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. VOC Content of Interior Sealants: Provide interior sealants and sealant primers that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
1. Sealants: 250 g/L.
 2. Sealant Primers for Nonporous Substrates: 250 g/L.
 3. Sealant Primers for Porous Substrates: 775 g/L.
- C. Colors of Exposed Joint Sealants:
1. As selected by Architect from manufacturer's full range.
 2. Areas where concrete joint sealant will be adjacent to concrete other than standard gray, sealant color shall match adjacent color as approved by Architect.

2.3 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
 - 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
 - 3. Remove laitance and form-release agents from concrete.
 - a. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

- C. Acoustical Sealant Application Standard: Comply with recommendations in ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.
- D. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- E. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- F. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- G. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
 - 1. Remove excess sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
 - 4. Provide flush joint configuration where indicated per Figure 5B in ASTM C 1193.
 - 5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 5C in ASTM C 1193.
 - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.
- H. Installation of Preformed Tapes: Install according to manufacturer's written instructions.
- I. Installation of Preformed Silicone-Sealant System: Comply with the following requirements:
 - 1. Apply masking tape to each side of joint, outside of area to be covered by sealant system.
 - 2. Apply silicone sealant to each side of joint to produce a bead of size complying with preformed silicone-sealant system manufacturer's written instructions and covering a bonding area of not less than 3/8 inch. Hold edge of sealant bead 1/4 inch inside masking tape.
 - 3. Within 10 minutes of sealant application, press silicone extrusion into sealant to wet extrusion and substrate. Use a roller to apply consistent pressure and ensure uniform contact between sealant and both extrusion and substrate.
 - 4. Complete installation of sealant system in horizontal joints before installing in vertical joints. Lap vertical joints over horizontal joints. At ends of joints, cut silicone extrusion with a razor knife.

- J. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping, taking care not to pull or stretch material, producing seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures where expansion of sealant requires acceleration to produce seal, apply heat to sealant in compliance with sealant manufacturer's written instructions.

3.4 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

3.6 JOINT-SEALANT LOCATION

- A. General Purpose Exterior Sealant: Polyurethane; ASTM C 920, Grade NS, Class 25, Uses M, G, and A; single component.
 - 1. Products:
 - a. SikaFlex 1A or 15LM by Sika Corp.
 - b. Dynatrol I-XL by Pecora.
 - c. Stampede 1 by The Sherwin-Williams Company.
 - 2. Color: Standard colors matching finished surfaces.
 - 3. Applications:
 - a. Control, expansion, and soft joints in masonry.
 - b. Joints between concrete and other materials.
 - c. Joints between metal frames and other materials.
 - d. Other exterior joints for which no other sealant is indicated.
- B. Exterior Metal Lap Joint Sealant: Silicone, Butyl or polyisobutylene, nondrying, nonskinning, noncuring.
 - 1. Products:
 - a. SikaSil WS-295 Silicone by Sika Corp.
 - b. 895 Silicone or Sil-Span by Pecora.
 - 2. Color: Standard colors matching finished surfaces.
 - 3. Applications:
 - a. Concealed sealant bead in sheet metal work.
 - b. Concealed sealant bead in siding overlaps.
- C. General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C 834, Type OP, Grade NF single component, paintable.
 - 1. Products:

- a. AC-20 manufactured by Pecora.
 - b. 950A manufactured by The Sherwin-Williams Company.
 2. Color: Standard colors matching finished surfaces.
 3. Applications:
 - a. Interior wall and ceiling control joints.
 - b. Joints between door and window frames and wall surfaces.
 - c. Other interior joints for which no other type of sealant is indicated.
- D. Interior Floor Joint Sealant: Polyurethane, chemically-curing, cold-applied, self-leveling elastomeric sealant; ASTM C 920, Grade P, Class 25, Uses T, M and A; two-part.
 1. Products:
 - a. SikaFlex 2C SL or NS with TG Additive by Sika Corp.
 - b. NR-200 self-leveling polyurethane and/or DYNATRED non-sag, traffic-grade polyurethane sealants by Pecora.
 - c. Stampede 2SL by The Sherwin-Williams Company.
 2. Primer: SikaFlex 429 Primer; P-150, P-75 or P-200.
 3. Color: Standard colors matching finished surfaces.
 4. Applications: Use for joints up to 1-1/2 inches.
 - a. Expansion joints in floors.
- E. Concrete Paving Joint Sealant: Polyurethane, chemically-curing, cold-applied, self-leveling elastomeric sealant; ASTM C 920, Class 25, Uses T, I, M and A; two-part.
 1. Products:
 - a. NR-200 Urexpan and/or DYNATRED non-sag, traffic-grade polyurethane sealant by Pecora or equal.
 - b. Stampede 2NS by The Sherwin-Williams Company.
 2. Primer: SikaFlex 429 Primer; P-150, P-75 or P-200.
 3. Color: Gray or Limestone.
 4. Applications:
 - a. Joints in sidewalks and vehicular paving.
- F. Butyl Sealant: ASTM C 920, Grade NS, Class 12-1/2, Uses NT, M, A, G, O; single component, solvent release, non-skinning, non-sagging.
 1. Products:
 - a. BC-158 sealant by Pecora.
 - b. WL Silicone Rubber by The Sherwin-Williams Company.
 2. Color: Standard colors matching finished surfaces.
 3. Movement Capability: Plus and minus 12-1/2 percent.
 4. Service Temperature Range: -13 to 180 degrees F.
 5. Shore A Hardness Range: 10 to 30.
- G. Silicone Sealant: ASTM C 920, Grade NS, Class 25, Uses NT, A, G, M, O; single component, solvent curing, non-sagging, non-staining, fungus resistant, non-bleeding.
 1. Products:
 - a. SikaSil WS 290 or WS 295 by Sika Corp.
 - b. 864 LM Architectural silicone or 890 silicone sealant by Pecora.
 - c. 790 by Dow Corning Corporation.
 - d. WL Silicone Ultra WL09210.
 2. Color: Standard colors matching finished surfaces.
 3. Movement Capability: Plus and minus 25 percent.
 4. Applications:

- a. Interior or exterior for joints 1/8 to 1-1/2 inch wide.
- b. Exterior use at expansion joints in masonry where substantial movement is expected.
- c. Glazing application.

END OF SECTION 079200

SECTION 096516 – RESILIENT SHEET FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes:
 - 1. Sheet vinyl floor coverings.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For each type of flooring. Include flooring layouts, locations of seams, edges, columns, doorways, enclosing partitions, built-in furniture, cabinets, and cutouts.
 - 1. Show details of special patterns.
 - 2. Include concrete moisture and alkalinity limits.
- C. Samples for Initial Selection: For each type of floor covering indicated.
 - 1. Include similar Samples of installation accessories involving color selection.
- D. Samples for Verification: In manufacturer's standard size, but not less than 6-by-9-inch sections of each different color and pattern of floor covering required.
 - 1. For heat-welding bead, manufacturer's standard-size Samples, but not less than 9 inches long, of each color required.
- E. Heat-Welded Seam Samples: For each flooring product and welding bead color and pattern combination required; with seam running lengthwise and in center of 6-by-9-inch Sample applied to a rigid backing and prepared by Installer for this Project.
- F. Qualification Data: For Installer.
- G. Maintenance Data: For floor coverings to include in maintenance manuals.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs workers for this Project that are competent in heat-welding techniques required by manufacturer for floor covering installation.
 - 1. Engage an installer who employs workers for this Project that are trained or certified by floor covering manufacturer for heat-welding techniques required.
- B. Fire-Test-Response Characteristics: Provide products identical to those tested for fire-exposure behavior per test method indicated by a testing and inspecting agency acceptable to authorities having jurisdiction.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store floor coverings and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store rolls upright.

1.5 PROJECT CONDITIONS

- A. Maintain temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 85 deg F, in spaces to receive floor tile during the following time periods:
 - 1. 48 hours before installation.
 - 2. During installation.
 - 3. 48 hours after installation.
- B. After postinstallation period, maintain temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.
- C. Close spaces to traffic during floor covering installation.
- D. Close spaces to traffic for 48 hours after floor covering installation.
- E. Install floor coverings after other finishing operations, including painting, have been completed.

1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of sheet vinyl floor coverings that fails in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 1 year.
- B. Installer's Warranty: 1 year.

1.7 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Furnish not less than 10 linear feet for every 500 linear feet or fraction thereof, in roll form and in full roll width for each color, pattern, and type of floor covering installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Sheet Vinyl Floor Coverings: Subject to compliance with requirements, provide either the named product or an equal product by one of the other manufacturers specified.
 - 1. Altro Floors. (Basis of Design)
 - 2. Mannington Commercial.

3. Forbo Industries, Inc.
4. Armstrong World Industries, Inc.
5. Johnsonite.
6. Or equal.

2.2 SHEET RUBBER FLOOR COVERING

- A. Product: Stronghold 30, commercial kitchen flooring by Altro or equal.
 1. Color As indicated on Drawings.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic cement based formulation provided or approved by floor covering manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit sheet vinyl floor covering and substrate conditions indicated.
- C. Heat-Welding Bead: Solid-strand product of floor covering manufacturer.
 1. Color: As selected by Architect from manufacturer's full range.
- D. Integral-Flash-Cove-Base Accessories:
 1. Cove Strip: 1-inch radius provided or approved by floor covering manufacturer.
 2. Cap Strip: Square metal, vinyl, or rubber cap provided or approved by floor covering manufacturer.
 3. Corners: Metal inside and outside corners and end stops provided or approved by floor covering manufacturer.
- E. Metal Edge Strips: Extruded aluminum with mill finish of width shown, of height required to protect exposed edges of floor coverings, and in maximum available lengths to minimize running joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor coverings.
 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of floor coverings.
- B. Concrete Substrates:
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
- C. Remove substrate coatings and other substances that are incompatible with floor covering adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
- D. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates.
- E. Move floor coverings and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
 - 1. Do not install floor coverings until they are same temperature as space where they are to be installed.
- F. Sweep and vacuum clean substrates to be covered by floor coverings immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

- A. Unroll sheet vinyl floor coverings and allow them to stabilize before cutting and fitting.
- B. Lay out sheet vinyl floor coverings as follows:
 - 1. Maintain uniformity of floor covering direction.
 - 2. Minimize number of seams; place seams in inconspicuous and low-traffic areas, at least 6 inches away from parallel joints in floor covering substrates.
 - 3. Match edges of floor coverings for color shading at seams.
 - 4. Avoid cross seams.
- C. Scribe and cut floor coverings to butt neatly and tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings.
- D. Extend floor coverings into toe spaces, door reveals, closets, and similar openings.
- E. Maintain reference markers, holes, or openings that are in place or marked for future cutting by repeating on floor coverings as marked on substrates. Use chalk or other nonpermanent marking device.
- F. Install floor coverings on covers for telephone and electrical ducts and similar items in installation areas. Maintain overall continuity of color and pattern with pieces of floor coverings installed on covers. Tightly adhere floor covering edges to substrates that abut covers and to cover perimeters.

- G. Adhere floor coverings to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- H. Heat-Welded Seams: Comply with ASTM F 1516. Rout joints and use welding bead to permanently fuse sections into a seamless floor covering. Prepare, weld, and finish seams to produce surfaces flush with adjoining floor covering surfaces.
- I. Integral Flash Cove Base: Cove floor coverings 6 inches up vertical surfaces. Support floor coverings at horizontal and vertical junction by cove strip. Butt at top against cap strip.
 - 1. Install metal corners at inside and outside corners.

3.4 CLEANING AND PROTECTION

- A. Perform the following operations immediately after completing floor covering installation:
 - 1. Remove adhesive and other blemishes from floor covering surfaces.
 - 2. Sweep and vacuum floor coverings thoroughly.
 - 3. Damp-mop floor coverings to remove marks and soil.
 - a. Do not wash floor coverings until after time period recommended by manufacturer.
- B. Protect floor coverings from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
 - 1. Apply protective floor polish to surfaces that are free from soil, visible adhesive, and blemishes if recommended in writing by manufacturer.
 - 2. Cover floor coverings with undyed, untreated building paper until Substantial Completion.
 - 3. Do not move heavy and sharp objects directly over floor coverings. Place plywood or hardboard panels over floor coverings and under objects while they are being moved. Slide or roll objects over panels without moving panels.

END OF SECTION 096516

SECTION 096723 – RESINOUS FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Resinous Flooring.

1.2 SUBMITTALS

- A. Product Data: Descriptive data and specific recommendations for surface preparation, mixing, and application of materials.
- B. Acceptance Sample: As required by owner, one foot square (1 ft. by 1 ft.) sample of the specified flooring system applied to hardboard or similar backing for rigidity and ease of handling.
- C. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.

1.3 QUALITY ASSURANCE

- A. Applicator shall have minimum of 5 years experience in application of the specified type of flooring.
- B. Provide certification from the manufacturer that the applicator is approved for installation of the flooring.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Resinous Flooring:
 - 1. Westcoat Specialty Coating Systems. (Basis of Design)
 - 2. Stonhard
 - 3. Key Resin Company.
 - 4. Polycoat.
 - 5. Or equal.

2.2 RESINOUS FLOORING

- A. Product: Temper-Crete Broadcast System by Westcoat or equal.
 - 1. Adhesion to Concrete: ASTM D4541, concrete fails.
 - 2. Compressive Strength: ASTM C-579, 6,191 psi.
 - 3. Tensile Strength: ASTM C-307, 1,000 psi.

4. Flexural Strength: ASTM C-580, 2,132 psi.
5. Impact Resistance: ASTM D-2794, >160 in/lbs.
6. Hardness: ASTM D-2240, Shore D, 78.
7. Flammability: ASTM E-648, Class I.
8. Water Absorption: ASTM C-413, <0.1%.
9. VOC Content: ASTM D-2369, Method E, 12 g/l.
10. Abrasion Resistance: ASTM D-4060, 0.07 gm loss.
11. Resistance to Fungi Growth: ASTM G21, Rated 0 (no growth).
12. Resistance to Mold Growth: ASTM D-3273, Rated 10 (highest resistance).
13. Service Temperature: -40°F (min) – 250°F (max).
14. Softening Point: 266°F.

B. System Materials:

1. Resin & Hardener: EC-24 Temper-Crete Urethane.
2. Cement: TC-24 Temper-Crete Cement.
3. Pigment: TC-45 Dry Pigment.
4. Broadcasted Aggregate: TC-65 Quartz Sand.
5. Topcoat: EC-102 Polyaspartic Topcoat.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verification of Conditions:

1. Inspect all surfaces to receive urethane cement flooring. Verify that surfaces are dry, clean, and free of contaminants that would prevent Temper-Crete from properly adhering to the surface and that the substrate is satisfactory for installation and complies with requirements specified.
2. Conduct calcium chloride testing according to ASTM F1869.
3. Prepare concrete to a profile equal to CSP 3-4 as specified by ICRI.
4. Before starting work report in writing to the authority having jurisdiction any unsatisfactory conditions.

3.2 PREPARATION

A. General

1. All concrete substrates shall be clean, dry and free of grease, paint, oil, dust, curing agents or any foreign material that will prevent proper adhesion. Any laitance or weak layers of concrete shall be removed prior to application.
2. Moisture Testing: All concrete should be tested for moisture before applying a seamless coating.
 - a. Perform relative humidity test in accordance with ASTM F2170. If relative humidity (RH) exceeds 90%, contact the manufacturer before application.
 - b. Perform moisture vapor emission rate measurement in accordance with ASTM F1869. If vapor drive exceeds 15 lbs./1,000 sq. ft./24 hrs., contact the manufacturer before application.
3. Mechanical Surface Preparation

- a. Prepare surfaces using methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- b. Create a surface profile of CSP 3-6 as described by the International Concrete Repair Institute (IRCI).
- c. Anchor grooves/keyways should be cut six inches from all free edges, walls, perimeter, drains and both sides of joints.
- d. Cracks, spawls and other imperfections in the substrate should be treated per manufactures recommendations.
- e. Joints: Moving expansion joints should be honored and treated per manufactures recommendations.
- f. Clean Surfaces thoroughly prior to installation.

3.3 APPLICATION

- A. Install coatings in accordance with the most up-to-date manufacturer’s instructions.
- B. Mix multi-component materials in accordance with manufacturer’s instructions.
- C. Use application equipment, tools, and techniques in accordance with manufacturer’s instructions.
- D. Uniformly apply coatings at spread rates and in number of coats to achieve specified mil thickness recommended by the manufacturer.
 1. Install integral cove base where indicated on the contract drawings and according to manufacturer’s instructions.
 2. All terminations, transitions, and details such as: drains, walls and doorways shall be treated per the manufacturer’s recommendations.
- E. Adhere to all limitations, instructions, and cautions for resinous coatings as stated in the manufacturer’s published literature.

3.4 FIELD QUALITY CONTROL

- A. Verify coatings and other materials are as specified.
- B. Verify coverage rates of the system as work progresses. Areas found not to meet the required thickness shall receive additional material until specified thickness is attained.
- C. Manufacturer’s representative shall provide technical assistance and guidance for surface preparation and application of coating systems.

3.5 PROTECTION AND CLEAN-UP

- A. Light foot traffic should be permitted after 18 hours. Heavy traffic and exposure to moisture and chemicals should be permitted after 72 hours.
- B. Protect finished surfaces of coating system from damage during construction.
- C. Touch-up, repair or replace damaged flooring system after substantial completion.

- D. Clean area and remove all debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.

END OF SECTION 096723

SECTION 260000 - GENERAL ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 SCOPE

- A. Work of this section includes everything necessary for or incidental to completing the electrical work, to provide a complete and operable electrical system, except as herein specifically excluded.

1.2 GENERAL REQUIREMENTS

- A. Electrical System Characteristics: 208/120V. 3PH, 4W.
- B. Guarantee: Furnish a written guarantee for a period of one-year from date of acceptance.
- C. Codes and Regulations: Work done under this Section shall comply with the 2022 edition of the following: California Electrical Code, State of California Title 24, State Building Standards, Occupational Safety and Health Administration (OSHA) requirements, State of California Title 17 and to all local codes having jurisdiction. In the case where the codes have different levels of requirements, the most stringent rule shall apply.
- D. Wherever a discrepancy in quantity or size of conduit, wire, equipment, devices, circuit breakers, etc., (all materials), arises on the Drawing and/or Specifications, the Contractor shall be responsible for providing and installing all material and services required by the strictest condition noted on Drawings and/or in Specifications to insure complete and operable systems as required by the Owner and Engineer.
- E. The General and Supplementary Conditions, as well as Special Conditions apply in addition to items in the Electrical Section. Special attention is directed to the following sections:
 - 1. Drawings and Specifications at the site.
 - 2. Shop drawings and samples.
 - 3. Record drawings.
 - 4. Cutting and Patching.
 - 5. Cleaning up.
 - 6. Guarantee.
 - 7. Tests.
- F. Additional Work: Refer to Mechanical and Plumbing specifications for additional Electrical requirements.
- G. Provide minimum of twenty percent (20%) spare circuit breakers for each retrofitted branch circuit panel.

H. Testing:

1. Scan:
 - a. Infrascan test of the existing power distribution system affected by the building addition (i.e. panels, switchboards) and the new branch circuit panels shall be required.
 - b. Infrascan certified reports shall be submitted on completion to the Owner and Engineer.
 - c. Scans shall be performed by an independent testing laboratory with total connected loads in operation.
2. Megger:
 - a. New branch circuit - phase, neutral and ground conductors.
 - b. New insulated bonding conductors.
3. All circuits shall be tested for continuity and circuit integrity. Adjustments shall be made for circuits not complying with testing criteria.
4. Grounding System: Shall be tested by an independent testing laboratory to meet resistance specified in Part 3.1, D.3 of these Specifications. It shall be this Contractor's responsibility to make adjustments, as required, to upgrade non-complying systems to proper and safe operation.
5. All certified testing reports shall be submitted to the Owner at completion of project.

I. All Core Cutting, Drilling, and Patching:

1. For the installation of work under this Section, the aforementioned shall be performed under this Section of the Specifications and the Concrete section of the Specifications.
2. No holes will be allowed in any structural members without the written approval of the Structural Engineer.
3. For penetrations of concrete slabs or concrete footings, the work will be as directed in the Concrete Section of Specifications.
4. The contractor shall be responsible for patching and repairing surfaces where he is required to penetrate for work under this contract.
5. Penetrations shall be sealed to meet the rated integrity of the surface required to be patched and repaired. The patched surface shall be painted or finished to match the existing surface.

J. Verifying Drawings and Job Conditions:

1. This Contractor shall examine all Drawings and Specifications in a manner to be fully cognizant of all work required under this Section.
2. This Contractor shall visit the site and verify existing conditions. Where existing conditions differ from Drawings, adjustment shall be made and allowances included for all necessary equipment to complete all parts of the Drawings and Specifications.

K. Shop Drawings:

1. Drawings shall be submitted in six (6) bound sets accompanied by Letter of Transmittal, which shall give a list of the number and dates of the drawings submitted. Drawings shall be complete in every respect and bound in sets.
2. The Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the approval of the Contractor as evidence that the Drawings have been checked by the Contractor. Any Drawings submitted without this approval will be returned to the Contractor for resubmission.
3. If the shop drawings show variations from the requirements of the Contract because of standard shop practice or other reasons, the Contractor shall make specific mention of such variations in his letter of transmittal. If the substitution is accepted, the Contractor shall be responsible for proper adjustment which may be caused by the substitution. Samples shall be submitted when requested.
4. Shop drawings shall be submitted on the following but not limited to:
 - a. Panels.
 - b. Pull and Junction boxes.
 - c. Wire/Cable and wire/cable termination equipment.
 - d. Conduit and fittings.
 - e. Conduit supports.
 - f. Receptacles.
 - g. Outlet Boxes.
 - h. Floor Boxes.

- L. Drawings of Record: The Contractor shall provide and keep up-to-date, a complete record set of blueprints. These shall be corrected daily and show every change from the original Drawings. This set of prints shall be kept on the job site and shall be used only as a record set. This shall not be construed as authorization for the Contractor to make changes in the layout without definite instruction in each case. Upon completion of the work, a set of reproducible Contract Drawings shall be obtained from the General Contractor and all changes as noted on the record set of prints shall be incorporated thereon with black ink in a neat, legible, understandable and professional manner. Refer to the Supplementary General Conditions for complete requirements.

1.3 WORK IN COOPERATION WITH OTHER TRADES

- A. Examine the Drawings and Specifications and determine the work to be performed by other trades. Provide the type and amount of electrical materials and equipment necessary to place this work in proper operation, completely wired, tested and ready for use. This shall include all conduit, wire, disconnects, and other devices for the required operation sequence of all electrical and kitchen equipment.

- B. Provide power and control circuits, conduit and wire as indicated on the kitchen equipment installation instructions for complete and operable systems.

1.4 TESTING AND ADJUSTMENT

- A. Upon completion of all electrical work, this Contractor shall test all circuits, switches, motors, breakers, motor starter(s) and their auxiliary circuits and any other electrical items to insure perfect operation of all electrical equipment.
- B. Equipment and parts in need of correction and discovered during such testing shall be immediately repaired or replaced with all new equipment and that part of the system shall then be retested. All such replacement or repair shall be done at no additional cost to the Owner.
- C. All circuit shall be tested for continuity and circuit integrity. Adjustments shall be made for circuits not complying with testing criteria.
- D. All certified testing reports shall be submitted to the Engineer at completion of project.

1.5 IDENTIFICATION

- A. Identification nameplates shall be Micarta 1/8" thick and of approved size, with bevelled edges and engraved white letters 1/4" high minimum on black background. Nameplates shall be provided for all circuits in the distribution panels and panel covers. Inscriptions on equipment shall be identical to those indicated in panels and other similar devices. Each nameplate shall be provided with drillings and suitable mounting screws corresponding to finish of the nameplate. The inscriptions in each nameplate shall be as indicated on the Drawings.
- B. Provide updated, typed, panel directories for all retrofitted branch circuit panels. Panel directories shall identify the load (i.e. Lights, receptacles, kitchen equipment) fed by each circuit breaker. Where no load is connected to a circuit breaker, the circuit shall be identified as "Spare".

1.6 MAINTENANCE, SERVICING, INSTRUCTION MANUALS AND WIRINGDIAGRAMS

- A. Prior to final acceptance of the job, the Electrical Contractor shall furnish to the Owner at least four (4) copies of operating and maintenance and servicing instructions, as well as four (4) complete wiring diagrams for the following item(s) or equipment:
 - 1. Circuit breakers.
 - 2. Receptacles.
- B. All wiring diagrams shall specifically cover the system supplied. Typical drawings will not be accepted. Two (2) copies shall be presented to the Electrical Engineer and four (4) copies to the Owner.

1.7 ELECTRICAL CONTRACTOR'S RESPONSIBILITY

- A. It shall be the Electrical Contractor's responsibility to obtain a complete set of Drawings and Specifications. He shall check the Drawings of the other trades and shall carefully read the entire Specifications and determine his responsibilities.

- B. The contractor shall be responsible for reviewing the plans and specifications to ensure each room, where electrical line or low voltage equipment is to be installed, has sufficient space to accommodate the system cabinets, equipment and terminations while maintaining code mandated clearances about said equipment. The contractor shall identify problem areas prior to bid, include all costs required for corrective measures in his bid and submit alternate equipment and materials suitable for the installation to the Architect/Engineer for acceptance as part of the product submittal process.
- C. The contractor shall possess a current C-10 license in the State of California. Copy of the license shall be included in all product and shop drawing submittals.

1.8 FINAL INSPECTION AND ACCEPTANCE

- A. After all requirements of the Specifications and/or the Drawings have been fully completed, representatives of the Owner will inspect the work. Contractor shall provide competent personnel to demonstrate the operation of any item or system to the full satisfaction of each representative.
- B. Final acceptance of the work will be made by the Owner after receipt of approval and recommendation of acceptance from each representative.

1.9 RECORD DRAWINGS

- A. Contractor shall furnish one set of reproducible record drawings before final payment of retention.

1.10 SUBSTITUTIONS

- A. Substitution to specified equipment shall be submitted and received by the Engineer fifteen (15) days after the bid date for review and approval. Obtain Architect/Engineer/Owner approval for all substitutions.
- B. To receive consideration, requests for substitutions must be accompanied by documentary proof of its equality with the specified material. Documentary proof shall be in letter form and identify the specified values/materials alongside proposed equal values/materials. In addition, catalog brochures and samples must be included in the submittal.
- C. In the event that authorization is given for a substitute equal to bid, after award of contract the Contractor shall submit to the Engineer certified quotations from suppliers of both the specified and proposed equal material for price comparison and delivery dates.
- D. In the event of cost reduction, the Owner will be credited with 100 percent of the reduction, arranged by Change Order.
- E. The Contractor warrants that substitutions proposed for specified items will fully perform the functions required.
- F. Substitutions or requests for substitution shall not be accepted and rejected for failure to comply with items A-E above.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Materials and Equipment: All electrical materials and equipment shall be new and shall be listed by Underwriter's Laboratories and bear their label, or listed and certified by a nationally recognized testing authority where UL does not have an approval. Custom made equipment must have complete test data submitted by the manufacturer attesting to its safety. In addition, the materials and equipment shall comply with the requirements of the following:
1. American Society of Testing Materials (ASTM).
 2. Insulated Cable Engineers Association (ICEA).
 3. National Electrical Manufacturer's Association (NEMA).
 4. National Fire Protection Association (NFPA).
 5. American National Standard Institute (ANSI).
- B. Existing Switchboard – Circuit Breaker:
1. Circuit breaker manufacturer shall match existing switchboard manufacturer. Provide new circuit breakers with required mounting hardware.
 2. Circuit breaker ampere interrupting capacity (AIC) shall be equal to or greater than the highest AIC rating of any existing circuit breaker in the panel.
 3. Circuit breakers shall be fully coordinated to ensure a local fault does not trip any upstream circuit breaker.
 4. Circuit breakers shall be the number of poles and current capacity as indicated on the single line diagram.
 5. Circuit breakers shall be provided with a device for locking circuit breaker in "OFF" position
 6. Provide screw-on nameplates for all feeder circuit breakers. Nameplates shall be 1/8" thick, Micarta or Lamacoid plate or approved size, with bevelled edges and engraved white letters on black background.
 7. Safe-off all unused openings.
 8. Refer to Section 26 05 73 for additional requirements. Switchgear and the overcurrent protective device coordination study must be submitted concurrently. A Switchgear submittal that does not include the overcurrent protective device coordination study will be considered incomplete.
- C. Panelboards – Branch Circuit:
1. Provide a complete retrofit of existing three phase panels. New panel interiors shall be three phase and shall use the existing back-box to support all retrofit components. Retrofit panel

- shall be provided with thermal-magnetic bolt-on type 40 deg C. circuit breakers. Refer to panel directories/schedules for ratings and quantity of circuits to be provided. Panels shall be provided with copper busses. Retrofit branch circuit panelboards shall be as manufactured by Eaton or approved equal.
2. Circuit breakers shall be fully AIC rated to provide the symmetrical interrupting capacity indicated on the single line diagram. Circuit breakers shall be the number of poles and current capacity as indicated on the single line diagram. All circuit breakers shall have terminals/lugs UL listed for 75°C.
 3. Circuit breakers shall be fully coordinated to ensure a local fault does not trip any upstream circuit breaker.
 4. Provide custom retrofit trims with doors equipped with flush type combination lock and catch, two milled type keys supplied with each recessed panel. All locks shall be keyed alike and each door shall have a plastic covered directory frame with a typed identification card of all circuit and panel numbers for branch circuit panelboards and engraved lamacoid nameplates for power distribution panelboards. Provide custom trims to fit the following recessed back boxes:
 - A. Panel N (Kitchen): 63”H x 30”W.
 - B. Panel M (Multi-Purpose Room): 32”H x 20”W.
 - C. Panel M2 (Music Room): 28.5”H x 20”W.
 5. Provide custom retrofit trims with doors equipped with flush type combination lock and catch, two milled type keys supplied with each surface mounted panel. All locks shall be keyed alike and each door shall have a plastic covered directory frame with a typed identification card of all circuit and panel numbers for branch circuit panelboards and engraved lamacoid nameplates for power distribution panelboards. Provide custom trims to fit the following surface back boxes:
 - A. Panel N1 (Locker Room): 50”H x 21”W.
 6. Provide nameplate for all panelboards, 1/8" thick, Micarta or Lamacoid plate of approved size, with bevelled edges and engraved white letters on black background. Install nameplates on exterior trim of panel, above the panel door.
 5. All wiring shall be neatly arranged and laced together.
 6. All circuit breakers shall be provided with a device for locking circuit breaker in "OFF" position.
 7. Refer to Section 26 05 73 for additional requirements. Panelboards and the overcurrent protective device coordination study must be submitted concurrently. A Panelboard submittal that does not include the overcurrent protective device coordination study will be considered incomplete.

D. Conduit:

1. Rigid conduit shall be full weight threaded type aluminum or steel, except where specifically required to be steel. Steel conduit shall be protected by overall zinc coating to inside and outside surfaces, applied by the hot dip, metallizing or sherardizing process.
2. Galvanized Rigid Conduit (GRC), shall be full weight threaded type aluminum or steel, except where specifically required to be steel. Steel conduit shall be protected by overall zinc coating to inside and outside surfaces, applied by the hot dip, metallizing, or sherardizing process.
3. Intermediate Metal Conduit (IMC), shall be hot-dipped galvanized in accordance with UL 1242 and meeting Federal Specification WWC-581 (latest revision).
4. Electrical Metallic Tubing (EMT), shall be zinc-coated steel with baked enamel or plastic finish on inside surfaces.
5. Flexible metal conduit shall be constructed of aluminum or hot-dipped galvanized steel strips wound spirally with interlocking edges to provide greatest flexibility with maximum strength. Interior surfaces shall be smooth and offer minimum drag to pulling in conductors. Used only as directed by the Engineer.
5. Liquid-tight conduit (Seal-Tite) shall be galvanized steel flexible conduit as above except with moisture and oil-proof jacket, pre-cut lengths and factory installed fittings. For outdoor installations and motor connection.
6. Electrical non-metallic tubing (ENT) is not permitted.
7. Non-Metallic Conduit:
 - a. Polyvinyl chloride (PVC) rigid conduit, Schedule 40, Type II for underground installation only.
 - b. Conduit and fitting shall be produced by the same manufacturer.

E. Fittings:

1. Conduit body type fittings shall be smooth inside and out, taper threaded with integral insulating bushing and of the shapes, sizes and types required to facilitate installation or removal of wires and cables from the conduit and tubing system. These fitting shall be of metal, smooth inside and out, thoroughly galvanized, and sherardized cadmium plated.
2. Metallic conduit body covers shall have the same finish as the fitting and shall be provided for the opening of each fitting where conductor do not pass through the cover.
3. Connector, coupling, locknut, bushings and caps used with rigid conduit shall be steel, threaded and thoroughly galvanized. Bushings shall be insulated.
4. EMT fittings, connectors and couplings, shall be steel, zinc or cadmium plated, raintight, threadless, compression or tap-on multiple point, steel locking ring type with insulated throat.
5. Flexible steel conduit connectors shall be or malleable iron clamp or squeeze type or steel

twist-in type with insulated throat. The finish shall be zinc or cadmium plating.

6. Die cast, set screw or indenter type fittings are not acceptable.
7. Conduit unions shall be "Erickson" couplings, or approved equal. The use of running threads will not be permitted.

F. 600 Volt Conductors - Wire and Cable:

1. All conductors shall be copper. SimPull type or equal.
2. Type THHN/THWN thermoplastic, 600 volt, UL approved, dry and wet locations, for conductor sizes up to and including #4 AWG.
3. Type XHHW cross-linked synthetic polymer, 600 volt, UL approved, for dry and wet locations, for conductor sizes #2 AWG. and above.
4. Cross-linked synthetic polymer, XHHW, 600 volts, UL approved, for installation underground, in concrete or masonry.
5. Wire and cable shall be new, manufactured not more than six (6) months prior to installation, shall have size, type of insulation, voltage rating and manufacturer's name permanently marked on outer covering at regular intervals.
6. Wire and cable shall be factory color coded by integral pigmentation with a separate color for each phase and neutral. Each system shall be color coded and it shall be maintained throughout.
7. Systems Conductor Color Coding:
 - a. Power 208/120V, 3PH, 4W:
 - (1) Phase A = Black
 - (2) Phase B = Red
 - (3) Phase C = Blue
 - (4) Neutral = White
 - b. Ground Conductors:
 - (1) Green
8. All color coding for #8 conductor and above shall be as identified above, utilizing phase tape at each termination.
9. No conductors carrying 120 volt or more shall be smaller than #12 AWG.
10. Multi-Conductor metal clad (MC) cable is not permitted.

G. Junction and Pullboxes:

1. For interior dry locations, boxes shall be galvanized one-piece drawn steel, knockout type,

with removable, machine screw secured covers.

2. For outside, damp or interior/exterior surface mounted locations, boxes shall be heavy cast aluminum or cast iron with removable, gasketed, non-ferrous machine screw secured covers.
3. All boxes shall be sized for the number and sizes of conductors and conduits entering the box and equipped with plaster rings where required. Each conductor shall be terminated at an insulated, barriered terminal connector and completely identified with an engraved fiber identification marker, Electrovert or Underwriter's Safety Device Company.

H. Outlet Boxes:

1. Unless otherwise noted on plan or specified herein, outlet boxes shall be 4" square x 2 1/8" deep, one-piece drawn steel, knockout type, mounted flush with in wall. Provide with plaster rings and wall plate.
2. For locations where standard boxes are not suitable due to number and size of conduit to be terminated, special boxes shall be designed to fit space or meet other requirements and submitted for approval.
3. For surface mounting or exposure to wet or damp locations, outlet boxes shall be heavy cast aluminum or cast iron with threaded hubs; covers shall be watertight with gaskets and non-ferrous screws.
4. Pop-Up floor boxes housing 20A, 125V, receptacles shall be coated steel, adjustable type, with low profile cover suitable for the outlets/connectors specified on plan and in the project manual. Boxes shall be suitable for terminating the conduit specified on plan. Leviton #PFGF2 with 20A GFI receptacle.
5. Floor boxes housing 20A, 250V, receptacles shall be cast iron, fully adjustable type, with flange and brass covers suitable for the outlets/connectors specified on plan and in the project manual. Boxes shall be suitable for terminating the conduit specified on plan. Wiremold Omnibox series or approved equal for 1" conduit and smaller.

I. Receptacles:

1. Receptacles for kitchen equipment shall be GFI type, factory installed in a pop-up floor box. Leviton #PFGF2, finish as selected by the Architect.
2. Specialty receptacles, identified on plans, for use with Owner furnished kitchen equipment shall be provided complete with flush floor box. Receptacle configuration shall match the plug being provided with the kitchen equipment. Actual receptacle configuration shall be determined at prior to shop drawing submittal.

J. Painting:

1. Panels, junction boxes, pull boxes, etc., and conduit installed outdoors and in public view shall be painted with colors selected by the Architect to match the subject exterior surface. Refer to painting section of the specifications for additional requirements.

K. Seismic Design and Anchoring of Electrical Equipment:

1. Seismic anchorage of electrical equipment shall conform to C.C.R. Title 24, 2022 CBC with California Amendments. Anchorage details for roof/floor mounted equipment shall be as shown on plans.

PART 3 - EXECUTION

3.1 PREPARATION AND INSTALLATION

A. Installation of Conduit and Outlet Boxes:

1. All conduit run exposed, shall be galvanized rigid steel conduit (GRC), or intermediate metal conduit (IMC).
2. Rigid steel conduit installed under slabs shall be 1" trade size minimum and shall be wrapped with 20 mil. polyvinyl chloride plastic tape. No conduit shall be installed/run horizontally in concrete slabs/floors.
3. All conduit except as hereinafter specified, installed in damp locations, surface mounted up to 8'-0" above finished floor or subject to mechanical injury shall be heavy wall, threaded, galvanized rigid steel conduit (GRC), or intermediate metal conduit (IMC).
4. Flexible steel conduit shall only be permitted to be used at connections to vibrating electrical equipment. All flexible steel conduit runs shall be less than 6'-0". All outdoor installation shall be made using liquid-tight flex with approved fittings. Use of flexible conduit shall be as approved by the Engineer.
5. Intermediate metal conduit (IMC), is approved for use in all locations as approved for GRC or EMT and in accordance with Article 345 of CEC and UL Information card #DYBY.
6. Interior surface raceways installed in public areas shall be Wiremold 2000 series, or approved equal, complete with required fittings and mounting hardware.
7. Conduit shall be run so as not to interfere with other piping fixtures or equipment.
8. The ends of all conduit shall be cut square, carefully reamed out to full size and shall be shouldered in fitting.
9. No running threads will be permitted in locations exposed to the weather, in concrete or underground. Special union fittings shall be used in these locations.
10. Underground conduit shall be, unless otherwise indicated, Schedule 40 PVC (polyvinyl chloride) installed at depth of not less than 24" below grade. Concrete encased with 2" minimum between conduits and 3" minimum between the last conduit and the edge of the duct-bank. Conduit separation shall be maintained using plastic spacers located at 10'-0" intervals. Maintain a minimum twelve inch (12") separation between power and communication/signal conduits. The grounding wire in plastic conduit shall be rated in accordance with Section 250-of 2022 CEC.

11. All underground conduit shall be 1" minimum trade size for steel and for PVC.
12. Where underground conduit runs stub-up, conduit shall transition to GRC underground. The contractor shall use GRC elbows and GRC risers wrapped in 20 mil. PVC tape for stub-ups.
13. PVC conduit shall not be run in walls or above grade.
14. Where underground conduit runs penetrate floor slab, conduit shall terminate 6" above finished floor with a grounding bushing.
15. Where conductors enter a raceway in a cabinet, pull box, junction box, or auxiliary gutter, the conductors shall be protected by a plastic bushing type fitting providing a smoothly rounded insulating surface.
16. Where conduit extends through roof to equipment on roof area, this Contractor shall provide 24 gauge galvanized sheet metal flashing cones with 4" flanges on roof surface. This flashing shall be delivered to the roofing contractor for installation. The actual location of all such roof penetrations and outlet shall be verified by the Contractor.
17. All conduit underground, in masonry and concrete and where concealed under floor slabs shall have joints painted with thread compound prior to makeup.
18. All conduit shall be supported at intervals not less than 10'-0" and within 12" from any outlet and at each side of bends and elbows. Conduit supports shall be galvanized, heavy stamped, two hole conduit clamp properly secured.
19. Where conduit racks are used the rack shall consist of two piece conduit clamps attached to galvanized steel slotted channels, properly secured via threaded rods attached directly to the building structure.
20. Nail-in conduit supports will not be allowed. One piece set-screw type conduit clamps or perforated iron for supporting conduit will not be permitted.

21. Seismic Conduit Support:

- a. All conduit shall be supported in such a manner that it is securely attached to the structure of the building. Attachment is to be capable of supporting the tributary weight of conduit and contents in any direction. Maximum spacing of support and braces are to be as follows:

<u>CONDUIT TYPE</u>	<u>MAXIMUM SPACING</u>
EMT, IMC	10'-0"
GRC (3/4" thru 1 1/2")	10'-0"
GRC (2" thru 2 1/2")	16'-0"
GRC (3" and larger)	20'-0"

22. All conduit runs shall be installed parallel or perpendicular to walls, structural members, or intersection of vertical planes and ceilings. Field made bends and offset shall be avoided where possible. Crushed or deformed raceway shall not be installed.
23. Open knockouts in outlet boxes only where required for inserting conduit.

24. Outlet boxes on metal studs shall be attached to metal hangers, tack welded or bolted to studs; on wood studs attachment shall be with wood screws, nails not acceptable.
25. Surface mounted panels secured to stud walls shall be secured to wall using 1/2" x 3" screws into steel backing plate provided by the Architect.
26. All boxes shall be covered with outlet box protector, Appleton SB-CK. Keep dirt from entering box or panels. If dirt does get in, it shall be removed prior to pulling wires.
28. All boxes installed outdoors shall be suitable for outdoor installations, gasketed, screw cover and painted as directed by the Architect with weatherproof paint to match building.
29. All conduit entries to outdoor mounted panels, cabinets, boxes, etc., shall be made using Myers "SCRU-TITE" hubs Series ST.
30. All conduit shall have a 200 lb test poly-propylene pull line left in place for future use in all runs tagged with a plastic tag at terminating end indicating the location of the opposite end of the conduit.
31. All rotating electrical equipment shall be supplied with flexible, liquid-tight conduit with appropriate slack and shall not exceed thirty-six (36) inches.
32. All multiple conduit runs within suspended ceilings or open ceilings shall be suspended from building structure by means of unistrut hangers/rack, see note 19. Refer to note 18 for support of single conduit runs. Conduit shall not be allowed to lay on ceiling or be supported from ceiling suspension wires or other suspension system.
33. All interior conduit shall be installed concealed in ceilings. Exposed interior conduit will not be permitted. When approved by the Architect/Engineer exposed interior raceways shall be Wiremold, or approved equal, painted to match the finish of the wall or ceiling to which it is supported to.
34. Provide complete conduit/raceway system for all line voltage systems. The Contractor shall coordinate the location of inaccessible or open ceilings with the Architectural Reflected Ceiling Plan and/or in the filed with the Architect/Owner.
35. Provide ceiling access panels for junction/pull boxes, equipment, devise/outlets installed over inaccessible ceilings. Ceiling access panels shall be minimum 12"x12" for junction/pull boxes. 24"x24" for all other applications.

B. Installation of 600 Volt Conductors:

1. All line voltage wire, including control circuits, shall be installed in conduit and/or surface raceway.
2. All line voltage circuits and feeder wires shall be continuous from the service point to terminal or farthest outlet. No joints shall be made except in pull, junction or outlet boxes, or in panel or switchboard gutters.

3. Thoroughly clean all conduit and wire-ways and see that all parts are perfectly dry before pulling any wires. No joint shall be made except in pull, junction or outlet boxes, or in panel or switchboard gutters.

C. Joints in 600 Volt Conductors:

1. Joints in 600 volt conductors smaller than No. 4 AWG shall be made with Scotchlok spring type connectors. Wires No 4 AWG and larger shall be joined together with approved type of pressure connector and taped with #33 3M tape, three (3) layers minimum to provide insulation not less than that of conductor. Connections to switch or busbar shall be made with one-piece copper lugs. Splicing of all 600 volt or less in-line connections #2 AWG through 350 MCM shall be made with 3M brand PST connector.
2. Joints/splices shall be done in junction or pull boxes.

D. Grounding:

1. Provide grounding for entire electric installation as shown on plans and as required by applicable codes. Included as requiring grounding are:
 - a. Conduit.
 - b. Neutral or identified conductors of interior wiring system.
 - c. Non-current carrying metal parts of fixed equipment.
2. Grounding and bonding conductors shall be sized per the 2022 edition of the California Code of Regulations, Title 24, State of California and CEC.
3. Provide and install a grounding conductor in all feeder and branch circuit conduits.
4. Building grounding system resistance to ground shall not exceed 25 ohm.

- E. Prefabricated Equipment: Installation of all prefabricated items and equipment shall conform to the requirements of the manufacturer's specifications and installation instruction pamphlets. Where code requirements affect installation of materials and equipment, the more stringent requirements, code or manufacturer's instructions and/or specifications, shall govern the work.

END OF SECTION

SECTION 26 05 73 OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes arc flash study and short circuit and protective device coordination study encompassing portions of electrical distribution system affected by the addition of the new switchboard mounted circuit breaker and circuit breakers added as part of the panel retrofits.
- B. Adjustable circuit breaker settings and non-adjustable circuit breaker selections shall be based on the results of the coordination study to ensure a local fault does not trip any upstream circuit breaker. Refer to 26 05 73 Item 1.7 for additional requirements.
- C. Panel and circuit breaker short circuit ratings shall be based on the results of the study's short circuit calculation results.
- D. Provide arc-flash labels for switchboards and panels. Labels shall indicate the nominal system voltage, arc flash PPE category, arc flash boundary, minimum arc rating of clothing.
- E. Study shall be performed by the Contractor's third party consultant.

1.2 REFERENCES

- A. Institute of Electrical and Electronics Engineers:
 - 1. IEEE 242 - Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems (Buff Book).
- B. National Fire Protection Association:
 - 1. NFPA 70 - California Electrical Code.

1.3 DESIGN REQUIREMENTS

- A. Complete Short Circuit and Protective Device Coordination Study to meet requirements of NFPA 70.
- B. Report Preparation:
 - 1. Prepare study prior to ordering distribution equipment to verify equipment ratings required.
 - 2. Perform study with aid of computer software program.
 - 3. Obtain actual settings for packaged motor characteristics for equipment incorporated into Work.
 - 4. Calculate short circuit interrupting and, when applicable, momentary duties for assumed 3-phase bolted fault short circuit current and phase to ground fault short circuit current at each of the following:
 - a. Utility supply bus.
 - b. Automatic transfer switch.
 - c. Engine generator.
 - d. Low-voltage switchgear.

- e. Switchboards.
 - f. Distribution panelboards.
 - g. Branch circuit panelboards.
 - h. Each other significant equipment location throughout system.
- C. Report Contents:
- 1. Include the following:
 - a. Calculation methods and assumptions.
 - b. Base per unit value selected.
 - c. One-line diagram.
 - d. Source impedance data including power company system available power and characteristics.
 - e. Typical calculations.
 - 1) Fault impedance.
 - 2) X to R ratios.
 - 3) Asymmetry factors.
 - 4) Motor fault contribution.
 - 5) Short circuit kVA.
 - 6) Symmetrical and asymmetrical phase-to-phase and phase-to-ground fault currents.
 - 7) Tabulations of calculation quantities and results.
 - f. One-line diagram revised by adding actual instantaneous short circuits available.
 - g. State conclusions and recommendations.
 - 2. Prepare time-current device coordination curves graphically indicating coordination proposed for system, centered on conventional, full-size, log-log forms.
 - 3. Prepare with each time-curve sheet complete title and one-line diagram with legend identifying specific portion of system covered by that particular curve sheet.
 - 4. Prepare detailed description of each protective device identifying its type, function, manufacturer, and time-current characteristics. Tabulate recommended device tap, time dial, pickup, instantaneous, and time delay settings.
 - 5. Plot device characteristic curves at point reflecting maximum symmetrical fault current to which device is exposed. Include on curve sheets the following:
 - a. Power company relay characteristics.
 - b. Power company fuse characteristics.
 - c. Low voltage equipment circuit breaker trip device characteristics.
 - d. Low voltage equipment fuse characteristics.
 - e. Cable damage point characteristics.
 - f. Pertinent transformer characteristics including:
 - 1) Transformer full load current.
 - 2) Transformer magnetizing inrush.
 - 3) ANSI transformer withstand parameters.
 - 4) Significant symmetrical fault current.
 - g. Pertinent motor characteristics.
 - h. Other system load protective device characteristics.

1.4 SUBMITTALS

- A. Qualifications Data: Submit the following for review prior to starting study.
 - 1. Submit qualifications and background of firm.
 - 2. Submit qualifications of Professional Engineer performing study.
- B. Software: Submit for review information on software proposed to be used in performing study.
- C. Product Data: Submit the following:
 - 1. Report: Summarize results of study in report format including the following:
 - a. Descriptions, purpose, basis, and scope of study.
 - b. Tabulations of circuit breaker, fuse and other protective device ratings versus calculated short-circuit duties, and commentary regarding same.
 - c. Protective device time versus current coordination curves, tabulations of relay and circuit breaker trip settings, fuse selection, and commentary regarding same.
 - d. Fault current calculations including definition of terms and guide for interpretation of computer printout.
- D. Submit copies of final report signed by professional engineer. Make additions or changes required by review comments.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with CEC requirements.
- B. Maintain one copy of each document on site.
- C. Use commercially available software, designed specifically for short circuit and protective device coordination studies with minimum of five years documented availability.
- D. Perform study in accordance with IEEE 242.

1.6 QUALIFICATIONS

- A. Study Preparer: Company specializing in performing work of this section with minimum five years documented experience and having completed five projects of similar size and complexity within the past two years.
- B. Perform study under direct supervision of Professional Engineer experienced in design of this Work and licensed in State of California with minimum of five years experience in power system analysis.
- C. Demonstrate company performing study has capability and experience to provide assistance during system start up.

1.7 SEQUENCING

- A. Submit short circuit and protective device coordination study to Architect/Engineer prior to receiving final approval of distribution equipment shop drawings and prior to releasing equipment for manufacturing.
- B. When formal completion of study will cause delay in equipment manufacturing, obtain approval from Architect/Engineer for preliminary submittal of study data sufficient in scope to ensure selection of device ratings and characteristics will be satisfactory.

1.8 SCHEDULING

- A. Schedule work to expedite collection of data to ensure completion of study for final approval of distribution equipment shop drawings prior to release of equipment for manufacturing.

1.9 COORDINATION

- A. The professional performing the study shall be responsible for contacting the serving utility company and obtaining all values required for the completion of the overcurrent protective device coordination study.
- B. Where available, the professional performing the study may reference/use the values included in the study performed for the service upgrade project (DSA approved 10/19/2021). A copy of the referenced study must be submitted along with the study for this project.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 FIELD QUALITY CONTROL

- A. Provide assistance to electrical distribution system equipment manufacturer during start up of electrical system and equipment.

3.2 ADJUSTING

- A. Perform field adjustments of protective devices and modifications to equipment to place equipment in final operating condition. Adjust settings in accordance with approved short circuit and protective device coordination study.

END OF SECTION

Appendix

**Asbestos, Lead, Polychlorinated Biphenyls (PCBs),
and Mercury Building Inspections/Survey**

Paradise High School
Buildings A,B,C,E,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y and the Shack

5911 Maxwell Drive
Paradise, CA 95969

Presented to:

Paradise Unified School District

6696 Clark Road
Paradise, CA 95969

Inspection Date:

August 5-12, 2020

Conducted by:

Ron Plumb
Certified Asbestos Consultant
Certified Lead Sampling Technician
and
Chad Calhoun
Certified Site Surveillance Technician
Certified Lead Inspector/Assessor

National Analytical Laboratories, Inc.
2201 Francisco Dr., Ste.140-261
El Dorado Hills, CA 95762
Office: (916) 361-0555 | Fax: (916) 361-0540
E-Mail: NAL1@NAL1.com | Web Page: www.NAL1.com



September 16, 2020

Paradise Unified School District
Brie Gargano C/O
BCA Architects
6696 Clark Road
Paradise, CA 95969

RE: **Asbestos, Lead, PCBs, and Mercury Building Inspections/Survey
Paradise High School (PHS)
Buildings A,B,C,E,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y and Shack/Shed
5911 Maxwell Drive
Paradise, CA 95969**

Dear Ms. Gargano,

The Paradise School District contracted with National Analytical Laboratories, Inc. to conduct an in-depth school survey following their renovation scope. The following report is regarding the hazardous inspection survey conducted at Paradise High School (PHS). **Of the Five Hundred & Thirty-Four (534) suspected asbestos-containing materials collected, One Hundred & Thirty-Nine (139) were found to contain asbestos. Of the Two Hundred & Sixty-Two (262) suspected lead-containing areas tested, ninety-one (91) were found to have Lead. Of the twenty-seven (27) bulk PCB samples collected, one (1) was found to be positive.** An inventory was also taken on other hazardous waste, mercury, PCB light bulbs, and Ballasts. Mister's Ron Plumb, Certified Asbestos Consultant, and Certified Lead Sampling Technician, and Chad Calhoun, Certified Site Surveillance Technician, and Certified Lead Inspector/Assessor, for National Analytical Laboratories, Inc. (N.A.L), conducted the inspections from August 5-12 of 2020.

SUMMARY OF FINDINGS –

Building A - Based on the inspection and analytical results indicate that **no asbestos or lead** in the areas that were tested. Based on the sample results, work may be conducted by a general contractor without any health and safety concerns to asbestos or lead exposure.

Building B – Asbestos results show, **the 12” Green Marble Floor Tile was found to contain asbestos.** The Contractor should verify all square footage. Based on the sample results, **no lead** was found to be present at the specific areas where testing was conducted; a general contractor may complete work without any health and safety concerns to lead exposure. No suspect **PCBs** material was located.

Breathe easy.....

Building C - Based on the inspection and analytical results indicate that **no asbestos or lead** in the areas that were tested. Based on the sample results, work may be conducted by a general contractor without any health and safety concerns to asbestos or lead exposure. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building D - **Asbestos** results show the **4" Black Cove Base Mastic, the 9" Brown Floor Tile, the 9" Green Floor Tile, the 9" Green Mastic, the 9" White Floor Tile, the 9" White Mastic, and the Window Putty were found to contain asbestos.** The Contractor should verify all square footage. The lead samples from the **Beige-Tan-Yellow, Beige-White-Tan, Blue-Yellow, Brown, Green-White-Beige-Blue-Pink, White and Yellow-Beige-Tan-White Painted surfaces and the Gray- Green-Lime Green-Tan, and Green-Tan-White-Yellow ceramic tile were found to contain LCM and LBP levels above the Cal-OSHA Limit of Detection.** No suspect PCBs material was located.

Building E - **Asbestos** results show, the **4" Beige Cove Base Mastic, the Caulking, the Gray Seam Mastic, the Mudded Elbow TSI, the Pipe Insulation TSI, the Seam Mastic, and the Sheetrock-Joint Compound were found to contain asbestos.** The Contractor should verify all square footage. The lead samples from the **Beige-Yellow-Gray, Black-Blue-Yellow, and Green-White Painted surfaces were found to have LCM and LBP levels above the Cal-OSHA Limit of Detection.** One (1) suspect **PCB** sample was collected from the Roof Expansion and was **positive** for PCBs.

Building I - **Asbestos** results show, the **12" White w/ Brown Spots Floor Tile, the 12" White w/ Brown Spots Mastic, the 4" Brown Cove Base Mastic, and the 4" Cove Base Mastic were found to contain ACCM.** The Contractors should verify all square footage. The lead samples from the **Yellow-Green-Blue-White Paint surfaces were found to have LCM/LBP/LBM levels above the OSHA Limit of Detection.** One (1) suspect **PCB** sample was collected and was **negative** for PCBs.

Building J - **Asbestos** results show, the **12" Beige Floor Tile, 9" Brown Floor Tile, 12" Beige Mastic, 9" Beige Floor Tile, 9" Beige Mastic, 9" Brown Mastic, 9" Cream Floor Tile, 9" Cream Mastic, 9" White Floor Tile, 9" White Mastic, Gray Roof Patch Compound, Sheetrock-Joint Compound, and the Window Glazing were found to contain asbestos.** The Contractor should verify all square footage. The lead samples from the **Green Paint, Peach Paint, White-Gray Paint, and White-Green Paint surfaces were found to contain LCM/LBP levels above the OSHA Limit of Detection.** One (1) suspect PCBs sample was collected and was negative for PCBs.

Building K - **Asbestos** results show the **12' Cream Floor Tile, the 12" Beige Floor Tile, the 12" Beige Mastic, the 12" Cream Floor Tile, the 12" Cream Mastic, the 4" Brown Cove Base Mastic, the Sheetrock-Joint Compound and the Window Glazing were found to contain asbestos.** The Contractor should verify all square footage. The lead samples from the **Blue-Yellow Paint, Gray-White Paint, Gray-Yellow- Paint, and Green Paint surfaces were found to have LCM/LBP levels above the OSHA Limit of Detection.** One



(1) suspect **PCB** sample was collected and was **negative** for PCBs.

Building L - Asbestos results show the **4" Brown Cove Base Mastic, the 9" Brown/Orange Floor Tile, the Black Mastic, the Blue Floor Tile, the Brown Floor Tile, the Gray Floor Tile, the Light Brown 9" Floor Tile, and the Red Floor Tile** were found to contain asbestos. The Contractor should verify all square footage. The lead samples from the **Green, Green-Beige-White, Green-Tan, Green-White, White Painted surfaces, and Yellow Ceramic Tile** was found to have **LCM/LBP/LBM** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building M - Asbestos results show the **12"x12" Ceiling Tile Mastic, the 4" Brown Cove Base Mastic, and the Composition Rolled Roofing** were found to contain asbestos. The Contractor should verify all square footage. The lead samples from the **Green and Green-White-Yellow Painted** surfaces were found to have **LBP** levels above the Cal-OSHA Limit of Detection. Two (2) suspect PCBs sample was collected and were negative for PCBs.

Building N - Asbestos results show the **Beige Floor Tile, the Black Mastic, the Brown Carpet Yellow Mastic, the Brown Floor Tile, the Green & Brown Carpet Yellow Mastic, the Grey Leveling Compound, and the Tan Floor Tile** were found to contain asbestos. The Contractor should verify all square footage. The lead samples from the **White-Beige-Green-Peach, Beige-Green-Peach-Yellow-Gray, Blue, Green, Green-Peach-White-Beige, Green-White, Green-White-Yellow, White and Yellow Painted** surfaces were found to contain **LCM/LBP** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building O - Asbestos results show the **4" Tan Cove Base Mastic, the Beige Floor Tile, the Black Mastic, and the Yellow Floor Tile** were found to contain asbestos. The Contractor should verify all square footage. The lead samples from the **Blue, Green, White-Yellow and Yellow Painted surfaces** were found to have **LCM/LBP** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building P - Asbestos results show the **12" Ceiling Tile Brown Mastic, the 4" Brown Cove Base Mastic, the Gray Composition Shingle Roofing, the Sheetrock-Joint Compound, and the Texture** were found to contain asbestos. The Contractor should verify all square footage. **No lead was found** to be present in the specific areas where testing was conducted. A general contractor may conduct all work without any health and safety concerns to lead exposure. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building Q - Based on the inspection and analytical results indicate that **no asbestos or lead** in the areas that were tested. Based on the sample results, work may be conducted by a general contractor without any health and safety concerns to lead exposure. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.



Building R - Asbestos results show the **12" Beige Floor Tile, the 12" Beige Mastic, the 2x2 Brown Carpet Squares Black Mastic, the 4" Black Cove Base Mastic, the Black Mastic, the Mastic, the Sheetrock-Joint Compound** were found to contain asbestos. The Contractor should verify all square footage. The **Lead** sample results show the **Beige-Black-White, Green, Green-White, Yellow-Gray-Black-Green-Yellow and Yellow-Green Painted surfaces** were found to contain **LCM/LBP** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building S - Asbestos results show the **9" Beige Floor Tile, the Beige Floor Tile, the Black Mastic, the Floor Tile, and the Gray Floor Tile** were found to contain asbestos. The Contractor should verify all square footage. The **Lead** sample results show the **Blue-Off White-Tan Ceramic Tile, The Blue-Peach-White-Yellow, Green, Green-Peach-White-Green/White, Green-White, White and Yellow Painted surfaces** were found to contain **LBP/LBM** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building T - Asbestos results show the **4" Beige Floor Tile, the 4" Light Lime Ceramic Tile Mortar & Grout, the Beige Floor Tile, the Black Mastic, the Gray Roof Mastic, and the Tan Floor Tile** were found to contain asbestos. The Contractor should verify all square footage. The **Lead** sample results show the **Gray-Peach-Yellow Ceramic Tile, the Black-Blue-Peach-Peach/Green-Yellow, Black-Green/White-Peach-White, Black-Peach, Black-Peach-Yellow, Green, Green-Peach-White, Green-White, Green-White-Yellow, and White Painted surfaces** were found to contain **LBP/LBM** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building U - Asbestos results show the **Black Mastic, the Green Floor Tile, and the Sheetrock-Joint Compound** were found to contain asbestos. All square footage should be verified by the Contractors. The **lead** sample results show the **Beige-Blue-Yellow, Beige-Green-White, and Green Painted surfaces** were found to contain **LCM/LBP** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building V - Based on the sample results from, no asbestos or lead was found in the areas that were tested. All work may be conducted by a general contractor without any health and safety concerns to asbestos or lead exposure. Two (2) suspect **PCBs** sample was collected and was **negative** for PCBs.

Building W - Asbestos results show the **12" White Floor Tile and the Black Mastic** were found to contain asbestos. The Contractor should verify all square footage. The **lead** sample results indicate the **Green and White Painted surfaces were found to have LBP** levels above the Cal-OSHA Limit of Detection. One (1) suspect **PCBs** sample was collected and was **negative** for PCBs.



Building X - Asbestos results show **the Black Roof Mastic was found to contain asbestos**. The Contractor should verify all square footage. The **lead** sample results revealed **no lead was found** to be present in the specific areas where testing was conducted.

Building Y- Asbestos results show **the Gray Seam Mastic was found to contain asbestos**. The Contractor should verify all square footage. **No lead was found** to be present in the specific areas where testing was conducted. A general contractor may conduct all work without any health and safety concerns to lead exposure. One (1) suspect **PCBs** sample was collected and was negative for PCBs.

The Shack- Based on the inspection and analytical results indicate that **no asbestos or lead** in the areas that were tested. Based on the sample results, work may be conducted by a general contractor without any health and safety concerns to asbestos or lead exposure.

SECTION I: ASBESTOS INSPECTION –

The inspection was completed according to the EPA’s Asbestos Containing Building Materials (ACBM) In-Schools Rule; 40 CFR 763.85 (Inspection and Re-Inspection). Currently, EPA regulations classify ACBM as materials containing more than 1-percent (1%) of asbestos. Cal-OSHA currently regulates asbestos to 1/10th of 1% (0.1%) and requires that a certified asbestos worker conduct this work.

Upon completion of the visual inspection, the suspect asbestos bulk sample materials were collected in accordance with EPA and OSHA protocol. They were placed into new, airtight, plastic bags, sealed, and identified with unique identification numbers. The bulk samples were transported to the laboratory under the chain of custody protocol for analysis.

No destructive sampling was conducted during the site visit, in the event that demolition work reveals any unforeseen suspect materials or if any future renovation work is to be conducted in other areas at the site; the contractor shall cease all work and contact the building owner for further testing.

EMSL Analytical, Inc. (EMSL) in Carle Place, New York, analyzed the bulk suspect asbestos containing samples utilizing Polarized Light Microscopy (PLM) Method. National Voluntary Laboratory Accreditation Program (NVLAP) Certification #10148-10 and California Environmental Laboratory Accreditation Program (CAELAP) Certification #2339 certifies EMSL.

The location and results of suspect sample found to contain asbestos is as follows:

Building B				
Sample ID#	Material	Location	Category	Results
16B	12" Green Marble Floor Tile	Building B, Northeast Corner (~50 sf)	I	4% Chrysotile



The 12" Green Marble Floor Tile in Building B is considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

Building D				
Sample ID#	Material	Location	Category	Results
68A	9" Brown Floor Tile	Building D, Boys Lobby	I	3% Chrysotile
69A	9" White Floor Tile	Building D, Boys Lobby (~200 sf)		Homogenous to Sample 69B
69B	9" White Mastic	Building D, Boys Lobby (~200 sf)	I	2% Chrysotile
70A	9" Green Floor Tile	Building D, Janitor Closet, Off Boys Lobby (~50 sf)		Homogenous to Sample 70B
70B	9" Green Mastic	Building D, Janitor Closet, Off Boys Lobby (~50 sf)	I	8% Chrysotile
71A	9" White Floor Tile	Building D, Janitor Closet, By Boys Lobby		Homogenous to Sample 71B
71B	9" White Mastic	Building D, Janitor Closet, By Boys Lobby	I	10% Chrysotile
73	4" Black Cove Base Mastic	Building D, Boys Lobby (~15 lf)	I	2% Anthophyllite
82	Window Putty	Building D, Girls Locker Room, Exterior Westside	II	4% Chrysotile
83	Window Putty	Building D, Space 301 Exterior Eastside	II	5% Chrysotile
84	Window Putty	Building D, Boys Locker Room, Exterior Northside	II	4% Chrysotile
87	Window Putty	Building D, Boys Locker Room, Exterior	II	5% Chrysotile

Building E				
Sample ID#	Material	Location	Category	Results
33	Mudded Elbow TSI	Building E, Southeast Corner (~8 each)	RACM	3% Amosite 4% Chrysotile
34	Pipe Insultation TSI	Building E, Southeast Corner (~80 lf)	RACM	10% Amosite
35	Pipe Insultation TSI	Building E, South Wall	RACM	11% Amosite
36	Pipe Insultation TSI	Building E, South Wall	RACM	11% Amosite
37	Sheetrock-Joint Compound	Building E, Southeast Corner (~2,000 sf)	ACCM	Trace, <1% Chrysotile PT CT 0.75%
38	Sheetrock-Joint Compound	Building E, Northwest Corner	ACCM	Trace, <1% Chrysotile PT CT 0.75%
40	4" Beige Cove Base	Building E, Southwest Corner	I	Trace, <1% Anthophyllite



	Mastic	(~15 lf)		
43	Seam Mastic	Building E, Lower Roof, Southside (~10 sf)	I	2% Chrysotile
44	Gray Seam Mastic	Building E, Lower Roof, Eastside	I	6% Chrysotile
45	Caulking	Building E, Southside, Between, Building D & E	II	3% Chrysotile

Based on the regulatory requirements by the National Emission Standards for Hazardous Air Pollutants (NESHAP), Regulation 40 CFR, Part 61, Subpart M the following must occur “If the asbestos content is less than 10 percent, verification shall be made using the point counting method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.7.2.4, Polarized Light Microscopy, Qualification of Asbestos Content.”

Samples found to contain a Trace, <1% amount of Chrysotile asbestos were re-analyzed utilizing the EPA 600/M4-82-020, Point Count Method to determine if the amount of asbestos is less than or greater than 1%. The sample results for the above material/s was/were found to contain 0.75% asbestos. Based on the results the materials will be treated as Trace, <1% Chrysotile asbestos containing construction material (ACCM) as regulated by CAL-OSHA.

Although neither EPA nor Local County Air Quality regulates materials at <1% level, it does fall under the jurisdiction of OSHA regarding worker protection. OSHA regulates the material at 1/10th of 1% [8 CCR-1529 (r) (1) Asbestos Containing Construction Material (ACCM)]. Based on this, the work must be completed by a certified asbestos contractor.

The CONTRACTOR shall be required to call the landfill to verify that they will accept the waste as general construction debris. If the landfill does not accept the material as general construction debris, the material shall be REQUIRED to be disposed of as non-friable/non-hazardous material

The Pipe Insulation TSI and Mudded Elbow TSI in Building E are considered RACM, friable-hazardous materials that when disturbed and/or removed must be disposed of at a regulated waste facility.

The Caulking, Gray Seam Mastic and Seam Mastic in Building E are considered Category I or II non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

The 4" Beige Cove Base Mastic contains trace, <1% Anthophyllite and the Sheetrock Joint Compound contains trace, <1% Chrysotile in Building E. A certified asbestos abatement contractor must be retained to remove the above materials containing the Trace (<1%) amount, prior to any renovation or demolition work being completed at the site. During the removal of the materials, the debris will be placed into an open top waste bin. The bin will have "Asbestos Hazard" signs posted around the perimeter of the waste bin. Upon completion of the removal process, the bin will be covered, the signs will be removed, and the debris will be disposed of as general construction debris at a non-regulated waste facility.



Building I				
Sample ID#	Material	Location	Category	Results
177A	12" White w/ Brown Spots Floor Tile	Building I, Room 402, Northeast Corner	I	Homogenous to Sample 177 B
177B	12" White w/ Brown Spots Mastic	Building I, Room 402, Northeast Corner	I	5% Chrysotile
178	4" Brown Cove Base Mastic	Building I, Room 402, North Wall	I	2% Anthophyllite
185	4" Cove Base Mastic	Building I, Room 403, Southeast Corner	I	2% Anthophyllite

The 4" Cove Base Mastic, 4" Brown Cove Base Mastic and 12" White w/ Brown Spots Mastic in Building I are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The 12" White w/ Brown Spots Floor Tile in Building I is to be considered homogeneous.

Building J				
Sample ID#	Material	Location	Category	Results
145	Sheetrock-Joint Compound	Building J, Kitchen, Above Drop Ceiling, North Wall	RACM	2% Chrysotile PT CT 2.25% Chrysotile
146	Sheetrock-Joint Compound	Building J, Kitchen, By Back Door Ceiling	RACM	2% Chrysotile PT CT 2.75% Chrysotile
157	Window Glazing	Building J, Northside, Window	II	3% Chrysotile
158A	9" Brown Floor Tile	Building J, Cafeteria (~1,500 sf)		Homogenous to Sample 158B
158B	9" Brown Mastic	Building J, Cafeteria (1,500 sf)	I	3% Chrysotile
159A	9" Cream Floor Tile	Building J, Cafeteria (~1,500 sf)		Homogenous to Sample 159B
159B	9" Cream Mastic	Building J, Cafeteria (~1,500 sf)	I	5% Chrysotile
160A	12" Beige Floor Tile	Building J, Cafeteria, Northwest Corner		Homogenous to Sample to Sample 160B
160B	12" Beige Mastic	Building J, Cafeteria, Northwest Corner	I	4% Chrysotile
161A	9" Cream Floor Tile	Building J, Cafeteria, North Wall, By Coolers (10 sf)		Homogenous to Sample to Sample 161B
161B	9" Cream Mastic	Building J, Cafeteria, North Wall, By Coolers (10 sf)	I	3% Chrysotile
162A	9" Beige Floor Tile	Building J, Cafeteria, North Wall, By Coolers (10 sf)		Homogenous to Sample to Sample 162B
162B	9" Beige Mastic	Building J, Cafeteria, North Wall, By Coolers (10 sf)	I	2% Chrysotile
163A	9" White Floor Tile	Building J, By Executive Office (~10 sf)		Homogenous to Sample to Sample 163B
163B	9" White Mastic	Building J, By Executive Office (~10 sf)	I	2% Chrysotile



169	Gray Roof Patch Compound	Building J, Roof over Kitchen (~10 lf)	I	7% Chrysotile
170	Window Glazing	Building J, North, Saw Tooth Roof	II	2% Chrysotile
171	Window Glazing	Building J, North, Saw Tooth Roof	II	2% Chrysotile

The Window Glazing, Gray Roof Patch Compound, 9" White Mastic, 9" Beige Mastic, 9" Cream Mastic, 12" Beige Mastic, 9" Cream Mastic, and 9" Brown Mastic are considered Category I or II, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

The 9" Brown Floor Tile, 9" White Floor Tile, 9" Cream Floor Tile, 12" Beige Floor Tile and 9" Cream Floor Tile are to be considered homogeneous to the associated Flooring materials.

The Sheetrock-Joint Compound is considered RACM, friable-hazardous materials that when disturbed and/or removed must be disposed of at a regulated waste facility.

Building K				
Sample ID#	Material	Location	Category	Results
122A	12" Beige Floor Tile	Building K, Southwest Corner (~100 sf)		Homogeneous to Sample 122B
122B	12" Beige Mastic	Building K, Southwest Corner (~100 sf)	I	2% Chrysotile
123A	12" Cream Floor Tile	Building K, Southwest Corner (~1,400 sf)		Homogeneous to Sample to 123B
123B	12" Cream Mastic	Building K, Southwest Corner (~1,400 sf)	ACCM	Trace, <1% Chrysotile
124	Sheetrock-Joint Compound	Building K, Building K, Southeast Corner (~1,400 sf)	ACCM	Trace, <1% Chrysotile PT CT 0.50%
125	Sheetrock-Joint Compound	Building K, Building K, Southwest Corner (~1,400 sf)	ACCM	Trace, <1% Chrysotile PT CT 0.25%
127A	12" Cream Floor Tile	Building K, Band Room, Northwest Corner		Homogeneous to Sample 127B
127B	12" Cream Mastic	Building K, Building K, Band Room, Northwest Corner	I	2% Chrysotile
128	4" Brown Cove Base Mastic	Building K, Band Room, Northwest Corner	I	3% Anthophyllite
129	Sheetrock-Joint Compound	Building K, Band Room Southeast Closet	ACCM	Trace, <1% Chrysotile PT CT 0.50%
130	Window Glazing	Building K, South Wall, Exterior	II	3% Chrysotile

Based on the regulatory requirements by the National Emission Standards for Hazardous Air Pollutants (NESHAP), Regulation 40 CFR, Part 61, Subpart M the following must occur "If the asbestos content is less than 10 percent, verification shall be made using the point counting



method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.7.2.4, Polarized Light Microscopy, Qualification of Asbestos Content.”

Samples found to contain a Trace, <1% amount of Chrysotile asbestos were re-analyzed utilizing the EPA 600/M4-82-020, Point Count Method to determine if the amount of asbestos is less than or greater than 1%. The sample results for the above material/s was/were found to contains 0.25%, and 0.50% asbestos. Based on the results the materials will be treated as Trace, <1% Chrysotile asbestos containing construction material (ACCM) as regulated by CAL-OSHA.

Although neither EPA nor Local County Air Quality regulates materials at <1% level, it does fall under the jurisdiction of OSHA regarding worker protection. OSHA regulates the material at 1/10th of 1% [8 CCR-1529 (r) (1) Asbestos Containing Construction Material (ACCM)]. Based on this, the work must be completed by a certified asbestos contractor. The Contractor shall be required to call the landfill to verify that they will accept the waste as general construction debris. If the landfill does not accept the material as general construction debris, the material shall be REQUIRED to be disposed of as non-friable/non-hazardous material

The Window Glazing, 4" Brown Cove Base Mastic, 12" Cream Mastic and 12" Beige Mastic are considered Category I or non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

The 12' Cream Floor Tile and 12" Beige Floor Tile are to be considered homogeneous.

Building L				
Sample ID#	Material	Location	Category	Results
199A	9" Brown/Orange Floor Tile	Building L, Water Heater Closet	I	8% Chrysotile
205A	Blue Floor Tile	Building L, Counselor's Office	I	Homogenous to Sample 205B
205B	Black Mastic	Building L, Counselor's Office	I	3% Chrysotile
206	Gray Floor Tile	Building L, Counselor's Office, Under Carpet	I	10% Chrysotile
207A	Red Floor Tile	Building L, North Principal's Office, Under Carpet	I	Homogenous to Sample 207B
207B	Black Mastic	Building L, North Principal's Office, Under Carpet	I	3% Chrysotile
208A	Brown Floor Tile	Building L, South Principal's Office	I	7% Chrysotile
210A	Light Brown 9" Floor Tile	Building L, Nurse's Office	I	Homogenous to 210B
210B	Black Mastic	Building L, Nurse's Office	I	3% Chrysotile
215	4" Brown Cove Base Mastic	Building L, Hallway	I	3% Anthophyllite



The 4" Brown Cove Base Mastic, Black Mastic, Brown Floor Tile, Gray Floor Tile, and 9" Brown/Orange Floor Tile in Building L are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The Light Brown 9" Floor Tile, Red Floor Tile. and Blue Floor Tile are to be considered homogeneous.

Building M				
Sample ID#	Material	Location	Category	Results
233	4" Brown Cove Base Mastic	Building M, Room 103, Northwest Corner	I	2% Anthophyllite
234	4" Brown Cove Base Mastic	Building M, Room 104, Northeast Corner	I	3% Anthophyllite
238	12"x12" Ceiling Tile Mastic	Building M, Room 101	I	2% Chrysotile
244	Composition Rolled Roofing	Building M, Roof, Southeast Corner	I	3% Chrysotile
245	Composition Rolled Roofing	Building M, Roof, North Side, Center	I	4% Chrysotile

The Composition Rolled Roofing, 12"x12" Ceiling Tile Mastic, and 4" Brown Cove Base Mastic in Building M are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

Building N				
Sample ID#	Material	Location	Category	Results
251A	Tan Floor Tile	Building N, Room 109, Bottom Layer	I	8% Chrysotile
253	Brown Carpet Yellow Mastic	Building N, Room 109	I	Trace, <1% Chrysotile
254A	Tan Floor Tile	Building N, Room 105, South East Corner, Bottom Layer	I	9% Chrysotile
255A	Brown Floor Tile	Building N, Room 107, East Wall, Bottom Layer	I	8% Chrysotile
257A	Beige Floor Tile	Building N, Room 106, North East Corner, Bottom Layer	I	8% Chrysotile
258	Green & Brown Carpet Yellow Mastic	Building N, Room 106, North East Corner	I	Trace, <1% Chrysotile
259A	Tan Floor Tile	Building N, Room 110	I	9% Chrysotile
261A	Grey Leveling Compound	Building N, Room 108, North Office, South East Corner, Over Black Mastic	I	Homogeneous to Sample 261-B
261B	Black Mastic	Building N, Room 108, North Office, South East Corner, Grey Leveling Compound	I	7% Chrysotile

The Tan Floor Tile, Beige Floor Tile, and Brown Floor Tile are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The Green & Brown Carpet Yellow Mastic and Brown Carpet Yellow Mastic contain <1% Chrysotile.



Building O				
Sample ID#	Material	Location	Category	Results
275A	Beige Floor Tile	Building O, Room 125, Bottom Layer with Black Mastic		Homogeneous to Sample 175-B
282	4" Tan Cove Base Mastic	Building O, Room 127, Southeast Corner	I	2% Anthophyllite
284A	Yellow Floor Tile	Building O, Room 127, North East Corner with Black Mastic Under Carpet	I	6% Chrysotile
275B	Black Mastic	Building O, Room 125, Beige Floor Tile, Bottom Layer	I	4% Chrysotile
	Transite Panels and Exhaust Vent	Room 124, Chemical Countertops, Lab Hood	II	Assumed

The Black Mastic, Yellow Floor Tile, and 4" Tan Cove Base Mastic are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The Beige Floor Tile is to be considered homogeneous.

Building P				
Sample ID#	Material	Location	Category	Results
299-B	Texture	Building P, Room 131, South Wall	ACCM	Trace, <1% Chrysotile PT CT None Detected
300	Sheetrock-Joint Compound	Building P, Room 132, Northwest Corner	ACCM	Trace, <1% Chrysotile PT CT None Detected
303	12" Ceiling Tile Brown Mastic	Building P, Room 131	I	2% Chrysotile
304	4" Brown Cove Base Mastic	Building P, Room 131, Southeast Corner	I	3% Anthophyllite
309	Gray Composition Shingle Roofing	Building P, Roof, Southeast by Ridge	I	5% Chrysotile
310	Gray Composition Shingle Roofing	Building P, Roof, Northwest Corner	I	3% Chrysotile

Based on the regulatory requirements by the National Emission Standards for Hazardous Air Pollutants (NESHAP), Regulation 40 CFR, Part 61, Subpart M the following must occur "If the asbestos content is less than 10 percent, verification shall be made using the point counting method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.7.2.4, Polarized Light Microscopy, Qualification of Asbestos Content."

Samples found to contain a Trace, <1% amount of Chrysotile asbestos were re-analyzed utilizing the EPA 600/M4-82-020, Point Count Method to determine if the amount of asbestos is less than or greater than 1%. The sample results for the above material/s was/were found to contains NO asbestos. Based on the results the materials will be treated as Trace, <1% Chrysotile asbestos containing construction material (ACCM) as regulated by CAL-OSHA.



Although neither EPA nor Local County Air Quality regulates materials at <1% level, it does fall under the jurisdiction of OSHA regarding worker protection. OSHA regulates the material at 1/10th of 1% [8 CCR-1529 (r) (1) Asbestos Containing Construction Material (ACCM)]. Based on this, the work must be completed by a certified asbestos contractor. The Contractor shall be required to call the landfill to verify that they will accept the waste as general construction debris. If the landfill does not accept the material as general construction debris, the material shall be REQUIRED to be disposed of as non-friable/non-hazardous material

The Gray Composition Shingle Roofing, 4" Brown Cove Base Mastic, and 12" Ceiling Tile Brown Mastic are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The assumed Transite Panels and vent are considered Category II, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

Building R				
Sample ID#	Material	Location	Category	Results
91	Sheetrock-Joint Compound	Building R, Room 204, West Wall (~1,400 sf)	ACCM	*Trace, <1% Chrysotile PT CT 0.25%
92	Sheetrock-Joint Compound	Building R, Room 206, East Wall By Door	ACCM	*Trace, <1% Chrysotile PT CT 0.50%
93A	12" Beige Floor Tile	Building R, Room 205 Southwest Corner (~250 sf)		Homogeneous to Sample 93B
93B	12" Beige Mastic	Building R, Room 205 Southwest Corner (~250 sf)	I	3% Chrysotile
99	Sheetrock-Joint Compound	Building R, Library Northeast Corner	ACCM	*Trace, <1% Chrysotile PT CT 0.25%
100	Sheetrock-Joint Compound	Building R, Room 208, East Wall	ACCM	*Trace, <1% Chrysotile PT CT 0.25%
102A	12" Beige Floor Tile	Building R, Room 210, 208 & 209 Server Room		Homogeneous to Sample 102B
102B	Black Mastic	Building R, Room 210, 208 & 209 Server Room	I	4% Chrysotile
104A	Stair Tread	Building R, Between Library & Room 208		Homogeneous to Sample 104B
104B	Mastic	Building R, Between Library & Room 208	I	2% Anthophyllite
105	4" Black Cove Base Mastic	Building R, Room 209, West Wall	I	2% Anthophyllite
106	Black Mastic	Building R, Library, Eastside under Carpet	I	6% Chrysotile
107	2x2 Brown Carpet Squares Black Mastic	Building R, Library / Computer Room Under (~3,400 sf)	I	*Trace, <1% Chrysotile
109	Sheetrock-Joint Compound	Building R, Room 210, Southwest Corner	ACCM	*Trace, <1% Chrysotile PT CT 0.25%



117B	Sheetrock-Joint Compound	Building R, Drama Room, Southwest Corner	ACCM	*Trace, <1% Chrysotile PT CT 0.25%
	Laboratory Chemical Countertops and Chemical Sinks	Rooms 208 and 209,		Assumed

Based on the regulatory requirements by the National Emission Standards for Hazardous Air Pollutants (NESHAP), Regulation 40 CFR, Part 61, Subpart M the following must occur “If the asbestos content is less than 10 percent, verification shall be made using the point counting method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.7.2.4, Polarized Light Microscopy, Qualification of Asbestos Content.”

Samples found to contain a Trace, <1% amount of Chrysotile asbestos were re-analyzed utilizing the EPA 600/M4-82-020, Point Count Method to determine if the amount of asbestos is less than or greater than 1%. The sample results for the above material/s was/were found to contains 0.25%, and 0.50% asbestos. Based on the results the materials will be treated as Trace, <1% Chrysotile asbestos containing construction material (ACCM) as regulated by CAL-OSHA.

Although neither EPA nor Local County Air Quality regulates materials at <1% level, it does fall under the jurisdiction of OSHA regarding worker protection. OSHA regulates the material at 1/10th of 1% [8 CCR-1529 (r) (1) Asbestos Containing Construction Material (ACCM)]. Based on this, the work must be completed by a certified asbestos contractor. The Contractor shall be required to call the landfill to verify that they will accept the waste as general construction debris. If the landfill does not accept the material as general construction debris, the material shall be REQUIRED to be disposed of as non-friable/non-hazardous material

The Black Mastic, 4" Black Cove Base Mastic, Mastic, and 12" Beige Mastic are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

The 2x2 Brown Carpet Squares Black Mastic, 12" Beige Floor Tile and 12" Beige Floor Tile are to be considered homogeneous.

Building S				
Sample ID#	Material	Location	Category	Results
317-A	Floor Tile	Building S, Room 112, Bottom Layer	I	6% Chrysotile
319-A	Beige Floor Tile	Building S, Room 113, Bottom Layer	I	8% Chrysotile
323-A	Gray Floor Tile	Building S, Room 114, Bottom Layer	I	Homogenous to Sample 323-B
323-B	Black Mastic	Building S, Room 114, Bottom Layer	I	4% Chrysotile



327-A	9" Beige Floor Tile	Building S, Room 114, Laundry (~200 sf)	I	6% Chrysotile
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The 9" Beige Floor Tile, Black Mastic, Beige Floor Tile, and Floor Tile are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The Gray Floor Tile is to be considered homogeneous.

Building T				
Sample ID#	Material	Location	Category	Results
344-A	4" Beige Floor Tile	Building T, Room 119 Bottom Layer	I	4% Chrysotile
349-A	Beige Floor Tile	Building T, Room 120, Bottom Layer		Homogeneous to Sample 351-A
349-B	Black Mastic	Building T, Room 120, Bottom Layer	I	3% Chrysotile
351-A	Tan Floor Tile	Building T, Room 122, Bottom Layer (Homogeneous to 121)		Homogeneous to Sample 351-A
351-B	Black Mastic	Building T, Room 122, Bottom Layer (Homogeneous to 121)	I	3% Chrysotile
360	4" Light Lime Ceramic Tile Mortar & Grout	Building T, Boy's Restroom	I	Trace, <1% Anthophyllite
365	Gray Roof Mastic	Building T, Roof, East Ridge, Electrical Sleeper	I	6% Chrysotile

The Gray Roof Mastic, Black Mastic, and 4" Beige Floor Tile are considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The 4" Light Lime Ceramic Tile Mortar and Grout, Tan Floor Tile, and Beige Floor Tile are to be considered homogeneous.

Building U				
Sample ID#	Material	Location	Category	Results
367	Sheetrock-Joint Compound	Building U, West Side Storage	ACCM	Trace, <1% Chrysotile PT CT 0.50%
369-A	Green Floor Tile	Building U, Office, Bottom Layer	I	4% Chrysotile
369-B	Black Mastic	Building U, Bottom Layer	I	Trace, <1% Chrysotile

Based on the regulatory requirements by the National Emission Standards for Hazardous Air Pollutants (NESHAP), Regulation 40 CFR, Part 61, Subpart M the following must occur "If the asbestos content is less than 10 percent, verification shall be made using the point counting method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.7.2.4, Polarized Light Microscopy, Qualification of Asbestos Content."



Samples found to contain a Trace, <1% amount of Chrysotile asbestos were re-analyzed utilizing the EPA 600/M4-82-020, Point Count Method to determine if the amount of asbestos is less than or greater than 1%. The sample results for the above material/s was/were found to contain 0.50% asbestos. Based on the results the materials will be treated as Trace, <1% Chrysotile) asbestos containing construction material (ACCM) as regulated by CAL-OSHA.

Although neither EPA nor Local County Air Quality regulates materials at <1% level, it does fall under the jurisdiction of OSHA in regard to worker protection. OSHA regulates the material at 1/10th of 1% [8 CCR-1529 (r) (1) Asbestos Containing Construction Material (ACCM)]. Based on this, the work must be completed by a certified asbestos contractor. The CONTRACTOR shall be required to call the landfill to verify that they will accept the waste as general construction debris. If the landfill does not accept the material as general construction debris, the material shall be REQUIRED to be disposed of as non-friable/non-hazardous material

The Green Floor Tile is considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

The Black Mastic is to be considered homogeneous and treated as containing Trace <1% Chrysotile. A certified asbestos abatement contractor must be retained to remove the above materials containing the Trace (<1%) amount prior to any renovation or demolition work being completed at the site. During the removal of the materials, the debris will be placed into an open top waste bin. The bin will have "Asbestos Hazard" signs posted around the perimeter of the waste bin. Upon completion of the removal process, the bin will be covered, the signs will be removed, and the debris will be disposed of as general construction debris at a non-regulated waste facility.

Building W				
Sample ID#	Material	Location	Category	Results
393-A	12" White Floor Tile	Building W, Room 118 (~150 sf)		Homogenous to Sample 393-B
393-B	Black Mastic	Building W, Room 118	I	2% Chrysotile

The Black Mastic is considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility. The 12" White Floor Tile is to be considered homogeneous.

Building X				
Sample ID#	Material	Location	Category	Results
401	Black Roof Mastic	Building X, Roof	I	4% Chrysotile

The Black Roof Mastic is considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.



		Building Y		
Sample ID#	Material	Location	Category	Results
409	Gray Seam Mastic	Building Y, Roof (~6 sf)	I	3% Chrysotile

sf = Square Feet; PC = Point Count; RACM = Regulated Asbestos Containing Material (Friable); Category I & II are Non-friable/Non-hazardous Materials. Approximate sample locations are depicted in a sample map attached.

The Gray Seam Mastic is considered Category I, non-friable/non-hazardous materials that can be removed and disposed of at a non-hazardous waste facility.

ASBESTOS RECOMMENDATION –

Federal and state regulations require that anyone disturbing asbestos containing materials are properly trained certified and have the required respiratory protection and medical surveillance.

N.A.L recommends that a certified asbestos abatement contractor be retained to remove the friable, non-friable and trace materials prior to any scheduled renovation/demolition work being completed at the site. Prior to the work process starting a work plan or specifications in regard to the abatement process should be completed and distributed to the abatement contractors during the job walk at the site.

On-Site Observation should be conducted by N.A.L.’s Certified Asbestos Consultant or Certified Site Surveillance Technician to verify that the work plan/specification is being followed. This will verify that during the abatement work the outside air was clean. Once a certified asbestos contractor has removed the ACCM, following EPA and OSHA requirements; a visual inspection and air clearance sampling should be completed. Clearances will confirm that the general contractor can reoccupy the work area(s), without concern for exposure to asbestos airborne fibers to their employees thus allowing the renovation or demolition work to be completed by the general contractor.

The following samples were non-asbestos containing materials:

Building A			
Sample ID#	Material	Location	Results
01	2x4 Ceiling Tile	Building A, Middle	None Detected
02	Dark Brown 4" Cove Base Mastic	Building A, East Wall (6 lf)	None Detected
03	4" Brown Cove Base	Building A, Southeast Corner (120 sf)	None Detected
04	Brown Carpet Mastic	Building A, Flooring (800 sf)	None Detected
05	Light Brown Carpet Mastic	Building A, East Side (100 sf)	None Detected
06	White Mastic	Building A, Roof Seam (50 sf)	None Detected
07	Under Mortar Roof Felt	Building A, Southwest Corner, Roof	None Detected
08	Under Metal Roof Felt	Building A, Center, Roof (800 sf)	None Detected

Building B			
Sample ID#	Material	Location	Results
09	Texture	Building B, North Wall (~1,700 sf)	None Detected
10	Texture	Building B, West Wall	None Detected
11	Texture	Building B, South Wall	None Detected



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12	Texture	Building B, East Wall	None Detected
13	Texture	Building B, Center Ceiling	None Detected
14	Sheetrock-Joint Compound	Building B, Southwest Corner	None Detected
15	Sheetrock-Joint Compound	Building B, Northeast Corner	None Detected
16A	Floor Tile Mastic	Building B, Northeast Corner (~50 sf)	None Detected
17	Gray Carpet Yellow Mastic	Building B, Southeast Corner	None Detected
18	Gray Carpet Yellow Mastic	Building B, Center	None Detected
19	Green Composition Shingle Roofing	Building B, Center, Bottom Layer (~800 sf)	None Detected
20	Red Composition Shingle Roofing	Building B, Northwest Corner, Bottom Layer (~800 sf)	None Detected
21	Red Composition Shingle Roofing	Building B, South Center, Bottom Layer	None Detected

Building C			
Sample ID#	Material	Location	Results
22	2x4 Fissure & Pin Hole Ceiling Tile	Building C	None Detected
23	47" Brown Cove Base Mastic	Building C, North Wall	None Detected
24A	12" Cream w/ Green Flecks Floor Tile	Building C, North Side (~500 sf)	None Detected
24B	Floor Tile Mastic	Building C, North Side (~500 sf)	None Detected
25A	12" Cream w/ Green Flecks Floor Tile	Building C, Northeast Corner	None Detected
25B	Floor Tile Mastic	Building C, Northeast Corner	None Detected
26A	12" Beige w/ Green Flecks Floor Tile	Building C, Southeast Corner (~500 sf)	None Detected
26B	Floor Tile Mastic	Building C, Southeast Corner (~500 sf)	None Detected
27A	12" Beige w/ Green Flecks Floor Tile	Building C, Southwest Corner	None Detected
27B	Floor Tile Removal Mastic	Building C, Southwest Corner	None Detected
28	Gray Seam Mastic	Building C, Roof (~3 sf)	None Detected
29	White Seam Mastic	Building C, Roof, East Edge (~20 sf)	None Detected
30	Under Metal Roofing Felt	Building C, Roof, West Side (~1,000 sf)	None Detected
31	Under Metal Roof Roofing Felt	Building C, Roof, East Side	None Detected
32	Caulking	Building C, South Side Exterior, Around Door	None Detected

Building D			
Sample ID#	Material	Location	Results
46	Stage Ceiling Plaster	Building D, Northeast Corner	None Detected
47	Stage Ceiling Plaster	Building D, Northside	None Detected
48	Stage Ceiling Plaster	Building D, Eastside	None Detected
49	Stage Ceiling Plaster	Building D, Southeast Corner	None Detected
50	Stage Ceiling Plaster	Building D, Southside	None Detected
51	By lobby door Plaster	Building D, Boys Locker Room (~5,500 sf)	None Detected
52	By door Plaster	Building D, Boys Locker Room	None Detected
53	Plaster	Building D, Boys Locker Room, Northeast Restroom	None Detected



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54	Plaster	Building D, Boys Locker Room, West Wall	None Detected
55	Plaster	Building D, Boys Locker Room, South Wall	None Detected
56	Plaster	Building D, Girls Storage, South Wall	None Detected
57	Plaster	Building D, Girls Office Restroom, North Wall	None Detected
58	Texture	Building D, Space 301 Northeast Corner (~150 sf)	None Detected
59	Texture	Building D, Space 301 Southeast Corner (~150 sf)	None Detected
60	Texture	Building D, Space 301 East Wall	None Detected
61	Sheetrock-Joint Compound	Building D, Space 301 Southeast Corner	None Detected
62	2x4 Grid Pattern Ceiling Tile	Building D, Boys Lobby, Above ceiling	None Detected
63	12" Pin Hole Ceiling Tile	Building D, Boys Lobby Above ceiling	None Detected
64	12" Pin Hole Ceiling Tile Mastic	Building D, Boys Lobby Above ceiling	None Detected
65	12" Pin Hole Ceiling Tile	Building D, Girls Lobby, Above ceiling	None Detected
66	12" Pin Hole Ceiling Tile Mastic	Building D, Girls Lobby, Above ceiling	None Detected
67A	9" Beige Floor Tile	Building D, Boys Lobby	None Detected
67B	9" Beige Mastic	Building D, Boys Lobby	None Detected
68B	9" Brown Mastic	Building D, Boys Lobby	None Detected
72	4" Brown Cove Base Mastic	Building D, Boys Lobby (~30 lf)	None Detected
74A	Beige Yellow Mastic	Building D, Space 301 (~200 sf)	None Detected
74B	Beige Vinyl Sheet Flooring	Building D, Space 301 (~200 sf)	None Detected
75	4" Brown Cove Base Mastic	Building D, Girls Office, West Wall (~80 lf)	None Detected
76A	Herringbone Beige Yellow Mastic	Building D, Girls Office (~400 sf)	None Detected
76B	Herringbone Beige Vinyl Sheet Flooring	Building D, Girls Office (~400 sf)	None Detected
77A	Beige Camo Yellow Mastic	Building D, Girls Lobby (~200 sf)	None Detected
77B	Beige Camo Vinyl Sheet Flooring	Building D, Girls Lobby (~200 sf)	None Detected
78	4" Black Cove Base Mastic	Building D, Gym, East Wall	None Detected
79	Penetration Mastic	Building D, Roof	None Detected
80	HVAC Base Mastic	Building D, Roof	None Detected
81	Duct Seam Mastic	Building D, Roof	None Detected
85	Green Vinyl Sheet Flooring	Building D, Boys Locker Room, Coach Office	None Detected
86	4" Green Cove Base Mastic	Building D, Boys Locker Room, Coach Office (~70 lf)	None Detected
88	Concrete	Building D, Boys Locker Room	None Detected
89	Concrete	Building D, Girls Locker Room	None Detected

Building E			
Sample ID#	Material	Location	Results
39	4" Black Cove Base Mastic	Building E, East Wall (~140 lf)	None Detected
41A	12" Beige Floor Tile	Building E, Southwest Corner (~100 sf)	None Detected
41B	12" Beige Mastic	Building E, Southwest Corner (~100 sf)	None Detected
42	12" Cream Floor Tile	Building E, North Wall (~50 sf)	None Detected



Building I			
Sample ID#	Material	Location	Results
172	Texture	Building I, Room 402, Southwest Corner	None Detected
173	Texture	Building I, Room 402, North wall, Center	None Detected
174	Texture	Building I, Room 402, Southeast Corner	None Detected
175	Texture	Building I, Room 403, Southwest Corner	None Detected
176	Texture	Building I, Room 403, Northeast Corner	None Detected
179	Sheetrock-Joint Compound	Building I, Room 403, Northwest Corner	None Detected
180	Sheetrock-Joint Compound	Building I, Room 402, Southwest Corner	None Detected
181	12" w/ Fissures Ceiling Tile	Building I, Room 402, Southeast Corner (550sf)	None Detected
182	Ceiling Tile Mastic	Building I, Room 402, Southeast Corner	None Detected
183	2x4 Ceiling Tile	Building I, Room 402, Southeast Office (60sf)	None Detected
184	Brown Carpet Mastic	Building I, Room 402	None Detected
186	Brown Carpet Mastic	Building I, Room 403	None Detected

Building J			
Sample ID#	Material	Location	Results
138	Blue / Gray Sheet Vinyl Flooring	Building J, Executive Office (~70 sf)	None Detected
139	Blue / Green Sheet Vinyl Flooring	Building J, Kitchen, Northeast Corner (~900 sf)	None Detected
140	Beige Sheet Vinyl Flooring	Building J, Kitchen, Strip In Center	None Detected
141	Beige Sheet Vinyl Flooring	Building J, Northwest Serving Area (~200sf)	None Detected
142	Chair Rail Adhesive	Building J, Kitchen, South Wall	None Detected
143	12" w/ Pin Hole Ceiling Tile	Building J, Cafeteria (~1,400 sf)	None Detected
144	Brown Mastic	Building J, Kitchen, Above Drop Ceiling	None Detected
147	Plaster	Building J, Kitchen Storage Area, East Wall (~1,600 sf)	None Detected
148	Plaster	Building J, Kitchen Bathroom Area, North Wall	None Detected
149	Plaster	Building J, Kitchen Serving Area, East Wall	None Detected
150	Plaster	Building J, Kitchen, By Back Door	None Detected
151	Plaster	Building J, Kitchen Server Area, West Wall	None Detected
152	Texture	Building J, Kitchen Office, South Wall	None Detected
153	Texture	Building J, Kitchen Office, West Wall	None Detected
154	Texture	Building J, Kitchen Office Ceiling	None Detected
155	FRP Adhesive	Building J, Kitchen, Center	None Detected
156	Glazing	Building J, Westside, Exterior Window	None Detected
158A	9" Brown Floor Tile	Building J, Cafeteria (~1,500 sf)	None Detected
164	Roofing	Building J, Roof, Over Offices, North Parapet Wall, Center	None Detected
165	Composition Rolled Roofing	Building J, Roof, Over Kitchen, Center	None Detected
166	Composition Rolled Roofing	Building J, Northeast Corner	None Detected
167	Composition Shingle Roofing	Building J, South Saw Tooth Roof, Southwest Corner, Over Felt	None Detected
168	Composition Shingle Roofing	Building J, North Saw Tooth Roof, Northeast Corner, Over Felt	None Detected



Building K			
Sample ID#	Material	Location	Results
126	12" Pin Hole & Fissure Ceiling Tile	Building K, Café (~1,500sf)	None Detected
131	4" Painted Cove Base Mastic	Building K, South Wall	None Detected
132	12" Pin Hole w/ Fissure Ceiling Tile	Building K, Band Room, North Wall	None Detected
133	Blue Carpet Yellow Mastic	Building K, Band Office Area, over Black Mastic (~500 sf)	None Detected
134	12" Ceiling Tile Mastic	Building K, Band Room, North Wall	None Detected
135	Composition Rolled Roofing	Building K, Roof, Southeast Corner	None Detected
136	Composition Rolled Roofing	Building K, Roof, Northeast Corner, Over Band Room	None Detected
137	Roof Mastic	Building K, Roof over Cafeteria by HVAC	None Detected

Building L			
Sample ID#	Material	Location	Results
186	Plaster	Building L, Northwest Corner (~3,200sf)	None Detected
187	Plaster	Building L, Women's Restroom, West Wall	None Detected
188	Plaster	Building L, Water Heater Closet	None Detected
189	Plaster	Building L, Hallway by Nurse's Office, East Wall	None Detected
190	Plaster	Building L, Men's Room, East Wall	None Detected
191	2'x4' w/ 1" Pattern Ceiling Tile	Building L, Office, West Wall	None Detected
192	1' with Large Pinhole Ceiling Tile	Building L, Hallway	None Detected
193	1' Brown Ceiling Tile Mastic	Building L, Hallway	None Detected
194	Sheetrock-Joint Compound	Building L, Hallway Above Ceiling	None Detected
195	Texture	Building L, Between Principal's Office, East Wall (~600 sf)	None Detected
196	Texture	Building L, North Principal's Office, South Wall	None Detected
197	Texture	Building L, South Principal's Office, East Wall	None Detected
198	Sheetrock-Joint Compound	Building L, Between Principal's Offices, Northeast Corner	None Detected
199B	Floor Tile Mastic	Building L, Water Heater Closet	None Detected
200	Sheet Vinyl	Building L, Kitchen, Flooring, Bottom Layer	None Detected
201	Sheet Vinyl	Building L, Kitchen, Flooring, Top Layer	None Detected
202	Blue Carpet Yellow Mastic	Building L, Office	None Detected
203	Green Carpet Yellow Mastic	Building L, Meeting Room	None Detected
204	Green Carpet Yellow Mastic	Building L, Counselor's Office	None Detected
208B	Black Mastic	Building L, South Principal's Office	None Detected
208C	Yellow Carpet Mastic	Building L, South Principal's Office	None Detected
209	Beige Pebble-Pattern Sheet Vinyl	Building L, Nurse's Office	None Detected
211A	White Floor Tile	Building L, Principal's Secretary Office	None Detected
211B	Black Mastic	Building L, Principal's Secretary Office	None Detected
211C	Yellow Carpet Mastic	Building L, Principal's Secretary Office	None Detected



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212A	Multi-Size Ceramic Tile Mortar	Building L, Men's Room	None Detected
212B	Grout	Building L, Men's Room	Insufficient Material - None Detected
213	Yellow Ceramic Tile, Mortar & Grout	Building L, Men's Room	None Detected
214A	Sheet Vinyl	Building L, Nurse's Restroom, Bottom Layer	None Detected
214B	Cove Base Mastic	Building L, Nurse's Restroom, Bottom Layer	None Detected
216	Composition Rolled Roofing	Building L, Upper Roof, Northeast Corner	None Detected
217	Composition Rolled Roofing	Building L, Roof, Southeast Corner	None Detected
218	Composition Rolled Roofing	Building L, Lower Roof, West Ridge	None Detected
219	Composition Rolled Roofing	Building L, Lower Roof, Southeast Corner	None Detected
220	Black Mastic with Silver Paint	Building L, Upper Roof, Electrical Conduits	None Detected
221	Stucco	Building L, Exterior, Southwest Corner (~800 sf)	None Detected
222	Stucco	Building L, Exterior, East Side, North End	None Detected
223	Stucco	Building L, Exterior, Southeast Corner, By Meeting Room	None Detected

Building M			
Sample ID#	Material	Location	Results
224	Texture	Building M, Room 104, East Wall (~2,000 sf)	None Detected
225	Texture	Building M, Room 103, South Wall	None Detected
226	Texture	Building M, Hall, South Wall	None Detected
227	Texture	Building M, Room 102, East Wall, South Side	None Detected
228	Texture	Building M, Room 101, Northeast Corner	None Detected
229	Sheetrock-Joint Compound	Building M, Room 103, Southwest Corner	None Detected
230	Sheetrock-Joint Compound	Building M, Room 101, Southwest Corner	None Detected
231	Green Carpet Yellow Mastic	Building M, Room 104	None Detected
232	Green Carpet Yellow Mastic	Building M, Hall	None Detected
235	2"x4" w/ Small Fissures Ceiling Tile	Building M, Hall	None Detected
236	2'x4' Fissures Ceiling Tile	Building M, Room 102	None Detected
237	12"x12" w/Fissures Ceiling Tile	Building M, Room 101	None Detected
239	Lightweight Concrete Panel	Building M, Exterior, North Side, Center	None Detected
240	Lightweight Concrete Panel	Building M, Exterior, South Side, by 104	None Detected
241	Lightweight Concrete Panel	Building M, Exterior, South Side, by 102	None Detected
242	Lightweight Concrete Panel	Building M, Exterior, East Side, Middle	None Detected
243	Lightweight Concrete Panel	Building M, Exterior, North Side, Soffit, Center	None Detected
246	Black Mastic with Silver Paint	Building M, Lower Room Electrical Conduits	None Detected



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Building N			
Sample ID#	Material	Location	Results
247	White Sheetrock-Joint Compound	Building N, Back Office, North West Corner, Room 108	None Detected
248	White Sheetrock-Joint Compound	Building N, Room 107, North West Corner	None Detected
249	12' Pin Hole Ceiling Tile	Building N, Room 106, South East Corner	None Detected
250	2'x4' Square Pattern Ceiling Tile	Building N, Room 106, South West Corner	None Detected
251B	Black Floor Tile Mastic	Building N, Room 109, Bottom Layer	None Detected
252	Brown Pebbled Vinyl Sheet Flooring	Building N, Room 109, Entrance (120sf)	None Detected
254B	Black Floor Tile Mastic	Building N, Room 105, South East Corner, Bottom Layer	None Detected
255B	Black Floor Tile Mastic	Building N, Room 107, East Wall, Bottom Layer	None Detected
256	Green & Brown Carpet Yellow Mastic	Building N, Room 107	None Detected
257B	Black Floor Tile Mastic	Building N, Room 106, North East Corner, Bottom Layer	None Detected
259B	Black Floor Tile Mastic	Building N, Room 110	None Detected
260	White Leveling Compound	Building N, Room 108, North Office, Over Black Mastic	None Detected
262	4' Brown Cove Base Mastic	Building N, Room 107, North West Corner	None Detected
263	Light Weight Concrete	Building N, South Side, Middle Exterior Siding	None Detected
264	Light Weight Concrete	Building N, South East Corner, Exterior Siding	None Detected
265A	White & Green Texture	Building N, North East Corner, Exterior Siding, On Concrete	None Detected
265B	White & Green Texture	Building N, South Side, Center, Exterior Siding, On Concrete	None Detected
265C	White & Green Texture	Building N, South East Corner, Exterior Siding, On Concrete	None Detected
265D	White & Green Texture	Building N, South West Corner, Exterior Siding, On Concrete	None Detected
265E	White & Green Texture	Building N, West Side, Center, Exterior Siding, On Concrete	None Detected
266	Green Composite Shingle Roofing	Building N, South West Corner	None Detected
267	Green Composite Shingle Roofing	Building N, North East Corner	None Detected

Building O			
Sample ID#	Material	Location	Results
268	Plaster	Building O, Room 124, Southwest Corner	None Detected
269	Plaster	Building O, Room 125, Storage, Southeast Corner (~900 sf)	None Detected
270	Plaster	Building O, Room 125, Storage,	None Detected



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		Northwest Corner	
271A	Brown Sheet Vinyl Flooring	Building O, Room 124, Southwest Corner, Bottom Layer	None Detected
271B	Mastic	Building O, Room 124, Southwest Corner, Bottom Layer	None Detected
272 A	12" White with Brown & Green Flecks Floor Tile	Building O, Room 124, Southwest Corner	None Detected
272B	Black Mastic	Building O, Room 124, South west Corner	None Detected
273A	Beige Sheet Vinyl Flooring	Building O, Room 125, Storage, West Wall, with Brown Mastic	None Detected
273B	Brown Mastic	Building O, Room 125, Storage, West Wall, Beige Sheet Vinyl Flooring	None Detected
274	White Sink Coating	Building O, Room 125, Sink Bottom Coatings (5 each)	None Detected
276A	Sheet Vinyl Flooring	Building O, Room 125, Middle Layer with Yellow Mastic	None Detected
277	12" White with Brown & Green Flecks Floor Tile	Building O, Room 125, Top Layer	None Detected
278A	Grey Floor Tile	Building O, Room 126, Bottom Layer with Black Mastic, Yellow on Top	None Detected
278B	Black Mastic	Building O, Room 126, Bottom Layer Floor Tile with Yellow on Top	None Detected
278C	Yellow Mastic	Building O, Room 126, Bottom Layer Floor Tile with Black Mastic	None Detected
279A	12" White with Brown & Green Flecks Floor Tile	Building O, Room 126, with Yellow Mastic	None Detected
279B	Yellow Mastic	Building O, Room 126, 12" White Floor Tile with Brown & Green Flecks	None Detected
280	4" Brown Cove Base Mastic	Building O, Room 126	None Detected
281	2'x4' with Square Pattern Ceiling Tile	Building O, Room 127 (~400 sf)	None Detected
283	Brown Carpet Yellow Mastic	Building O, North East Corner (~400 sf)	None Detected
284B	Black Mastic	Building O, Room 127, North East Corner, Yellow Floor Tile Under Carpet	None Detected
285	Exterior Carpet Mastic	Building O, Room 127, Entrance (~6 sf)	None Detected
286	12" with Pin Hole Ceiling Tile	Building O, Room 127, Above Drop Ceiling (600 sf)	None Detected
287	Paper/Foil Insulation	Building O, Room 127 above 12" Ceiling Tile (~400 sf)	None Detected
288A	Concrete Texture	Building O, North Side, Center, Exterior Siding	None Detected
288B	Concrete Texture	Building O, Southeast Corner, Center, Exterior Siding	None Detected
288C	Concrete Texture	Building O, West Side, Center, Exterior Siding	None Detected
288D	Concrete Texture	Building O, East Side, North End, Exterior Siding	None Detected
288E	Concrete Texture	Building O, Southwest Corner, Exterior Siding	None Detected
289	Exterior Window Glazing	Building O, North Side	None Detected
290	Light Weight Concrete	Building O, West Side, Middle Exterior	None Detected



		Siding	
291	Green Composite Shingle Roofing	Building O, Northwest Corner	None Detected
292	Green Composite Shingle Roofing	Building O, Southeast Corner	None Detected
276B	Yellow Mastic	Building O, Room 125, Middle Layer, Sheet Vinyl Flooring	None Detected

Building P			
Sample ID#	Material	Location	Results
299-A	Texture	Building P, Room 131, North Wall, Center (-1800sf)	None Detected
299-C	Texture	Building P, Room 131, West Wall	None Detected
299-D	Texture	Building P, Room 132, Center, West Wall	None Detected
299-E	Texture	Building P, Room 132, Center, South Wall	None Detected
301	Sheetrock-Joint Compound	Building P, Room 131, Southwest Corner	None Detected
302	12" w/ Pinhole & Fissures Ceiling Tile	Building P, Room 131	None Detected
305	Multi-Colored Carpet Yellow Mastic	Building P, Room 131	None Detected
306	Multi-Colored Carpet Yellow Mastic	Building P, Room 132	None Detected
307	Gray Seam Mastic	Building P, HVAC	None Detected
308-A	Texture	Building P, Northeast Corners, Exterior Siding on Concrete	None Detected
308-B	Texture	Building P, West Side, Exterior Siding on Concrete	None Detected
308-C	Texture	Building P, South Side, Middle, Exterior Siding on Concrete	None Detected
308-D	Texture	Building P, Southeast Corner, Exterior Siding on Concrete	None Detected
308-E	Texture	Building P, Southwest Corner, Exterior Siding on Concrete	None Detected
311	Gray Roofing Patch	Building P, HVAC Area	None Detected

Building Q			
Sample ID#	Material	Location	Results
293	4" Brown Cove Base Mastic	Building Q, Room 128	None Detected
294	Brown Carpet Yellow Mastic	Building Q, Room 128	None Detected
295	Brown Carpet Yellow Mastic	Building Q, Room 130	None Detected
296	4" Brown Cove Base Mastic	Building Q, Room 130	None Detected
297	Roofing Felt	Building Q, Roof, South East Side, Under Metal	None Detected
298	Gray Mastic	Building Q, Roof Covering, Screws on Ridge Cap (~6 sf)	None Detected



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Building R			
Sample ID#	Material	Location	Results
90	2x4 Pin Hole w/ Fissure Ceiling Tile	Building R, Room 203 (~100 sf)	None Detected
94	4" Black Cove Base Mastic	Building R, Room 205 (~70 lf)	None Detected
95A	Beige Ceiling Tile	Building R, Room 206, Under Carpet (~550 sf)	None Detected
95B	Beige Mastic	Building R, Room 206, Under Carpet (~550 sf)	None Detected
96	Blue Carpet Yellow Mastic	Building R, Room 206 (~550 sf)	None Detected
97	4" Beige Cove Base Mastic	Building R, Room 206 (~80 lf)	None Detected
98	Brown Carpet Yellow Mastic	Building R, Room 203 (~450 sf)	None Detected
101	2X4 Pin Holes / Fissure Ceiling Tile	Building R, Room 208	None Detected
103	Square Pattern Over Floor Tile Linoleum	Building R, Library, Northside, Kitchen (~50 sf)	None Detected
108	Window Glazing	Building R, Room 208, Northside, Exterior	None Detected
110	Composition Rolled Roofing	Building R, Northwest Corner	None Detected
111	Composition Rolled Roofing	Building R, Northwest Corner	None Detected
112	Composition Rolled Roofing	Building R, Center over Library	None Detected
113	Composition Rolled Roofing	Building R, Southwest Corner	None Detected
114	Composition Rolled Roofing	Building R, Northside Roof over Walkway	None Detected
115	Composition Rolled Roofing	Building R, Southside, Lower roof over Walkway	None Detected
116	Penetration Mastic	Building R, Upper Room	None Detected
117A	Roof Patch Compound	Building R, Upper Roof Around Sleepers	None Detected
118	4" White Ceramic Tile w/ Grout	Building R, Girls Restroom	None Detected
119	1X2 Green Ceramic Tile w/ Grout	Building R, Girls Restroom	None Detected
120	4" White Ceramic Tile w/ Grout	Building R, Boys Restroom	None Detected
121	1X2 Green Ceramic Tile w/ Grout	Building R, Boys Restroom	None Detected

Building S			
Sample ID#	Material	Location	Results
312-B	Black Mastic	Building S, Room 111, Bottom Layer	None Detected
313	Multi-Colored Carpet Yellow Mastic	Building S, Room 111	None Detected
314	2'x4' with Pinhole and Small Fissure Ceiling Tile	Building S, Room 111	None Detected
315	12" with Large Pinhole Ceiling	Building S, Room 111 Above Drop Ceiling	None Detected
316	4" Brown Cove Base Mastic	Building S, Room 112	None Detected
317-B	Mastic	Building S, Room 112, Bottom Layer	None Detected
318-A	Beige Floor Tile	Building S, Room 112, Top Layer	None Detected



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318-B	Mastic	Building S, Room 112, Top Layer	None Detected
319-B	Black Mastic	Building S, Room 113, Bottom Layer	None Detected
320	Green Carpet Yellow Mastic	Building S, Room 113	None Detected
321	4" Brown Cove Base Mastic	Building S, Room 113	None Detected
322	Sheetrock-Joint Compound	Building S, Room 114, Northwest Corner (500sf)	None Detected
324-A	12" Beige Floor Tile	Building S, Room 114 (750sf)	None Detected
324-B	Mastic	Building S, Room 114	None Detected
325	Green/Blue Carpet Yellow Mastic	Building S, Room 114 (200sf)	None Detected
326	4" Gray Cove Base Mastic	Building S, Room 114 (100lf)	None Detected
327-B	Black Mastic	Building S, Room 1147, Laundry	None Detected
328-A	Sheet Vinyl	Building S, Room 114, Laundry, Middle Layer	None Detected
328-B	Mastic	Building S, Room 114, Laundry, Middle Layer	None Detected
329-A	Beige Pebble Sheet Vinyl	Building S, Room 114, Laundry, Top Layer	None Detected
329-B	Mastic	Building S, Room 114, Laundry, Top Layer	None Detected
330	Seam Mastic	Building S, Room 116, Laundry, Attic, HVAC	None Detected
331-A	12" Blue Black Floor Tile	Building S, Room 116 (750sf)	None Detected
331-B	Mastic	Building S, Room 116	None Detected
332	4" Blue Ceramic Tile Mortar & Grout	Building S, Girl's Restroom, Northeast Corner (600sf)	None Detected
333	Sheetrock-Joint Compound	Building S, Girl's Restroom, by Door (20sf)	None Detected
334	Blue Ceramic Flood Ring Mortar & Grout	Building S, Girl's Restroom	None Detected
335	4" White Ceramic Tile Mortar & Grout	Building S, Girl's Restroom, North Wall (80sf)	None Detected
336-A	Plaster	Building S, Room 113, Back Wall	None Detected
336-B	Plaster	Building S, Room 114, Laundry, North Wall (500sf)	None Detected
336-C	Plaster	Building S, Room 114, Laundry, West Wall, North Side	None Detected
336-D	Plaster	Building S, Girl's Restroom, South Wall	None Detected
336-E	Plaster	Building S, Girl's Restroom, North Wall (900sf)	None Detected
336-F	Plaster	Building S, Custodial Room, 1st Floor, West Wall	None Detected
336-G	Plaster	Building S, Custodial Room, 2nd Floor, South Wall	None Detected
337	4" Peach Ceramic Tile Mortar & Grout	Building S, Men's Restroom, Southeast Corner	None Detected
339	Foil/Paper Insulation	Building S, Room 116, Laundry, Attic	None Detected
338	Green Ceramic Tile Mortar	Building S, Men's Restroom, Southwest Corner	None Detected



340-A	Texture	Building S, Northwest Corner, Exterior Siding on Concrete	None Detected
340-B	Texture	Building S, West Wall of Bathroom, Exterior Siding on Concrete	None Detected
340-C	Texture	Building S, Southwest Corner, Exterior Siding on Concrete	None Detected
340-D	Texture	Building S, South Side, Middle, Exterior Siding on Concrete	None Detected
340-E	Texture	Building S, North East Side, by Girl's Room, Exterior Siding on Concrete	None Detected
341	Green Composition Shingle Roofing	Building S, Roof, North Side, Middle	None Detected
342	Green Composition Shingle Roofing	Building S, Roof, Southwest Corner	None Detected
343	Gray Composition Shingle Roofing	Building S, Upper Roof, East Side	None Detected

Building T			
Sample ID#	Material	Location	Results
344-B	Black Floor Tile Mastic	Building T, Room 119 Bottom Layer	None Detected
345-A	Gray Pebble Sheet Vinyl	Building T, Room 119 & Dorm Room Throughout (~600 sf)	None Detected
345-B	Mastic	Building T, Room 119 & Dorm Room Throughout	None Detected
346	Tan Sheet Vinyl	Building T, Room 119 (~30 sf)	None Detected
347	Sheetrock-Joint Compound	Building T, Room 119, Dark Room (~600 sf)	None Detected
348	White Under Coating	Building T, Room 119, Sink	None Detected
350	Multi-Colored Carpet Yellow/Gray Mastic	Building T, Room 120	None Detected
352	Green Carpet Yellow Mastic	Building T, Room 122	None Detected
353	4" Brown Cove Base Mastic	Building T, Room 122	None Detected
354	12" with Large Pinhole Ceiling Tile	Building T, Room 123, Above Drop Ceiling	None Detected
355	6" Black Cove Base Mastic	Building T, Room 123	None Detected
356	2'x4' with Square Pattern Ceiling Tile	Building T, Room 123	None Detected
357	Multi-Colored Carpet Yellow Mastic	Building T, Room 123	None Detected
358-A	Plaster	Building T, Custodial, South Wall (~1,900 sf)	None Detected
358-B	Plaster	Building T, Custodial, West Wall	None Detected
358-C	Plaster	Building T, Custodial, North Wall	None Detected
358-D	Plaster	Building T, Boy's Restroom, North Wall	None Detected
358-E	Plaster	Building T, Boy's Restroom, North Wall	None Detected
359	4" Peach Ceramic Tile Mortar & Grout	Building T, Boy's Restroom, West Wall (~350 sf)	None Detected
361	Paper/Foil Insulation	Building T, Room 123, Above Ceiling Tile	None Detected
362-A	Texture	Building T, Southwest Corner, Exterior	None Detected



		Siding on Concrete	
362-B	Texture	Building T, South Side, Middle, Exterior Siding on Concrete	None Detected
362-C	Texture	Building T, South Side, East End, Exterior Siding on Concrete	None Detected
362-D	Texture	Building T, West Side, Middle, Exterior Siding on Concrete	None Detected
362-E	Texture	Building T, North Side, Middle, Exterior Siding on Concrete	None Detected
363	Green Composition Shingle Roofing	Building T, Roof, Northwest Corner	None Detected
364	Green Composition Shingle Roofing	Building T, Roof, South Side, Middle	None Detected

Building U			
Sample ID#	Material	Location	Results
366-A	Texture	Building U, Storage Area, South Wall (800sf)	None Detected
366-B	Texture	Building U, Break Area, East Wall	None Detected
366-C	Texture	Building U, Break Area, West Wall	None Detected
368	Sheetrock-Joint Compound	Building U, Break Area, Southwest Corner	None Detected
370	Mauve Carpet Yellow Mastic	Building U, Office	None Detected
371	Lightweight Concrete	Building U, East Side, Exterior	None Detected
372	Window Caulking	Building U, West Side, Exterior	None Detected
373-A	Texture	Building U, Hallway to Office, South Side, Exterior Siding on Concrete	None Detected
373-B	Texture	Building U, Northwest Corner, Exterior Siding on Concrete	None Detected
373-C	Texture	Building U, Southeast Corner, Exterior Siding on Concrete	None Detected
373-D	Texture	Building U, Exterior Siding, West Side on Concrete	None Detected
373-E	Texture	Building U, East Side, Exterior Siding	None Detected
374	Composition Rolled Roofing	Building U, Southeast Side, Roof	None Detected
375	Gray Composition Rolled Roofing	Building U, Upper Roof, East Side	None Detected
376	Composition Rolled Roofing	Building U, Roof, Northwest Corner	None Detected

Building V			
Sample ID#	Material	Location	Results
377	Brown Cove Base Mastic	Building V, Room 133	None Detected
378	Brown Carpet Yellow Mastic	Building V, Room 133	None Detected
379	Brown Carpet Yellow Mastic	Building V, Room 135	None Detected
380	4" Brown Cove Base	Building V, Room 135	None Detected



	Mastic		
381	4" Brown Cove Base Mastic	Building V, Room 137	None Detected
382	Brown Carpet Yellow Mastic	Building V, Room 137	None Detected
383	6" Gray Ceramic Tile Grout	Building V, East End, Restroom	None Detected
384	Roofing Felt	Building V, Roof, Center, Under Metal Roof	None Detected
385	Gray Roof Mastic	Building V, Roof, Screws Ridge Cap	None Detected

Building W			
Sample ID#	Material	Location	Results
386	12: with Pinhole & Fissures Ceiling Tile	Building W, Room 117, Southwest Corner	None Detected
387	12" Brown Ceiling Tile Mastic	Building W, Room 117	None Detected
388	2'x4' with Pinhole & Small Fissure Ceiling Tile	Building W, Office (~300 sf)	None Detected
389	Seam Tape/Mastic	Building W, Office Attic, HVAC	None Detected
390	2'4' with Pinhole & Large Fissure Ceiling Tile	Building W, Office (~100 sf)	None Detected
391-A	Texture	Building W, Room 118, South Wall (~3,200 sf)	None Detected
391-B	Texture	Building W, Room 117, West Wall, South Side	None Detected
391-C	Texture	Building W, Office Entrance, South Wall	None Detected
391-D	Texture	Building W, Pantry, North Wall	None Detected
391-E	Texture	Building W, Storage, East Wall	None Detected
392	3" Dark Brown Cove Base Mastic	Building W, Southwest Corner	None Detected
394	Multi-Colored Carpet Yellow-Brown Mastic	Building W, Room 118	None Detected
395-A	Texture	Building W, Southwest Corner, Exterior Siding on Concrete	None Detected
395-B	Texture	Building W, East Side, by North Drain, Exterior Siding, on Concrete	None Detected
395-C	Texture	Building W, West Side, North End, Exterior Siding, on Concrete	None Detected
395-D	Texture	Building W, West Side, South Exterior Siding, on Concrete	None Detected
395-E	Texture	Building W, East Side, by Drain, Exterior Siding, on Concrete	None Detected
396	Gray/Tan Composition Shingle Roofing	Building W, Roof, Northeast Side	None Detected
397	Gray/Tan Composition Shingle Roofing	Building W, Roof, Southwest Side	None Detected
398	Gray Roof Mastic	Building W, HVAC Area	None Detected
399	White Seam Caulking	Building W, HVAC	None Detected



Building X			
Sample ID#	Material	Location	Results
400	Roofing Felt	Building X, Roof, Center, Under Metal Roof	None Detected
402	Gray Roof Mastic	Building X, Roof (20sf)	None Detected

Building Y			
Sample ID#	Material	Location	Results
403	2'x4' w/ Pinhole & Small Fissures Ceiling Tile	Building Y, Room 138	None Detected
404	4" Brown Cove Base Mastic	Building Y, Rom 138	None Detected
405A	12" Beige Floor Tile	Building Y, Room 138	None Detected
405B	Yellow Mastic	Building Y, Room 138	None Detected
406	4" Brown Cove Base Mastic	Building Y, Room 139	None Detected
407	Brown Carpet Yellow Mastic	Building Y, Room 139	None Detected
408	Roofing Felt	Building Y, Roof, Center, Under Metal Roof	None Detected

Shack			
Sample ID#	Material	Location	Results
410-A	Texture	Shack, Southwest Corner, Ceiling (100 sf)	None Detected
410-B	Texture	Shack, Northeast Corner, Ceiling	None Detected
410-C	Texture	Shack, Northwest Corner, Ceiling	None Detected
411	Marble Pattern Sheet Vinyl	Shack, Flooring (80 sf)	None Detected
412	Brown Cove Base Mastic	Shack, Flooring (30 lf)	None Detected

SECTION II: LEAD INSPECTION –

The lead suspect samples were collected according to the Housing Urban Development (HUD) Guidelines, the Environmental Protection Agency (EPA), and the California Public Health Department (formally DHS). These agencies regulate and require the abatement or in-place management of lead hazards equal to or greater than 1.0 milligram per square centimeter (1.0 mg/cm²) of lead by XRF analysis or more than 0.5% lead by weight by laboratory flame atomic absorption. The following regulation shall be adhered to because Cal-OSHA considers all surfaces to contain lead: Cal-OSHA’s 29 CFR 1926.62, California Occupational Safety and Health Standard, Title 8 (Cal-OSHA 8 CCR 1532.1).

Upon completion of the visual inspections, suspect painted finishes, and materials were sampled for potential lead content, Chad Calhoun, utilizing the Thermo Scientific Portable X-ray Fluorescent (XRF) analyzer, analyzed the lead samples. When a surface is measured using XRF, each element present in the sample emits its own unique fluorescent x-ray energy spectrum. By simultaneously measuring the fluorescent x-rays emitted by the different elements in the sample, we can rapidly determine the presence of lead in the finishes.



Once the determination is made on where the lead paints/coating are located, the stabilization of the lead paints/coatings can commence. All loose and flaky paint must be removed until the remaining paint adheres smoothly to the substrate. Once this task is completed, the surface area can be primed, or the building may be demolished.

If the stabilization of all surfaces is completed, then the removed debris is to be bagged or burrito wrapped before the removal from the work area(s) and, subsequently, the site. Because the paint samples listed below were found to contain lead, all areas where the lead will be disturbed will require abatement, encapsulation, or prep work by a certified lead worker.

Although not all the rooms or materials (non-suspect) were sampled, the like materials that were not tested and their results will be treated as homogeneous and the materials will be treated as containing lead throughout the site.

The locations and results of the suspect samples **found to be lead-containing:**

Building D					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
2	Green-Tan-White-Yellow Ceramic Tile	Building D, Interior, Boy's Locker Room, Ceramic Wall Tile System, Various Areas	2405, 2371, 2404, 2407, 2408, 2396	LBM	7.8
3	Gray-Green-Lime Green-Tan Ceramic Tile	Building D, Interior, Girl's Locker Room, Ceramic Wall Tile System, Various Areas	2372, 2442, 2435, 2437, 2434	LBP	10.2
4	Brown Paint	Building D, Interior, Boy's Locker Room, Concrete Floor System, Various Areas	2397, 2398, 2399	LCM	0.16
5	Green-White-Beige-Blue-Pink Paint	Building D, Interior-Exterior, Concrete Wall System, Various Areas	2333, 2334, 2335, 2329, 2332, 2378, 2367, 2368, 2370, 2377, 2365, 2633, 2382	LCM	0.18
9	Blue-Yellow Paint	Building D, Interior, Boy's & Girl's Lobby, Metal Door System, Various Areas	2386, 2421, 2340	LCM	0.8
11	Beige-Tan-Yellow Paint	Building D, Interior-Exterior, Girl's Lobby, Metal Door Jamb System, Various Areas	2423, 2383, 2338, 2341	LBP	1.4
16	Yellow-Beige-Tan-White Paint	Building D, Interior-Exterior, Metal Window Apron/Frame Systems, Various Areas	2339, 2419, 2429, 2430, 2355, 2357, 2410	LBP	1.23
19	White Paint	Building D, Interior, Wood Awning Ceiling/Support Column Systems, Various Areas	2349, 2344, 2345	LBP	1.5
22	White Paint	Building D, Exterior, Wood Fascia System, Various Areas	2346, 2347, 2348, 2361	LCM	1.7



Building D					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
24	Beige-White-Tan Paint	Building D, Interior-Exterior, Wood Window Apron/Casing/Sill Systems, Various Areas	2417, 2350, 2351, 2418, 2428, 2352, 2353, 2411, 2416, 2427, 2354, 2309	LCM	0.8
25	White-Green Paint	Building D, Exterior, Metal Support Bracket-Column System, Various Areas	2328, 2342	LBP	2.6
26	White Paint	Building D, Exterior, Wood Soffit System	2360	LCM	.6

Building E					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
5	Black-Blue-Yellow Paint	Building E, Interior, Metal Door System, Various Areas	2298, 2289, 2306	LCM	0.39
6	Beige-Yellow-Gray Paint	Building E, Exterior-Interior, Metal Door Casing/Jamb Systems, Various Areas	2290, 2307, 2291, 2299, 2308	LCM	0.32
7	Green-White Paint	Building E, Exterior, Metal Downspout System	2319	LBP	2.3
13	Green-White Paint	Building E, Exterior, Wood Fascia/Soffit Systems, Various Areas	2326, 2327	LBP	2.3

Building F					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
1	Blue-White Ceramic Tile	Building F, Interior, Rooms 501 Restroom, Wall/Lower Wall Systems, Various Areas	3228, 3230	LBM	18.3

Building I					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
5	Yellow-Green-Blue-White Paint	Building I, Exterior, Metal Downspout System, Various Areas	2597, 2598, 2599, 2600, 2613, 2614, 2615	LBP	1.96

Building J					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
1	Peach Paint	Building J, Interior, Drywall Wall System, Various Areas	2546, 2547, 2548	LCM	0.22
3	Green Paint	Building J, Exterior, Metal Downspout System	2520	LBP	2.3
4	Peach Paint	Building J, Interior, Metal Window Frame System	2549	LBP	2.3
6	White-Green Paint	Building J, Exterior, Stucco Wall System, Various Areas	2498, 2509, 2499, 2500, 2510	LCM	0.8
13	White-Gray Paint	Building J, Exterior, Wood Window Apron-Casing-Frame Systems,	2519, 2513, 2518, 2512, 2517, 2511	LBP	1.4



	Various Areas			
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Buildings K					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
3	Green Paint	Building K, Exterior, Metal Downspout System	2520	LPB	2.3
13	Gray-Yellow-Paint	Building K, Interior-Exterior, Wood Door Casing-Jamb System, Various Areas	2515, 2496, 2507, 2516, 2497, 2508	LCM	0.27
16	Gray-White Paint	Building K, Exterior, Wood Apron-Casing-Frame System, Various Areas	2513, 2519, 2518, 2512, 2517, 2511	LBP	1.4
2	Blue-Yellow Paint	Building K, Interior-Exterior, Metal Door System, Various Areas	2560, 2495, 2506	LBP	1.52

Building L					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
2	Yellow Ceramic Tile	Building L, Interior, Men's Restroom, Ceramic Wall Tile System	2670	LBM	4.9
3	Green Paint	Building L, Exterior, Metal Gutter System, Various Areas	2657, 2658, 2659, 2660	LBP	2.25
5	Green-White Paint	Building L, Exterior, Stucco Wall System, Various Areas	2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639	LBP	1.5
6	White Paint	Building L, Exterior, Wood Awning/Support Column Systems, Various Areas	2646, 2647	LCM	0.7
7	Green-Tan Paint	Building L, Exterior-Interior, Main Office, Wood Door/Casing/Jamb Systems, Various Areas	2661, 2640, 2645, 2662, 2641, 2663, 2642	LBP	1.9
8	Green-White Paint	Building L, Exterior, Wood Fascia System, Various Areas	2650, 2651, 2648, 2649	LBP	1.8
9	Green Paint	Building L, Exterior, Wood Soffit System, Various Areas	2652, 2653, 2654, 2655	LCM	.9
10	Green-Beige-White Paint	Building L, Exterior-Interior, Main Office & Meeting Room, Wood Soffit & Window Apron/Casing/Sill Systems, Various Areas	2665, 2666, 2644, 2664, 2643	LBP	2.4

Building M					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
6	Green-White-Yellow Paint	Building M, Exterior, Metal Wall System, Various Areas	2689, 2691, 2690	LBP	1.7
8	Green Paint	Building M, Exterior, Stucco Soffit System, Various Areas	2683, 2684	LBP	1.6



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Building N					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm²
1	White Paint	Building N, Interior, Room 107, Drywall Wall System	2747	LCM	0.6
2	Green-White Paint	Building N, Interior, Room 107, Metal I Beam System, Various Areas	2755, 2757, 2756	LCM	0.7
5	Green-White-Yellow Paint	Building N, Exterior, Stucco Wall System, Various Areas	2728, 2717, 2727, 2729	LCM	0.29
6	Blue Paint	Building N, Rooms 105 & 107, Interior, Wood Door System, Various Areas	2741, 2742, 2751	LCM	0.45
7	Yellow Paint	Building N, Exterior, Wood Door System, Various Areas	2722, 2730	LBP	1.7
8	Beige-Green-Peach-Yellow-Gray Paint	Building N, Rooms 105 & 107, Interior-Exterior, Wood Door Casing/Jamb Systems, Various Areas	2743, 2731, 2740, 2752, 2723, 2744, 2732, 2725, 2739, 2753, 2724	LBP	2.4
9	Green Paint	Building N, Exterior, Wood Fascia System	2726	LBP	2.6
10	Green Paint	Building N, Exterior, Wood Support Column System, Various Areas	2734, 2735	LCM	0.8
13	Green-Peach-White-Beige Paint	Building N, Interior-Exterior, Wood Window Casing/Sill Systems, Various Areas	2719, 2736, 2748, 2721, 2746, 2718, 2737, 2749	LBP	2.5

Building O					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm²
4	White-Yellow Paint	Building O, Exterior, Stucco Wall System, Various Areas	2795, 2796, 2797, 2793, 2794	LBP	1.6
5	Blue Paint	Building O, Interior, Wood Door System, Various Areas	2769, 2772	LCM	.6
6	Yellow Paint	Building O, Exterior, Wood Door System, Various Areas	2784, 2785, 2786	LBP	1.4
7	White-Yellow Paint	Building O, Interior-Exterior, Wood Door Casing/Jamb Systems, Various Areas	2770, 2774, 2783, 2771, 2773, 2782	LBP	1.9
8	Green Paint	Building O, Exterior, Wood Fascia System, Various Areas	2787, 2789	LBP	5.4
9	Green Paint	Building O, Exterior, Wood Soffit/Wall Systems, Various Areas	2788, 2781	LBP	1.6
11	Green Paint	Building O, Exterior, Wood Window Casing/Sill Systems, Various Areas	2780, 2779	LBP	2.1
12	White Paint	Building O, Interior, Room 125/127, Wood Sill-Casing-Apron System, Various Areas	2768, 2778, 2767, 2777, 2766, 2775	LCM	.6



Building R					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
5	Yellow-Gray-Black-Green Yellow Paint	Building R, Metal Door/Casing/Jamb Systems, Various Areas	2455, 2472, 2466, 2457, 2467, 2473, 2486, 2468, 2488, 2456	LCM	.18
6	Yellow Paint	Building R, Metal Downspout Systems, Various Areas	2469	LBP	1.8

Building S					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
2	Blue-Off White-Tan Ceramic Tile	Building S, Interior, Women's & Men's Restrooms, Ceramic Wall Tile System, Various Areas	2904, 903, 2907	LBM	10.1
5	Green Paint	Building S, Exterior, Metal Window System, Various Areas	2873, 2874, 2872	LBP	0.8
8	Green-White Paint	Building S, Exterior, Stucco Wall System, Various Areas	2864, 2865, 2866, 2867	LBP	1.7
11	Yellow Paint	Building S, Exterior, Wood Door System, Various Areas	2875, 2878	LBP	1.4
13	Blue-Peach-White-Yellow Paint	Building S, Exterior-Interior, Rooms 111 & 115, & Women's Restroom, Wood Door Casing/Jamb Systems, Various Areas	2898, 2886, 2892, 2897, 2876, 2887, 2893, 2899, 2877	LBP	2.3
14	Green Paint	Building S, Exterior, Wood Fascia System	2880	LBP	2.1
16	White Paint	Building S, Exterior, Wood Soffit System	2879	LBP	3.2
17	Green-Peach-White-Green/White Paint	Building S, Exterior-Interior, Rooms 111 & 115, Wood Window Casing/Sill Systems, Various Areas	2869, 2889, 2895, 2896, 2868, 2888, 2894	LBP	1.9

Building T					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm ²
1	Gray-Peach-Yellow Ceramic Tile	Building T, Interior, Men's Restroom, Ceramic Wall Tile System, Various Areas	2978, 297, 2977	LBM	29.4
6	Green Paint	Building T, Exterior, Metal Window Frame System	2927	LBP	1.4
7	Green Paint	Building T, Shop, Interior, Plaster Wall System, Various Areas	2980, 2981	LBP	1.4
9	Green-White-Yellow Paint	Building T, Exterior, Stucco Wall System, Various Areas	2917, 2918, 2922, 2923, 2924, 2919, 2920, 2921	LBP	1.3
10	Green-Peach-White Paint	Building T, Shop and Room 121, Interior, Wood Cabinet Door/Drawer/Frame/Shelf Systems, Various Areas	2983, 2964, 2984, 2982, 2963, 2965	LBP	.23
11	Black-Blue-Peach-	Building T, Interior-Exterior, Rooms 119, 121, and 123,	2967, 2968, 2948, 2966, 2955, 2939	LBP	1.3



	Peach/Green-Yellow Paint	Wood Door System, Various Areas			
12	Black-Peach-Yellow Paint	Building T, Interior-Exterior, Wood Door Casing/Jamb Systems, Various Areas	2970, 2971, 2950, 2957, 2940, 2969, 2949, 2956, 2941	LBP	3.9
13	Green-White Paint	Building T, Exterior, Wood Fascia System, Various Areas	2930, 2931	LBP	2.2
14	White Paint	Building T, Exterior, Wood Soffit System, Various Areas	2932, 2933, 2934, 2395, 2936	LBP	7.2
16	Black-Peach Paint	Building T, Interior, Rooms 119, 121, 123, Wood Window Apron System, Various Areas	2973, 2953, 2959, 2960	LBP	.32
17	Black-Green/White-Peach-White Paint	Building T, Interior-Exterior, Wood Window –Sill System, Various Areas	2974, 2926, 2952, 2961, 2937, 2938, 2972, 2925, 2951, 2958, 2929	LBP	2.6

Building U					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm2
1	Green Paint	Building U, Exterior, Concrete Wall System	3008	LBP	1.5
6	Green Paint	Building U, Exterior, Metal Handrail System, Various Areas	2985, 3006, 3007	LCM	.45
10	Beige-Blue-Yellow Paint	Building U, Exterior-Interior, Wood Door System, Various Areas	3025, 3018, 2992	LCM	0.45
15	Beige-Green-White Paint	Building U, Exterior-Interior, Wood Windowsill System, Various Areas	3028, 2989, 3030, 3035	LCM	0.42

Building W					
Sample ID#	Material	Location	XRF #'s	Category	Mg/cm2
1	Green Paint	Building W, Exterior, Concrete Footer System	3098	LBP	1.8
12	White Paint	Building W, Exterior, Wood Soffit System	3104	LBP	1.8

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading

Before the demolition work is completed or the transporting of the debris from the site, Health, and Safety Code 25157.8 (AB 2784 National Resources) requires that all lead debris be sampled for Waste Characterization. This will assist the Contractor in deciding whether the material is to be considered Hazardous or Non-Hazardous Lead waste or general construction debris. The sequence of testing to be completed by the Contractor is as follows:

- Total Threshold Limit Concentration (TTLC) with a result of 50 mg/kg or more but less than 1,000 mg/kg of lead must be re-tested using the Soluble Threshold Limit concentration (STLC) method³
- An STLC result of 5.0 mg/L or greater is considered California Hazardous Waste.
- A Total Characteristic Leaching Procedure (TCLP) test should only be used when approved by the Owners Representative; This procedure is generally reserved for out-of-



state shipments, and A TCLP result of 5.0 mg/L or more deems the waste Federal RCRA materials; and

- The California hazardous waste threshold for total lead using STLC is 5 mg/L and
- Lead Paint that is intact on a surface does not permit the material to be classed as non-hazardous. Waste profiling shall be accomplished if the paint contains more than 350 ppm by Flame AAS. Exception: Metals that are coated with paint are to be recycled.

The following samples were found to be less than (<) the Cal-OSHA's Limit of Detection:

Building A				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Green-Yellow-Brown Paint	Building A, Exterior, Metal Door/Casing/Jamb Systems, Various Areas	2200, 2206, 2219, 2201, 2221, 2205	<0.03
2	White Paint	Building A, Exterior, Metal Wall at Handrail Systems, Various Areas	2210, 2204, 2199, 2198	<0.04
3	White-Yellow-Brown Paint	Building A, Exterior, Wood Door/Jamb/Casing Systems, Various Areas	2209, 2208, 2220, 2207	<0.03
4	Green Paint	Building A, Exterior, Wood Fascia - Handrail Systems, Various Areas	2213, 2215, 2217, 2202	<0.03
5	White Paint	Building A, Exterior, Wood Soffit Systems, Various Areas	2214, 2216, 2218	<0.04
6	White-Green Paint	Building A, Exterior, Wood Wall - Window Casing System, Various Areas	2203, 2211, 2212, 2222	<0.03

Building B				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Paint	Building B, Concrete Footer System, Various Areas	2233, 2248, 2249	<0.03
2	White Paint	Building B, Interior, Drywall, Ceiling System, Various Areas	2240, 2241	<0.03
3	Green-White-Yellow Paint	Building B, Interior, Drywall, Wall System, Various Areas	2236, 2239, 2234, 2237, 2235, 2238	<0.03
4	Blue-Yellow Paint	Building B, Metal, Door System, Various Areas	2242, 2245, 2227	<0.03
5	Brown-Yellow Paint	Building B, Metal, Door Casing System, Various Areas	2244, 2247, 2228	<0.04
6	Green Paint	Building B, Metal, Door Jamb System, Various Areas	2243, 2246, 2229	<0.03
7	White Paint	Building B, Interior, Wood, Fascia System, Various Areas	2252, 2254, 2250	<0.03
8	Green-White Paint	Building B, Interior, Wood, Soffit System, Various Areas	2251, 2253, 2255	<0.03
9	Green Paint	Building B, Exterior, Wood Wall, Window Casing System, Various Areas	2223, 2225, 2230, 2224, 2226, 2231, 2232	<0.03

Building C				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²



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1	Green-White Paint	Building C, Interior, Fiberboard, Wall System, Various Areas	2273, 2274, 2271, 2272	<0.03
2	Green-White Paint	Building C, Interior, Metal, Framing Systems, Various Areas	2281, 2282	<0.03
3	Green Paint	Building C, Exterior, Metal, Cabinet Locker System, Various Areas	2275, 2276	<0.03
4	Gray-Tan Paint	Building C, Exterior, Metal, Door System, Various Areas	2277, 2264	<0.03
5	Gray-Tan Paint	Building C, Exterior, Metal, Door/Casing/Jamb Systems, Various Areas	2278, 2279, 2280, 2263	<0.03
6	Green-White Paint	Building C, Exterior, Metal, Gutter/Downspout Systems, Various Areas	2265, 2266, 2270	<0.03
7	Green Paint	Building C, Metal, Flashing System, Various Areas	2258, 2261	<0.03
8	Green Paint	Building C, Exterior, Metal, Handrail System, Various Areas	2268, 2269, 2270	<0.03
9	Tan-Green Paint	Building C, Exterior. Wood, Door Casing/Fascia Systems, Various Areas	2262, 2259	<0.03
10	Green-White Paint	Building C, Wood, Soffit/Wall Systems, Various Areas	2257, 2260, 2283	<0.03

Building D				
Sample ID#	Material	Location	Condition	Mg/cm²
1	Blue-Brown-Gray Paint	Building D, Interior, Girl's & Boy's Locker Rooms, Ceramic Floor Tile System, Various Areas	2438, 2395, 2406, 2436, 2444	<0.09
6	Beige Paint	Building D, Interior, Room 301, Drywall Wall System	2391	<0.03
7	Beige Paint	Building D, Interior, Metal Bracket System	2376	<0.03
8	Blue-Yellow Paint	Building D, Interior-Exterior, Metal Door System, Various Areas	2373, 2336	<0.51
10	Beige-Gray-Tan-Yellow Paint	Building D, Interior-Exterior, Girl's & Boy's Lobby, Metal Door Casing/Jamb Systems, Various Areas	2374, 2422, 2387, 2388, 2384, 2337, 2375	<0.93
12	Gray Paint	Building D, Exterior, Metal Flashing System	2330	<0.54
13	Green Paint	Building D, Exterior, Metal Handrail System	2343	<0.03
14	Beige-Green Paint	Building D, Interior, Metal Locker System, Various Areas	2401, 2402, 2433, 2400, 2403, 2432	<0.11
15	White Paint	Building D, Exterior, Metal Window System, Various Areas	2356, 2359	<0.03
17	Tan-White Paint	Building D, Interior, Plaster Ceiling System, Various Areas	2441, 2389, 2431	<0.05
18	Beige-Forest-Lime Green-White Paint	Building D, Interior, Plaster Wall System, Various Areas	2439, 2414, 2415, 2385, 2424, 2425, 2426	<0.23



20	Forest-White Paint	Building D, Exterior, Office & Lobby, Wood Cabinet System, Various Areas	2412, 2413, 2420	<0.12
21	Tan-White-Yellow Paint	Building D, Interior-Exterior, Wood Door/Casing/Jamb Systems, Various Areas	2392, 2362, 2381, 2363, 2393, 2380, 2394, 2379	<0.54
23	Green-Tan Paint	Building D, Interior, Wood Stage/Window Systems, Various Areas	2369, 2440	<0.04

Building E				
Sample ID#	Material	Location	Condition	Mg/cm ²
1	Red Paint	Building E, Exterior, Concrete Slab System, Various Areas	2316, 2317, 2318	<0.03%
2	Beige-Black-Green Paint	Building E, Interior, Concrete Wall System, Various Areas	2288, 2287, 2286	<0.12%
3	White Paint	Building E, Interior, Drywall Wall System, Various Areas	2292, 2293, 2294	<0.04%
4	White-Green Paint	Building E, Exterior, Metal Awning Fascia/Support Column Systems, Various Areas	2309, 2310, 2311	<0.03%
8	Tan Paint	Building E, Interior, Metal Electrical Panel System, Various Areas	2295, 2296, 2297	<0.36%
9	Green-White Paint	Building E, Exterior, Metal Gutter System, Various Areas	2321, 2322, 2323, 2320, 2324, 2325	<0.03%
10	Brown Paint	Building E, Interior, Metal Handrail System, Various Areas	2304, 2305, 2303	<0.17%
11	Tan-White Paint	Building E, Interior, Metal HVAC Duct System, Various Areas	2300, 2301, 2302	<0.03%
12	Green-White Paint	Building E, Exterior, Stucco Wall System, Various Areas	2312, 2314, 2313, 2315	<0.03%
14	Beige-Black Paint	Building E, Interior, Wood Wall System, Various Areas	2285, 2284	<0.03%

Building I				
Sample ID#	Material	Location	Condition	Mg/cm ²
1	Green Paint	Building I, Exterior, Concrete Footer System, Various Areas	2593, 2594, 2595, 2956	<0.03
2	Blue-White Paint	Building I, Interior, Rooms 402, 403, 408 & 409, Drywall Ceiling-Wall System, Various Areas	2616, 2617, 2618, 2627, 2628	<0.03
3	Blue-Black Paint	Building I, Interior-Exterior, Room 405 and Others, Metal Door, Various Areas	2624, 2583, 2588	<0.03
4	Black-Gray Paint	Building I, Interior, Room 406 and 407, Metal Door Jamb-Casings, Various Areas	2625, 2626, 2584, 2585, 25905	<0.03
6	Green Paint	Building I, Exterior, Metal Gutter System, Various Areas	2607, 2608, 2609	<0.03%
7	Green Paint	Building I, Exterior, Metal Support Column System, Various Areas		<0.03



Building I				
Sample ID#	Material	Location	Condition	Mg/cm ²
8	Blue-Brown Paint	Building I, Interior-Exterior, Metal Wall System, Various Areas	2587, 2592, 2619	<0.03
9	Black-Brown-Gray Paint	Building I, Interior, Room 402, 403 & 404, Metal Window Casing-Window Sill System, Various Areas	2586, 2591, 2620, 2621, 2622, 2623	<0.03
10	Green-Yellow-White Paint	Building I, Exterior, Stucco Wall-Soffit System, Various Areas	2577, 2578, 2579, 2580, 2581, 2582, 2601, 2602	<0.03
11	Green Paint	Building I, Exterior, Wood Facia System, Various Areas	2604, 2605, 2606	<0.12
12	Brown Paint	Building I, Interior, Room 402 & 403, Wood Support Column System, Various Areas	2629, 2630, 2631	<0.03

Buildings K				
Sample ID#	Material	Location	XRF Reading	Mg/cm ²
1	Beige-Teal-White Paint	Building K, Interior, Teacher's Lounge and Rm 401, Drywall Wall/Ceiling Systems, Various Areas	2525, 2523, 2524, 2534, 2535, 2558, 2559	<0.31
4	Green Paint	Building K, Interior, Room 401, Metal Locker System, Various Areas	2565, 2566, 2567	<0.03
5	White Paint	Building K, Interior, Teacher's Lounge, Metal Window Frame System	2542	<0.05
6	White-Green Paint	Building K, Exterior, Stucco Awning-Support Column Systems, Various Areas	2503, 2505	<0.03
7	Green-White Paint	Building K, Exterior, Stucco Wall System, Various Areas	2498, 2509, 2499, 2500, 2510	<0.8
8	Yellow Paint	Building K, Exterior, Stucco Window Apron-Casing System	2502, 2501	<0.03
9	Green Paint	Building K, Exterior, Wood Awning System	2522	<0.04
10	White Paint	Building K, Interior, Teacher Lounge, Wood Cabinet Door-Drawer-Frame System, Various Areas	2538, 2537, 2536	<0.28
11	White Paint	Building K, Interior, Room 401, Wood Cabinet Frame-Shelf System, Various Areas	2539, 2530	<0.03
12	Red-Green Paint	Building K, Interior, Teacher's Lounge, Wood Door System, Various Areas	2539, 2530	<0.11
14	Beige-Red-White Paint	Building K, Interior, Teachers' Lounge-Room 401, Wood Door Casing-Jamb System, Various Areas	2529, 2531, 2533, 2540, 2561, 2532, 2541, 2562	<0.83
15	Green Paint	Building K, Exterior, Wood Facia-Wall System, Various Areas	2504, 2521, 2514	<0.03
17	Beige-White Paint	Building K, Interior, Teacher's Lounge-Room 401, Wood Window Apron-Casing-Sill System, Various Areas	2528, 2545, 2526, 2543, 2564, 2527, 2544, 2563	<1.7



Building L				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Gray Ceramic Tile	Building L, Interior, Men's & Women's Restrooms, Ceramic Floor Tile System, Various Areas	2671, 2672	<0.03
4	White Paint	Building L, Interior, Hall, Meeting Room, & Main Office, Plaster Wall System, Various Areas	2667, 2668, 2669	<0.26

Building L				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Gray Ceramic Tile	Building L, Interior, Men's & Women's Restrooms, Ceramic Floor Tile System, Various Areas	2671, 2672	<0.03
4	White Paint	Building L, Interior, Hall, Meeting Room, & Main Office, Plaster Wall System, Various Areas	2667, 2668, 2669	<0.26

Building M				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	White Paint	Building M, Interior, Hall, and Rooms 101, 104, Drywall Wall System, Various Areas	2694, 2695, 2696	<0.03
2	Brown-Yellow Paint	Building M, Interior-Exterior, Metal Door System, Various Areas	2697, 2698, 2705, 2706, 2677	<0.09
3	Brown-Yellow Paint	Building M, Interior-Exterior, Metal Door Casing/Jamb Systems, Various Areas	2700, 2707, 2678, 2699, 2708, 2679	<0.15
4	Green Paint	Building M, Exterior, Metal Downspout/Gutter Systems, Various Areas	2685, 2688, 2681	<1.04
5	Yellow Paint	Building M, Exterior, Exterior, Metal Handrail System, Various Areas	2686, 2687	<0.03
7	Brown-Yellow Paint	Building M, Interior-Exterior, (Rooms 101, 103) Metal Window Casing/Sill Systems, Various Areas	2702, 2703, 2680, 2701, 2704	<0.22
9	Green-White-Yellow Paint	Building M, Exterior, Stucco Wall System, Various Areas	2673, 2676, 2675, 2674	<0.03
10	Green	Building M, Exterior, Green Wood Facia System, Various Areas	2682, 2692, 2693	<.42

Building N				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
3	Green Paint	Building N, Exterior, Metal Window Frame System, Various Areas	2720	<0.03
4	Green Paint	Building N, Room 107, Exterior, PVC Downspout System, Various Areas	2733, 2754	<0.45
11	Beige Paint	Building N, Interior, Room 105, Wood Wall System	2745	<0.04
12	Green-Peach Paint	Building N, Interior-Exterior, Wood	2738, 2750	<0.13



	Window Apron System, Various Areas	
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Building O				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Red Paint	Building O, Exterior, Concrete Floor System	2798	<0.03
2	Green Paint	Building O, Exterior, Metal Gutter System	2792	<0.03
3	Green-Yellow Paint	Building O, Exterior, PCM Downspout System, Various Areas	2790, 2791	<0.03
10	White Paint	Building O, Interior, Rooms 125 & 127, Wood Wall System, Various Areas	2765, 2776	<0.03

Building P				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	White Paint	Building P, Interior, Rooms 131 & 132, Drywall Ceiling/Wall Systems, Various Areas	2801, 2815, 2799, 2800	<0.07
2	Blue-Yellow Paint	Building P, Interior-Exterior, Rooms 131 & 132, Metal Door System, Various Areas	2804, 2807, 2832	<0.03
3	Brown-Yellow-Gray Paint	Building P, Interior-Exterior, Rooms 131 & 132, Metal Door Casing/Jamb Systems, Various Areas	2805, 2808, 2833, 2806, 2809, 2834	<0.0
4	Green-White Paint	Building P, Exterior, Metal Downspout/Gutter Systems, Various Areas	2826, 2825, 2827	<0.03
5	White Paint	Building P, Exterior, Metal I Beam System, Various Areas	2829, 2830	<0.03
6	Brown Paint	Building P, Interior, Rooms 131 & 132, Metal Window Casing/Sill Systems, Various Areas	2803, 2811, 2802, 2810	<0.06
7	Green-White-Yellow Paint	Building P, Exterior, Stucco Wall/Soffit Systems, Various Areas	2816, 2831, 2836, 2822, 2823, 2824, 2817, 2818, 2819, 2820, 2821	<0.04
8	Green Paint	Building P, Interior, Room 132, Wood Chair Rail System, Various Areas	2812, 2813, 2814	<0.07
9	Green Paint	Building P, Exterior, Wood Fascia System, Various Areas	2828, 3285	<0.22

Building Q				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Green Paint	Building Q, Exterior-Interior, Rooms 128 & 130, Metal Door System, Various Areas	2843, 2856, 2861	<0.03
2	Green Paint	Building Q, Exterior-Interior, Rooms 128 & 130, Metal Door Casing/Jamb Systems, Various Areas	2844, 2857, 2862, 2845, 2858, 2863	<0.03
3	Green Paint	Building Q, Exterior, Metal Flashing System, Various Areas	2850, 2853, 2854	<0.03
4	Green Paint	Building Q, Exterior, Metal Window	2846, 2847	<0.03



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		Casing System, Various Areas		
5	Green Paint	Building Q, Exterior, Wood Fascia System, Various Areas	2849, 2852, 2855	<0.03
6	White Paint	Building Q, Exterior, Wood Soffit System, Various Areas	2848, 2851	<0.03
7	Green-White-Yellow Paint	Building Q, Exterior, Wood Wall System, Various Areas	2837, 2840, 2839, 2842, 2838, 2841	<0.03
8	White Paint	Building Q, Interior, Rooms 128 & 130, Wood Window Casing System, Various Areas	2859, 2860	<0.03

Building R				
Sample ID#	Material	Location	XRF #'s	Mg/cm²
1	Green Paint	Building R, Interior, Concrete Floor System, Various Areas	2483, 2493	<0.03
2	Green Paint	Building R, Exterior, Concrete Footer System, Various Areas	2458, 2459, 2460	<0.03
3	Beige-Black-White Paint	Building R, Interior, Drywall Wall System, Various Areas	2491, 2484, 2494, 2481, 2482, 2490	<.36
4	Green-White Paint	Building R, Exterior, Metal Flashing, Awning Flashing & Support Column Systems, Various Areas	2463, 2477, 2478	<.04
7	Green Paint	Building R, Metal Gutter System, Various Areas	2479, 2480	<0.03
8	Green Paint	Building R, Metal Handrail System, Various Areas	2470, 2471	<.03
9	Green-Yellow Paint	Building R, Exterior, Stucco Wall System, Various Areas	2452, 2453, 2454, 2464, 2465	<0.03
10	White Paint	Building R, Wood Awning & Support Column Systems, Various Areas	2461, 2474, 2476, 2462, 2475	<0.04
11	Black-White Paint	Building R, Wood Door/Casing Systems, Various Areas	2485, 2487, 2492	<0.03

Building S				
Sample ID#	Material	Location	XRF #'s	Mg/cm²
1	Blue Paint	Building S, Interior, Women's Restroom, Ceramic Floor Tile System	2906	<0.03
3	White Paint	Building S, Interior, Rooms 111, 115, & Women's Restroom, Drywall Wall System, Various Areas	2890, 2901, 2902	<0.15
4	Green Paint	Building S, Exterior, Metal Gutter System, Various Areas	2881, 2882, 2883, 2884	<0.06
6	Green Paint	Building S, Exterior, Metal Window Frame System, Various Areas	2870, 2871	<0.03
7	Green Paint	Building S, Exterior, PVC Downspout System	2909	<0.03
9	White Paint	Building S, Interior, Room 113, Wood Cabinet System	2908	<0.1
10	Blue-Peach Paint	Building S, Interior, Rooms 111 & 115, Wood	2891, 2885	<0.6



		Door System, Various Areas		
12	Green Paint	Building S, Interior, Women's Restroom, Wood Door System	2900	<0.07
15	White Paint	Building S, Interior, Women's Restroom, Wood Shelf	2905	<0.03

Building T				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
2	Red Paint	Building T, Exterior, Concrete Floor System	2942	<0.03
3	Gray-Green Paint	Building T, Exterior, Concrete Footer System, Various Areas	2946, 2947, 2945	<0.03
4	Black-White Paint	Building T, Interior, Men's & Women's Restroom, Drywall Wall System, Various Areas	2975, 2979	<0.2
5	Green-Yellow Paint	Building T, Exterior, Metal Downspout System, Various Areas	2943, 2944	<1.18
8	Green Paint	Building T, Exterior, PVC Downspout System	2928	<0.03
15	Peach-White Paint	Building T, Interior, Rooms 121 & 123, Wood Wall System, Various Systems	2962, 2954	<0.46

Building U				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
2	Beige-Green Paint	Building U, Interior, Drywall Ceiling/Wall Systems, Various Areas	3024, 3022, 3023, 3034	<0.06
3	Gray-Green Paint	Building U, Exterior, Metal Condensation Line/Conduit Systems, Various Areas	305, 3016, 3017	<0.53
4	Green-Blue Paint	Building U, Exterior, Metal Door/Casing/Jamb Systems, Various Areas	3009, 3010, 3011	<0.42
5	Green Paint	Building U, Exterior, Metal Downspout/Gutter Systems, Various Areas	3001, 2999, 3000	<0.03
7	Green Paint	Building U, Exterior, Metal Support Column System	2986	<0.03
8	Green-Yellow Paint	Building U, Exterior, Stucco Wall System, Various Areas	2995, 2996, 2997, 2998	<0.96
9	White Paint	Building U, Interior, Wood Baseboard System, Various Areas	3031, 3032, 3033	<0.03
11	Gray-Beige-White Paint	Building U, Exterior-Interior, Wood Door Casing/Jamb Systems, Various Areas	2994, 3026, 2993, 3020, 3021, 3019	<0.23
12	Green Paint	Building U, Exterior, Wood Fascia System, Various Areas	3002, 3003, 3004	<0.03
13	Gray-Green-Pink-Yellow Paint	Building U, Exterior, Wood Wall System, Various Areas	3012, 3013, 2987, 3014, 3015, 2988	<0.52
14	Green-Beige-White-Yellow Paint	Building U, Exterior-Interior, Wood Window Apron/Casing/Frame Systems, Various Areas	2990, 3027, 2991, 3029, 3036, 3037	<0.47



Building V				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Green-Yellow Paint	Building V, Interior-Exterior, Rooms 133, 135, 137, Metal Door System, Various Areas	3069, 3070, 3075, 3078, 3044, 3047	<0.03
2	Green-Yellow Paint	Building V, Interior-Exterior, Rooms 133, 135, 137, Metal Door Casing/Jamb Systems, Various Areas	3076, 3079, 3072, 3077, 3080, 3046, 3049, 3071	<0.03
3	Green Paint	Building V, Exterior, Metal Downspout/Gutter Systems, Various Areas	3065, 3066, 3067	<0.03
4	Green Paint	Building V, Exterior, Metal Flashing System, Various Areas	3062, 3063, 3064	<0.03
5	White Paint	Building V, Exterior, Metal Soffit System, Various Areas	3056, 3057, 3058, 3059, 3061, 3068	<0.03
6	Green Paint	Building V, Exterior, Wood Door Casing System, Various Areas	3045, 3048	<0.03
7	Green Paint	Building V, Exterior, Wood Fascia System, Various Areas	3054, 3055, 3060	<0.03
8	Green-White-Yellow Paint	Building V, Exterior, Wood Wall System, Various Areas	3038, 3040, 3042, 3043, 3039, 3041	<0.03
9	Beige-Green-White Paint	Building V, Interior-Exterior, Rooms 133, 135, 137, Wood Window Casing System, Various Areas	3073, 3074, 3050, 3051, 3051, 3053, 3081	<0.03

Building W				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
2	White Paint	Building W, Interior, Rooms 117, 118, & Office, Drywall Wall System, Various Areas	3110, 3111, 3116, 3121	<0.35
3	Brown-Green Paint	Building W, Interior, Rooms 117, 118, & Office, Metal Door System, Various Areas	3117, 3107, 3122	<0.03
4	Brown-Yellow Paint	Building W, Interior-Exterior, Rooms 117, 118, & Office, Metal Door Casing/Jamb Systems, Various Areas	3108, 3118, 3123, 3101, 3109, 3119, 3124	<0.11
5	Green Paint	Building W, Exterior, Metal Downspout/Gutter Systems, Various Areas	3097, 3083, 3084, 3096	<0.3
6	White-Yellow Paint	Building W, Exterior, Metal I Beam Soffit System, Various Areas	3103, 3102	<0.05
7	White Paint	Building W, Exterior, Metal Soffit System	3085	<0.03
8	Brown-Green Paint	Building W, Interior-Exterior, Room 118 & Office, Metal Window Casing/Sill Systems, Various Areas	3112, 3115, 3120, 3099, 3113, 3114	<0.06
9	Green-White-Yellow Paint	Building W, Exterior, Stucco Wall System, Various Areas	3086, 3087, 3088, 3089, 3092, 3094, 3095, 3090, 3093	<0.03
10	Yellow Paint	Building W, Exterior, Wood Door System	3100	<0.03
11	Green Paint	Building W, Exterior, Wood Fascia System, Various Areas	3082, 3105, 3106	<0.12



13	Yellow Paint	Building W, Exterior, Wood Window Casing System	3091	<0.03
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Building X				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Blue-Yellow Paint	Building X, Interior-Exterior, Metal Door System, Various Areas	3149, 3129	<0.03
2	Brown-Yellow Paint	Building X, Interior-Exterior, Metal Door Casing/Jamb Systems, Various Areas	3150, 3151, 3131	<0.03
3	Green-White Paint	Building X, Exterior, Metal Downspout/Gutter Systems, Various Areas	3138, 3140, 3139	<0.03
4	Green-White Paint	Building X, Exterior, Metal Electrical Panel Systems, Various Areas	3147, 3148	<0.03
5	Green Paint	Building X, Exterior, Metal Handrail System, Various Areas	3136, 3137	<0.03
6	Yellow Paint	Building X, Exterior, Wood Door Casing System	3130	<0.03
7	Green-White Paint	Building X, Exterior, Wood Fascia System, Various Areas	3141, 3142, 3143	<0.03
8	Brown Paint	Building X, Exterior, Wood Ramp-ADA System, Various Areas	3134, 3135	<0.03
9	White Paint	Building X, Exterior, Wood Soffit System, Various Areas	3144, 3145, 3146	<0.05
10	Green-White Paint	Building X, Exterior, Wood Wall System, Various Areas	3125, 3126, 3127, 3128	<0.03
11	Green Paint	Building X, Exterior, Wood Window Casing System, Various Areas	3132, 3133	<0.03

Building Y				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	Gray-Yellow Paint	Building Y, Interior-Exterior, Metal Door System, Various Areas	3152, 3159	<0.03
2	Blue-Yellow Paint	Building Y, Interior-Exterior, Metal Door Casing/Jamb Systems, Various Areas	3153, 3161, 3154, 3160	<0.03
3	Green-White Paint	Building Y, Exterior, Metal Downspout-Gutter System, Various Areas	3171, 3172, 3173	<0.03
4	Green-White Paint	Building Y, Exterior, Metal Electrical Panel System, Various Areas	3166, 3165	<0.03
5	Green Paint	Building Y, Exterior, Metal Flashing System, Various Areas	3182, 3183, 3184	<0.03
6	Green Paint	Building Y, Exterior, Metal Footer System, Various Areas	3175, 3176, 3177, 3186, 3187, 3188	<0.03
7	Green-White Paint	Building Y, Exterior, Metal Framing System, Various Areas	3178, 3179, 3174	<0.03
8	Green Paint	Building Y, Exterior, Metal Handrail System, Various Areas	3155, 3156	<0.15
9	White Paint	Building Y, Exterior, Metal Soffit System	3181	<0.03
10	Brown Paint	Building Y, Exterior, Wood Platform System	3158	<0.03
11	Brown Paint	Building Y, Exterior, Wood Ramp-ADA System	3157	<0.03



12	White Paint	Building Y, Exterior, Wood Soffit System, Various Areas	3180, 3185	<0.03
13	Green-White Paint	Building Y, Exterior, Wood Wall System, Various Areas	3168, 3169, 3167, 3170	<0.03
14	Green Paint	Building Y, Exterior, Wood Window Casing System, Various Areas	3162, 3163, 3164	<0.03

Building - Shack				
Sample ID#	Material	Location	XRF #'s	Mg/cm ²
1	White Paint	Shack, Interior, Drywall Ceiling System, Various Areas	3395, 3396	<0.03
2	Green-Brown-Yellow-Gray Paint	Shack, Interior-Exterior, Wood/Metal Door/Casing/Jamb Systems, Various Areas	3382, 3403, 3381, 3405, 3404, 3383	<0.22
3	White Paint	Shack, Interior, Wood Cabinet Door/Drawer/Frame Systems, Various Areas	3399, 3398, 3397	<0.03
4	White Paint	Shack, Interior, Wood Fascia System, Various Areas	3387, 3388, 3389	<0.03
5	Gray Paint	Shack, Interior, Wood Soffit System, Various Areas	3390, 3391, 3392	<0.03
6	Green Paint	Shack, Interior, Wood Trim System, Various Areas	3384, 3385, 3386	<0.03
7	Gray-White-Yellow Paint	Shack, Interior-Exterior, Wood Wall System, Various Areas	3376, 3393, 3394, 3375, 3377	<0.03
8	Green-White Paint	Shack, Interior-Exterior, Wood Window Casing System, Various Areas	3378, 3379, 3380, 3400, 3401, 3402	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading.

LEAD RECOMMENDATION -

To stabilize the current lead conditions, N.A.L. recommends Lead Certified CDPH Workers, conduct in-place management work, of the LCM/LBP/LBM surfaces/samples scheduled for renovation/demolition. Once the abatement, in-place management, and/or prep work is completed and the areas are stabilized, the existing surfaces/samples will be in good condition and not create a health or safety concern to the workers conducting the general construction work at the site. A Scope of Work and/or specifications should be utilized to conduct the lead work at the site.

On-Site Observation should be conducted by N.A.L.'s Certified Asbestos Consultant or Certified Site Surveillance Technician that also holds CDPH certifications to verify that the work plan/specification is being followed. Once a certified abatement contractor has removed the asbestos and stabilized all lead paints and/or coatings, following EPA and Cal-OSHA requirements, a visual inspection and air clearance sampling should be completed. Clearances will confirm that the General Contractor can reoccupy the work area(s), without concern for exposure to airborne asbestos fibers to their employees thus allowing the renovation or demolition work to be completed by the General Contractor.



SECTION III: PCBs INSPECTION –

Polychlorinated biphenyls (PCBs) sampling was conducted on suspect materials for the preparation of the renovation, removal, and disposal of the material. PCBs are stable compounds that break down very slowly in the environment. PCBs can bioaccumulate in the fatty tissue of fish, birds, and mammals after entering through the lungs, skin, or gastrointestinal tract. They are suspected human carcinogens and have been shown to be teratogenic (i.e., capable of inducing mutations in the offspring of affected organisms).

Twenty-seven (27) suspect PCBs samples were collected from various buildings at PHS. The samples were then identified with unique identification numbers and sent to the laboratory under a chain of custody protocol to be analyzed. The samples were analyzed by EMSL Analytical, Inc. (EMSL), in North Cinnaminson, New Jersey, utilizing EPA method 8082A. This method is used to determine the concentrations of polychlorinated biphenyls (PCBs) as Aroclor's or as individual PCB congeners. It extracts from solid, tissue, and aqueous matrices, using open-tubular, capillary columns with electron capture detectors (ECD) or electrolytic conductivity detectors (ELCD).

The location and results of this sampling are as follows:

Sample ID#	Sample Location	Results	
1-PCB	Building A, South Window / Lightweight Caulking	Negative	Aroclor-1248- 4.7 mg/Kg Arcolor-1260- 1.1 mg/Kg
2-PCB	Building C, North Wall / Lightweight Caulking	Negative	Aroclor-1248- 8.4 mg/Kg Arcolor-1260- .82 mg/Kg
3-PCB	Building E, South Between D & E / Expansion Joint	Positive	Aroclor-1248- 8300 mg/Kg Arcolor-1260- 47000 mg/Kg
9-PCB	Building I, Northwest Window / Lightweight Caulking	Negative	Aroclor-1248- 11 mg/Kg Arcolor-1260- 1.3 mg/Kg
10-PCB	Building J, West, / Window Caulking	Negative	Aroclor-1248- 11 mg/Kg Arcolor-1260- .82 mg/Kg
11-PCB	Building K, South / Window Caulking	Negative	Aroclor-1248- 6.3 mg/Kg Arcolor-1260- 1.2 mg/Kg
12-PCB	Building L, South Window / Lightweight Caulking	Negative	Aroclor-1248- 1.1 mg/Kg
13-PCB	Building M, Room 103, South Window / Lightweight Caulking	Negative	Aroclor-1248- 1.1 mg/Kg
14-PCB	Building M, Rom 102, South Window at Wall / Lightweight Caulking	Negative	Aroclor-1248- 1.7 mg/Kg Arcolor-1260- 1.9 mg/Kg
15-PCB	Building N, Northeast Wall / Lightweight Caulking	Negative	Aroclor-1248- 1.8 mg/Kg Arcolor-1260- 1.3 mg/Kg
16-PCB	Building O, North Window / Lightweight Caulking	Negative	Aroclor-1248- 4.0 mg/Kg Arcolor-1260- .47 mg/Kg
17-PCB	Building P, North Wall, North Window / Lightweight Caulking	Negative	
18-PCB	Building P, North Wall, North Window / Lightweight Caulking	Negative	Aroclor-1248- 1.4 mg/Kg
19-PCB	Building Q, South Wall / Lightweight Caulking	Negative	



Sample ID#	Sample Location	Results	
20-PCB	Building R, West Window / Lightweight Caulking	Negative	Aroclor-1248- 3.1 mg/Kg Arcolor-1260- .60 mg/Kg
21-PCB	Building S, Northeast Window / Lightweight Caulking	Negative	Aroclor-1248- 1.0 mg/Kg
22-PCB	Building T, South Window / Lightweight Caulking	Negative	Aroclor-1248- .79 mg/Kg
23-PCB	Building U, North Window / Lightweight Caulking	Negative	Aroclor-1248- 1.0 mg/Kg
24-PCB	Building V, Northeast Window / Expansion Joint	Negative	Aroclor-1248- .53 mg/Kg
25-PCB	Building V, Northeast Window / Expansion Joint	Negative	Aroclor-1248- .65 mg/Kg
26-PCB	Building W, Window, West at South End / Lightweight Caulking	Negative	Aroclor-1248- 12 mg/Kg Arcolor-1260- 2.2 mg/Kg
27-PCB	Building Y, North Wall / Expansion Joint	Negative	Aroclor-1248- 1.8 mg/Kg Arcolor-1260- 1.6 mg/Kg

PCB CONCLUSION –

One (1) bulk PCBs samples of the Expansion Joint in building E show levels above the allowable limits of 50 mg/Kg for waste and will need to be abated and disposed of before any demolition or renovation work is completed on areas above.

SECTION IV: FLOURESCENT LIGHTS, BALLASTS, AND MERCURY SWITCHES -

Mr. Calhoun conducted the visual inspection of the interiors and took an inventory of the ballasts, fixtures, and switches from all the rooms below are his findings.

Mercury is an essential element to fluorescent lamps and lights (FLB) throughout the United States. Still, because Mercury is known to produce hazardous waste and is toxic, both State and federal regulatory agencies are working to reduce mercury releases to the environment. Based on this since January 1, 2000, the United States Environmental Protection Agency (USEPA) has allowed for spent lamps to be managed as Universal Wastes. The Universal Waste Rules (UWR) are designed in part to simplify the management of mercury-containing wastes, including spent fluorescent lamps and lights. The Rules are also intended to encourage recycling, thereby reducing mercury emissions to the environment.

The following suspect Ballasts, Lights and switches found at the site:

Building	Fluorescent Light Ballasts	Fluorescent Light Tubes	Mercury Switches
A	10	20	0
B	12	24	0
C	12	20	0
D	65	171	0



E	7	14	0
I	67	117	0
J	15	24	0
K	69	200	0
L	26	62	0
M	200	181	0
N	62	124	0
O	64	256	0
P	42	42	0
Q	120	30	0
R	201	442	1
S	57	228	0
T	60	120	0
U	5	10	0
V	50	200	0
W	62	76	0
X	12	24	0
Y	18	54	0
Shed	2	4	0

All light tubes are considered to be mercury containing and to be handled and disposed of appropriately.

According to EPA, any structure built or renovated before 1979 could have FLBs, if it has not undergone a complete lighting retrofit after 1979. In some cases, PCB-containing ballasts that were manufactured before 1979 were stored and later used in some fluorescent light fixtures installed or repaired after 1979.

The following criteria are provided to help identify ballasts and materials that may contain PCBs:

- FLBs manufactured before July 1, 1979, may contain PCBs



- Ballasts manufactured between July 1, 1979, and July 1, 1998, that do not contain PCBs must be labeled "No PCBs"
- If a ballast is not labeled "No PCBs," it is best to assume it contains PCBs unless it is known to be manufactured after 1979
- FLBs manufactured after 1998 are not required to be labeled.

A trained hazardous materials worker should conduct the removal and disposal of light tubes and any ballasts containing PCBs. Any ballast identified as "non-PCB" is to be recycled properly. It would be cost-effective to have the Abatement Contractor perform the removal and disposal.

Included at the end of this report are the laboratory analytical results, chain of custody form(s), and site map. If you have any questions regarding this report or if we can be of further assistance, please contact our office.

Conducted, Reviewed and Submitted by:



Ron Plumb
Certified Asbestos Consultant
DOSH# 18-6416
Certified Lead Sampling Technician
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Conducted by:



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EMSL Order: 062013908

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
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Fax: (916) 361-0540

Received Date: 08/03/2020 10:44 AM

Analysis Date: 08/03/2020

Collected Date: 07/29/2020

Project: Paradise High School, Bldg. A: 5911 Maxwell Drive, Paradise, CA 95969 / Log in #: 43022

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01 <i>062013908-0001</i>	Building A, Middle - 2'x4' Ceiling Tile	White/Yellow Fibrous Heterogeneous	81% Min. Wool	19% Non-fibrous (Other)	None Detected
02 <i>062013908-0002</i>	Building A, East Wall - Dark Brown 4" Cove Base Mastic	Brown/White Non-Fibrous Heterogeneous	32% Cellulose	63% Matrix 5% Non-fibrous (Other)	None Detected
03 <i>062013908-0003</i>	Building A, Southeast Corner - 4" Brown Cove Base	Tan Non-Fibrous Homogeneous		59% Ca Carbonate 36% Matrix 5% Non-fibrous (Other)	None Detected
04 <i>062013908-0004</i>	Building A, Flooring - Brown Carpet Mastic	Tan Non-Fibrous Homogeneous		32% Ca Carbonate 63% Matrix 5% Non-fibrous (Other)	None Detected
05 <i>062013908-0005</i>	Building A, East Side - Light Brown Carpet Mastic	Brown Fibrous Homogeneous	87% Cellulose	13% Non-fibrous (Other)	None Detected
06 <i>062013908-0006</i>	Building A, Roof Seam - White Mastic	White Non-Fibrous Homogeneous	3% Cellulose	29% Ca Carbonate 61% Matrix 7% Non-fibrous (Other)	None Detected
07 <i>062013908-0007</i>	Building A, Southwest Corner, Roof - Under Mortar Roof Felt	Black Fibrous Homogeneous	12% Cellulose	80% Matrix 8% Non-fibrous (Other)	None Detected
08 <i>062013908-0008</i>	Building A, Center, Roof - Under Metal Roof Felt	Black Fibrous Homogeneous	14% Cellulose	76% Matrix 10% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (8)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/03/2020 20:47:57

062 013908



NAL LOG-IN RECORD

Login # 43022

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 5

Paradise Unified School District

Paradise High School Bldg. A:

5911 Maxwell Drive

Paradise, CA 95969

KS 10468

Date 7/28/2020

Sampling Date: 7/29/2020

Sampling Time 12:00:00 PM

Type Of Work: PLM-BI

No. of Samples 9

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	01	Building A, Middle / 2x4 Ceiling Tile
2	02	Building A, East Wall (6lf) / Dark Brown 4" Cove Base Mastic
3	03	Building A, Southeast Corner (120sf) / 4" Brown Cove Base
4	04	Building A, Flooring (800sf) / Brown Carpet Mastic
5	05	Building A, East Side (100sf) / Light Brown Carpet Mastic
6	06	Building A, Roof Seam (50sf) / White Mastic
7	07	Building A, Southwest Corner, Roof / Under Mortar Roof Felt
8	08	Building A, Center, Roof (800sf) / Under Metal Roof Felt

RECEIVED
 NATIONAL ANALYTICAL LABORATORIES, INC.
 PARADISE PLACENTIA, CA
 20 AUG - 3 AM 10/14

Please analyze all Texture, Plaster and Sheetrock Joint Compound on a Test tile First

Positive, Stop at First Positive Basis, Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY OF THE SAMPLES

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 1044 At: a
Ron Plumb	08/01/20 12:00		8/3/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	

Just take 8-3-20 3:00PM

062013908



NAL LOG-IN RECORD

Login # **43022**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911/5

Paradise High School Bldg. A:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 9

E-Mail Address

Turnaround: 6 hours

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
Ron Plumb	08/01/20 12:00		8/1/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	

Justin Valle 3:00 PM
8-3-20



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Customer PO:

Project ID:

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Received Date: 08/03/2020 10:44 AM

Analysis Date: 08/03/2020

Collected Date: 07/29/2020

Project: Paradise High School, Bldg. B: 5911 Maxwell Drive, Paradise, CA 95969 / Log in #: 43023

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
09 062013907-0001	Building B, North Wall - Texture	Brown/White Non-Fibrous Heterogeneous	13% Cellulose	16% Ca Carbonate 25% Gypsum 41% Matrix 5% Non-fibrous (Other)	None Detected
10 062013907-0002	Building B, West Wall - Texture	Brown/White Non-Fibrous Heterogeneous	11% Cellulose	16% Ca Carbonate 20% Gypsum 47% Matrix 6% Non-fibrous (Other)	None Detected
11 062013907-0003	Building B, South Wall - Texture	Brown/White Non-Fibrous Heterogeneous	8% Cellulose	17% Ca Carbonate 29% Gypsum 41% Matrix 5% Non-fibrous (Other)	None Detected
12 062013907-0004	Building B, East Wall - Texture	Brown/White Non-Fibrous Heterogeneous	23% Cellulose	11% Ca Carbonate 16% Gypsum 45% Matrix 5% Non-fibrous (Other)	None Detected
13 062013907-0005	Building B, Center Ceiling - Texture	Brown/White Non-Fibrous Heterogeneous	22% Cellulose	13% Ca Carbonate 17% Gypsum 43% Matrix 5% Non-fibrous (Other)	None Detected
14 062013907-0006	Building B, Southwest Corner - Sheetrock - Joint Compound	Brown/White Non-Fibrous Heterogeneous	3% Cellulose <1% Glass	31% Ca Carbonate 58% Gypsum 8% Non-fibrous (Other)	None Detected
15 062013907-0007	Building B, Northeast Corner - Sheetrock - Joint Compound	Brown/White Non-Fibrous Heterogeneous	6% Cellulose <1% Glass	32% Ca Carbonate 57% Gypsum 5% Non-fibrous (Other)	None Detected
16A 062013907-0008	Building B, Northeast Corner - Floor Tile Mastic	Tan Non-Fibrous Heterogeneous		15% Ca Carbonate 71% Matrix 14% Non-fibrous (Other)	None Detected
16B 062013907-0009	Building B, Northeast Corner - 12" Green Marble Floor Tile	Tan/White Non-Fibrous Heterogeneous		61% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	4% Chrysotile
17 062013907-0010	Building B, Southeast Corner - Gray Carpet Yellow Mastic	Tan Non-Fibrous Homogeneous		19% Ca Carbonate 73% Matrix 8% Non-fibrous (Other)	None Detected
18 062013907-0011	Building B, Center - Gray Carpet Yellow Mastic	Tan Non-Fibrous Homogeneous		21% Ca Carbonate 68% Matrix 11% Non-fibrous (Other)	None Detected
19 062013907-0012	Building B, Center, Bottom Layer - Green Composition Shingle Roofing	Black/Green Fibrous Homogeneous	6% Glass	31% Quartz 58% Matrix 5% Non-fibrous (Other)	None Detected
20 062013907-0013	Building B, Northwest Corner, Bottom Layer - Red Composition Shingle Roofing	Black/Green Fibrous Homogeneous	9% Glass	29% Quartz 54% Matrix 8% Non-fibrous (Other)	None Detected
21 062013907-0014	Building B, South Center, Bottom Layer - Red Composition Shingle Roofing	Red/Black/Green Fibrous Heterogeneous	3% Glass	22% Ca Carbonate 40% Matrix 35% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2020 20:55:22



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013907
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type

Analyst(s)

Justin Valles (13)

Steve Juszczuk (1)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/03/2020 20:55:22

062013907



NAL LOG-IN RECORD

Login # **43023**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 6

Paradise Unified School District

Paradise High School Bldg B:

5911 Maxwell Drive

Paradise, CA 95969

KS 10468

Date 7/28/2020

Sampling Date: 7/29/2020

Sampling Time 12:00:00 PM

Type Of Work: PLM-BI

No. of Samples 14

Turnaround: 6 hours

Phone Number

FAX Number

Contact

E-Mail Address

Num.	Sample ID#	Location/Description
1	09	Building B, North Wall (1700sf) / Texture
2	10	Building B, West Wall / Texture
3	11	Building B, South Wall / Texture
4	12	Building B, East Wall / Texture
5	13	Building B, Center Ceiling / Texture
6	14	Building B, Southwest Corner / Sheetrock-Joint Compound
7	15	Building B, Northeast Corner / Sheetrock-Joint Compound
8	16A	Building B, Northeast Corner (50sf) / Floor Tile Mastic
9	16B	Building B, Northeast Corner (50sf) / 12" Green Marble Floor Tile
10	17	Building B, Southeast Corner / Gray Carpet Yellow Mastic
11	18	Building B, Center / Gray Carpet Yellow Mastic
12	19	Building B, Center, Bottom Layer (800sf) / Green Composition Shingle Roofing
13	20	Building B, Northwest Corner, Bottom Layer (800sf) / Red Composition Shingle Roofing
14	21	Building B, South Center, Bottom Layer / Red Composition Shingle Roofing

NATIONAL ANALYTICAL LABORATORIES, INC.
 CARLE PLASTER DIV.
 20 AUG - 3 AM 10:44

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test-tilt First Positive, Stop at First Positive Basis. Positive is >=1% For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY OF THESE SAMPLES

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: <i>copy</i>
<i>Ron Plumb</i>	08/01/20	<i>[Signature]</i>	8/3/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:
		<i>[Signature]</i>		

J 8/3/20 *[Signature]* *Justin Valles* 8-3-20 4:06 PM



EMSL Analytical, Inc.

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<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013906

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/03/2020 10:45 AM

Analysis Date: 08/03/2020

Collected Date: 07/29/2020

Project: Paradise High School, Bldg. C: 5911 Maxwell Drive, Paradise, CA 95969 / Log in #: 43026

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
22 062013906-0001	Building C - 2'x4' Fissure & Pin Hole Ceiling Tile	Tan/White Fibrous Heterogeneous	55% Cellulose 10% Min. Wool	20% Perlite 15% Non-fibrous (Other)	None Detected
23 062013906-0002	Building C, North Wall - 47" Brown Cove Base Mastic	Tan Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
24A 062013906-0003	Building C, North Side - 12" Cream w./ Green Flecks Floor Tile	White/Pink Non-Fibrous Homogeneous		60% Ca Carbonate 35% Matrix 5% Non-fibrous (Other)	None Detected
24B 062013906-0004	Building C, North Side - Floor Tile Mastic	Yellow Non-Fibrous Homogeneous		35% Ca Carbonate 60% Matrix 5% Non-fibrous (Other)	None Detected
25A 062013906-0005	Building C, Northeast Corner - 12" Cream w./ Green Flecks Floor Tile	White Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
25B 062013906-0006	Building C, Northeast Corner - Floor Tile Mastic	Yellow Non-Fibrous Homogeneous		5% Ca Carbonate 90% Matrix 5% Non-fibrous (Other)	None Detected
26A 062013906-0007	Building C, Southeast Corner - 12" Beige w./ Green Flecks Floor Tile	White/Various Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
26B 062013906-0008	Building C, Southeast Corner - Floor Tile Mastic	Yellow Non-Fibrous Homogeneous		10% Ca Carbonate 85% Matrix 5% Non-fibrous (Other)	None Detected
27A 062013906-0009	Building C, Southwest Corner - 12" Beige w./ Green Flecks Floor Tile	White/Various Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
27B 062013906-0010	Building C, Southwest Corner - Floor Tile Mastic	Brown Non-Fibrous Homogeneous	4% Cellulose	31% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	None Detected
28 062013906-0011	Building C, Roof - Gray Seam Mastic	Gray/Black Non-Fibrous Heterogeneous	15% Cellulose	35% Ca Carbonate 45% Matrix 5% Non-fibrous (Other)	None Detected
29 062013906-0012	Building C, Roof East Edge - White Seam Mastic	Gray/White Non-Fibrous Heterogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
30 062013906-0013	Building C, Roof, West Side - Under Metal Roofing Felt	Black Fibrous Homogeneous	65% Cellulose	30% Matrix 5% Non-fibrous (Other)	None Detected
31 062013906-0014	Building C, Roof, East Side - Under Metal Roof Roofing Felt	Black Fibrous Homogeneous	50% Cellulose	45% Matrix 5% Non-fibrous (Other)	None Detected
32 062013906-0015	Building C, South Side Exterior Around Door - Caulking	White Non-Fibrous Homogeneous	4% Synthetic	26% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2020 20:45:38



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EMSL Order: 062013906

Customer ID: NAL51

Customer PO:

Project ID:

Analyst(s)

Steve Juszczuk (15)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/03/2020 20:45:38

062 013906



NAL LOG-IN RECORD

Login # 43026

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 9

Paradise High School Bldg C:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10648

No. of Samples 15

E-Mail Address

Turnaround: 6 hours

20 AUG - 3 AM 10:45
RECEIVED
NATIONAL ANALYTICAL LABORATORIES, INC.

Num.	Sample ID#	Location/Description
1	22	Building C / 2x4 Fissure & Pin Hole Ceiling Tile
2	23	Building C, North Wall / 47" Brown Cove Base Mastic
3	24A	Building C, North Side (500sf) / 12" Cream w/ Green Flecks Floor Tile
4	24B	Building C, North Side (500sf) / Floor Tile Mastic
5	25A	Building C, Northeast Corner / 12" Cream w/ Green Flecks Floor Tile
6	25B	Building C, Northeast Corner / Floor Tile Mastic
7	26A	Building C, Southeast Corner (500sf) / 12" Beige w/ Green Flecks Floor Tile
8	26B	Building C, Southeast Corner (500sf) / Floor Tile Mastic
9	27A	Building C, Southwest Corner / 12" Beige w/ Green Flecks Floor Tile
10	27B	Building C, Southwest Corner / Floor Tile Mastic
11	28	Building C, Roof (3sf) / Gray Seam Mastic
12	29	Building C, Roof East Edge (20sf) / White Seam Mastic
13	30	Building C, Roof, West Side (1000sf) / Under Metal Roofing Felt
14	31	Building C, Roof, East Side / Under Metal Roof Roofing Felt
15	32	Building C, South Side Exterior Around Door / Caulking

Please analyze all Texture, Plaster and Sheetrock Joint Compound on a Test fill First Positive, Stop at

First Positive Basis. Positive is ≥1%

DO NOT POINT COUNT ANY OF THE SAMPLES

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>[Signature]</i>	8/3/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:
		<i>[Signature]</i>	8/3/20	



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EMSL Order: 062014010

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/04/2020 11:45 AM

Analysis Date: 08/04/2020 - 08/05/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg. D: 5911 Maxwell Drive, Paradise, CA 95969, Login #43024

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
46 062014010-0001	Building D, Northeast Corner, Stage Ceiling - Plaster	White Non-Fibrous Homogeneous		31% Quartz 11% Ca Carbonate 53% Gypsum 5% Non-fibrous (Other)	None Detected
47 062014010-0002	Building D, Northside, Stage Ceiling - Plaster	White Non-Fibrous Homogeneous		33% Quartz 11% Ca Carbonate 51% Gypsum 5% Non-fibrous (Other)	None Detected
48 062014010-0003	Building D, Eastside, Stage Ceiling - Plaster	White Non-Fibrous Homogeneous	<1% Cellulose	6% Quartz 15% Ca Carbonate 67% Gypsum 12% Non-fibrous (Other)	None Detected
<i>Sheetrock present in sample bag not included in analysis.</i>					
49 062014010-0004	Building D, Southeast Corner, Stage Ceiling - Plaster	White Non-Fibrous Homogeneous	<1% Cellulose	9% Quartz 31% Ca Carbonate 55% Gypsum 5% Non-fibrous (Other)	None Detected
50 062014010-0005	Building D, Southside, Stage Ceiling - Plaster	White Non-Fibrous Homogeneous	<1% Cellulose	5% Quartz 36% Ca Carbonate 54% Gypsum 5% Non-fibrous (Other)	None Detected
51 062014010-0006	Building D, Boys Locker Room, By Lobby Door (5,500 SF) - Plaster	White Non-Fibrous Homogeneous	<1% Cellulose	4% Quartz 31% Ca Carbonate 57% Gypsum 8% Non-fibrous (Other)	None Detected
52 062014010-0007	Building D, Boys Locker Room, By Lobby Door - Plaster	White Non-Fibrous Homogeneous	<1% Cellulose	6% Quartz 27% Ca Carbonate 62% Gypsum 5% Non-fibrous (Other)	None Detected
53 062014010-0008	Building D, Boys Locker Room, Northeast Restroom - Plaster	White Non-Fibrous Homogeneous	<1% Cellulose	4% Quartz 33% Ca Carbonate 57% Gypsum 6% Non-fibrous (Other)	None Detected
54 062014010-0009	Building D, Boys Locker Room, West Wall - Plaster	White Non-Fibrous Homogeneous		5% Quartz 26% Ca Carbonate 63% Gypsum 6% Non-fibrous (Other)	None Detected
55 062014010-0010	Building D, Boys Locker Room, South Wall - Plaster	White Non-Fibrous Homogeneous		36% Ca Carbonate 51% Gypsum 13% Non-fibrous (Other)	None Detected
56 062014010-0011	Building D, Girls Storage, South Wall - Plaster	White Non-Fibrous Homogeneous		40% Ca Carbonate 55% Gypsum 5% Non-fibrous (Other)	None Detected
57 062014010-0012	Building D, Girls Office, Restroom North Wall - Plaster	Tan/White Non-Fibrous Heterogeneous	10% Cellulose	17% Ca Carbonate 64% Gypsum 9% Non-fibrous (Other)	None Detected
58 062014010-0013	Building D, Space 301, Northeast Corner (150 sf) - Texture	Tan/White Non-Fibrous Heterogeneous	6% Cellulose	21% Ca Carbonate 66% Matrix 7% Non-fibrous (Other)	None Detected

Initial report from: 08/06/2020 09:21:24



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EMSL Order: 062014010
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
59 062014010-0014	Building D, Space 301, Southeast Corner (150 sf) - Texture	Tan/White Non-Fibrous Heterogeneous	6% Cellulose	27% Ca Carbonate 62% Matrix 5% Non-fibrous (Other)	None Detected
60 062014010-0015	Building D, Space 301, East Wall/ - Texture	Tan/White Non-Fibrous Heterogeneous	7% Cellulose	23% Ca Carbonate 65% Matrix 5% Non-fibrous (Other)	None Detected
61 062014010-0016	Building D, Space 301, Southeast Corner - Sheetrock - Joint Compound	Brown/White Non-Fibrous Heterogeneous	10% Cellulose	26% Ca Carbonate 59% Gypsum 5% Non-fibrous (Other)	None Detected
62 062014010-0017	Building D, Boys Lobby, Above Ceiling - 2'x4' Grid Pattern Ceiling Tile	Gray/White Fibrous Homogeneous	63% Cellulose 32% Min. Wool	5% Non-fibrous (Other)	None Detected
63 062014010-0018	Building D, Boys Lobby, Above Ceiling - 12" Pin Hole Ceiling Tile	Gray/White Fibrous Homogeneous	57% Cellulose 37% Min. Wool	6% Non-fibrous (Other)	None Detected
64 062014010-0019	Building D, Boys Lobby, Above Ceiling - 12" Pin Hole Ceiling Tile - Mastic	Brown Non-Fibrous Homogeneous		88% Matrix 12% Non-fibrous (Other)	None Detected
65 062014010-0020	Building D, Girls Lobby, Above Ceiling - 12" Pin Hole Ceiling Tile	Brown/White Fibrous Homogeneous	84% Cellulose	16% Non-fibrous (Other)	None Detected
66 062014010-0021	Building D, Girls Lobby, Above Ceiling - 12" Pin Hole Ceiling Tile - Mastic	Brown Non-Fibrous Homogeneous		86% Matrix 14% Non-fibrous (Other)	None Detected
67A 062014010-0022	Building D, Boys Lobby - 9" Beige Floor Tile	Beige Non-Fibrous Heterogeneous		61% Ca Carbonate 34% Matrix 5% Non-fibrous (Other)	None Detected
67 062014010-0023	Building D, Boys Lobby - 9" Beige Mastic	Brown Non-Fibrous Heterogeneous		24% Ca Carbonate 71% Matrix 5% Non-fibrous (Other)	None Detected
68A 062014010-0024	Building D, Boys Lobby - 9" Brown Floor Tile	Brown Non-Fibrous Heterogeneous	2% Cellulose	54% Ca Carbonate 36% Matrix 5% Non-fibrous (Other)	3% Chrysotile
68B 062014010-0025	Building D, Boys Lobby - 9" Brown Mastic	Brown/Black Non-Fibrous Heterogeneous		36% Ca Carbonate 59% Matrix 5% Non-fibrous (Other)	None Detected
69A 062014010-0026 <i>Mastic layer positive.</i>	Building D, Boys Lobby (200 sf) - 9" White Floor Tile				Not Analyzed
69B 062014010-0027	Building D, Boys Lobby (200 sf) - 9" White Mastic	Tan/Black/Yellow Non-Fibrous Homogeneous	3% Cellulose	12% Quartz 70% Matrix 13% Non-fibrous (Other)	2% Chrysotile
70A 062014010-0028 <i>Mastic layer positive.</i>	Building D, Janitor Closet off Boys Lobby (50sf) - 9" Green Floor Tile				Not Analyzed

Initial report from: 08/06/2020 09:21:24



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528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014010

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
70B 062014010-0029	Building D, Janitor Closet off Boys Lobby (50sf) - 9" Green Mastic	Brown/Black Fibrous Homogeneous	2% Cellulose	10% Quartz 70% Matrix 10% Non-fibrous (Other)	8% Chrysotile
71A 062014010-0030 <i>Mastic layer positive.</i>	Building D, Janitor Closet off Boys Lobby - 9" White Floor Tile				Not Analyzed
71B 062014010-0031	Building D, Janitor Closet off Boys Lobby - 9" White Mastic	Black Fibrous Homogeneous	2% Cellulose	15% Quartz 65% Matrix 8% Non-fibrous (Other)	10% Chrysotile
72 062014010-0032	Building D, Boys Lobby (301f) - 4" Brown Cove Base Mastic	Brown/Tan/White Fibrous Heterogeneous	15% Cellulose	10% Quartz 70% Matrix 5% Non-fibrous (Other)	None Detected
73 062014010-0033	Building D, Boys Lobby (1511f) - 4" Black Cove Base Mastic	Brown/Various/Black Non-Fibrous Heterogeneous	3% Cellulose 5% Wollastonite	20% Quartz 60% Matrix 10% Non-fibrous (Other)	2% Anthophyllite
74A 062014010-0034	Building D, Space 301 (200 sf) - Beige Yellow Mastic	Tan/Yellow Fibrous Homogeneous	12% Cellulose	55% Matrix 33% Non-fibrous (Other)	None Detected
74B 062014010-0035	Building D, Space 301 (200 sf) - Beige Vinyl Sheet Flooring	Gray/Tan/White Fibrous Homogeneous	25% Cellulose 12% Glass	10% Quartz 50% Matrix 3% Non-fibrous (Other)	None Detected
75 062014010-0036	Building D, Girls Office, West Wall (801f) - 4" Brown Cove Base Mastic	Brown/Tan/White Fibrous Heterogeneous	3% Cellulose 5% Synthetic	15% Quartz 60% Matrix 17% Non-fibrous (Other)	None Detected
76A 062014010-0037	Building D, Girls Office (400 sf) - Herringbone Beige Yellow Mastic	Tan/Yellow Fibrous Homogeneous	8% Cellulose	12% Quartz 65% Matrix 15% Non-fibrous (Other)	None Detected
76B 062014010-0038	Building D, Girls Office (400 sf) - Herringbone Beige Vinyl Sheet Flooring	Tan/White/Clear Non-Fibrous Heterogeneous	25% Cellulose	15% Quartz 55% Matrix 5% Non-fibrous (Other)	None Detected
77A 062014010-0039 <i>Inseparable leveling compound present in sample, included in analysis.</i>	Building D, Girls Lobby (200 sf) - Beige Camo Yellow Mastic Beige Camo Vinyl Sheet Flooring	Gray/Yellow/Orange Fibrous Heterogeneous	2% Cellulose	10% Quartz 35% Ca Carbonate 45% Matrix 8% Non-fibrous (Other)	None Detected
77B 062014010-0040	Building D, Girls Lobby (200 sf) - Beige Camo Vinyl Sheet Flooring	White/Beige/Clear Fibrous Heterogeneous	15% Cellulose	70% Matrix 15% Non-fibrous (Other)	None Detected
78 062014010-0041	Building D, Gym, East Wall - 4" Black Cove Base Mastic	Brown/Tan Non-Fibrous Homogeneous	2% Cellulose	10% Quartz 70% Matrix 18% Non-fibrous (Other)	None Detected
79 062014010-0042	Building D, Roof - Penetration Mastic	Tan/White/Silver Non-Fibrous Heterogeneous	6% Cellulose	7% Quartz 75% Matrix 12% Non-fibrous (Other)	None Detected
80 062014010-0043	Building D, Roof - HVAC Base Mastic	Gray Non-Fibrous Homogeneous	10% Cellulose	70% Matrix 20% Non-fibrous (Other)	None Detected

Initial report from: 08/06/2020 09:21:24



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

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<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014010

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
81 <i>062014010-0044</i>	Building D, Roof - Duct Seam Mastic	Tan/White Fibrous Homogeneous	6% Synthetic	15% Quartz 65% Matrix 14% Non-fibrous (Other)	None Detected
82 <i>062014010-0045</i>	Building D, Girls Locker Room, Exterior, Westside - Window Putty	Gray/Tan/White Non-Fibrous Heterogeneous	2% Cellulose	12% Quartz 60% Ca Carbonate 22% Non-fibrous (Other)	4% Chrysotile
83 <i>062014010-0046</i>	Building D, Space 301, Exterior, Eastside - Window Putty	Brown/Tan/White Non-Fibrous Heterogeneous	<1% Cellulose	15% Quartz 65% Ca Carbonate 15% Non-fibrous (Other)	5% Chrysotile
84 <i>062014010-0047</i>	Building D, Boys Locker Room, Exterior Northside - Window Putty	Brown/Tan/White Non-Fibrous Heterogeneous	<1% Cellulose	20% Quartz 55% Ca Carbonate 21% Non-fibrous (Other)	4% Chrysotile
85 <i>062014010-0048</i>	Building D, Boys Locker Room, Coach Office - Green Vinyl Sheet Flooring	Tan/White/Green Fibrous Heterogeneous	30% Cellulose 20% Glass	45% Matrix 5% Non-fibrous (Other)	None Detected
86 <i>062014010-0049</i>	Building D, Boys Locker Room, Coach Office (701f) - 4" Green Cove Base Mastic4" GreenCove Base Mastic	Brown/Tan/Green Fibrous Heterogeneous	8% Cellulose 3% Wollastonite	15% Quartz 65% Matrix 9% Non-fibrous (Other)	None Detected
87 <i>062014010-0050</i>	Building D, Boys Locker Room, Exterior - Window Putty	Gray/White/Variou Non-Fibrous Heterogeneous		10% Quartz 65% Ca Carbonate 20% Non-fibrous (Other)	5% Chrysotile
88 <i>062014010-0051</i>	Building D, Boys Locker Room - Concrete	Brown/Gray/White Non-Fibrous Homogeneous		65% Quartz 25% Ca Carbonate 10% Non-fibrous (Other)	None Detected
89 <i>062014010-0052</i>	Building D, Girls Locker Room - Concrete	Brown/Gray/White Non-Fibrous Homogeneous		60% Quartz 30% Ca Carbonate 10% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (25)

Tomas Montes De Oca (24)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/06/2020 09:21:24



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7

Paradise High School Bldg D:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI 10

Contact

KS 10468

No. of Samples 52

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	46	Building D, Northeast Corner / Stage Ceiling Plaster
2	47	Building D, Northside / Stage Ceiling Plaster
3	48	Building D, Eastside / Stage Ceiling Plaster
4	49	Building D, Southeast Corner / Stage Ceiling Plaster
5	50	Building D, Southside / Stage Ceiling Plaster
6	51	Building D, Boys Locker Room (5,500 SF) / By lobby door Plaster
7	52	Building D, Boys Locker Room / By door Plaster
8	53	Building D, Boys Locker Room Northeast Restroom / Plaster
9	54	Building D, Boys Locker Room West Wall / Plaster
10	55	Building D, Boys Locker Room South Wall / Plaster
11	56	Building D, Girls Storage South Wall / Plaster
12	57	Building D, Girls Office Restroom North Wall / Plaster
13	58	Building D, Space 301 Northeast Corner (150sf) / Texture
14	59	Building D, Space 301 Southeast Corner (150sf) / Texture
15	60	Building D, Space 301 East Wall / Texture
16	61	Building D, Space 301 Southeast Corner / Sheetrock-Joint Compound
17	62	Building D, Boys Lobby above ceiling / 2x4 Grid Pattern Ceiling Tile

RECEIVED
 ANALYTICAL INC.
 CHARLE PLACE, NY
 20 AUG - 6 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 11:45 AM
Ron Plumb	08/01/20 12:00	<i>Michelle DeLo</i>	8/4/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Justin Keller 5:33PM
8/4/20

062014010

Tomás Montalvo 8/4/20 / 8/5/20



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg D:
 5911 Maxwell Drive
 Paradise, CA 95969
 KS 10468

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM *T.M.*
 Type Of Work: PLM-BL *(S)*
 No. of Samples 52
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	63	Building D, Boys Lobby above ceiling / 12" Pin Hole Ceiling Tile
19	64	Building D, Boys Lobby above ceiling / 12" Pin Hole Ceiling Tile Mastic
20	65	Building D, Girl Lobby above ceiling / 12" Pin Hole Ceiling Tile
21	66	Building D, Girls Lobby above ceiling / 12" Pin Hole Ceiling Tile Mastic
22	67A	Building D, Boys Lobby / 9" Beige Floor Tile
23	67B	Building D, Boys Lobby / 9" Beige Mastic
24	68A	Building D, Boys Lobby / 9" Brown Floor Tile
25	68B	Building D, Boys Lobby / 9" Brown Mastic
26	69A	Building D, Boys Lobby (200sf) / 9" White Floor Tile
27	69B	Building D, Boys Lobby (200sf) / 9" White Mastic
28	70A	Building D, Janitor Closet off Boys Lobby (50sf) / 9" Green Floor Tile
29	70B	Building D, Janitor Closet off Boys Lobby (50sf) / 9" Green Mastic
30	71A	Building D, Janitor Closet by Boys Lobby / 9" White Floor Tile
31	71B	Building D, Janitor Closet by Boys Lobby / 9" White Mastic
32	72	Building D, Boys Lobby (30lf) / 4" Brown Cove Base Mastic
33	73	Building D, Boys Lobby (15lf) / 4" Black Cove Base Mastic
34	74A	Building D, Space 301 (200sf) / Beige Yellow Mastic

INST. ANALYTICAL LAB. INC.
 CARLE PLACE, N.Y.
 20 AUG - 4 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Michelle Davito</i>	8/4/20 11:45 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Justin Valh
 8-4-20 5:33 PM

062014010

Lorna Monte de Oca 8/4/20/8/5/20



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7
Paradise Unified School District
Phone Number
FAX Number
Contact
E-Mail Address

Paradise High School Bldg D:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
Sampling Date: 7/29/2020
Sampling Time 12:00:00 PM
Type Of Work: PLM-BI
No. of Samples 52
Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	74B	Building D, Space 301 (200sf) / Beige Vinyl Sheet Flooring
36	75	Building D, Girls Office West Wall (80lf) / 4" Brown Cove Base Mastic
37	76A	Building D, Girls Office (400sf) / Herringbone Beige Yellow Mastic
38	76B	Building D, Girls Office (400sf) / Herringbone Beige Vinyl Sheet Flooring
39	77A	Building D, Girls Lobby (200sf) / Beige Camo Yellow Mastic
40	77B	Building D, Girls Lobby (200sf) / Beige Camo Vinyl Sheet Flooring
41	78	Building D, Gym East Wall / 4" Black Cove Base Mastic
42	79	Building D, Roof / Penetration Mastic
43	80	Building D, Roof / HVAC Base Mastic
44	81	Building D, Roof / Duct Seam Mastic
45	82	Building D, Girls Locker Room Exterior Westside / Window Putty
46	83	Building D, Space 301 Exterior Eastside / Window Putty
47	84	Building D, Boys Locker Room Exterior Northside / Window Putty
48	85	Building D, Boys Locker Room Coach Office / Green Vinyl Sheet Flooring
49	86	Building D, Boys Locker Room Coach Office (70lf) / 4" Green Cove Base Mastic
50	87	Building D, Boys Locker Room Exterior / Window Putty
51	88	Building D, Boys Locker Room / Concrete

RECEIVED
 NATIONAL ANALYTICAL LABS, INC.
 CARLE PLACE NY
 10 AUG - 4 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Michelle Balbo</i>	8/4/20 12:45	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:
				APR

*Justa Valle 5:33 PM
8/4/20*

062014010

*James Montalvo Deca 8/4/20
8/5/20*



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg D:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI P
 No. of Samples 52
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
52	89	Building D, Girls Locker Room / Concrete

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test fill First

Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

RECEIVED
 EMSL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG - 4 AM 11:45

062014010

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 11:45 AM
Ron Plumb	08/01/20 12:00	Michelle DeVito	8/4/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

[Signature]
 8/4/20
 5:33 PM

Tomás Montaño De Oca 8/4/20 / 8/5/20



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7

Paradise High School Bldg D:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BL S

Contact

KS 10468

No. of Samples 52

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	63	Building D, Boys Lobby above ceiling / 12" Pin Hole Ceiling Tile
19	64	Building D, Boys Lobby above ceiling / 12" Pin Hole Ceiling Tile Mastic
20	65	Building D, Girl Lobby above ceiling / 12" Pin Hole Ceiling Tile
21	66	Building D, Girls Lobby above ceiling / 12" Pin Hole Ceiling Tile Mastic
22	67A	Building D, Boys Lobby / 9" Beige Floor Tile
23	67B	Building D, Boys Lobby / 9" Beige Mastic
24	68A	Building D, Boys Lobby / 9" Brown Floor Tile
25	68B	Building D, Boys Lobby / 9" Brown Mastic
26	69A	Building D, Boys Lobby (200sf) / 9" White Floor Tile
27	69B	Building D, Boys Lobby (200sf) / 9" White Mastic
28	70A	Building D, Janitor Closet off Boys Lobby (50sf) / 9" Green Floor Tile
29	70B	Building D, Janitor Closet off Boys Lobby (50sf) / 9" Green Mastic
30	71A	Building D, Janitor Closet by Boys Lobby / 9" White Floor Tile
31	71B	Building D, Janitor Closet by Boys Lobby / 9" White Mastic
32	72	Building D, Boys Lobby (30lf) / 4" Brown Cove Base Mastic
33	73	Building D, Boys Lobby (15lf) / 4" Black Cove Base Mastic
34	74A	Building D, Space 301 (200sf) / Beige Yellow Mastic

INST. ANALYTICAL LAB. CARLE PLACE, NY
 20 AUG - 4 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 11:45 AM
Ron Plumb	08/01/20 12:00	<i>Michelle DeVito</i>	8/4/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014010



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg D:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 52
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	74B	Building D, Space 301 (200sf) / Beige Vinyl Sheet Flooring
36	75	Building D, Girls Office West Wall (80lf) / 4" Brown Cove Base Mastic
37	76A	Building D, Girls Office (400sf) / Herringbone Beige Yellow Mastic
38	76B	Building D, Girls Office (400sf) / Herringbone Beige Vinyl Sheet Flooring
39	77A	Building D, Girls Lobby (200sf) / Beige Camo Yellow Mastic
40	77B	Building D, Girls Lobby (200sf) / Beige Camo Vinyl Sheet Flooring
41	78	Building D, Gym East Wall / 4" Black Cove Base Mastic
42	79	Building D, Roof / Penetration Mastic
43	80	Building D, Roof / HVAC Base Mastic
44	81	Building D, Roof / Duct Seam Mastic
45	82	Building D, Girls Locker Room Exterior Westside / Window Putty
46	83	Building D, Space 301 Exterior Eastside / Window Putty
47	84	Building D, Boys Locker Room Exterior Northside / Window Putty
48	85	Building D, Boys Locker Room Coach Office / Green Vinyl Sheet Flooring
49	86	Building D, Boys Locker Room Coach Office (70lf) / 4" Green Cove Base Mastic
50	87	Building D, Boys Locker Room Exterior / Window Putty
51	88	Building D, Boys Locker Room / Concrete

10 AUG - 4 AM 11:45
 FIRST ANALYTICAL, INC.
 CARLE PLACE NY

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 8/4/20 12:45 PM
Ron Plumb	08/01/20 12:00	<i>Michelle DeSto</i>	8/4/20 12:45	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014010



NAL LOG-IN RECORD

Login # 43024

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 7
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg D:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI *R*
 No. of Samples 52
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
52	89	Building D, Girls Locker Room / Concrete

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First

Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

RECEIVED
 ENSL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG - 4 AM 11:45

062014010

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Michelle Devito</i>	8/4/20	11:45 Am
Released By Signature	Date/Time	Received By Signature	Date/Time	At:



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014007

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/04/2020 11:45 AM

Analysis Date: 08/04/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg E: 5911 Maxwell Drive, Paradise, CA 95969, KS 10648, Login #43025

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
39 062014007-0001	Building E, East Wall (1401F)/4" Black Cove Base Mastic	Brown Non-Fibrous Homogeneous	9% Wollastonite	60% Matrix 31% Non-fibrous (Other)	None Detected
33 062014007-0002	Building E, Southeast Corner (8 Each)/Mudded Elbow TSI	Tan/White Fibrous Homogeneous	21% Min. Wool	30% Ca Carbonate 42% Non-fibrous (Other)	3% Amosite 4% Chrysotile
34 062014007-0003	Building E, Southeast Corner (801 F)/Pipe Insulation TSI	Tan/White Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Amosite
35 062014007-0004	Building E, South Wall/Pipe Insulation TSI	Tan Fibrous Homogeneous		15% Ca Carbonate 74% Non-fibrous (Other)	11% Amosite
36 062014007-0005	Building E, South Wall/Pipe Insulation TSI	Tan/White Fibrous Homogeneous	3% Cellulose	15% Ca Carbonate 71% Non-fibrous (Other)	11% Amosite
37 062014007-0006	Building E, Southeast Corner (2,000 SF)/Sheetrock-Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	7% Cellulose	20% Ca Carbonate 50% Gypsum 23% Non-fibrous (Other)	<1% Chrysotile
38 062014007-0007	Building E, Northwest Corner/Sheetrock-Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	4% Cellulose <1% Glass	21% Ca Carbonate 50% Gypsum 4% Mica 21% Non-fibrous (Other)	<1% Chrysotile
40 062014007-0008 <i>inseparable brown mastic.</i>	Building E, Southwest Corner (151F)/4" Cove Base Mastic	Brown/Beige Non-Fibrous Heterogeneous	4% Cellulose	30% Ca Carbonate 50% Matrix 16% Non-fibrous (Other)	<1% Anthophyllite
41A 062014007-0009	Building E, Southwest Corner (100 SF)/12" Beige Floor Tile	Tan/White Non-Fibrous Heterogeneous	2% Cellulose	65% Ca Carbonate 33% Non-fibrous (Other)	None Detected
41B 062014007-0010	Building E, Southwest Corner (100 SF)/12" Beige Floor Tile	Brown/Tan Non-Fibrous Heterogeneous	7% Cellulose 4% Synthetic	20% Ca Carbonate 50% Matrix 19% Non-fibrous (Other)	None Detected
42 062014007-0011	Building E, North Wall (50 SF)/12" Cream Floor Tile	White Non-Fibrous Homogeneous	3% Cellulose	65% Ca Carbonate 32% Non-fibrous (Other)	None Detected
43 062014007-0012	Building E, Lower Roof, Southside (10 sf)/Seam Mastic	Gray/Tan/Silver Non-Fibrous Heterogeneous	2% Cellulose 4% Glass	60% Matrix 32% Non-fibrous (Other)	2% Chrysotile
44 062014007-0013	Building E, Lower Roof, Eastside/Gray Seam Mastic	Gray/Black Non-Fibrous Heterogeneous		60% Matrix 34% Non-fibrous (Other)	6% Chrysotile
45 062014007-0014	Building E, Southside, Between Bldg. D & E/Caulking	Gray/White Non-Fibrous Heterogeneous		15% Ca Carbonate 55% Matrix 27% Non-fibrous (Other)	3% Chrysotile

Initial report from: 08/04/2020 22:46:08



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014007

Customer ID: NAL51

Customer PO:

Project ID:

Analyst(s)

Jimmy Encalada (14)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/04/2020 22:46:08

062013



NAL LOG-IN RECORD

Login # 43025

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 8

Paradise High School Bldg E:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI *(CS)*

Contact

KS 10648

No. of Samples 14

E-Mail Address

Turnaround: 6 hours *(CS)*

Num.	Sample ID#	Location/Description
1	39	Building E, East Wall (140lf) / 4" Black Cove Base Mastic
2	33	Building E, Southeast Corner (8 each) / Mudded Elbow TSI
3	34	Building E, Southeast Corner (80lf) / Pipe Insultation TSI
4	35	Building E, South Wall / Pipe Insultation TSI
5	36	Building E, South Wall / Pipe Insultation TSI
6	37	Building E, Southeast Corner (2,000 sf) / Sheetrock-Joint Compound
7	38	Building E, Northwest Corner / Sheetrock-Joint Compound
8	40	Building E, Southwest Corner (15lf) / 4" Beige Cove Base Mastic
9	41A	Building E, Southwest Corner (100sf) / 12" Beige Floor Tile
10	41B	Building E, Southwest Corner (100sf) / 12" Beige Mastic
11	42	Building E, North Wall (50sf) / 12" Cream Floor Tile
12	43	Building E, Lower Roof, Southside (10sf) / Seam Mastic
13	44	Building E, Lower Roof, Eastside / Gray Seam Mastic
14	45	Building E, Southside, Between Bldg. D & E / Caulking

RECEIVED
 NATIONAL ANALYTICAL LABORATORIES, INC.
 20 AUG - 1 AM 11:45
 CIRCLE PLAZA, IY

**Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%
 For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile**

DO NO POINT COUNT ANY MATERIAL

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	Katherine Vraod	8-4-2020 11:45 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

(Signature)
8/4/20

062014007



NAL LOG-IN RECORD

Login # 43025

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 8
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg E:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10648

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI (K)
 No. of Samples 14
 Turnaround: 6 hours (K)

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG -14 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	Katherine Viauci	8-4-20 11:45 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Ron Plumb
 8/3/20

062014007



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014006

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/04/2020 11:44 AM

Analysis Date: 08/04/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg I: 5911 Maxwell Drive, Paradise, CA 95969, Login #43029

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
172 062014006-0001	Building I, Room 402, Southwest Corner/Texture	Tan/White Non-Fibrous Heterogeneous		30% Quartz 50% Ca Carbonate 7% Mica 13% Non-fibrous (Other)	None Detected
<i>Sheetrock present in sample, only texture analyzed.</i>					
173 062014006-0002	Building I, Room 402, North Wall, Center/Texture	Tan/White Non-Fibrous Heterogeneous		25% Quartz 45% Ca Carbonate 8% Mica 22% Non-fibrous (Other)	None Detected
<i>Sheetrock present in sample, only texture analyzed.</i>					
174 062014006-0003	Building I, Room 402, Southeast Corner/Texture	Tan/White Non-Fibrous Heterogeneous		20% Quartz 45% Ca Carbonate 5% Mica 30% Non-fibrous (Other)	None Detected
<i>Sheetrock present in sample, only texture analyzed.</i>					
175 062014006-0004	Building I, Room 403, Southwest Corner/Texture	Tan/White Non-Fibrous Heterogeneous		35% Quartz 50% Ca Carbonate 7% Mica 8% Non-fibrous (Other)	None Detected
<i>Sheetrock present in sample, only texture analyzed.</i>					
176 062014006-0005	Building I, Room 403, Northeast Corner/Texture	Tan/White Non-Fibrous Heterogeneous		30% Quartz 50% Ca Carbonate 6% Mica 14% Non-fibrous (Other)	None Detected
<i>Sheetrock present in sample, only texture analyzed.</i>					
177A 062014006-0006	Building I, Room 402, Northeast Corner/12" White w/Brown Spots Floor Tile				Positive Stop (Not Analyzed)
177B 062014006-0007	Building I, Room 402, Northeast Corner/12" White w/Brown Spots Mastic	Brown/Tan/Black Fibrous Heterogeneous	20% Cellulose	15% Quartz 55% Matrix 5% Non-fibrous (Other)	5% Chrysotile
178 062014006-0008	Building I, Room 402, North Wall/4" Brown Cove Base Mastic	Brown/Tan Fibrous Heterogeneous	3% Cellulose 6% Wollastonite	25% Quartz 60% Matrix 4% Non-fibrous (Other)	2% Anthophyllite
<i>Sheetrock and tape layer present in sample, only mastic analyzed.</i>					
179 062014006-0009	Building I, Room 403, Northwest Corner/Sheetrock-Joint Compound	Brown/Tan/White Fibrous Heterogeneous	8% Cellulose 10% Glass	25% Ca Carbonate 50% Gypsum 5% Mica 2% Non-fibrous (Other)	None Detected
<i>Composite of sheetrock and joint compound layers.</i>					
180 062014006-0010	Building I, Room 402, Southwest Corner/Joint-Compound	Tan/White Non-Fibrous Heterogeneous		30% Quartz 55% Ca Carbonate 5% Mica 10% Non-fibrous (Other)	None Detected
<i>Sample contains mostly sheetrock. Only joint compound layer analyzed.</i>					

Initial report from: 08/04/2020 22:44:33



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<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014006
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
181 <i>062014006-0011</i>	Building I, Room 402, Southeast Corner (550sf)/12" w/Fissures Ceiling Tile	Brown/Gray/White Fibrous Heterogeneous	25% Cellulose 60% Min. Wool	15% Non-fibrous (Other)	None Detected
182 <i>062014006-0012</i>	Building I, Room 402, Southeast Corner/Ceiling Tile Mastic	Brown/White Fibrous Homogeneous	2% Cellulose 15% Min. Wool	20% Quartz 60% Matrix 3% Non-fibrous (Other)	None Detected
183 <i>062014006-0013</i>	Building I, Room 402, Southeast Office (0sf)/2x4 Ceiling Tile	Brown/Gray/White Fibrous Homogeneous	60% Cellulose 20% Min. Wool	15% Perlite 5% Non-fibrous (Other)	None Detected
184 <i>062014006-0014</i>	Building I, Room 402/Brown Carpet Mastic	Gray/Tan/White Fibrous Heterogeneous	2% Synthetic	12% Quartz 20% Ca Carbonate 45% Matrix 21% Non-fibrous (Other)	None Detected
185 <i>062014006-0015</i>	Building I, Room 403, Southeast Corner/4" Cove Base Mastic	Brown/Tan/White Fibrous Homogeneous	2% Cellulose 4% Wollastonite	15% Quartz 65% Matrix 12% Non-fibrous (Other)	2% Anthophyllite
186 <i>062014006-0016</i>	Building I, Room 403/Brown Carpet Mastic	Brown/Tan Fibrous Homogeneous	7% Synthetic	15% Quartz 70% Matrix 8% Non-fibrous (Other)	None Detected

Analyst(s)
 Tomas Montes De Oca (15)



Daniel Clarke, Asbestos Laboratory Manager
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/04/2020 22:44:33



NAL LOG-IN RECORD

Login # 43029

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 12
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg I:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10648

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI S
 No. of Samples 16
 Turnaround: 6 hours

Nu m.	Sample ID#	Location/Description
1	172	Building I, Room 402, Southwest Corner / Texture
2	173	Building I, Room 402, North wall, Center / Texture
3	174	Building I, Room 402, Southeast Corner / Texture
4	175	Building I, Room 403, Southwest Corner / Texture
5	176	Building I, Room 403, Northeast Corner / Texture
6	177A	Building I, Room 402, Northeast Corner / 12" White w/ Brown Spots Floor Tile
7	177B	Building I, Room 402, Northeast Corner / 12" White w/ Brown Spots Mastic
8	178	Building I, Room 402, North Wall / 4" Brown Cove Base Mastic
9	179	Building I, Room 403, Northwest Corner / Sheetrock-Joint Compound
10	180	Building I, Room 402, Southwest Corner / Joint-Compound
11	181	Building I, Room 402, Southeast Corner (550sf) / 12" w/ Fissures Ceiling Tile
12	182	Building I, Room 402, Southeast Corner / Ceiling Tile Mastic
13	183	Building I, Room 402, Southeast Office (60sf) / 2x4 Ceiling Tile
14	184	Building I, Room 402 / Brown Carpet Mastic
15	185	Building I, Room 403, Southeast Corner / 4" Cove Base Mastic
16	186	Building I, Room 403 / Brown Carpet Mastic

RECEIVED
 ENVIRONMENTAL INC.
 CHARLE PLACE, NY
 20 AUG - 11 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Michelle D...</i>	8/4/20	11:44 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014006

Tomás Montalvo 8/4/20



NAL LOG-IN RECORD

Login # 43029

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 12
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg I:
 5911 Maxwell Drive
 Paradise, CA 95969
 KS 10648

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 16
 Turnaround: 6 hours

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First

Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

RECEIVED
 ENASL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG -4 AM 11:44

062014006

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Michelle DeWitt</i>	8/4/20	1144 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

James Monte DeDea 8/4/20



EMSL Analytical, Inc.

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Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014009

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/04/2020 11:44 AM

Analysis Date: 08/04/2020 - 08/05/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg J: 5911 Maxwell Drive, Paradise, CA 95969, KS 10648, Login #43027

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
138 062014009-0001	Building J, Executive Office (70 SF)/Blue/Gray Sheet Vinyl Flooring	Gray/Blue Non-Fibrous Heterogeneous	30% Cellulose	50% Ca Carbonate 20% Matrix	None Detected
139 062014009-0002	Building J, Kitchen, Northeast Corner (900 SF)/Green Sheet Vinyl Flooring	Gray/Blue Fibrous Heterogeneous	25% Cellulose 25% Glass	20% Ca Carbonate 30% Matrix	None Detected
140 062014009-0003	Building J, Kitchen, Strip in Center/Beige Vinyl Flooring	Gray/Blue Fibrous Heterogeneous	20% Cellulose 15% Glass	20% Ca Carbonate 45% Matrix	None Detected
141 062014009-0004	Building J, Northwest Serving Area (200 SF)/Beige Sheet Vinyl Flooring	Beige Non-Fibrous Homogeneous	40% Cellulose 10% Glass	10% Ca Carbonate 40% Matrix	None Detected
142 062014009-0005	Building J, Kitchen, South Wall/Chair Rail Adhesive	Yellow Non-Fibrous Homogeneous		25% Ca Carbonate 70% Matrix 5% Non-fibrous (Other)	None Detected
143 062014009-0006	Building J, Cafeteria (1,400 SF)/12" w/Pin Hole Ceiling Tile	Brown/White Fibrous Heterogeneous	90% Cellulose	2% Ca Carbonate 8% Non-fibrous (Other)	None Detected
144 062014009-0007	Building J, Kitchen, Above Drop Ceiling/Brown Mastic	Brown Fibrous Heterogeneous	32% Cellulose	45% Matrix 23% Non-fibrous (Other)	None Detected
145 062014009-0008	Building J, Kitchen, Above Drop Ceiling, North Wall/Sheetrock-Joint Compound	Brown/Gray/White Fibrous Heterogeneous	<1% Cellulose	15% Ca Carbonate 70% Gypsum 13% Non-fibrous (Other)	2% Chrysotile
146 062014009-0009	Building J, Kitchen, by Back Door Ceiling/Sheetrock-Joint Compound	Brown/Gray/White Fibrous Heterogeneous	<1% Cellulose	18% Ca Carbonate 72% Gypsum 8% Non-fibrous (Other)	2% Chrysotile
147 062014009-0010	Building J, Kitchen Storage Area, East Wall (1,600 SF)/Plaster	White Non-Fibrous Heterogeneous		20% Quartz 10% Ca Carbonate 45% Gypsum 25% Non-fibrous (Other)	None Detected
148 062014009-0011	Building J, Kitchen Bathroom Area, North Wall/Plaster	White Non-Fibrous Heterogeneous		15% Quartz 12% Ca Carbonate 45% Gypsum 28% Non-fibrous (Other)	None Detected
149 062014009-0012	Building J, Kitchen Serving Area, East Wall/Plaster	White Non-Fibrous Heterogeneous		22% Quartz 10% Ca Carbonate 47% Gypsum 21% Non-fibrous (Other)	None Detected
150 062014009-0013	Building J, Kitchen by Back Door/Plaster	White Non-Fibrous Heterogeneous		14% Quartz 10% Ca Carbonate 56% Gypsum 20% Non-fibrous (Other)	None Detected

Initial report from: 08/05/2020 11:45:53



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EMSL Order: 062014009

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
151 062014009-0014	Building J, Kitchen Server Area, West Wall/Plaster	Tan/White/Various Non-Fibrous Heterogeneous	3% Cellulose	28% Quartz 15% Ca Carbonate 35% Gypsum 19% Non-fibrous (Other)	None Detected
152 062014009-0015	Building J, Kitchen Office, South Wall/Texture	Brown/Tan/White Non-Fibrous Heterogeneous	4% Cellulose	40% Ca Carbonate 4% Mica 25% Matrix 27% Non-fibrous (Other)	None Detected
153 062014009-0016	Building J, Kitchen Office, West Wall/Texture	Tan/White Non-Fibrous Heterogeneous	5% Cellulose	40% Ca Carbonate 10% Mica 30% Matrix 15% Non-fibrous (Other)	None Detected
154 062014009-0017	Building J, Kitchen Office Ceiling/Texture	Brown/Tan/White Non-Fibrous Heterogeneous	6% Cellulose	40% Ca Carbonate 5% Mica 25% Matrix 24% Non-fibrous (Other)	None Detected
155 062014009-0018	Building J, Kitchen Center/FRP Adhesive	Tan Non-Fibrous Heterogeneous	4% Cellulose	30% Ca Carbonate 50% Matrix 16% Non-fibrous (Other)	None Detected
156 062014009-0019 <i>TEM recommended.</i>	Building J, Westside, Exterior Window/Glazing	Gray/White Non-Fibrous Heterogeneous	<1% Fibrous (Other)	50% Ca Carbonate 5% Mica 45% Non-fibrous (Other)	None Detected
157 062014009-0020	Building J, Northside, Window/Glazing	Gray/Tan/White Non-Fibrous Heterogeneous		55% Ca Carbonate 42% Non-fibrous (Other)	3% Chrysotile
158A 062014009-0021 <i>Floor tile not analyzed since mastic 158B is positive.</i>	Building J, Cafeteria (1,500 sf)/9" Brown Floor Tile				Not Analyzed
158B 062014009-0022	Building J, Cafeteria (1,500 sf)/9" Brown Mastic	Tan/Black Non-Fibrous Heterogeneous	3% Cellulose	25% Ca Carbonate 55% Matrix 14% Non-fibrous (Other)	3% Chrysotile
159A 062014009-0023 <i>Floor tile not analyzed since mastic 159B is positive.</i>	Building J, Cafeteria (1,500 sf)/9" Cream Floor Tile				Not Analyzed
159B 062014009-0024	Building J, Cafeteria (1,500 sf)/9" Cream Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
160A 062014009-0025 <i>Floor tile not analyzed since mastic 160B is positive.</i>	Building J, Cafeteria, Northwest Corner/12" Beige Floor Tile				Not Analyzed
160B 062014009-0026	Building J, Cafeteria, Northwest Corner/12" Beige Mastic	Tan/White/Black Non-Fibrous Heterogeneous		60% Matrix 36% Non-fibrous (Other)	4% Chrysotile
161A 062014009-0027 <i>Floor tile not analyzed since mastic 161B is positive.</i>	Building J, Cafeteria, North Wall, By Coolers (10 sf)/9" Cream Floor Tile				Not Analyzed
161B 062014009-0028	Building J, Cafeteria, North Wall, By Coolers (10 sf)/9" Cream Mastic	Brown/Black Non-Fibrous Homogeneous		15% Ca Carbonate 58% Matrix 24% Non-fibrous (Other)	3% Chrysotile

Initial report from: 08/05/2020 11:45:53



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EMSL Order: 062014009

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
162A <i>062014009-0029</i>	Building J, Cafeteria, North Wall, by Coolers (10 sf)/9" Beige Floor Tile <i>Floor tile not analyzed since mastic 162B is positive.</i>				Not Analyzed
162B <i>062014009-0030</i>	Building J, Cafeteria, North Wall, by Coolers (10 sf)/9" Beige Mastic	Brown/Black Non-Fibrous Heterogeneous		18% Ca Carbonate 60% Matrix 20% Non-fibrous (Other)	2% Chrysotile
163A <i>062014009-0031</i>	Building J, by Executive Office (10 sf)/9" White Floor Tile <i>Floor tile not analyzed since mastic 163B is positive.</i>				Not Analyzed
163B <i>062014009-0032</i>	Building J, by Executive Office (10 sf)/9" White Mastic	Tan/Black Non-Fibrous Heterogeneous	5% Cellulose	20% Ca Carbonate 58% Matrix 15% Non-fibrous (Other)	2% Chrysotile
164 <i>062014009-0033</i>	Building J, Roof Over Offices, North Parapet Wall, Center/Roofing	White/Black Non-Fibrous Heterogeneous	3% Cellulose 8% Synthetic	18% Ca Carbonate 55% Matrix 16% Non-fibrous (Other)	None Detected
165 <i>062014009-0034</i>	Building J, Roof Over Kitchen, Center/Composition Rolled Roofing	White/Black Non-Fibrous Heterogeneous	6% Synthetic 8% Glass	7% Quartz 25% Ca Carbonate 40% Matrix 14% Non-fibrous (Other)	None Detected
166 <i>062014009-0035</i>	Building J, Northeast Corner/Composition Rolled Roofing	Brown/White/Black Non-Fibrous Heterogeneous	5% Cellulose 7% Synthetic 3% Glass	8% Quartz 15% Ca Carbonate 42% Matrix 20% Non-fibrous (Other)	None Detected
167 <i>062014009-0036</i>	Building J, South Saw Tooth Roof, Southwest Corner Over Felt/Composition Shingle Roofing	Gray/Black Non-Fibrous Homogeneous	8% Cellulose	6% Quartz 25% Ca Carbonate 45% Matrix 16% Non-fibrous (Other)	None Detected
168 <i>062014009-0037</i>	Building J, South Saw Tooth Roof, Southwest Corner Over Felt/Composition Shingle Roofing	Gray/Black Non-Fibrous Heterogeneous	8% Cellulose 4% Glass	18% Ca Carbonate 40% Matrix 30% Non-fibrous (Other)	None Detected
169 <i>062014009-0038</i>	Building J, Roof Over Kitchen (101f)/Gray Roof Patch Compound	Gray/Black Non-Fibrous Homogeneous		15% Ca Carbonate 60% Matrix 18% Non-fibrous (Other)	7% Chrysotile
170 <i>062014009-0039</i>	Building J, North Saw Tooth Roof/Window Glazing	Gray/Tan Non-Fibrous Homogeneous		65% Ca Carbonate 33% Non-fibrous (Other)	2% Chrysotile
171 <i>062014009-0040</i>	Building J, North Saw Tooth Roof/Window Glazing	Gray/Tan Non-Fibrous Homogeneous	<1% Fibrous (Other)	69% Ca Carbonate 29% Non-fibrous (Other)	2% Chrysotile



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EMSL Order: 062014009

Customer ID: NAL51

Customer PO:

Project ID:

Analyst(s)

Erick Rosa (6)

Jimmy Encalada (23)

Omatie Ramrattan-Scarallo (5)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/05/2020 11:45:53

062014009



NAL LOG-IN RECORD

Login # **43027**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 10

Paradise High School Bldg J:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10648

No. of Samples 40

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	138	Building J, Executive Office (70sf) / Blue / Gray Sheet Vinyl Flooring
2	139	Building J, Kitchen, Northeast Corner (900sf) / Blue / Green Sheet Vinyl Flooring
3	140	Building J, Kitchen, Strip in Center / Beige Sheet Vinyl Flooring
4	141	Building J, Northwest Serving Area (200sf) / Beige Sheet Vinyl Flooring
5	142	Building J, Kitchen, South Wall / Chair Rail Adhesive
6	143	Building J, Cafeteria (1,400sf) / 12" w/ Pin Hole Ceiling Tile
7	144	Building J, Kitchen, Above Drop Ceiling / Brown Mastic
8	145	Building J, Kitchen, Above Drop Ceiling, North Wall / Sheetrock-Joint Compound
9	146	Building J, Kitchen, By Back Door Ceiling / Sheetrock-Joint Compound
10	147	Building J, Kitchen Storage Area, East Wall (1,600sf) / Plaster
11	148	Building J, Kitchen Bathroom Area, North Wall / Plaster
12	149	Building J, Kitchen Serving Area, East Wall / Plaster
13	150	Building J, Kitchen by Back Door / Plaster
14	151	Building J, Kitchen Server Area, West Wall / Plaster
15	152	Building J, Kitchen Office, South Wall / Texture
16	153	Building J, Kitchen Office, West Wall / Texture
17	154	Building J, Kitchen Office Ceiling / Texture

RECEIVED
 NATIONAL ANALYTICAL LABS
 CARLE PLACE, NY
 20 AUG -4 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	Katherine Viaud	8-4-2020 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

[Signature]
8/4/20

[Signature]
8/4/20

[Signature] slulas

062014009



NAL LOG-IN RECORD

Login # 43027

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 10
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg J:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10648

Date 7/28/2020
 Sampling Date: 7/29/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 40
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	155	Building J, Kitchen Center / FRP Adhesive
19	156	Building J, Westside, Exterior Window / Glazing
20	157	Building J, Northside, Window / Glazing
21	158A	Building J, Cafeteria (1,500sf) / 9" Brown Floor Tile
22	158B	Building J, Cafeteria (1,500sf) / 9" Brown Mastic
23	159A	Building J, Cafeteria (1,500sf) / 9" Cream Floor Tile
24	159B	Building J, Cafeteria (1,500sf) / 9" Cream Mastic
25	160A	Building J, Cafeteria, Northwest Corner / 12" Beige Floor Tile
26	160B	Building J, Cafeteria, Northwest Corner / 12" Beige Mastic
27	161A	Building J, Cafeteria, North Wall, By Coolers (10sf) / 9" Cream Floor Tile
28	161B	Building J, Cafeteria, North Wall, By Coolers (10sf) / 9" Cream Mastic
29	162A	Building J, Cafeteria, North Wall, By Coolers (10sf) / 9" Beige Floor Tile
30	162B	Building J, Cafeteria, North Wall, By Coolers (10sf) / 9" Beige Mastic
31	163A	Building J, By Executive Office (10sf) / 9" White Floor Tile
32	163B	Building J, By Executive Office (10sf) / 9" White Mastic
33	164	Building J, Roof over Offices, North Parapet Wall, Center / Roofing
34	165	Building J, Roof over Kitchen, Center / Composition Rolled Roofing

RECEIVED
 NATIONAL ANALYTICAL LABS.
 CHARLESTON, WV
 20 AUG - 4 AM '11

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
	08/01/20 12:00	Katherine Vaud	8-4-20 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/4/20
 8/4/20
 8/4/20

062014009



NAL LOG-IN RECORD

Login # 43027

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 10

Paradise High School Bldg J:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10648

No. of Samples 40

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	166	Building J, Northeast Corner / Composition Rolled Roofing
36	167	Building J, South Saw Tooth Roof, Southwest Corner over Felt / Composition Shingle Roofing
37	168	Building J, North Saw Tooth Roof, Northeast Corner over Felt / Composition Shingle Roofing
38	169	Building J, Roof over Kitchen (10lf) / Gray Roof Patch Compound
39	170	Building J, North Saw Tooth Roof / Window Glazing
40	171	Building J, North Saw Tooth Roof / Window Glazing

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1% *OR*

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile *OR*

DO NOT POINT COUNT ANY MATERIAL *OR*

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG - 4 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	Katherine Vivaldi	8-4-20 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Evelyn
8/4/20

[Signature]
8/11/20

[Signature]

8/11/20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014017

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/04/2020 11:44 AM

Analysis Date: 08/04/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg K: 5911 Maxwell Drive, Paradise, CA 95969, Login #43028

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
122A <small>062014017-0001</small>	Building K, Southwest Corner (100 sf)/12" Beige Floor Tile				Not Analyzed
<i>Associated mastic (122B) was positive. Sample 122A not analyzed as per client request.</i>					
122B <small>062014017-0002</small>	Building K, Southwest Corner (100 sf)/12" Beige Mastic	Black Non-Fibrous Heterogeneous	<1% Cellulose	16% Ca Carbonate 77% Matrix 5% Non-fibrous (Other)	2% Chrysotile
123A <small>062014017-0003</small>	Building K, Southwest Corner (1,400 sf)/12" Cream Floor Tile				Not Analyzed
<i>Associated mastic (123B) was positive. Sample 123A not analyzed as per client request.</i>					
123B <small>062014017-0004</small>	Building K, Southwest Corner (1,400 sf)/12" Cream Mastic	Black Non-Fibrous Homogeneous		31% Ca Carbonate 35% Matrix 34% Non-fibrous (Other)	<1% Chrysotile
124 <small>062014017-0005</small>	Building K, Building K, Southeast Corner (1,400 sf)/Sheetrock-Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	3% Cellulose <1% Glass	33% Ca Carbonate 54% Gypsum 5% Mica 5% Non-fibrous (Other)	<1% Chrysotile
125 <small>062014017-0006</small>	Building K, Building K, Southwest Corner (1,400 sf)/Sheetrock-Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	3% Cellulose <1% Glass	35% Ca Carbonate 53% Gypsum 4% Mica 5% Non-fibrous (Other)	<1% Chrysotile
126 <small>062014017-0007</small>	Building K, Café (1,500 sf)/12" Pin Hole & Fissure Ceiling Tile	Brown/White Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
127A <small>062014017-0008</small>	Building K, Band Room, Northwest Corner/12' Cream Floor Tile				Not Analyzed
<i>Associated mastic (127B) was positive. Sample 127A not analyzed as per client request.</i>					
127B <small>062014017-0009</small>	Building K, Building K, Band Room, Northwest Corner/12" Cream Mastic	Black Non-Fibrous Heterogeneous		20% Ca Carbonate 65% Matrix 13% Non-fibrous (Other)	2% Chrysotile
128 <small>062014017-0010</small>	Building K, Band Room, Northwest Corner/4" Brown Cove Base Mastic	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Anthophyllite
129 <small>062014017-0011</small>	Building K, Band Room Southeast Closet/Sheetrock-Joint Compound	Brown/White Non-Fibrous Heterogeneous	3% Cellulose <1% Glass	27% Ca Carbonate 60% Gypsum 5% Mica 5% Non-fibrous (Other)	<1% Chrysotile
130 <small>062014017-0012</small>	Building K, South Wall, Exterior/Window Glazing	Gray/White Non-Fibrous Homogeneous		55% Ca Carbonate 36% Matrix 6% Non-fibrous (Other)	3% Chrysotile

Initial report from: 08/05/2020 11:44:38



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<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014017
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
131 <i>062014017-0013</i>	Building K, South Wall/4" Painted Cove Base Mastic	Black Non-Fibrous Homogeneous		55% Ca Carbonate 39% Matrix 6% Non-fibrous (Other)	None Detected
132 <i>062014017-0014</i>	Building K, Band Room, North Wall/12" Pin Hole w/Fissure Ceiling Tile	Brown/White Fibrous Homogeneous	87% Cellulose	13% Non-fibrous (Other)	None Detected
133 <i>062014017-0015</i>	Building K, Band Office Area, over Black Mastic (500 sf)/Blue Carpet Yellow Mastic	Yellow Non-Fibrous Homogeneous	10% Cellulose	81% Matrix 9% Non-fibrous (Other)	None Detected
134 <i>062014017-0016</i>	Building K, Band Room, North Wall/12" Ceiling Tile Mastic	Brown Non-Fibrous Homogeneous	<1% Cellulose	88% Matrix 12% Non-fibrous (Other)	None Detected
135 <i>062014017-0017</i>	Building K, Roof, Southeast Corner/Composition Rolled Roofing	Black Fibrous Homogeneous	10% Glass	31% Quartz 45% Matrix 14% Non-fibrous (Other)	None Detected
136 <i>062014017-0018</i>	Building K, Roof, Northeast Corner, Over Band Room/Composition Rolled Roofing	Black Fibrous Homogeneous	8% Glass	22% Quartz 65% Matrix 5% Non-fibrous (Other)	None Detected
137 <i>062014017-0019</i>	Building K, Roof over Cafeteria by HVAC/Roof Mastic	White/Black Non-Fibrous Heterogeneous		10% Ca Carbonate 82% Matrix 8% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (16)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/05/2020 11:44:38



NAL LOG-IN RECORD

Login # 43028

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 11

Paradise High School Bldg K:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI 

Contact

KS 10648

No. of Samples 19

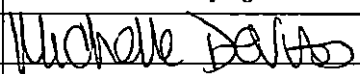
E-Mail Address

Turnaround: 6 hours


Num.	Sample ID#	Location/Description
1	122A	Building K, Southwest Corner (100sf) / 12" Beige Floor Tile
2	122B	Building K, Southwest Corner (100sf) / 12" Beige Mastic
3	123A	Building K, Southwest Corner (1,400sf) / 12" Cream Floor Tile
4	123B	Building K, Southwest Corner (1,400sf) / 12" Cream Mastic
5	124	Building K, Building K, Southeast Corner (1,400sf) / Sheetrock-Joint Compound
6	125	Building K, Building K, Southwest Corner (1,400sf) / Sheetrock-Joint Compound
7	126	Building K, Café (1,500sf) / 12" Pin Hole & Fissure Ceiling Tile
8	127A	Building K, Band Room, Northwest Corner / 12' Cream Floor Tile
9	127B	Building K, Building K, Band Room, Northwest Corner / 12" Cream Mastic
10	128	Building K, Band Room, Northwest Corner / 4" Brown Cove Base Mastic
11	129	Building K, Band Room Southeast Closet / Sheetrock-Joint Compound
12	130	Building K, , South Wall, Exterior / Window Glazing
13	131	Building K, South Wall / 4" Painted Cove Base Mastic
14	132	Building K, Band Room, North Wall / 12" Pin Hole w/ Fissure Ceiling Tile
15	133	Building K, Band Office Area, over Black Mastic (500sf) / Blue Carpet Yellow Mastic
16	134	Building K, Band Room, North Wall / 12" Ceiling Tile Mastic
17	135	Building K, Roof, Southeast Corner / Composition Rolled Roofing

RECEIVED
 NATIONAL ANALYTICAL LABORATORIES, INC.
 20 AUG - 4 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00		8/4/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014017


8-4-20



NAL LOG-IN RECORD

Login # 43028

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 11

Paradise High School Bldg K:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10648

No. of Samples 19

E-Mail Address

Turnaround: 6 hours

(Handwritten circled 'M')

Num.	Sample ID#	Location/Description
18	136	Building K, Roof, Northeast Corner, Over Band Room / Composition Rolled Roofing
19	137	Building K, Roof over Cafeteria by HVAC / Roof Mastic

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG -4 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Michelle DeVito</i>	8/4/20	1144 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014017

Justin Valles
8-4-20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013911

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/03/2020 10:45 AM

Analysis Date: 08/03/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg L: 5911 Maxwell Drive, Paradise, CA 95969, Login #43030

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
186 062013911-0001	Building L, Northwest Corner (3200sf) - Plaster	Tan/White Non-Fibrous Heterogeneous		20% Ca Carbonate 20% Vermiculite 55% Gypsum 5% Non-fibrous (Other)	None Detected
187 062013911-0002	Building L, Women's Restroom, West Wall - Plaster	Tan/White Non-Fibrous Heterogeneous		35% Ca Carbonate 15% Vermiculite 45% Gypsum 5% Non-fibrous (Other)	None Detected
188 062013911-0003	Building L, Water Heater Closet - Plaster	Tan/White Non-Fibrous Heterogeneous		40% Ca Carbonate 15% Vermiculite 40% Gypsum 5% Non-fibrous (Other)	None Detected
189 062013911-0004	Building L, Hallway by Nurse's Office, East Wall - Plaster	Tan/White Non-Fibrous Heterogeneous		35% Ca Carbonate 10% Vermiculite 50% Gypsum 5% Non-fibrous (Other)	None Detected
190 062013911-0005	Building L, Men's Room, East Wall - Plaster	Tan/White Non-Fibrous Heterogeneous		35% Ca Carbonate 15% Vermiculite 45% Gypsum 5% Non-fibrous (Other)	None Detected
191 062013911-0006	Building L, Office, West Wall - 2'x4' w/1" Pattern Ceiling Tile	Gray/White Fibrous Heterogeneous	50% Cellulose 5% Min. Wool	25% Perlite 20% Non-fibrous (Other)	None Detected
192 062013911-0007	Building L, Hallway - 1' with Large Pinhole Ceiling Tile	Tan/White Fibrous Heterogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
193 062013911-0008	Building L, Hallway - 1' Brown Ceiling Tile Mastic	Brown Non-Fibrous Homogeneous		92% Matrix 8% Non-fibrous (Other)	None Detected
194 062013911-0009	Building L, Hallway Above Ceiling - Sheetrock - Joint Compound	Tan/White Fibrous Heterogeneous	7% Cellulose <1% Glass	38% Ca Carbonate 50% Gypsum 5% Non-fibrous (Other)	None Detected
195 062013911-0010	Building L, Between Principal's Office, East Wall (600 sf) - Texture	White Non-Fibrous Heterogeneous		62% Ca Carbonate 3% Mica 35% Non-fibrous (Other)	None Detected
196 062013911-0011	Building L, North Principal's Office, South Wall - Texture	White Non-Fibrous Heterogeneous		57% Ca Carbonate 3% Mica 40% Non-fibrous (Other)	None Detected
197 062013911-0012	Building L, South Principal's Office, East Wall - Texture	White Non-Fibrous Heterogeneous		57% Ca Carbonate 3% Mica 40% Non-fibrous (Other)	None Detected
198 062013911-0013	Building L, Between Principal's Offices, Northeast Corner - Sheetrock - Joint Compound	Tan/White Fibrous Heterogeneous	6% Cellulose	35% Ca Carbonate 45% Gypsum 4% Mica 10% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2020 20:42:21



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013911

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
199A 062013911-0014	Building L, Water Heater Closet - 9" Brown-Orange Floor Tile	Gray/White/Orange Non-Fibrous Homogeneous		47% Ca Carbonate 40% Matrix 5% Non-fibrous (Other)	8% Chrysotile
199B 062013911-0015	Building L, Water Heater Closet - Floor Tile Mastic	Brown Non-Fibrous Homogeneous		60% Matrix 40% Non-fibrous (Other)	None Detected
200 062013911-0016	Building L, Kitchen, Flooring, Bottom Layer - Sheet Vinyl	Gray/Tan Fibrous Heterogeneous	8% Cellulose 2% Synthetic	40% Ca Carbonate 35% Matrix 15% Non-fibrous (Other)	None Detected
201 062013911-0017	Building L, Kitchen, Flooring, Top Layer - Sheet Vinyl	Brown/Gray/Tan Fibrous Heterogeneous	9% Cellulose 1% Synthetic	45% Ca Carbonate 35% Matrix 10% Non-fibrous (Other)	None Detected
202 062013911-0018	Building L, Office - Blue Carpet - Yellow Mastic	Gray/Yellow Non-Fibrous Heterogeneous		5% Quartz 45% Ca Carbonate 50% Non-fibrous (Other)	None Detected
203 062013911-0019	Building L, Meeting Room - Green Carpet - Yellow Mastic	Brown/White Non-Fibrous Heterogeneous		25% Ca Carbonate 70% Matrix 5% Non-fibrous (Other)	None Detected
204 062013911-0020	Building L, Counselor's Office - Green Carpet - Yellow Mastic	Brown Non-Fibrous Homogeneous	3% Cellulose <1% Synthetic	17% Ca Carbonate 70% Matrix 10% Non-fibrous (Other)	None Detected
205A 062013911-0021	Building L, Counselor's Office - Blue Floor Tile				Positive Stop (Not Analyzed)
205B 062013911-0022	Building L, Counselor's Office - Black Mastic	Black Non-Fibrous Homogeneous		12% Ca Carbonate 80% Matrix 5% Non-fibrous (Other)	3% Chrysotile
206 062013911-0023	Building L, Counselor's Office, Under Carpet - Gray Floor Tile	Gray Non-Fibrous Homogeneous		45% Ca Carbonate 40% Matrix 5% Non-fibrous (Other)	10% Chrysotile
207A 062013911-0024	Building L, North Principal's Office, Under Carpet - Red Floor Tile				Positive Stop (Not Analyzed)
207B 062013911-0025	Building L, North Principal's Office, Under Carpet - Black Mastic	Black Non-Fibrous Homogeneous		17% Ca Carbonate 75% Matrix 5% Non-fibrous (Other)	3% Chrysotile
208A 062013911-0026	Building L, South Principal's Office - Brown Floor Tile	Gray/Tan Non-Fibrous Homogeneous		48% Ca Carbonate 40% Matrix 5% Non-fibrous (Other)	7% Chrysotile
208B 062013911-0027	Building L, South Principal's Office - Black Mastic	Black Non-Fibrous Homogeneous		10% Ca Carbonate 65% Matrix 25% Non-fibrous (Other)	None Detected
208C 062013911-0028	Building L, South Principal's Office - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		35% Ca Carbonate 60% Matrix 5% Non-fibrous (Other)	None Detected
209 062013911-0029	Building L, Nurse's Office - Beige Pebble-Pattern Sheet Vinyl	Gray/Tan/White Fibrous Heterogeneous	8% Cellulose	32% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected
210A 062013911-0030	Building L, Nurse's Office - Light Brown 9" Floor Tile				Positive Stop (Not Analyzed)

Initial report from: 08/03/2020 20:42:21



EMSL Analytical, Inc.

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EMSL Order: 062013911

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
210B <i>062013911-0031</i>	Building L, Nurse's Office - Black Mastic	Black Non-Fibrous Homogeneous		22% Ca Carbonate 70% Matrix 5% Non-fibrous (Other)	3% Chrysotile
211A <i>062013911-0032</i> <i>Sample is leveling compound. Not floor tile.</i>	Building L, Principal's Secretary Office - White Floor Tile	White Non-Fibrous Homogeneous		85% Gypsum 15% Non-fibrous (Other)	None Detected
211B <i>062013911-0033</i>	Building L, Principal's Secretary Office - Black Mastic	Black Non-Fibrous Homogeneous		10% Ca Carbonate 75% Matrix 15% Non-fibrous (Other)	None Detected
211C <i>062013911-0034</i>	Building L, Principal's Secretary Office - Yellow Carpet Mastic	Brown Non-Fibrous Homogeneous		95% Matrix 5% Non-fibrous (Other)	None Detected
212A <i>062013911-0035</i> <i>Composite of inseparable mortar and grout.</i>	Building L, Men's Room - Multi-Size Ceramic Tile Mortar	Gray Non-Fibrous Homogeneous		60% Quartz 25% Ca Carbonate 15% Non-fibrous (Other)	None Detected
212B <i>062013911-0036</i> <i>Inseparable layers.</i>	Building L, Men's Room - Grout				Insufficient Material
213 <i>062013911-0037</i>	Building L, Men's Room - Yellow Ceramic Tile, Mortar & Grout	Gray/White Non-Fibrous Heterogeneous		45% Quartz 35% Ca Carbonate 20% Non-fibrous (Other)	None Detected
214A <i>062013911-0038</i>	Building L, Nurse's Restroom, Bottom Layer - Sheet Vinyl	Gray/White Fibrous Heterogeneous	3% Synthetic	37% Ca Carbonate 35% Matrix 25% Non-fibrous (Other)	None Detected
214B <i>062013911-0039</i>	Building L, Nurse's Restroom, Bottom Layer - Cove Base Mastic	Yellow Non-Fibrous Homogeneous		15% Ca Carbonate 80% Matrix 5% Non-fibrous (Other)	None Detected
215 <i>062013911-0040</i> <i>Yellow mastic not analyzed,</i>	Building L, Hallway - 4" Brown Cove Base Mastic	Brown Non-Fibrous Homogeneous		90% Matrix 7% Non-fibrous (Other)	3% Anthophyllite
216 <i>062013911-0041</i>	Building L, Upper Roof, Northeast Corner - Composition Rolled Roofing	Brown/White/Black Fibrous Heterogeneous	23% Cellulose 2% Glass	10% Ca Carbonate 55% Matrix 10% Non-fibrous (Other)	None Detected
217 <i>062013911-0042</i>	Building L, Roof, Southeast Corner - Composition Rolled Roofing	Brown/White/Black Fibrous Heterogeneous	8% Cellulose <1% Glass	17% Ca Carbonate 70% Matrix 5% Non-fibrous (Other)	None Detected
218 <i>062013911-0043</i>	Building L, Lower Roof, West Ridge - Composition Rolled Roofing	White/Black Fibrous Heterogeneous	2% Glass	23% Ca Carbonate 55% Matrix 20% Non-fibrous (Other)	None Detected
219 <i>062013911-0044</i>	Building L, Lower Roof, Southeast Corner - Composition Rolled Roofing	Brown/White/Black Fibrous Heterogeneous	13% Cellulose 2% Glass	25% Ca Carbonate 45% Matrix 15% Non-fibrous (Other)	None Detected
220 <i>062013911-0045</i>	Building L, Upper Roof, Electrical Conduits - Black Mastic with Silver Paint	White/Black Non-Fibrous Heterogeneous	8% Cellulose	22% Ca Carbonate 65% Matrix 5% Non-fibrous (Other)	None Detected

Initial report from: 08/03/2020 20:42:21



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013911
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
221 <small>062013911-0046</small>	Building L, Exterior, Southwest Corner (800 sf) - Stucco	Gray/White/Green Non-Fibrous Heterogeneous	<1% Cellulose	55% Quartz 20% Ca Carbonate 25% Non-fibrous (Other)	None Detected
222 <small>062013911-0047</small>	Building L, Exterior, East Side, North End - Stucco	Gray/White Non-Fibrous Heterogeneous		50% Quartz 25% Ca Carbonate 25% Non-fibrous (Other)	None Detected
223 <small>062013911-0048</small>	Building L, Exterior, Southeast Corned, By Meeting Room - Stucco	Gray/White Non-Fibrous Heterogeneous		55% Quartz 25% Ca Carbonate 20% Non-fibrous (Other)	None Detected

Analyst(s)

Steve Juszczak (44)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/03/2020 20:42:21



NAL LOG-IN RECORD

Login # 43030

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 13

Paradise Unified School District

Paradise High School Bldg L:

5911 Maxwell Drive

Paradise, CA 95969

KS 10468

Date 7/28/2020

Sampling Date: 7/29/2020

Sampling Time 12:00:00 PM

Type Of Work: PLM-BI **(NS)**

No. of Samples 48

Turnaround: .6 hours

Num.	Sample ID#	Location/Description
1	186	Building L, Northwest Corner (3200sf) / Plaster
2	187	Building L, Women's Restroom, West Wall / Plaster
3	188	Building L, Water Heater Closet / Plaster
4	189	Building L, Hallway by Nurse's Office, East Wall / Plaster
5	190	Building L, Men's Room, East Wall / Plaster
6	191	Building L, Office, West Wall / 2'x4' w/ 1" Pattern Ceiling Tile
7	192	Building L, Hallway / 1' with Large Pinhole Ceiling Tile
8	193	Building L, Hallway / 1' Brown Ceiling Tile Mastic
9	194	Building L, Hallway Above Ceiling / Sheetrock-Joint Compound
10	195	Building L, Between Principal's Office, East Wall (600sf) / Texture
11	196	Building L, North Principal's Office, South Wall / Texture
12	197	Building L, South Principal's Office, East Wall / Texture
13	198	Building L, Between Principal's Offices, Northeast Corner / Sheetrock-Joint Compound
14	199A	Building L, Water Heater Closet / 9" Brown/Orange Floor Tile
15	199B	Building L, Water Heater Closet / Floor Tile Mastic
16	200	Building L, Kitchen, Flooring, Bottom Layer / Sheet Vinyl
17	201	Building L, Kitchen, Flooring, Top Layer / Sheet Vinyl

RECEIVED
 MID
 CARLE PLACE, NY
 20 AUG - 3 AM 10:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
<i>Ron Plumb</i>	08/01/20 12:00	<i>Deonno Lewis</i>	8/3/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	

062013911

8/3/20 Jean



NAL LOG-IN RECORD

Login # 43030

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 13

Paradise Unified School District

Phone Number

FAX Number

Contact

E-Mail Address

Paradise High School Bldg L:

5911 Maxwell Drive

Paradise, CA 95969

KS 10468

Date 7/28/2020

Sampling Date: 7/29/2020

Sampling Time 12:00:00 PM

Type Of Work: PLM-BI

No. of Samples 48

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	202	Building L, Office / Blue Carpet Yellow Mastic
19	203	Building L, Meeting Room / Green Carpet Yellow Mastic
20	204	Building L, Counselor's Office / Green Carpet Yellow Mastic
21	205A	Building L, Counselor's Office / Blue Floor Tile
22	205B	Building L, Counselor's Office / Black Mastic
23	206	Building L, Counselor's Office, Under Carpet / Gray Floor Tile
24	207A	Building L, North Principal's Office, Under Carpet / Red Floor Tile
25	207B	Building L, North Principal's Office, Under Carpet / Black Mastic
26	208A	Building L, South Principal's Office / Brown Floor Tile
27	208B	Building L, South Principal's Office / Black Mastic
28	208C	Building L, South Principal's Office / Yellow Carpet Mastic
29	209	Building L, Nurse's Office / Beige Pebble-Pattern Sheet Vinyl
30	210A	Building L, Nurse's Office / Light Brown 9" Floor Tile
31	210B	Building L, Nurse's Office / Black Mastic
32	211A	Building L, Principal's Secretary Office / White Floor Tile
33	211B	Building L, Principal's Secretary Office / Black Mastic
34	211C	Building L, Principal's Secretary Office / Yellow Carpet Mastic

RECEIVED
 NATIONAL ANALYTICAL INC.
 CARLE PLACE, NY
 20 AUG - 3 AM 10:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 1045 AM
<i>Ron Plumb</i>	08/01/20 12:00	<i>Michelle DeLo</i>	8/3/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062013911

8/3/20 269



NAL LOG-IN RECORD

Login # 43030

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 13

Paradise Unified School District

Paradise High School Bldg L:

5911 Maxwell Drive

Paradise, CA 95969

Phone Number

FAX Number

Contact

E-Mail Address

KS 10468

Date 7/28/2020

Sampling Date: 7/29/2020

Sampling Time 12:00:00 PM

Type Of Work: PLM-BI

No. of Samples 48

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	212A	Building L, Men's Room / Multi-Size Ceramic Tile Mortar
36	212B	Building L, Men's Room / Grout
37	213	Building L, Men's Room / Yellow Ceramic Tile, Mortar & Grout
38	214A	Building L, Nurse's Restroom, Bottom Layer / Sheet Vinyl
39	214B	Building L, Nurse's Restroom, Bottom Layer / Cove Base Mastic
40	215	Building L, Hallway / 4" Brown Cove Base Mastic
41	216	Building L, Upper Roof, Northeast Corner / Composition Rolled Roofing
42	217	Building L, Roof, Southeast Corner / Composition Rolled Roofing
43	218	Building L, Lower Roof, West Ridge / Composition Rolled Roofing
44	219	Building L, Lower Roof, Southeast Corner / Composition Rolled Roofing
45	220	Building L, Upper Roof, Electrical Conduits / Black Mastic with Silver Paint
46	221	Building L, Exterior, Southwest Corner (800sf) / Stucco
47	222	Building L, Exterior, East Side, North End / Stucco
48	223	Building L, Exterior, Southeast Corner, By Meeting Room / Stucco

RECEIVED
 NATIONAL ANALYTICAL LABORATORIES, INC.
 20 AUG - 3 AM 10:45
 CARLE PLACE, IY

Please analyze all Stucco, Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >= 1% For All Floor files, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY OF THE SAMPLES

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 8/3/20/10/15
<i>Ron Plumb</i>	08/01/20 12:00	<i>Michelle Berito</i>	8/3/20/10/15	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062013911

8/3/20 2400



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013909

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/03/2020 10:45 AM

Analysis Date: 08/03/2020

Collected Date: 07/29/2020

Project: Paradise High School, Bldg. M: 5911 Maxwell Drive, Paradise, CA 95969 / Log in #: 43031

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
224 062013909-0001	Building M, Room 104, East Wall - Texture	White Non-Fibrous Heterogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	None Detected
225 062013909-0002	Building M, Room 103, South Wall - Texture	White Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
226 062013909-0003	Building M, Hall, South Wall - Texture	White Non-Fibrous Heterogeneous		55% Ca Carbonate 45% Non-fibrous (Other)	None Detected
227 062013909-0004	Building M, Room 102, East Wall, South Side - Texture	White Non-Fibrous Heterogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	None Detected
228 062013909-0005	Building M, Room 101, Northeast Corner - Texture	White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
229 062013909-0006	Building M, Room 103, Southwest Corner - Sheetrock - Joint Compound	Tan/White Fibrous Heterogeneous	6% Cellulose	29% Ca Carbonate 60% Gypsum 5% Non-fibrous (Other)	None Detected
230 062013909-0007	Building M, Room 101, Southwest Corner - Sheetrock - Joint Compound	Tan/White Fibrous Heterogeneous	5% Cellulose	20% Ca Carbonate 70% Gypsum 5% Non-fibrous (Other)	None Detected
231 062013909-0008	Building M, Room 104 - Green Carpet Yellow Mastic	Gray/Yellow Non-Fibrous Heterogeneous		35% Ca Carbonate 55% Matrix 10% Non-fibrous (Other)	None Detected
232 062013909-0009	Building M, Hall - Green Carpet Yellow Mastic	Brown/Gray/Yellow Non-Fibrous Heterogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (Other)	None Detected
233 062013909-0010	Building M, Room 103, Northwest Corner - 4" Brown Cove Base Mastic	Brown Non-Fibrous Homogeneous		85% Matrix 13% Non-fibrous (Other)	2% Anthophyllite
234 062013909-0011	Building M, Room 104, Northeast Corner - 4" Brown Cove Base Mastic	Brown Non-Fibrous Homogeneous		82% Matrix 15% Non-fibrous (Other)	3% Anthophyllite
235 062013909-0012	Building M, Hall - 2"x4" Ceiling Tile w./ Small Fissures	Gray/White Fibrous Heterogeneous	55% Cellulose	35% Perlite 10% Non-fibrous (Other)	None Detected
236 062013909-0013	Building M, Room 102 - 2"x4" Ceiling Tile w./ Fissures	Gray/White Fibrous Heterogeneous	50% Cellulose 5% Min. Wool	25% Perlite 20% Non-fibrous (Other)	None Detected
237 062013909-0014	Building M, Room 101 - 12"x12" Ceiling Tile w./ Fissures	Gray/White Fibrous Heterogeneous	35% Cellulose 20% Min. Wool	25% Ca Carbonate 20% Non-fibrous (Other)	None Detected
238 062013909-0015	Building M, Room 101 - 12"x12" Ceiling Tile Mastic	Brown Non-Fibrous Homogeneous		88% Matrix 10% Non-fibrous (Other)	2% Chrysotile

Initial report from: 08/04/2020 11:16:16



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062013909

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
239 062013909-0016	Building M, Exterior, North Side, Center - Lightweight Concrete Panel	Gray/White/Green Non-Fibrous Heterogeneous		60% Quartz 20% Ca Carbonate 20% Non-fibrous (Other)	None Detected
240 062013909-0017	Building M, Exterior, South Side, By 104 - Lightweight Concrete Panel	Brown/Gray Non-Fibrous Heterogeneous		55% Quartz 20% Ca Carbonate 25% Non-fibrous (Other)	None Detected
241 062013909-0018	Building M, Exterior, South Side, By 102 - Lightweight Concrete Panel	Gray/White/Green Non-Fibrous Heterogeneous		55% Quartz 20% Ca Carbonate 25% Non-fibrous (Other)	None Detected
242 062013909-0019	Building M, Exterior, East Side, Middle - Lightweight Concrete Panel	Gray/White/Green Non-Fibrous Heterogeneous		50% Quartz 25% Ca Carbonate 25% Non-fibrous (Other)	None Detected
243 062013909-0020	Building M, Exterior, North Side, Soffit, Center - Lightweight Concrete Panel	Gray/White/Green Non-Fibrous Heterogeneous		55% Quartz 20% Ca Carbonate 25% Non-fibrous (Other)	None Detected
244 062013909-0021	Building M, Roof, Southeast Corner - Composition Rolled Roofing	Brown/Black Fibrous Heterogeneous	12% Cellulose	70% Matrix 15% Non-fibrous (Other)	3% Chrysotile
245 062013909-0022	Building M, Roof, North Side, Center - Composition Rolled Roofing	Brown/Black Fibrous Heterogeneous	11% Cellulose	70% Matrix 15% Non-fibrous (Other)	4% Chrysotile
246 062013909-0023	Building M, Lower Room Electrical Conduits - Black Mastic with Silver Paint	White/Black Non-Fibrous Heterogeneous	5% Cellulose	75% Matrix 20% Non-fibrous (Other)	None Detected

Analyst(s)

Steve Juscuk (23)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/04/2020 11:16:16



NAL LOG-IN RECORD

Login # 43031

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 14

Paradise Unified School District

Paradise High School Bldg M:

5911 Maxwell Drive

Paradise, CA 95969

KS 10468

Date 7/28/2020

Sampling Date: 7/29/2020

Sampling Time 12:00:00 PM

Type Of Work: PLM-BI

No. of Samples 23

Turnaround: 26 hours

Contact

E-Mail Address

RECEIVED
 NATIONAL ANALYTICAL LABORATORIES, INC.
 20 AUG - 3 AM 10:45

Num.	Sample ID#	Location/Description
1	224	Building M, Room 104, East Wall (2000sf) / Texture
2	225	Building M, Room 103, South Wall / Texture
3	226	Building M, Hall, South Wall / Texture
4	227	Building M, Room 102, East Wall, South Side / Texture
5	228	Building M, Room 101, Northeast Corner / Texture
6	229	Building M, Room 103, Southwest Corner / Sheetrock-Joint Compound
7	230	Building M, Room 101, Southwest Corner / Sheetrock-Joint Compound
8	231	Building M, Room 104 / Green Carpet Yellow Mastic
9	232	Building M, Hall / Green Carpet Yellow Mastic
10	233	Building M, Room 103, Northwest Corner / 4" Brown Cove Base Mastic
11	234	Building M, Room 104, Northeast Corner / 4" Brown Cove Base Mastic
12	235	Building M, Hall / 2"x4" w/ Small Fissures Ceiling Tile
13	236	Building M, Room 102 / 2'x4' Fissures Ceiling Tile
14	237	Building M, Room 101 / 12"x12" w/Fissures Ceiling Tile
15	238	Building M, Room 101 / 12"x12" Ceiling Tile Mastic
16	239	Building M, Exterior, North Side, Center / Lightweight Concrete Panel
17	240	Building M, Exterior, South Side, by 104 / Lightweight Concrete Panel

062013909

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 10:15 At:
<i>Ron Plumb</i>	08/01/20 12:00	<i>[Signature]</i>	8/3/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	

[Handwritten signature] 8/3/20 8:12am



NAL LOG-IN RECORD

Login # **43031**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot#

3911 / 14

Paradise Unified School District

Paradise High School Bldg M:

Date 7/28/2020

Phone Number

5911 Maxwell Drive

Sampling Date: 7/29/2020

FAX Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

Contact

KS 10468

Type Of Work: PLM-BI

E-Mail Address

No. of Samples 23

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	241	Building M, Exterior, South Side, by 102 / Lightweight Concrete Panel
19	242	Building M, Exterior, East Side, Middle / Lightweight Concrete Panel
20	243	Building M, Exterior, North Side, Soffit, Center / Lightweight Concrete Panel
21	244	Building M, Roof, Southeast Corner / Composition Rolled Roofing
22	245	Building M, Roof, North Side, Center / Composition Rolled Roofing
23	246	Building M, Lower Room Electrical Conduits / Black Mastic with Silver Paint

~~Please analyze all Stucco, Texture, Plaster and Sheetrock Joint Compound on a Test till First~~

~~Positive, Stop at First Positive Basis. Positive is >1%~~

~~For All Floor tiles, Analyze Mastic First.~~

~~If Mastic is Positive, Do not analyze Floor Tile~~

DO NOT POINT COUNT ANY OF THE SAMPLES

20 AUG - 3 AM 10:45
 CARLE PLACE NY
 NAL ANALYTICAL, INC.

062 013909

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
<i>Ron Plumb</i>	08/01/20 12:00	<i>[Signature]</i>	8/3/20 12:00	
Released By Signature	Date/Time	Received By Signature	Date/Time	

8/3/20 8:00



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014503

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:02 AM

Analysis Date: 08/11/2020

Collected Date: 08/05/2020

Project: Paradise High School, Bldg. N: 5911 Maxwell Drive, Paradise, CA 95969, Log in #: 43032

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
247 062014503-0001	Building N, Back Office, North West Corner, Room 108 - White Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	7% Cellulose <1% Glass	25% Ca Carbonate 50% Gypsum 3% Mica 15% Non-fibrous (Other)	None Detected
248 062014503-0002	Building N, Room 107, North West Corner - White Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	7% Cellulose 2% Glass	23% Ca Carbonate 50% Gypsum 4% Mica 14% Non-fibrous (Other)	None Detected
249 062014503-0003	Building N, Room 106, South East Corner - 12' Pin Hole Ceiling Tile	Brown/White Non-Fibrous Heterogeneous	70% Cellulose	15% Matrix 15% Non-fibrous (Other)	None Detected
250 062014503-0004	Building N, Room 106, South West Corner - 2'x4' Square Pattern Ceiling Tile	Tan/White Non-Fibrous Heterogeneous	32% Cellulose 35% Min. Wool	12% Ca Carbonate 21% Non-fibrous (Other)	None Detected
251A 062014503-0005	Building N, Room 109, Bottom Layer - Tan Floor Tile	Tan Non-Fibrous Homogeneous		50% Matrix 42% Non-fibrous (Other)	8% Chrysotile
251B 062014503-0006	Building N, Room 109, Bottom Layer - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous	3% Cellulose	15% Ca Carbonate 67% Matrix 15% Non-fibrous (Other)	None Detected
252 062014503-0007	Building N, Room 109, Entrance (120sf) - Brown Pebbled Vinyl Sheet Flooring	Brown/Gray/Tan Non-Fibrous Heterogeneous	7% Cellulose 4% Glass	20% Ca Carbonate 50% Matrix 19% Non-fibrous (Other)	None Detected
253 062014503-0008 <i>Inseparable pieces of floor tile.</i>	Building N, Room 109 - Brown Carpet - Yellow Mastic	Tan/Yellow Non-Fibrous Heterogeneous	4% Cellulose	30% Ca Carbonate 40% Matrix 26% Non-fibrous (Other)	<1% Chrysotile
254A 062014503-0009	Building N, Room 105, South East Corner, Bottom Layer - Tan Floor Tile	Tan Non-Fibrous Homogeneous		6% Ca Carbonate 60% Matrix 25% Non-fibrous (Other)	9% Chrysotile
254B 062014503-0010	Building N, Room 105, South East Corner, Bottom Layer - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous	21% Cellulose	6% Quartz 60% Matrix 13% Non-fibrous (Other)	None Detected
255A 062014503-0011	Building N, Room 107, East Wall, Bottom Layer - Brown Floor Tile	Brown Non-Fibrous Homogeneous	3% Cellulose	12% Ca Carbonate 55% Matrix 22% Non-fibrous (Other)	8% Chrysotile
255B 062014503-0012	Building N, Room 107, East Wall, Bottom Layer - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous	7% Cellulose	16% Ca Carbonate 63% Matrix 14% Non-fibrous (Other)	None Detected

Initial report from: 08/12/2020 00:42:04



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014503
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
256 <i>062014503-0013</i>	Building N, Room 107 - Green & Brown Carpet - Yellow Mastic	Gray/Tan Non-Fibrous Homogeneous	3% Cellulose	25% Ca Carbonate 50% Matrix 22% Non-fibrous (Other)	None Detected
257A <i>062014503-0014</i>	Building N, Room 106, North East Corner, Bottom Layer - Beige Floor Tile	Beige Non-Fibrous Homogeneous	4% Cellulose	60% Matrix 28% Non-fibrous (Other)	8% Chrysotile
257B <i>062014503-0015</i>	Building N, Room 106, North East Corner, Bottom Layer - Black Floor Tile Mastic	Black Non-Fibrous Heterogeneous	3% Cellulose	15% Ca Carbonate 59% Matrix 23% Non-fibrous (Other)	None Detected
258 <i>062014503-0016</i>	Building N, Room 106, North East Corner - Green & Brown Carpet - Yellow Mastic <i>Inseparable pieces of floor tile.</i>	Tan Non-Fibrous Homogeneous	7% Cellulose	20% Ca Carbonate 60% Matrix 13% Non-fibrous (Other)	<1% Chrysotile
259A <i>062014503-0017</i>	Building N, Room 110 - Tan Floor Tile	Tan Non-Fibrous Homogeneous	7% Cellulose	14% Ca Carbonate 48% Matrix 22% Non-fibrous (Other)	9% Chrysotile
259B <i>062014503-0018</i>	Building N, Room 110 - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous		10% Ca Carbonate 60% Matrix 30% Non-fibrous (Other)	None Detected
260 <i>062014503-0019</i>	Building N, Room 108, North Office, Over Black Mastic - White Leveling Compound	White Non-Fibrous Homogeneous	3% Cellulose	25% Ca Carbonate 55% Gypsum 17% Non-fibrous (Other)	None Detected
261A <i>062014503-0020</i>	Building N, Room 108, North Office, South East Corner, Over Black Mastic - Gray Leveling Compound	Gray Non-Fibrous Homogeneous	3% Cellulose	4% Quartz 55% Ca Carbonate 20% Gypsum 18% Non-fibrous (Other)	None Detected
262 <i>062014503-0021</i>	Building N, Room 107, North West Corner - 4" Brown Cove Base Mastic	Tan Non-Fibrous Homogeneous		60% Ca Carbonate 25% Matrix 15% Non-fibrous (Other)	None Detected
263 <i>062014503-0022</i>	Building N, South Side, Middle Exterior Siding - Light Weight Concrete	Gray Non-Fibrous Homogeneous	3% Cellulose	55% Quartz 25% Ca Carbonate 4% Mica 13% Non-fibrous (Other)	None Detected
264 <i>062014503-0023</i>	Building N, South East Corner, Exterior Siding - Light Weight Concrete	Gray/Green Non-Fibrous Heterogeneous	2% Cellulose	60% Quartz 25% Ca Carbonate 4% Mica 9% Non-fibrous (Other)	None Detected
265A <i>062014503-0024</i>	Building N, North East Corner, Exterior Siding, on Concrete - White & Green Texture	White/Green Non-Fibrous Heterogeneous	2% Cellulose	12% Ca Carbonate 4% Mica 60% Matrix 22% Non-fibrous (Other)	None Detected
265B <i>062014503-0025</i>	Building N, South Side, Center, Exterior Siding, On Concrete - White & Green Texture	White/Green Non-Fibrous Heterogeneous	3% Cellulose	22% Ca Carbonate 4% Mica 55% Matrix 16% Non-fibrous (Other)	None Detected

Initial report from: 08/12/2020 00:42:04



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014503
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
265C <small>062014503-0026</small>	Building N, South East Corner, Exterior Siding, On Concrete - White & Green Texture	Brown/White/Green Non-Fibrous Heterogeneous		4% Quartz 15% Ca Carbonate 60% Matrix 21% Non-fibrous (Other)	None Detected
265D <small>062014503-0027</small>	Building N, South West Corner, Exterior Siding, On Concrete - White & Green Texture	White/Green Non-Fibrous Heterogeneous		12% Quartz 17% Ca Carbonate 52% Matrix 19% Non-fibrous (Other)	None Detected
265E <small>062014503-0028</small>	Building N, West Side, Center, Exterior Siding, On Concrete - White & Green Texture	White/Green Non-Fibrous Heterogeneous	3% Cellulose	9% Quartz 18% Ca Carbonate 51% Matrix 19% Non-fibrous (Other)	None Detected
266 <small>062014503-0029</small>	Building N, South West Corner - Green Compositte Shingle Roofing	Black/Green Non-Fibrous Heterogeneous	3% Glass	4% Quartz 20% Ca Carbonate 60% Matrix 13% Non-fibrous (Other)	None Detected
267 <small>062014503-0030</small>	Building N, North East Corner - Green Compositte Shingle Roofing	Black/Green Non-Fibrous Heterogeneous	5% Cellulose 6% Glass	4% Quartz 21% Ca Carbonate 50% Matrix 14% Non-fibrous (Other)	None Detected
261B <small>062014503-0031</small>	Building N, Room 108, North Office, South East Corner, Gray Leveling Compound - Black Mastic	Black Non-Fibrous Homogeneous		69% Matrix 24% Non-fibrous (Other)	7% Chrysotile

Analyst(s)

Jimmy Encalada (31)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/12/2020 00:42:04



NAL LOG-IN RECORD

Login # 43032

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 15

Paradise High School Bldg N:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/5/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 31

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	259B	Building N, Room 110 / Black Floor Tile Mastic
19	260	Building N, Room 108, North Office, Over Black Mastic / White Leveling Compound
20	261A	Building N, Room 108, North Office, South East Corner, Over Black Mastic / Grey Leveling Compound
21	262	Building N, Room 107, North West Corner / 4' Brown Cove Base Mastic
22	263	Building N, South Side, Middle Exterior Siding / Light Weight Concrete
23	264	Building N, South East Corner, Exterior Siding / Light Weight Concrete
24	265A	Building N, North East Corner, Exterior Siding, On Concrete / White & Green Texture
25	265B	Building N, South Side, Center, Exterior Siding, On Concrete / White & Green Texture
26	265C	Building N, South East Corner, Exterior Siding, On Concrete / White & Green Texture
27	265D	Building N, South West Corner, Exterior Siding, On Concrete / White & Green Texture
28	265E	Building N, West Side, Center, Exterior Siding, On Concrete / White & Green Texture
29	266	Building N, South West Corner / Green Composite Shingle Roofing
30	267	Building N, North East Corner / Green Composite Shingle Roofing
31	261B	Building N, Room 108, North Office, South East Corner, Grey Leveling Compound / Black Mastic

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 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:02

Please analyze all Texture, Plaster and Sheetrock Joint Compound on a Test till First

Positive, Stop at First Positive Basis. Positive is ≥1%

062014503

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 8/10/20 9:00 AM
Ron Plumb	08/04/20 12:00			
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/11/20 5:56pm



NAL LOG-IN RECORD

Login # 43032

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 15
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg N:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 8/5/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 31
 Turnaround: 6 hours

For All Floor files, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor File

DO NOT POINT COUNT

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:02

062014503

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8/10/20	9:00am
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/11/20 5:57pm
 Page 2 Of 4



NAL LOG-IN RECORD

Login # 43032

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 15

Paradise High School Bldg N:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/5/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 31

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	259B	Building N, Room 110 / Black Floor Tile Mastic
19	260	Building N, Room 108, North Office, Over Black Mastic / White Leveling Compound
20	261A	Building N, Room 108, North Office, South East Corner, Over Black Mastic / Grey Leveling Compound
21	262	Building N, Room 107, North West Corner / 4' Brown Cove Base Mastic
22	263	Building N, South Side, Middle Exterior Siding / Light Weight Concrete
23	264	Building N, South East Corner, Exterior Siding / Light Weight Concrete
24	265A	Building N, North East Corner, Exterior Siding, On Concrete / White & Green Texture
25	265B	Building N, South Side, Center, Exterior Siding, On Concrete / White & Green Texture
26	265C	Building N, South East Corner, Exterior Siding, On Concrete / White & Green Texture
27	265D	Building N, South West Corner, Exterior Siding, On Concrete / White & Green Texture
28	265E	Building N, West Side, Center, Exterior Siding, On Concrete / White & Green Texture
29	266	Building N, South West Corner / Green Composite Shingle Roofing
30	267	Building N, North East Corner / Green Composite Shingle Roofing
31	261B	Building N, Room 108, North Office, South East Corner, Grey Leveling Compound / Black Mastic

20 AUG 10 AM 9:02
 NATIONAL ANALYTICAL LABORATORIES, INC.
 CARLE PLACE, NY

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First

Positive, Stop at First Positive Basis, Positive is ≥1%

062014503

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8/10/20 9:09	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:



NAL LOG-IN RECORD

Login # 43032

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 15

Paradise High School Bldg N:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/5/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 31

E-Mail Address

Turnaround: 6 hours

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:02

062014503

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	
Ron Plumb	08/04/20 12:00		8/10/20	Due:
Released By Signature	Date/Time	Received By Signature	Date/Time	At:



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014502

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:01 AM

Analysis Date: 08/11/2020

Collected Date: 08/05/2020

Project: Paradise High School, Bldg. O: 5911 Maxwell Drive, Paradise, CA 95969, Login #:43033

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
268 062014502-0001	Building O, Room 124, South West Corner - Plaster	Tan/White Non-Fibrous Heterogeneous		55% Quartz 15% Ca Carbonate 4% Vermiculite 11% Gypsum 4% Mica 11% Non-fibrous (Other)	None Detected
269 062014502-0002	Building O, Room 125, Storage, South East Corner (900 sf) - Plaster	Brown/White Non-Fibrous Heterogeneous		40% Quartz 11% Ca Carbonate 7% Vermiculite 15% Gypsum 27% Non-fibrous (Other)	None Detected
270 062014502-0003	Building O, Room 125, Storage, North West Corner - Plaster	Brown/White Non-Fibrous Heterogeneous		48% Quartz 12% Ca Carbonate 11% Vermiculite 10% Gypsum 19% Non-fibrous (Other)	None Detected
271A 062014502-0004	Building O, Room 124, South West Corner, Bottom Layer - Brown Sheet Vinyl Flooring	Brown Non-Fibrous Heterogeneous		32% Ca Carbonate 50% Matrix 18% Non-fibrous (Other)	None Detected
271B 062014502-0005	Building O, Room 124, South West Corner, Bottom Layer - Mastic	Tan Fibrous Heterogeneous	<1% Glass	88% Matrix 12% Non-fibrous (Other)	None Detected
272A 062014502-0006	Building O, Room 124, South West Corner - 12" White with Brown & Green Flecks Floor Tile	White Non-Fibrous Heterogeneous		45% Ca Carbonate 34% Matrix 21% Non-fibrous (Other)	None Detected
272B 062014502-0007	Building O, Room 124, South West Corner - Black Mastic	Black Non-Fibrous Heterogeneous		65% Matrix 35% Non-fibrous (Other)	None Detected
273A 062014502-0008	Building O, Room 125, Storage, West Wall, with Brown Mastic - Beige Sheet Vinyl Flooring	Tan/White Non-Fibrous Heterogeneous		65% Ca Carbonate 15% Matrix 20% Non-fibrous (Other)	None Detected
273B 062014502-0009	Building O, Room 125, Storage, West Wall, Beige Sheet Vinyl Flooring - Brown Mastic	Brown Non-Fibrous Heterogeneous		12% Ca Carbonate 65% Matrix 23% Non-fibrous (Other)	None Detected
274 062014502-0010	Building O, Room 125, Sink Bottom Coatings (5 each) - White Sink Coating	Gray Fibrous Heterogeneous	12% Cellulose	8% Ca Carbonate 70% Matrix 10% Non-fibrous (Other)	None Detected
275A 062014502-0011	Building O, Room 125, Bottom Layer with Black Mastic - Beige Floor Tile				Positive Stop (Not Analyzed)

Initial report from: 08/12/2020 11:21:56



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Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014502
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
<i>Black Mastic is Positive.</i>					
276A 062014502-0012	Building O, Room 125, Middle Layer with Yellow Mastic - Sheet Vinyl Flooring	Brown/Yellow Fibrous Heterogeneous	12% Cellulose	9% Ca Carbonate 45% Matrix 34% Non-fibrous (Other)	None Detected
277 062014502-0013	Building O, Room 125, Top Layer - 12" White with Brown & Green Flecks Floor Tile	White Non-Fibrous Heterogeneous		18% Ca Carbonate 70% Matrix 12% Non-fibrous (Other)	None Detected
278A 062014502-0014	Building O, Room 126, Bottom Layer with Black Mastic, Yellow on Top - Gray Floor Tile	Gray Non-Fibrous Heterogeneous		18% Ca Carbonate 70% Matrix 12% Non-fibrous (Other)	None Detected
278B 062014502-0015	Building O, Room 126, Bottom Layer Floor Tile with Yellow on Top - Black Mastic	Black Non-Fibrous Heterogeneous		6% Ca Carbonate 88% Matrix 6% Non-fibrous (Other)	None Detected
278C 062014502-0016	Building O, Room 126, Bottom Layer Floor Tile with Black Mastic - Yellow Mastic	Tan Non-Fibrous Heterogeneous		8% Ca Carbonate 80% Matrix 12% Non-fibrous (Other)	None Detected
279A 062014502-0017	Building O, Room 126, with Yellow Mastic - 12" White with Brown & Green Flecks Floor Tile	White Non-Fibrous Heterogeneous		30% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
279B 062014502-0018	Building O, Room 126, 12" White Floor Tile with Brown & Green Flecks - Yellow Mastic	Yellow Non-Fibrous Heterogeneous		11% Ca Carbonate 78% Matrix 11% Non-fibrous (Other)	None Detected
280 062014502-0019	Building O, Room 126 - 4" Brown Cove Base Mastic	Gray/Tan Non-Fibrous Heterogeneous		30% Ca Carbonate 58% Matrix 12% Non-fibrous (Other)	None Detected
281 062014502-0020	Building O, Room 127 (400 sf) - 2'x4' with Square Pattern Ceiling Tile	Gray/White Fibrous Heterogeneous	45% Cellulose 20% Min. Wool	8% Perlite 27% Non-fibrous (Other)	None Detected
282 062014502-0021	Building O, Room 127, South East Corner - 4" Tan Cove Base Mastic	Brown/White Non-Fibrous Heterogeneous		18% Ca Carbonate 75% Matrix 5% Non-fibrous (Other)	2% Anthophyllite
283 062014502-0022	Building O, North East Corner (400 sf) - Brown Carpet - Yellow Mastic	Brown/White/Yellow Non-Fibrous Heterogeneous	3% Cellulose <1% Synthetic	12% Ca Carbonate 80% Matrix 5% Non-fibrous (Other)	None Detected
284A 062014502-0023	Building O, Room 127, North East Corner with Black Mastic Under Carpet - Yellow Floor Tile	Yellow Non-Fibrous Homogeneous		34% Ca Carbonate 50% Matrix 10% Non-fibrous (Other)	6% Chrysotile
284B 062014502-0024	Building O, Room 127, North East Corner, Yellow Floor Tile under Carpet - Black Mastic	Black Non-Fibrous Homogeneous		10% Ca Carbonate 85% Matrix 5% Non-fibrous (Other)	None Detected

Initial report from: 08/12/2020 11:21:56



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

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<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014502

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
285 062014502-0025	Building O, Room 127, Entrance (6 sf) - Exterior Carpet Mastic	Brown/White/Yellow Non-Fibrous Heterogeneous		20% Ca Carbonate 65% Matrix 15% Non-fibrous (Other)	None Detected
286 062014502-0026	Building O, Room 127, Above Drop Ceiling (600 sf) - 12" with Pin Hole Ceiling Tile	Brown/White Fibrous Heterogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
287 062014502-0027	Building O, Room 127 above 12" Ceiling Tile (400 sf) - Paper/Foil Insulation	Brown/Black/Silver Fibrous Heterogeneous	35% Cellulose	30% Matrix 35% Non-fibrous (Other)	None Detected
288A 062014502-0028	Building O, North Side, Center, Exterior Siding on Concrete - Texture	Gray/Yellow/Green Non-Fibrous Heterogeneous		85% Matrix 15% Non-fibrous (Other)	None Detected
288B 062014502-0029	Building O, South East Corner, Center, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		80% Matrix 20% Non-fibrous (Other)	None Detected
288C 062014502-0030	Building O, West Side, Center, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		70% Matrix 30% Non-fibrous (Other)	None Detected
288D 062014502-0031	Building O, East Side, North End, Exterior Siding on Concrete - Texture	Brown/White/Green Non-Fibrous Heterogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
288E 062014502-0032	Building O, South West Corner, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		85% Matrix 15% Non-fibrous (Other)	None Detected
289 062014502-0033	Building O, North Side - Exterior Window Glazing	Gray/Tan Non-Fibrous Heterogeneous		90% Ca Carbonate 10% Non-fibrous (Other)	None Detected
290 062014502-0034	Building O, West Side, Middle Exterior Siding - Light Weight Concrete	Gray/Green Non-Fibrous Heterogeneous		55% Quartz 20% Ca Carbonate 25% Non-fibrous (Other)	None Detected
291 062014502-0035	Building O, North West Corner - Green Composite Shingle Roofing	Brown/Black/Green Fibrous Heterogeneous	3% Glass	22% Ca Carbonate 45% Matrix 30% Non-fibrous (Other)	None Detected
292 062014502-0036	Building O, South East Corner - Green Composite Shingle Roofing	Black/Green Fibrous Heterogeneous	3% Glass	27% Ca Carbonate 40% Matrix 30% Non-fibrous (Other)	None Detected
275B 062014502-0037	Building O, Room 125, Beige Floor Tile, Bottom Layer - Black Mastic	Black Non-Fibrous Homogeneous		16% Ca Carbonate 75% Matrix 5% Non-fibrous (Other)	4% Chrysotile
276B 062014502-0038	Building O, Room 125, Middle Layer, Sheet Vinyl Flooring - Yellow Mastic	Yellow Non-Fibrous Homogeneous		35% Ca Carbonate 55% Matrix 10% Non-fibrous (Other)	None Detected

Initial report from: 08/12/2020 11:21:56



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014502

Customer ID: NAL51

Customer PO:

Project ID:

Analyst(s)

Erick Rosa (19)

Steve Juszczak (18)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/12/2020 11:21:56



NAL LOG-IN RECORD

Login # 43033

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 16

Paradise High School Bldg O:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/5/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 38

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	268	Building O, Room 124, South West Corner / Plaster
2	269	Building O, Room 125, Storage, South East Corner (900sf) / Plaster
3	270	Building O, Room 125, Storage, North West Corner / Plaster
4	271A	Building O, Room 124, South West Corner, Bottom Layer / Brown Sheet Vinyl Flooring
5	271B	Building O, Room 124, South West Corner, Bottom Layer / Mastic
6	272 A	Building O, Room 124, South West Corner / 12" White with Brown & Green Flecks Floor Tile
7	272B	Building O, Room 124, South West Corner / Black Mastic
8	273A	Building O, Room 125, Storage, West Wall, with Brown Mastic / Beige Sheet Vinyl Flooring
9	273B	Building O, Room 125, Storage, West Wall, Beige Sheet Vinyl Flooring / Brown Mastic
10	274	Building O, Room 125, Sink Bottom Coatings (5 each) / White Sink Coating
11	275A	Building O, Room 125, Bottom Layer with Black Mastic / Beige Floor Tile
12	276A	Building O, Room 125, Middle Layer with Yellow Mastic / Sheet Vinyl Flooring
13	277	Building O, Room 125, Top Layer / 12" White with Brown & Green Flecks Floor Tile
14	278A	Building O, Room 126, Bottom Layer with Black Mastic, Yellow on Top / Grey Floor Tile
15	278B	Building O, Room 126, Bottom Layer Floor Tile with Yellow on Top / Black Mastic
16	278C	Building O, Room 126, Bottom Layer Floor Tile with Black Mastic / Yellow Mastic
17	279A	Building O, Room 126, with Yellow Mastic / 12" White with Brown & Green Flecks Floor Tile

RECEIVED
NATIONAL ANALYTICAL, INC.
CARLE PLACE, NY
20 AUG 10 AM 9:01

062014502

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 9:01 AM
Ron Plumb	08/04/20 12:00	Michelle DeLo	8/10/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Ron Plumb
8/11/20

J. DeLo



NAL LOG-IN RECORD

Login # 43033

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 16

Paradise High School Bldg O:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/5/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 38

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	279B	Building O, Room 126, 12" White Floor Tile with Brown & Green Flecks / Yellow Mastic
19	280	Building O, Room 126 / 4" Brown Cove Base Mastic
20	281	Building O, Room 127 (400sf) / 2'x4' with Square Pattern Ceiling Tile
21	282	Building O, Room 127, South East Corner / 4" Tan Cove Base Mastic
22	283	Building O, North East Corner (400sf) / Brown Carpet Yellow Mastic
23	284A	Building O, Room 127, North East Corner with Black Mastic Under Carpet / Yellow Floor Tile
24	284B	Building O, Room 127, North East Corner, Yellow Floor Tile under Carpet / Black Mastic
25	285	Building O, Room 127, Entrance (6sf) / Exterior Carpet Mastic
26	286	Building O, Room 127, Above Drop Ceiling (600sf) / 12" with Pin Hole Ceiling Tile
27	287	Building O, Room 127 above 12" Ceiling Tile (400sf) / Paper/Foil Insulation
28	288A	Building O, North Side, Center, Exterior Siding on Concrete / Texture
29	288B	Building O, South East Corner, Center, Exterior Siding on Concrete/ Texture
30	288C	Building O, West Side, Center, Exterior Siding on Concrete/ Texture
31	288D	Building O, East Side, North End, Exterior Siding on Concrete/ Texture
32	288E	Building O, South West Corner, Exterior Siding on Concrete/ Texture
33	289	Building O, North Side / Exterior Window Glazing
34	290	Building O, West Side, Middle Exterior Siding / Light Weight Concrete

RECEIVED
 NATIONAL ANALYTICAL, INC.
 20 AUG 10 AM 9:01
 500 RIVER PLACE, N.

062014502

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00	<i>Michelle DeVito</i>	8/10/20 9:01	At:
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Carthon
8/11/20

1 Bluko 657N



NAL LOG-IN RECORD

Login # 43033

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 16

Paradise High School Bldg O:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/5/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 38

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	291	Building O, North West Corner / Green Composite Shingle Roofing
36	292	Building O, South East Corner / Green Composite Shingle Roofing
37	275B	Building O, Room 125, Beige Floor Tile, Bottom Layer / Black Mastic
38	276B	Building O, Room 125, Middle Layer, Sheet Vinyl Flooring / Yellow Mastic

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

062014502

RECEIVED
NATIONAL ANALYTICAL, INC.
CARLE PLACE, NY
20 AUG 10 AM 9:01

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00	<i>[Signature]</i>	8/10/20	9:01 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

[Signature]
8/11/20

[Signature] 8/11/20 6:00



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014501

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:04 AM

Analysis Date: 08/10/2020

Collected Date: 08/04/2020

Project: Paradise High School, Bldg. P: 5911 Maxwell Drive, Paradise, CA 95969

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
299-A 062014501-0001	Building P, Room 131, North Wall, Center (-1800sf) - Texture	White Non-Fibrous Heterogeneous		25% Ca Carbonate 55% Matrix 20% Non-fibrous (Other)	None Detected
299-B 062014501-0002	Building P, Room 131, South Wall - Texture	Brown/White Non-Fibrous Heterogeneous		52% Ca Carbonate 3% Mica 15% Matrix 30% Non-fibrous (Other)	<1% Chrysotile
299-C 062014501-0003	Building P, Room 131, West Wall - Texture	White Non-Fibrous Heterogeneous		35% Ca Carbonate 5% Mica 25% Matrix 35% Non-fibrous (Other)	None Detected
299-D 062014501-0004	Building P, Room 132, Center, West Wall - Texture	Tan/White Non-Fibrous Heterogeneous		30% Ca Carbonate 50% Matrix 20% Non-fibrous (Other)	None Detected
299-E 062014501-0005	Building P, Room 132, Center, South Wall - Texture	Tan/White Non-Fibrous Heterogeneous		40% Ca Carbonate 40% Matrix 20% Non-fibrous (Other)	None Detected
300 062014501-0006	Building P, Room 132, Northwest Corner - Sheetrock - Joint Compound	Tan/White Fibrous Heterogeneous	4% Cellulose	21% Ca Carbonate 70% Gypsum 5% Non-fibrous (Other)	<1% Chrysotile
301 062014501-0007	Building P, Room 131, Southwest Corner - Sheetrock - Joint Compound	Brown/White Fibrous Heterogeneous	5% Cellulose <1% Glass	20% Ca Carbonate 67% Gypsum 8% Non-fibrous (Other)	None Detected
302 062014501-0008	Building P, Room 131 - 12" Ceiling Tile w./ Pinhole & Fissures	Gray/White Fibrous Heterogeneous	55% Cellulose 15% Min. Wool	30% Non-fibrous (Other)	None Detected
303 062014501-0009	Building P, Room 131 - 12" Ceiling Tile - Brown Mastic	Brown Non-Fibrous Homogeneous		90% Matrix 8% Non-fibrous (Other)	2% Chrysotile
304 062014501-0010	Building P, Room 131, Southeast Corner - 4" Brown Cove Base - Mastic	Brown Non-Fibrous Homogeneous		82% Matrix 15% Non-fibrous (Other)	3% Anthophyllite
305 062014501-0011	Building P, Room 131 - Multi-Colored Carpet - Yellow Mastic	Brown/Yellow Non-Fibrous Heterogeneous		45% Ca Carbonate 45% Matrix 10% Non-fibrous (Other)	None Detected
306 062014501-0012	Building P, Room 132 - Multi-Colored Carpet - Yellow Mastic	Brown/Yellow Non-Fibrous Heterogeneous		60% Ca Carbonate 35% Matrix 5% Non-fibrous (Other)	None Detected
307 062014501-0013	Building P, HVAC - Gray Seam Mastic	White Non-Fibrous Homogeneous		50% Ca Carbonate 40% Matrix 10% Non-fibrous (Other)	None Detected
308-A 062014501-0014	Building P, Northeast Corners, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		30% Quartz 25% Ca Carbonate 45% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 15:37:47



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014501
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
308-B <small>062014501-0015</small>	Building P, West Side, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		5% Quartz 20% Ca Carbonate 60% Matrix 15% Non-fibrous (Other)	None Detected
308-C <small>062014501-0016</small>	Building P, South Side, Middle, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		20% Quartz 35% Ca Carbonate 35% Matrix 10% Non-fibrous (Other)	None Detected
308-D <small>062014501-0017</small>	Building P, Southeast Corner, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		35% Quartz 35% Ca Carbonate 30% Non-fibrous (Other)	None Detected
308-E <small>062014501-0018</small>	Building P, Southwest Corner, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		45% Quartz 30% Ca Carbonate 25% Non-fibrous (Other)	None Detected
309 <small>062014501-0019</small>	Building P, Roof, Southeast by Ridge - Gray Composition Shingle Roofing	Black Fibrous Heterogeneous	15% Cellulose 3% Glass	50% Matrix 27% Non-fibrous (Other)	5% Chrysotile
310 <small>062014501-0020</small>	Building P, Roof, Northwest Corner - Gray Composition Shingle Roofing	Gray/Black Fibrous Heterogeneous	20% Cellulose 2% Glass	45% Matrix 30% Non-fibrous (Other)	3% Chrysotile
311 <small>062014501-0021</small>	Building P, HVAC Area - Gray Roofing Patch	Black Non-Fibrous Homogeneous	5% Cellulose	35% Ca Carbonate 50% Matrix 10% Non-fibrous (Other)	None Detected

Analyst(s) _____
 Steve Juscuk (21)


 Daniel Clarke, Asbestos Laboratory Manager
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/11/2020 15:37:47

062 014501



NAL LOG-IN RECORD

Login # 43034

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 17

Paradise High School Bldg P:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/4/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-B

Contact

KS 10468

No. of Samples 21

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	299-A	Building P, Room 131, North Wall, Center (-1800sf) / Texture
2	299-B	Building P, Room 131, South Wall / Texture
3	299-C	Building P, Room 131, West Wall / Texture
4	299-D	Building P, Room 132, Center, West Wall / Texture
5	299-E	Building P, Room 132, Center, South Wall / Texture
6	300	Building P, Room 132, Northwest Corner / Sheetrock-Joint Compound
7	301	Building P, Room 131, Southwest Corner / Sheetrock-Joint Compound
8	302	Building P, Room 131 / 12" w/ Pinhole & Fissures Ceiling Tile
9	303	Building P, Room 131 / 12" Ceiling Tile Brown Mastic
10	304	Building P, Room 131, Southeast Corner / 4" Brown Cove Base Mastic
11	305	Building P, Room 131 / Multi-Colored Carpet Yellow Mastic
12	306	Building P, Room 132 / Multi-Colored Carpet Yellow Mastic
13	307	Building P, HVAC / Gray Seam Mastic
14	308-A	Building P, Northeast Corners, Exterior Siding on Concrete / Texture
15	308-B	Building P, West Side, Exterior Siding on Concrete / Texture
16	308-C	Building P, South Side, Middle, Exterior Siding on Concrete / Texture
17	308-D	Building P, Southeast Corner, Exterior Siding on Concrete / Texture

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 20 AUG 10 AM 9:04

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8-10-2020 9:04	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Handwritten signature and date: 8/10/20 20m

062 014501



NAL LOG-IN RECORD

Login # 43034

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 17

Paradise High School Bldg P:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 21

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	308-E	Building P, Southwest Corner, Exterior Siding on Concrete / Texture
19	309	Building P, Roof, Southeast by Ridge / Gray Composition Shingle Roofing
20	310	Building P, Roof, Northwest Corner / Gray Composition Shingle Roofing
21	311	Building P, HVAC Area / Gray Roofing Patch

Please analyze all Texture, Plaster, and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor tile

DO NOT POINT COUNT

RECEIVED
 NATIONAL ANALYTICAL, INC.
 100 RIVER PLACE, NY
 AUG 10 AM 9:04

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: <i>galla</i>
Ron Plumb	08/04/20 12:00	<i>[Signature]</i>	8/10/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

10/10/20 7.2



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014499

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:04 AM

Analysis Date: 08/10/2020

Collected Date: 08/05/2020

Project: Paradise High School Bldg Q: 5911 Maxwell Drive, Paradise, CA 95969, Log in #:43035

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
293 062014499-0001	Building Q, Room 128 - 4" Brown Cove Base - Mastic	White Non-Fibrous Homogeneous		70% Ca Carbonate 25% Matrix 5% Non-fibrous (Other)	None Detected
294 062014499-0002	Building Q, Room 128 - Brown Carpet - Yellow Mastic	Yellow Non-Fibrous Homogeneous		35% Ca Carbonate 60% Matrix 5% Non-fibrous (Other)	None Detected
295 062014499-0003	Building Q, Room 130 - Brown Carpet - Yellow Mastic	Yellow Non-Fibrous Homogeneous	3% Cellulose	35% Ca Carbonate 57% Matrix 5% Non-fibrous (Other)	None Detected
296 062014499-0004	Building Q, Room 130 - 4" Brown Cove Base - Mastic	White Non-Fibrous Homogeneous		67% Ca Carbonate 27% Matrix 6% Non-fibrous (Other)	None Detected
297 062014499-0005	Building Q, Roof, South East Side, Under Metal - Roofing Felt	Brown/Black Fibrous Homogeneous	40% Cellulose	55% Matrix 5% Non-fibrous (Other)	None Detected
298 062014499-0006	Building Q, Roof Covering Screws on Ridge Cap (6sf) - Gray Mastic	Gray Non-Fibrous Homogeneous		35% Ca Carbonate 59% Matrix 6% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (6)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/10/2020 22:40:01



NAL LOG-IN RECORD

Login # 43035

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 18

Paradise High School Bldg Q:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/5/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BL

Contact

No. of Samples 6

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	293	Building Q, Room 128 / 4" Brown Cove Base Mastic
2	294	Building Q, Room 128 / Brown Carpet Yellow Mastic
3	295	Building Q, Room 130 / Brown Carpet Yellow Mastic
4	296	Building Q, Room 130 / 4" Brown Cove Base Mastic
5	297	Building Q, Roof, South East Side under Metal / Roofing Felt
6	298	Building Q, Roof Covering Screws on Ridge Cap (6sf) / Gray Mastic

DO NOT PRINT COUNT

062014499

8/10-20

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ENSL ANALYTICAL, INC.
CARLE PLACE, NY
20 AUG 10 AM 9:04

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8/10/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014018

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/04/2020 11:44 AM

Analysis Date: 08/05/2020

Collected Date: 07/29/2020

Project: Paradise High School Bldg R: 5911 Maxwell Drive, Paradise, CA 95969, Login # 43036

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
90 062014018-0001	Building R, Room 203 (100sf) - 2'x4' Pin Hole w./ Fissure Ceiling Tile	Brown/White Fibrous Heterogeneous	80% Cellulose <1% Min. Wool	4% Perlite 16% Non-fibrous (Other)	None Detected
91 062014018-0002	Building R, Room 204, West Wall (1,400sf) - Sheetrock - Joint Compound	Brown/White Fibrous Heterogeneous	2% Cellulose	25% Ca Carbonate 65% Gypsum 8% Non-fibrous (Other)	<1% Chrysotile
92 062014018-0003	Building R, Room 206, East Wall by Door - Sheetrock - Joint Compound	Brown/White Fibrous Heterogeneous	2% Cellulose	15% Ca Carbonate 65% Gypsum 18% Non-fibrous (Other)	<1% Chrysotile
93A 062014018-0004	Building R, Room 205 Southwest Corner (250sf) - 12" Beige Floor Tile				Not Analyzed
93B 062014018-0005	Building R, Room 205 Southwest Corner (250sf) - 12" Beige Mastic	Black Non-Fibrous Heterogeneous		80% Matrix 17% Non-fibrous (Other)	3% Chrysotile
94 062014018-0006	Building R, Room 205 (201f) - 4" Black Cove Base Mastic	Black Non-Fibrous Heterogeneous		34% Ca Carbonate 48% Matrix 18% Non-fibrous (Other)	None Detected
95A 062014018-0007	Building R, Room 206, Under Carpet (550sf) - Beige Ceiling Tile	Tan Non-Fibrous Heterogeneous		45% Ca Carbonate 35% Matrix 20% Non-fibrous (Other)	None Detected
95B 062014018-0008	Building R, Room 206, Under Carpet (550sf) - Beige Mastic	Yellow Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
96 062014018-0009	Building R, Room 206 (550sf) - Blue Carpet - Yellow Mastic	Tan Non-Fibrous Heterogeneous		47% Ca Carbonate 40% Matrix 13% Non-fibrous (Other)	None Detected
97 062014018-0010	Building R, Room 206 (801f) - 4" Beige Cove Base Mastic	Tan Non-Fibrous Heterogeneous		20% Ca Carbonate 68% Matrix 12% Non-fibrous (Other)	None Detected
98 062014018-0011	Building R, Room 203 (450sf) - Brown Carpet - Yellow Mastic	Tan Non-Fibrous Heterogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
99 062014018-0012	Building R, Library, Northeast Corner - Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	7% Cellulose 2% Glass	25% Ca Carbonate 50% Gypsum 16% Non-fibrous (Other)	<1% Chrysotile
100 062014018-0013	Building R, Room 208, East Wall - Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	4% Cellulose 2% Glass	21% Ca Carbonate 55% Gypsum 18% Non-fibrous (Other)	<1% Chrysotile

Initial report from: 08/05/2020 17:33:20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

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EMSL Order: 062014018

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
101 <i>062014018-0014</i>	Building R, Room 208 - 2'x4' Pin Holes-Fissure Ceiling Tile	Tan/White Non-Fibrous Heterogeneous	25% Cellulose 30% Min. Wool	15% Ca Carbonate 30% Non-fibrous (Other)	None Detected
102A <i>062014018-0015</i>	Building R, Room 210, 208 & 209 Server Room - 12" Beige Floor Tile <i>Floor tile was not analyzed since mastic 102B is positive.</i>				Not Analyzed
102B <i>062014018-0016</i>	Building R, Room 210, 208 & 209 Server Room - Black Mastic	Black Non-Fibrous Homogeneous	6% Cellulose	68% Matrix 22% Non-fibrous (Other)	4% Chrysotile
103 <i>062014018-0017</i>	Building R, Library, Northside Kitchen (50sf) - Square Pattern over Floor Tile Linoleum	Tan/White Non-Fibrous Heterogeneous	12% Cellulose 4% Glass	25% Ca Carbonate 35% Matrix 24% Non-fibrous (Other)	None Detected
104A <i>062014018-0018</i>	Building R, Between Library & Room 208 - Stair Tread	Black Non-Fibrous Homogeneous		33% Ca Carbonate 50% Matrix 17% Non-fibrous (Other)	None Detected
104B <i>062014018-0019</i>	Building R, Between Library & Room 208 - Mastic	Brown Non-Fibrous Homogeneous		65% Matrix 33% Non-fibrous (Other)	2% Anthophyllite
105 <i>062014018-0020</i>	Building R, Room 209, West Wall - 4" Black Cove Base Mastic	Brown/Tan Non-Fibrous Heterogeneous	3% Cellulose	75% Matrix 20% Non-fibrous (Other)	2% Anthophyllite
106 <i>062014018-0021</i>	Building R, Library, Eastside under Carpet - Black Mastic	Black Non-Fibrous Homogeneous	5% Cellulose	68% Matrix 21% Non-fibrous (Other)	6% Chrysotile
107 <i>062014018-0022</i>	Building R, Library / Computer Room under (3,400sf) - 2'x2' Brown Carpet Squares - Black Mastic	Tan/Black Non-Fibrous Homogeneous	6% Cellulose	22% Ca Carbonate 60% Matrix 12% Non-fibrous (Other)	<1% Chrysotile
108 <i>062014018-0023</i>	Building R, Room 208, Northside, Exterior - Window Glazing <i>TEM recommended.</i>	Gray Non-Fibrous Homogeneous	<1% Fibrous (Other)	78% Ca Carbonate 22% Non-fibrous (Other)	None Detected
109 <i>062014018-0024</i>	Building R, Room 210, Southwest Corner - Sheetrock - Joint Compound	Brown/Tan Non-Fibrous Heterogeneous	7% Cellulose	26% Ca Carbonate 50% Gypsum 5% Mica 12% Non-fibrous (Other)	<1% Chrysotile
110 <i>062014018-0025</i>	Building R, Northwest Corner - Composition Rolled Roofing	White/Black Non-Fibrous Heterogeneous	8% Cellulose 4% Synthetic	8% Quartz 12% Ca Carbonate 48% Matrix 20% Non-fibrous (Other)	None Detected
111 <i>062014018-0026</i>	Building R, Northwest Corner - Composition Rolled Roofing	Black Non-Fibrous Homogeneous	4% Cellulose 8% Glass	7% Quartz 18% Ca Carbonate 50% Matrix 13% Non-fibrous (Other)	None Detected
112 <i>062014018-0027</i>	Building R, Center over Library - Composition Rolled Roofing	Black Non-Fibrous Heterogeneous	4% Synthetic 7% Glass	18% Ca Carbonate 48% Matrix 23% Non-fibrous (Other)	None Detected

Initial report from: 08/05/2020 17:33:20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014018
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
113 062014018-0028	Building R, Southwest Corner - Composition Rolled Roofing	White/Black Non-Fibrous Heterogeneous	7% Cellulose 4% Synthetic	7% Quartz 19% Ca Carbonate 48% Matrix 15% Non-fibrous (Other)	None Detected
114 062014018-0029	Building R, Northside Roof over Walkway - Composition Rolled Roofing	Brown/Black Non-Fibrous Homogeneous	9% Cellulose 5% Glass	7% Quartz 12% Ca Carbonate 50% Matrix 17% Non-fibrous (Other)	None Detected
115 062014018-0030	Building R, Southside, Lower Roof over Walkway - Composition Rolled Roofing	White/Black Non-Fibrous Heterogeneous	5% Synthetic 7% Glass	8% Quartz 9% Ca Carbonate 50% Matrix 21% Non-fibrous (Other)	None Detected
116 062014018-0031	Building R, Upper Room - Penetration Mastic	White/Black Non-Fibrous Heterogeneous	3% Cellulose	25% Ca Carbonate 60% Matrix 12% Non-fibrous (Other)	None Detected
117A 062014018-0032	Building R, Upper Roof around Sleepers - Roof Patch Compound	White Non-Fibrous Homogeneous	3% Cellulose	25% Ca Carbonate 50% Matrix 22% Non-fibrous (Other)	None Detected
117B 062014018-0033	Building R, Drama Room, Southwest Corner - Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	7% Cellulose <1% Glass	20% Ca Carbonate 50% Gypsum 4% Mica 19% Non-fibrous (Other)	<1% Chrysotile
118 062014018-0034	Building R, Girls Restroom - 4" White Ceramic Tile w./ Grout	Gray/Tan/White Non-Fibrous Homogeneous		48% Quartz 23% Ca Carbonate 4% Mica 25% Non-fibrous (Other)	None Detected
119 062014018-0035	Building R, Girls Restroom - 1x2 Green Ceramic Tile w./ Grout	Gray/Tan/Silver Non-Fibrous Heterogeneous		50% Quartz 25% Ca Carbonate 3% Mica 22% Non-fibrous (Other)	None Detected
120 062014018-0036	Building R, Boys Restroom - 4" White Ceramic Tile w./ Grout	Gray/White Non-Fibrous Heterogeneous	3% Cellulose	50% Quartz 25% Ca Carbonate 22% Non-fibrous (Other)	None Detected
121 062014018-0037	Building R, Boys Restroom - 1x2 Green Ceramic Tile w./ Grout	Tan/White Non-Fibrous Heterogeneous	4% Cellulose	48% Quartz 26% Ca Carbonate 22% Non-fibrous (Other)	None Detected

Analyst(s)

Erick Rosa (10)

Jimmy Encalada (25)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/05/2020 17:33:20



NAL LOG-IN RECORD

Login # 43036

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 19

Paradise High School Bldg R:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI (S)

Contact

KS 10468

No. of Samples 37

E-Mail Address

Turnaround: 6 hours (S)

Num.	Sample ID#	Location/Description
1	90	Building R, Room 203 (1,00sf) / 2x4 Pin Hole w/ Fissure Ceiling Tile
2	91	Building R, Room 204, West wall (1,400sf) / Sheetrock-Joint Compound
3	92	Building R, Room 206, East Wall by door / Sheetrock-Joint Compound
4	93A	Building R, Room 205 Southwest Corner (250sf) / 12" Beige Floor Tile
5	93B	Building R, Room 205 Southwest Corner (250sf) / 12" Beige Mastic
6	94	Building R, Room 205 (70lf) / 4" Black Cove Base Mastic
7	95A	Building R, Room 206, Under Carpet (550sf) / Beige Ceiling Tile
8	95B	Building R, Room 206, Under Carpet (550sf) / Beige Mastic
9	96	Building R, Room 206 (550sf) / Blue Carpet Yellow Mastic
10	97	Building R, Room 206 (80lf) / 4" Beige Cove Base Mastic
11	98	Building R, Room 203 (450sf) / Brown Carpet Yellow Mastic
12	99	Building R, Library Northeast Corner / Sheetrock-Joint Compound
13	100	Building R, Room 208, East Wall / Sheetrock-Joint Compound
14	101	Building R, Room 208 / 2X4 Pin Holes / Fissure Ceiling Tile
15	102A	Building R, Room 210, 208 & 209 Server Room / 12" Beige Floor Tile
16	102B	Building R, Room 210, 208 & 209 Server Room / Black Mastic
17	103	Building R, Library, Northside, Kitchen (50sf) / Square Pattern Over Floor Tile Linoleum

20 AUG - 6 AM 11:44
 CARLE PLACE, NY
 NATIONAL ANALYTICAL INC.

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	Unique McCoy	8/4/20 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/5/20
062014018

8/5/20 4:16pm



NAL LOG-IN RECORD

Login # 43036

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 19

Paradise High School Bldg R:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 37

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	104A	Building R, Between Library & Room 208 / Stair Tread
19	104B	Building R, Between Library & Room 208 / Mastic
20	105	Building R, Room 209, West Wall / 4" Black Cove Base Mastic
21	106	Building R, Library, Eastside under Carpet / Black Mastic
22	107	Building R, Library / Computer Room Under (3,400sf) / 2x2 Brown Carpet Squares Black Mastic
23	108	Building R, Room 208, Northside, Exterior / Window Glazing
24	109	Building R, Room 210, Southwest Corner / Sheetrock-Joint Compound
25	110	Building R, Northwest Corner / Composition Rolled Roofing
26	111	Building R, Northwest Corner / Composition Rolled Roofing
27	112	Building R, Center over Library / Composition Rolled Roofing
28	113	Building R, Southwest Corner / Composition Rolled Roofing
29	114	Building R, Northside Roof over Walkway / Composition Rolled Roofing
30	115	Building R, Southside, Lower roof over Walkway / Composition Rolled Roofing
31	116	Building R, Upper Room / Penetration Mastic
32	117A	Building R, Upper Roof Around Sleepers / Roof Patch Compound
33	117B	Building R, Drama Room, Southwest Corner / Sheetrock-Joint Compound
34	118	Building R, Girls Restroom / 4" White Ceramic Tile w/ Grout

ENVIRO
 ANALYTICAL INC.
 CARLE PLACE, HY
 20 AUG - 11 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Unique McKay</i>	8/4/20 11:44 AM	At:
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/5/20
062014018

8/5/20 4:16pm



NAL LOG-IN RECORD

Login # 43036

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 19

Paradise High School Bldg R:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 37

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	119	Building R, Girls Restroom / 1X2 Green Ceramic Tile w/ Grout
36	120	Building R, Boys Restroom / 4" White Ceramic Tile w/ Grout
37	121	Building R, Boys Restroom / 1X2 Green Ceramic Tile w/ Grout

Please analyze all Stucco, Texture, Plaster and Sheetrock-Joint Compound on a Test till First

Positive, Stop at First Positive Basis. Positive is >1% *u*

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

[Signature]
8/5/20

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG -4 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Unique McKay</i>	8/1/20 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014018

[Signature] 8/5/20 4:16pm



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014504

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:03 AM

Analysis Date: 08/11/2020

Collected Date: 08/04/2020

Project: Paradise High School Bldg S: 5911 Maxwell Drive, Paradise, CA 95969, Login #:43037

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
312-A <small>062014504-0001</small>	Building S, Room 111, Bottom Layer - Tan Floor Tile	Tan Non-Fibrous Homogeneous		49% Ca Carbonate 35% Matrix 10% Non-fibrous (Other)	6% Chrysotile
312-B <small>062014504-0002</small>	Building S, Room 111, Bottom Layer - Black Mastic	Black Non-Fibrous Homogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
313 <small>062014504-0003</small>	Building S, Room 111 - Multi-Colored Carpet - Yellow Mastic	Brown/Gray/Yellow Fibrous Heterogeneous	10% Synthetic	45% Ca Carbonate 40% Matrix 5% Non-fibrous (Other)	None Detected
314 <small>062014504-0004</small>	Building S, Room 111 - 2'x4' Ceiling Tile with Pinhole and Small Fissure	Gray/White Fibrous Heterogeneous	55% Cellulose 5% Min. Wool	20% Perlite 20% Non-fibrous (Other)	None Detected
315 <small>062014504-0005</small>	Building S, Room 111 Above Drop Ceiling - 12" Ceiling - with Large Pinhole	Brown/White Fibrous Heterogeneous	96% Cellulose	4% Non-fibrous (Other)	None Detected
316 <small>062014504-0006</small>	Building S, Room 112 - 4" Brown Cove Base - Mastic	Tan Non-Fibrous Homogeneous		45% Ca Carbonate 50% Matrix 5% Non-fibrous (Other)	None Detected
317-A <small>062014504-0007</small>	Building S, Room 112, Bottom Layer - Floor Tile	Tan Non-Fibrous Homogeneous		34% Ca Carbonate 45% Matrix 15% Non-fibrous (Other)	6% Chrysotile
317-B <small>062014504-0008</small>	Building S, Room 112, Bottom Layer - Mastic	Brown/Yellow Non-Fibrous Heterogeneous		40% Ca Carbonate 50% Matrix 10% Non-fibrous (Other)	None Detected
318-A <small>062014504-0009</small>	Building S, Room 112, Top Layer - Beige Floor Tile	Brown/Gray/Beige Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
318-B <small>062014504-0010</small>	Building S, Room 112, Top Layer - Mastic	Yellow Non-Fibrous Homogeneous	3% Cellulose	7% Ca Carbonate 80% Matrix 10% Non-fibrous (Other)	None Detected
319-A <small>062014504-0011</small>	Building S, Room 113, Bottom Layer - Beige Floor Tile	Tan Non-Fibrous Homogeneous		32% Ca Carbonate 45% Matrix 15% Non-fibrous (Other)	8% Chrysotile
319-B <small>062014504-0012</small>	Building S, Room 113, Bottom Layer - Black Mastic	Black Non-Fibrous Homogeneous		85% Matrix 15% Non-fibrous (Other)	None Detected
320 <small>062014504-0013</small>	Building S, Room 113 - Green Carpet - Yellow Mastic	Brown/Yellow Non-Fibrous Heterogeneous	4% Cellulose	6% Ca Carbonate 75% Matrix 15% Non-fibrous (Other)	None Detected
321 <small>062014504-0014</small>	Building S, Room 113 - 4" Brown Cove Base - Mastic	Gray/White Non-Fibrous Homogeneous		55% Ca Carbonate 40% Matrix 5% Non-fibrous (Other)	None Detected
322 <small>062014504-0015</small>	Building S, Room 114, Northwest Corner (500 sf) - Sheetrock - Joint Compound	Brown/Tan/White Fibrous Heterogeneous	3% Cellulose	17% Ca Carbonate 5% Vermiculite 60% Gypsum 15% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 20:37:21



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014504

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
323-A 062014504-0016	Building S, Room 114, Bottom Layer - Gray Floor Tile				Positive Stop (Not Analyzed)
323-B 062014504-0017	Building S, Room 114, Bottom Layer - Black Mastic	Black Non-Fibrous Homogeneous		16% Ca Carbonate 75% Matrix 5% Non-fibrous (Other)	4% Chrysotile
324-A 062014504-0018	Building S, Room 114 (750 sf) - 12" Beige Floor Tile	Brown/Gray/Beige Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
324-B 062014504-0019	Building S, Room 114 - Mastic	White/Yellow Non-Fibrous Heterogeneous		30% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	None Detected
325 062014504-0020	Building S, Room 114 (200 sf) - Green/Blue Carpet - Yellow Mastic	Brown Non-Fibrous Homogeneous	1% Synthetic	14% Ca Carbonate 80% Matrix 5% Non-fibrous (Other)	None Detected
326 062014504-0021	Building S, Room 114 (100lf) - 4" Gray Cove Base - Mastic	Brown/White Non-Fibrous Heterogeneous		45% Ca Carbonate 50% Matrix 5% Non-fibrous (Other)	None Detected
327-A 062014504-0022	Building S, Room 114, Laundry (200 sf) - 9" Beige Floor Tile	Brown/Tan Non-Fibrous Heterogeneous		24% Ca Carbonate 60% Matrix 10% Non-fibrous (Other)	6% Chrysotile
327-B 062014504-0023	Building S, Room 1147, Laundry - Black Mastic	Black Non-Fibrous Homogeneous	3% Cellulose	22% Ca Carbonate 70% Matrix 5% Non-fibrous (Other)	None Detected
328-A 062014504-0024	Building S, Room 114, Laundry, Middle Layer - Sheet Vinyl	Gray/Tan Fibrous Heterogeneous	6% Synthetic 2% Glass	37% Ca Carbonate 40% Matrix 15% Non-fibrous (Other)	None Detected
328-B 062014504-0025	Building S, Room 114, Laundry, Middle Layer - Mastic	Yellow Non-Fibrous Homogeneous		95% Matrix 5% Non-fibrous (Other)	None Detected
329-A 062014504-0026	Building S, Room 114, Laundry, Top Layer - Beige Pebble Sheet Vinyl	Gray/Tan/White Fibrous Heterogeneous	5% Cellulose	45% Ca Carbonate 40% Matrix 10% Non-fibrous (Other)	None Detected
329-B 062014504-0027	Building S, Room 114, Laundry, Top Layer - Mastic	Yellow Non-Fibrous Homogeneous		95% Matrix 5% Non-fibrous (Other)	None Detected
330 062014504-0028	Building S, Room 116, Laundry, Attic, HVAC - Seam Mastic	White Fibrous Heterogeneous	8% Cellulose	77% Matrix 15% Non-fibrous (Other)	None Detected
331-A 062014504-0029	Building S, Room 116 (750 sf) - 12" Blue Fleck Floor Tile	White/Blue Non-Fibrous Homogeneous		65% Ca Carbonate 30% Matrix 5% Non-fibrous (Other)	None Detected
331-B 062014504-0030	Building S, Room 116 - Mastic	Yellow Non-Fibrous Homogeneous		15% Ca Carbonate 80% Matrix 5% Non-fibrous (Other)	None Detected
332 062014504-0031	Building S, Girls Restroom, Northeast Corner (600 sf) - 4" Blue Ceramic Tile Mortar & Grout	Gray/Tan/White Non-Fibrous Heterogeneous		50% Quartz 25% Ca Carbonate 25% Non-fibrous (Other)	None Detected
333 062014504-0032	Building S, Girls Restroom by Door (20 sf) - Sheetrock - Joint Compound	Tan/White Fibrous Heterogeneous	4% Cellulose <1% Glass	38% Ca Carbonate 50% Gypsum 3% Mica 5% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 20:37:21



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EMSL Order: 062014504

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
334 062014504-0033	Building S, Girls Restroom - Blue Ceramic Flood Ring Mortar & Gout	Gray/White Non-Fibrous Heterogeneous		55% Quartz 25% Ca Carbonate 20% Non-fibrous (Other)	None Detected
335 062014504-0034	Building S, Girls Restroom, North Wall (80 sf) - 4" White Cermaic Tile Mortar & Grout	Gray/Tan Non-Fibrous Heterogeneous		15% Quartz 35% Ca Carbonate 50% Non-fibrous (Other)	None Detected
336-A 062014504-0035	Building S, Room 113, Back Wall - Plaster	White/Green Non-Fibrous Heterogeneous		20% Ca Carbonate 15% Vermiculite 57% Gypsum 8% Non-fibrous (Other)	None Detected
336-B 062014504-0036	Building S, Room 114, Laundry, North Wall (500 sf) - Plaster	White/Blue Non-Fibrous Heterogeneous		20% Ca Carbonate 15% Vermiculite 55% Gypsum 10% Non-fibrous (Other)	None Detected
336-C 062014504-0037	Building S, Room 114, Laundry, West Wall, North Side - Plaster	Tan/White Non-Fibrous Heterogeneous		20% Ca Carbonate 20% Vermiculite 55% Gypsum 5% Non-fibrous (Other)	None Detected
336-D 062014504-0038	Building S, Girls Restroom, South Wall - Plaster	Gray/Tan/White Non-Fibrous Heterogeneous		15% Ca Carbonate 20% Vermiculite 60% Gypsum 5% Non-fibrous (Other)	None Detected
336-E 062014504-0039	Building S, Girls Restroom, North Wall (900 sf) - Plaster	Gray/Tan/White Non-Fibrous Heterogeneous		25% Ca Carbonate 20% Vermiculite 50% Gypsum 5% Non-fibrous (Other)	None Detected
336-F 062014504-0040	Building S, Custodial Room, 1st Floor, West Wall - Plaster	Gray/Tan/White Non-Fibrous Heterogeneous		25% Ca Carbonate 15% Vermiculite 53% Gypsum 7% Non-fibrous (Other)	None Detected
336-G 062014504-0041	Building S, Custodial Room, 2nd Floor, South Wall - Plaster	Gray/Tan/White Non-Fibrous Heterogeneous		30% Ca Carbonate 15% Vermiculite 48% Gypsum 7% Non-fibrous (Other)	None Detected
337 062014504-0042	Building S, Men's Restroom, Southeast Corner - 4" Peach Ceramic Tile Mortar & Grout	Gray/White Non-Fibrous Heterogeneous		55% Quartz 30% Ca Carbonate 15% Non-fibrous (Other)	None Detected
339 062014504-0043	Building S, Room 116, Library, Attic - Foil/Paper Insulation	Brown/Black/Silver Fibrous Heterogeneous	55% Cellulose	20% Matrix 25% Non-fibrous (Other)	None Detected
338 062014504-0044	Building S, Men's Restroom, Southwest Corner - Green Cermaic Tile Motar	Gray/Tan/White Non-Fibrous Heterogeneous		65% Quartz 25% Ca Carbonate 10% Non-fibrous (Other)	None Detected
340-A 062014504-0045	Building S, Northwest Corner, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		15% Ca Carbonate 75% Matrix 10% Non-fibrous (Other)	None Detected
340-B 062014504-0046	Building S, West Wall of Bathroom Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		15% Quartz 20% Ca Carbonate 55% Matrix 10% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 20:37:21



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EMSL Order: 062014504
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
340-C <small>062014504-0047</small>	Building S, Southwest Corner, Exterior Siding on Concrete - Texture	Various/Green Non-Fibrous Heterogeneous		15% Ca Carbonate 75% Matrix 10% Non-fibrous (Other)	None Detected
340-D <small>062014504-0048</small>	Building S, South Side, Middle, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		25% Ca Carbonate 65% Matrix 10% Non-fibrous (Other)	None Detected
340-E <small>062014504-0049</small>	Building S, North East Side, by Girls Room, Exterior Siding on Concrete - Texture	Tan/Various/Green Non-Fibrous Heterogeneous		20% Quartz 20% Ca Carbonate 55% Matrix 5% Non-fibrous (Other)	None Detected
341 <small>062014504-0050</small>	Building S, Roof, North Side, Middle - Green Composition Shingle Roofing	Brown/Black/Green Fibrous Heterogeneous	3% Cellulose 2% Glass	25% Ca Carbonate 45% Matrix 25% Non-fibrous (Other)	None Detected
342 <small>062014504-0051</small>	Building S, Roof, South West Corner - Green Composition Shingle Roofing	Brown/Green Fibrous Heterogeneous	3% Cellulose 1% Glass	26% Ca Carbonate 40% Matrix 30% Non-fibrous (Other)	None Detected
343 <small>062014504-0052</small>	Building S, Upper Roof, East Side - Gray Composition Shingle Roofing	Brown/Black Fibrous Heterogeneous	15% Cellulose <1% Glass	30% Ca Carbonate 40% Matrix 15% Non-fibrous (Other)	None Detected

Analyst(s) _____
 Steve Juszczak (51)


 Daniel Clarke, Asbestos Laboratory Manager
 or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/11/2020 20:37:21



NAL LOG-IN RECORD

Login # 43037

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 20

Paradise High School Bldg S:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI 2

Contact

No. of Samples 52

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	312-A	Building S, Room 111, Bottom Layer / Tan Floor Tile
2	312-B	Building S, Room 111, Bottom Layer / Black Mastic
3	313	Building S, Room 111 / Multi-Colored Carpet Yellow Mastic
4	314	Building S, Room 111 / 2'x4' with Pinhole and Small Fissure Ceiling Tile
5	315	Building S, Room 111 Above Drop Ceiling / 12" with Large Pinhole Ceiling
6	316	Building S, Room 112 / 4" Brown Cove Base Mastic
7	317-A	Building S, Room 112, Bottom Layer / Floor Tile
8	317-B	Building S, Room 112, Bottom Layer / Mastic
9	318-A	Building S, Room 112, Top Layer / Beige Floor Tile
10	318-B	Building S, Room 112, Top Layer / Mastic
11	319-A	Building S, Room 113, Bottom Layer / Beige Floor Tile
12	319-B	Building S, Room 113, Bottom Layer / Black Mastic
13	320	Building S, Room 113 / Green Carpet Yellow Mastic
14	321	Building S, Room 113 / 4" Brown Cove Base Mastic
15	322	Building S, Room 114, Northwest Corner (500sf) / Sheetrock-Joint Compound
16	323-A	Building S, Room 114, Bottom Layer / Gray Floor Tile
17	323-B	Building S, Room 114, Bottom Layer / Black Mastic

20 AUG 10 AM 9:03
NATIONAL ANALYTICAL LABORATORIES, INC.
CABLE PLACE, NY

062014504

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00	Michelle DeVito	8/10/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/10/20 8:54 AM



NAL LOG-IN RECORD

Login # 43037

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 20

Paradise High School Bldg S:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/4/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 52

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	324-A	Building S, Room 114 (750sf) / 12" Beige Floor Tile
19	324-B	Building S, Room 114 / Mastic
20	325	Building S, Room 114 (200sf) / Green/Blue Carpet Yellow Mastic
21	326	Building S, Room 114 (100lf) / 4" Gray Cove Base Mastic
22	327-A	Building S, Room 114, Laundry (200sf) / 9" Beige Floor Tile
23	327-B	Building S, Room 1147, Laundry / Black Mastic
24	328-A	Building S, Room 114, Laundry, Middle Layer / Sheet Vinyl
25	328-B	Building S, Room 114, Laundry, Middle Layer / Mastic
26	329-A	Building S, Room 114, Laundry, Top Layer / Beige Pebble Sheet Vinyl
27	329-B	Building S, Room 114, Laundry, Top Layer / Mastic
28	330	Building S, Room 116, Laundry, Attic, HVAC / Seam Mastic
29	331-A	Building S, Room 116 (750sf) / 12" Blue Fleck Floor Tile
30	331-B	Building S, Room 116 / Mastic
31	332	Building S, Girl's Restroom, Northeast Corner (600sf) / 4" Blue Ceramic Tile Mortar & Grout
32	333	Building S, Girl's Restroom, by Door (20sf) / Sheetrock-Joint Compound
33	334	Building S, Girl's Restroom / Blue Ceramic Flood Ring Mortar & Grout
34	335	Building S, Girl's Restroom, North Wall (80sf) / 4" White Ceramic Tile Mortar & Grout

20 AUG 10 AM 9:03
 CARLE PLACE, NY
 LEVINSON
 CARLE PLACE, NY

062014504

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00	<i>Nichelle Davis</i>	8/10/20	9:30 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

/ 8/10/20 1500



NAL LOG-IN RECORD

Login # 43037

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 20

Paradise High School Bldg S:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 52

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	336-A	Building S, Room 113, Back Wall / Plaster
36	336-B	Building S, Room 114, Laundry, North Wall (500sf) / Plaster
37	336-C	Building S, Room 114, Laundry, West Wall, North Side / Plaster
38	336-D	Building S, Girl's Restroom, South Wall / Plaster
39	336-E	Building S, Girl's Restroom, North Wall (900sf) / Plaster
40	336-F	Building S, Custodial Room, 1st Floor, West Wall / Plaster
41	336-G	Building S, Custodial Room, 2nd Floor, South Wall / Plaster
42	337	Building S, Men's Restroom, Southeast Corner / 4" Peach Ceramic Tile Mortar & Grout
43	339	Building S, Room 116, Laundry, Attic / Foil/Paper Insulation
44	338	Building S, Men's Restroom, Southwest Corner / Green Ceramic Tile Mortar
45	340-A	Building S, Northwest Corner, Exterior Siding on Concrete / Texture
46	340-B	Building S, West Wall of Bathroom, Exterior Siding on Concrete / Texture
47	340-C	Building S, Southwest Corner, Exterior Siding on Concrete / Texture
48	340-D	Building S, South Side, Middle, Exterior Siding on Concrete / Texture
49	340-E	Building S, North East Side, by Girl's Room, Exterior Siding on Concrete / Texture
50	341	Building S, Roof, North Side, Middle / Green Composition Shingle Roofing
51	342	Building S, Roof, Southwest Corner / Green Composition Shingle Roofing

20 AUG 10 AM 03
NATIONAL ANALYTICAL LABORATORIES, INC.
CALIFORNIA

062014504

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 9:03 AM
Ron Plumb	08/04/20 12:00	<i>Michelle Devito</i>	8/10/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Michelle Devito



NAL LOG-IN RECORD

Login # 43037

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 20
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg S:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 8/4/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 52
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
52	343	Building S, Upper Roof, East Side / Gray Composition Shingle Roofing

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test, till First Positive, Stop at First Positive Basis. Positive is $\geq 1\%$

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DONOT POINT COUNT

ANALYZED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:03

062014504

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
Ron Plumb	08/04/20 12:00	<i>Michelle Delitto</i>	8/10/20 9:23	
Released By Signature	Date/Time	Received By Signature	Date/Time	

A 8/12/20 15:22



NAL LOG-IN RECORD

Login # **43037**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 20
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg S:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 8/4/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 52
 Turnaround: 6 hours

RECEIVED
 NATIONAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:03

062014504

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	
Ron Plumb	08/04/20 12:00	<i>Michelle Denton</i>	8/10/20	Due: 903
Released By Signature	Date/Time	Received By Signature	Date/Time	At: <i>AM</i>

J. Blum



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014489

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:02 AM

Analysis Date: 08/11/2020

Collected Date: 08/04/2020

Project: Paradise High School, Bldg. T: 5911 Maxwell Drive, Paradise, CA 95969, Login #:43038

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
344-A 062014489-0001	Building T, Room 119, Bottom Layer - 4" Beige Floor Tile	Beige Non-Fibrous Heterogeneous		5% Quartz 51% Ca Carbonate 35% Matrix 5% Non-fibrous (Other)	4% Chrysotile
344-B 062014489-0002	Building T, Room 119, Bottom Layer - Black Floor Tile Mastic	Black Non-Fibrous Heterogeneous		10% Ca Carbonate 83% Matrix 7% Non-fibrous (Other)	None Detected
345-A 062014489-0003	Building T, Room 119 & Dark Room, Throughout (600 sf) - Gray Pebble Sheet Vinyl	Tan Non-Fibrous Heterogeneous	19% Cellulose 9% Glass	43% Ca Carbonate 24% Matrix 5% Non-fibrous (Other)	None Detected
345-B 062014489-0004	Building T, Room 119 & Dark Room, Throughout - Mastic	White Non-Fibrous Heterogeneous		61% Ca Carbonate 34% Matrix 5% Non-fibrous (Other)	None Detected
346 062014489-0005	Building T, Room 119 (30 sf) - Tan Sheet Vinyl	Tan Non-Fibrous Homogeneous	3% Glass	63% Ca Carbonate 29% Matrix 5% Non-fibrous (Other)	None Detected
347 062014489-0006	Building T, Room 119, Dark Room (600 sf) - Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	4% Cellulose <1% Glass	36% Ca Carbonate 47% Gypsum 5% Mica 8% Non-fibrous (Other)	None Detected
348 062014489-0007	Building T, Room 119, Sink - White Under Coating	White Non-Fibrous Homogeneous		35% Ca Carbonate 44% Gypsum 8% Mica 13% Non-fibrous (Other)	None Detected
349-A 062014489-0008	Building T, Room 120, Bottom Layer - Beige Floor Tile				Positive Stop (Not Analyzed)
349-B 062014489-0009	Building T, Room 120, Bottom Layer - Black Mastic	Black Non-Fibrous Heterogeneous		16% Ca Carbonate 75% Matrix 6% Non-fibrous (Other)	3% Chrysotile
350 062014489-0010	Building T, Room 120 - Multi-Colored Carpet - Yellow/Gray Mastic	Gray/Yellow Non-Fibrous Heterogeneous	<1% Cellulose	63% Ca Carbonate 31% Matrix 6% Non-fibrous (Other)	None Detected
351-A 062014489-0011	Building T, Room 122, Bottom Layer - Tan Floor Tile				Positive Stop (Not Analyzed)
351-B 062014489-0012	Building T, Room 122, Bottom Layer - Black Mastic	Black Non-Fibrous Heterogeneous		31% Ca Carbonate 61% Matrix 5% Non-fibrous (Other)	3% Chrysotile
352 062014489-0013	Building T, Room 122 - Green Carpet - Yellow Mastic	Yellow Non-Fibrous Homogeneous		31% Ca Carbonate 64% Matrix 5% Non-fibrous (Other)	None Detected
353 062014489-0014	Building T, Room 122 - 4" Brown Cove Base - Mastic	Gray/White Non-Fibrous Heterogeneous		59% Ca Carbonate 35% Matrix 6% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 20:47:14



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014489

Customer ID: NAL51

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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
354 062014489-0015	Building T, Room 123, Above Drop Ceiling - 12" Ceiling Tile with Large Pinhole	Brown/White Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (Other)	None Detected
355 062014489-0016	Building T, Room 123 - 6" Black Cove Base - Mastic	White Non-Fibrous Heterogeneous		31% Ca Carbonate 58% Matrix 11% Non-fibrous (Other)	None Detected
356 062014489-0017	Building T, Room 123 - 2'x4' Ceiling Tile with Square Pattern	Gray/White Fibrous Homogeneous	77% Cellulose	15% Perlite 8% Non-fibrous (Other)	None Detected
357 062014489-0018	Building T, Room 123 - Multi-Colored Carpet - Yellow Mastic	Yellow Non-Fibrous Homogeneous		32% Ca Carbonate 63% Matrix 5% Non-fibrous (Other)	None Detected
358-A 062014489-0019	Building T, Custodial, South Wall (1900 sf) - Plaster	White Non-Fibrous Homogeneous		5% Quartz 22% Ca Carbonate 65% Gypsum 2% Perlite 6% Non-fibrous (Other)	None Detected
358-B 062014489-0020	Building T, Custodial, West Wall - Plaster	White Non-Fibrous Homogeneous		6% Quartz 31% Ca Carbonate 57% Gypsum 6% Non-fibrous (Other)	None Detected
358-C 062014489-0021	Building T, Custodial, North Wall - Plaster	Brown/White Non-Fibrous Homogeneous		29% Quartz 48% Ca Carbonate 15% Gypsum 8% Non-fibrous (Other)	None Detected
358-D 062014489-0022	Building T, Boys Restroom, North Wall - Plaster	Brown Non-Fibrous Homogeneous		57% Ca Carbonate 17% Vermiculite 26% Non-fibrous (Other)	None Detected
358-E 062014489-0023	Building T, Boys Restroom, North Wall - Plaster	Brown Non-Fibrous Homogeneous	9% Cellulose	31% Ca Carbonate 5% Vermiculite 50% Gypsum 5% Non-fibrous (Other)	None Detected
359 062014489-0024	Building T, Boys Restroom, West Wall (350 sf) - 4" Peach Ceramic Tile Mortar & Grout	Gray/White Non-Fibrous Heterogeneous	2% Cellulose	42% Quartz 33% Ca Carbonate 16% Gypsum 7% Non-fibrous (Other)	None Detected
360 062014489-0025	Building T, Boys Restroom - 4" Light Lime Ceramic Tile Mortar & Grout	Brown/White Non-Fibrous Heterogeneous		50% Quartz 29% Ca Carbonate 16% Matrix 5% Non-fibrous (Other)	<1% Anthophyllite
<i>Sample contains brown adhesive not grout. Analyzed as a composite.</i>					
361 062014489-0026	Building T, Room 123, Above Ceiling Tile - Paper/Foil Insulation	Brown/Black/Silver Fibrous Homogeneous	85% Cellulose	7% Matrix 8% Non-fibrous (Other)	None Detected
362-A 062014489-0027	Building T, Southwest Corner, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		45% Ca Carbonate 50% Matrix 5% Non-fibrous (Other)	None Detected
362-B 062014489-0028	Building T, South Side, Middle, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		35% Ca Carbonate 57% Matrix 8% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 20:47:14



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014489
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
362-C <small>062014489-0029</small>	Building T, South Side, East End, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		40% Ca Carbonate 55% Matrix 5% Non-fibrous (Other)	None Detected
362-D <small>062014489-0030</small>	Building T, West Side, Middle, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		41% Ca Carbonate 53% Matrix 6% Non-fibrous (Other)	None Detected
362-E <small>062014489-0031</small>	Building T, North Side, Middle, Exterior Siding on Concrete - Texture	Gray/White/Green Non-Fibrous Heterogeneous		43% Ca Carbonate 50% Matrix 7% Non-fibrous (Other)	None Detected
363 <small>062014489-0032</small>	Building T, Roof, Northwest Corner - Green Composition Shingle Roofing	Black Non-Fibrous Homogeneous	11% Glass	5% Quartz 76% Matrix 8% Non-fibrous (Other)	None Detected
364 <small>062014489-0033</small>	Building T, Roof, South Side, Middle - Green Composition Shingle Roofing	Black Non-Fibrous Homogeneous	7% Cellulose 5% Glass	16% Ca Carbonate 60% Matrix 12% Non-fibrous (Other)	None Detected
365 <small>062014489-0034</small>	Building T, Roof, East Ridge, Electrical Sleeper - Gray Roof Mastic	Black Fibrous Homogeneous		23% Ca Carbonate 65% Matrix 6% Non-fibrous (Other)	6% Chrysotile

Analyst(s) _____

Jimmy Encalada (1)

Justin Valles (31)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/11/2020 20:47:14



NAL LOG-IN RECORD

Login # 43038

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 21

Paradise High School Bldg T:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI M

Contact

No. of Samples 35

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	344-A	Building T, Room 119 Bottom Layer / 4" Beige Floor Tile
2	344-B	Building T, Room 119 Bottom Layer / Black Floor Tile Mastic
3	345-A	Building T, Room 119 & Dark Room Throughout (600sf) / Gray Pebble Sheet Vinyl
4	345-B	Building T, Room 119 & Dark Room Throughout / Mastic
5	346	Building T, Room 119 (30sf) / Tan Sheet Vinyl
6	347	Building T, Room 119, Dark Room (600sf) / Sheetrock-Joint Compound
7	348	Building T, Room 119, Sink / White Under Coating
8	349-A	Building T, Room 120, Bottom Layer / Beige Floor Tile
9	349-B	Building T, Room 120, Bottom Layer / Black Mastic
10	350	Building T, Room 120 / Multi-Colored Carpet Yellow/Gray Mastic
11	351-A	Building T, Room 122, Bottom Layer / Tan Floor Tile
12	351-B	Building T, Room 122, Bottom Layer / Black Mastic
13	352	Building T, Room 122 / Green Carpet Yellow Mastic
14	353	Building T, Room 122 / 4" Brown Cove Base Mastic
15	354	Building T, Room 123, Above Drop Ceiling / 12" with Large Pinhole Ceiling Tile
16	355	Building T, Room 123 / 6" Black Cove Base Mastic
17	356	Building T, Room 123 / 2'x4' with Square Pattern Ceiling Tile

20 AUG 10 AM 9:02
NATIONAL ANALYTICAL LABORATORIES, INC.
CARLE PLACE, NY

062014489

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
<i>Ron Plumb</i>	08/04/20 12:00	<i>Michelle DeJ...</i>	8/12/20	9:02 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Justin Valles
8-11-20

Justin Valles

8/11/20 6:57



NAL LOG-IN RECORD

Login # 43038

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 21

Paradise High School Bldg T:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/4/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 35

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	357	Building T, Room 123 / Multi-Colored Carpet Yellow Mastic
19	358-A	Building T, Custodial, South Wall (1900sf) / Plaster
20	358-B	Building T, Custodial, West Wall / Plaster
21	358-C	Building T, Custodial, North Wall / Plaster
22	358-D	Building T, Boy's Restroom, North Wall / Plaster
23	358-E	Building T, Boy's Restroom, North Wall / Plaster
24	359	Building T, Boy's Restroom, West Wall (350sf) / 4" Peach Ceramic Tile Mortar & Grout
25	360	Building T, Boy's Restroom / 4" Light Lime Ceramic Tile Mortar & Grout
26	361	Building T, Room 123, Above Ceiling Tile / Paper/Foil Insulation
27	362-A	Building T, Southwest Corner, Exterior Siding on Concrete / Texture
28	362-B	Building T, South Side, Middle, Exterior Siding on Concrete / Texture
29	362-C	Building T, South Side, East End, Exterior Siding on Concrete / Texture
30	362-D	Building T, West Side, Middle, Exterior Siding on Concrete / Texture
31	362-E	Building T, North Side, Middle, Exterior Siding on Concrete / Texture
32	363	Building T, Roof, Northwest Corner / Green Composition Shingle Roofing
33	364	Building T, Roof, South Side, Middle / Green Composition Shingle Roofing
34	365	Building T, Roof, East Ridge, Electrical Sleeper / Gray Roof Mastic

RECEIVED BY
 DAMAGE TABLE, INC.
 20 AUG 10 11 59:02 AM

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 8/10/20 9:02 AM
<i>Ron Plumb</i>	08/04/20 12:00	<i>Michelle DeLa...</i>	8/10/20 9:02 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Juti Valles 8-11-20
Page 2 of 3

062014489

Juti Valles 8/11/20 6:57pm



NAL LOG-IN RECORD

Login # 43038

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.		Job Site/Job #:	
Client#-Lot#	3911 / 21	Paradise High School Bldg T:	Date 7/28/2020
Paradise Unified School District		5911 Maxwell Drive	Sampling Date: 8/4/2020
Phone Number		Paradise, CA 95969	Sampling Time 12:00.00 PM
FAX Number			Type Of Work: PLM-BI
Contact		KS 10468	No. of Samples 35
E-Mail Address			Turnaround: 6 hours

Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

NATIONAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:02

062014489

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
<i>Ron Plumb</i>	08/04/20 12:00	<i>Michael Lewis</i>	8/10/20	9:00
Released By Signature	Date/Time	Received By Signature	Date/Time	At:
				<i>AM</i>

Justin Valles
8-11-20

Justin Valles 8/11/20 6:57pm



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014470

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:01 AM

Analysis Date: 08/10/2020

Collected Date: 08/04/2020

Project: Paradise High School Bldg U: 5911 Maxwell Drive, Paradise, CA 95969, Log in #: 43039

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
366-A <small>062014470-0001</small>	Building U, Storage Area, South Wall/Texture	Brown/White Non-Fibrous Heterogeneous	27% Cellulose	13% Ca Carbonate 51% Matrix 9% Non-fibrous (Other)	None Detected
366-B <small>062014470-0002</small>	Building U, Break Area, East Wall/Texture	Brown/White Non-Fibrous Heterogeneous	16% Cellulose	13% Ca Carbonate 63% Matrix 8% Non-fibrous (Other)	None Detected
366-C <small>062014470-0003</small>	Building U, Break Area, West Wall/Texture	White Non-Fibrous Heterogeneous	14% Cellulose	11% Ca Carbonate 62% Matrix 13% Non-fibrous (Other)	None Detected
367 <small>062014470-0004</small>	Building U, West Side Storage/Sheetrock-Joint Compound	Brown/White Non-Fibrous Heterogeneous	6% Cellulose <1% Glass	35% Ca Carbonate 47% Gypsum 2% Mica 10% Non-fibrous (Other)	<1% Chrysotile
368 <small>062014470-0005</small>	Building U, Break Area, Southwest Corner/Sheetrock-Joint Compound	Brown/White Non-Fibrous Heterogeneous	6% Cellulose <1% Glass	35% Ca Carbonate 47% Gypsum 2% Mica 10% Non-fibrous (Other)	None Detected
369-A <small>062014470-0006</small>	Building U, Office, Bottom Layer/Green Floor Tile	Green Non-Fibrous Heterogeneous		51% Ca Carbonate 40% Matrix 5% Non-fibrous (Other)	4% Chrysotile
369-B <small>062014470-0007</small>	Building U, Bottom Layer/Black Mastic	Black Non-Fibrous Heterogeneous		7% Ca Carbonate 81% Matrix 12% Non-fibrous (Other)	<1% Chrysotile
370 <small>062014470-0008</small>	Building U, Office/Mauve Carpet Yellow Mastic	Yellow Non-Fibrous Homogeneous		30% Ca Carbonate 65% Matrix 5% Non-fibrous (Other)	None Detected
371 <small>062014470-0009</small>	Building U, East Side, Exterior/Lightweight Concrete	Gray Non-Fibrous Homogeneous		55% Quartz 40% Ca Carbonate 5% Non-fibrous (Other)	None Detected
372 <small>062014470-0010</small>	Building U, West Side, Exterior/Window Caulking	Gray Non-Fibrous Homogeneous		70% Ca Carbonate 25% Matrix 5% Non-fibrous (Other)	None Detected
373-A <small>062014470-0011</small>	Building U, Hallway to Office, South Side, Exterior Siding on Concrete/Texture	White Non-Fibrous Homogeneous		36% Quartz 57% Ca Carbonate 7% Non-fibrous (Other)	None Detected
373-B <small>062014470-0012</small>	Building U, Northwest Corner, Exterior Siding on Concrete/Texture	White Non-Fibrous Homogeneous		35% Quartz 59% Ca Carbonate 6% Non-fibrous (Other)	None Detected
373-C <small>062014470-0013</small>	Building U, Southeast Corner, Exterior Siding on Concrete/Texture	White/Green Non-Fibrous Homogeneous		15% Quartz 20% Ca Carbonate 50% Matrix 15% Non-fibrous (Other)	None Detected
373-D <small>062014470-0014</small>	Building U, Exterior Siding, West Side on Concrete/Texture	White/Green Non-Fibrous Homogeneous		16% Quartz 35% Ca Carbonate 41% Matrix 8% Non-fibrous (Other)	None Detected

Initial report from: 08/10/2020 15:15:52



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014470
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
373-E 062014470-0015	Building U, East Side, Exterior Siding/Texture	White/Green Non-Fibrous Homogeneous		11% Quartz 35% Ca Carbonate 49% Matrix 5% Non-fibrous (Other)	None Detected
374 062014470-0016	Building U, Southeast Side, Roof/Composition Rolled Roofing	Black Fibrous Homogeneous	2% Glass	10% Ca Carbonate 73% Matrix 15% Non-fibrous (Other)	None Detected
375 062014470-0017	Building U, Upper Roof, East Side/Gray Composition Rolled Roofing	Black Fibrous Homogeneous	3% Glass	11% Ca Carbonate 76% Matrix 10% Non-fibrous (Other)	None Detected
376 062014470-0018	Building U, Roof, Northwest Corner/Composition Rolled Roofing	Black Fibrous Homogeneous	4% Glass	13% Ca Carbonate 75% Matrix 8% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (18)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/10/2020 15:15:52



NAL LOG-IN RECORD

Login # 43039

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 22

Paradise High School Bldg U:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 18

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	366-A	Building U, Storage Area, South Wall (800sf) / Texture
2	366-B	Building U, Break Area, East Wall / Texture
3	366-C	Building U, Break Area, West Wall / Texture
4	367	Building U, West Side Storage / Sheetrock-Joint Compound
5	368	Building U, Break Area, Southwest Corner / Sheetrock-Joint Compound
6	369-A	Building U, Office, Bottom Layer / Green Floor Tile
7	369-B	Building U, Bottom Layer / Black Mastic
8	370	Building U, Office / Mauve Carpet Yellow Mastic
9	371	Building U, East Side, Exterior / Lightweight Concrete
10	372	Building U, West Side, Exterior / Window Caulking
11	373-A	Building U, Hallway to Office, South Side, Exterior Siding on Concrete / Texture
12	373-B	Building U, Northwest Corner, Exterior Siding on Concrete / Texture
13	373-C	Building U, Southeast Corner, Exterior Siding on Concrete / Texture
14	373-D	Building U, Exterior Siding, West Side on Concrete / Texture
15	373-E	Building U, East Side, Exterior Siding / Texture
16	374	Building U, Southeast Side, Roof / Composition Rolled Roofing
17	375	Building U, Upper Roof, East Side / Gray Composition Rolled Roofing

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 CARLE PLACE, NY
 20 AUG 10 AM 9:01

062014470

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00	<i>[Signature]</i>	8-10-20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:
		<i>[Signature]</i>	8-10-20	

Justin Valles
8-10-20



NAL LOG-IN RECORD

Login # 43039

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911/22

Paradise High School Bldg U:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 18

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	376	Building U, Roof, Northwest Corner / Composition Rolled Roofing

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

RECEIVED
NATIONAL ANALYTICAL, INC.
CARLE PLACE, NY
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062014470

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8/4/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:
			8-10-20	



NAL LOG-IN RECORD

Login # 43039

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 22

Paradise High School Bldg U:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 18

E-Mail Address

Turnaround: 6 hours

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NAL ANALYTICAL, INC.
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20 AUG 10 AM 9:01

062014470

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	
Ron Plumb	08/04/20 12:00		8/4/2020	Due:
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Santi Valle
870-20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014500

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:04 AM

Analysis Date: 08/10/2020

Collected Date: 08/04/2020

Project: Paradise High School Bldg V: 5911 Maxwell Drive, Paradise, CA 95969

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
377 <i>062014500-0001</i>	Building V, Room 133/4" Brown Cove Base Mastic	White Non-Fibrous Homogeneous		62% Ca Carbonate 33% Matrix 5% Non-fibrous (Other)	None Detected
378 <i>062014500-0002</i>	Building V, Room 133/Brown Carpet Yellow Mastic	Brown/Yellow Non-Fibrous Homogeneous		37% Ca Carbonate 55% Matrix 8% Non-fibrous (Other)	None Detected
379 <i>062014500-0003</i>	Building V, Room 135/4" Brown Cove Base Mastic	Brown/Yellow Non-Fibrous Homogeneous		59% Ca Carbonate 35% Matrix 6% Non-fibrous (Other)	None Detected
380 <i>062014500-0004</i>	Building V, Room 135/4" Brown Cove Base Mastic	White Non-Fibrous Homogeneous		30% Ca Carbonate 63% Matrix 7% Non-fibrous (Other)	None Detected
381 <i>062014500-0005</i>	Building V, Room 137/4" Brown Cove Base Mastic	White Non-Fibrous Homogeneous		30% Ca Carbonate 65% Matrix 5% Non-fibrous (Other)	None Detected
382 <i>062014500-0006</i>	Building V, Room 137/Brown Carpet Yellow Mastic	Brown/Yellow Non-Fibrous Homogeneous		60% Ca Carbonate 33% Matrix 7% Non-fibrous (Other)	None Detected
383 <i>062014500-0007</i>	Building V, East End, Restroom/6" Gray Ceramic Tile Grout	Black Non-Fibrous Homogeneous		43% Quartz 27% Ca Carbonate 30% Non-fibrous (Other)	None Detected
384 <i>062014500-0008</i>	Building V, Roof, Center, Under Metal Roof/Roofing Felt	Brown/Black Fibrous Homogeneous	32% Cellulose	63% Matrix 5% Non-fibrous (Other)	None Detected
385 <i>062014500-0009</i>	Building V, Roof, Screws Ridge Cap/Gray Roof Mastic	Gray Non-Fibrous Homogeneous		31% Ca Carbonate 64% Matrix 5% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (9)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/10/2020 22:38:12



NAL LOG-IN RECORD

Login # 43040

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 23
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg V:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 8/4/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 9
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	377	Building V, Room 133 / 4: Brown Cove Base Mastic
2	378	Building V, Room 133 / Brown Carpet Yellow Mastic
3	379	Building V, Room 135 / Brown Carpet Yellow Mastic
4	380	Building V, Room 135 / 4" Brown Cove Base Mastic
5	381	Building V, Room 137 / 4" Brown Cove Base Mastic
6	382	Building V, Room 137 / Brown Carpet Yellow Mastic
7	383	Building V, East End, Restroom / 6" Gray Ceramic Tile Grout
8	384	Building V, Roof, Center, Under Metal Roof / Roofing Felt
9	385	Building V, Roof, Screws Ridge Cap / Gray Roof Mastic

DO NOT POINT COUNT

062 014500

20 AUG 10 AM 9:04

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 NATIONAL ANALYTICAL, INC.
 CARLE PLACE, NY

8-10-20

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
Ron Plumb	08/04/20 12:00		8/10/2020 9:04	
Released By Signature	Date/Time	Received By Signature	Date/Time	



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014482

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:04 AM

Analysis Date: 08/11/2020

Collected Date: 08/04/2020

Project: Paradise High School Bldg. W.: 5911 Maxwell Drive, Paradise, CA 95969, #43041

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
386 062014482-0001	Building W, Room 117, Southwest Corner - 1'x2' ACT Ceiling Tile with Pinhole & Fissures	Gray Fibrous Heterogeneous	32% Cellulose 52% Min. Wool	4% Perlite 12% Non-fibrous (Other)	None Detected
387 062014482-0002	Building W, Room 117 - 12" Brown Ceiling Tile Mastic	Brown Non-Fibrous Heterogeneous		90% Matrix 10% Non-fibrous (Other)	None Detected
388 062014482-0003	Building W, Office (300 sf) - 2'x4' Ceiling Tile with Pinhole & Small Fissure	Gray Fibrous Heterogeneous	39% Cellulose 48% Min. Wool	4% Perlite 9% Non-fibrous (Other)	None Detected
389 062014482-0004	Building W, Office Attic, HVAC - Seam Tape / Mastic	Gray/Silver Fibrous Heterogeneous	8% Min. Wool	80% Matrix 12% Non-fibrous (Other)	None Detected
390 062014482-0005	Building W, Office (100 sf) - 2'x4' Ceiling Tile with Pinhole & Large Fissure	Gray Fibrous Heterogeneous	60% Min. Wool	20% Matrix 20% Non-fibrous (Other)	None Detected
391-A 062014482-0006	Building W, Room 118, South Wall (3200 sf) - Texture	Gray/White Fibrous Heterogeneous	21% Cellulose	15% Ca Carbonate 48% Matrix 16% Non-fibrous (Other)	None Detected
391-B 062014482-0007	Building W, Room 117, West Wall, South Side - Texture	Gray/White Fibrous Heterogeneous		20% Ca Carbonate 60% Matrix 20% Non-fibrous (Other)	None Detected
391-C 062014482-0008	Building W, Office Entrance, South Wall - Texture	Gray/White Fibrous Heterogeneous		28% Ca Carbonate 51% Matrix 21% Non-fibrous (Other)	None Detected
391-D 062014482-0009	Building W, Pantry, North Wall - Texture	Gray/White Non-Fibrous Heterogeneous		26% Ca Carbonate 55% Matrix 19% Non-fibrous (Other)	None Detected
391-E 062014482-0010	Building W, Storage, East Wall - Texture	Gray/White Non-Fibrous Heterogeneous		38% Ca Carbonate 42% Matrix 20% Non-fibrous (Other)	None Detected
392 062014482-0011	Building W, Southwest Corner - 3" Dark Brown Cove Base Mastic	Brown Non-Fibrous Heterogeneous		5% Ca Carbonate 80% Matrix 15% Non-fibrous (Other)	None Detected
393-A 062014482-0012	Building W, Room 118 (150 sf) - 12" White Floor Tile				Not Analyzed
393-B 062014482-0013	Building W, Room 118 - Black Mastic	Black Non-Fibrous Heterogeneous		80% Matrix 18% Non-fibrous (Other)	2% Chrysotile
394 062014482-0014	Building W, Room 118 - Multi-Colored Carpet - Yellow-Brown Mastic	Yellow Non-Fibrous Heterogeneous		12% Ca Carbonate 70% Matrix 18% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2020 15:38:35



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014482
Customer ID: NAL51
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	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
395-A 062014482-0015	Building W, Southwest Corner, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		8% Ca Carbonate 15% Gypsum 50% Matrix 27% Non-fibrous (Other)	None Detected
395-B 062014482-0016	Building W, East Side, by North Drain, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		4% Ca Carbonate 9% Gypsum 48% Matrix 39% Non-fibrous (Other)	None Detected
395-C 062014482-0017	Building W, West Side, North End, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		7% Ca Carbonate 11% Gypsum 54% Matrix 28% Non-fibrous (Other)	None Detected
395-D 062014482-0018	Building W, West Side, South Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		5% Ca Carbonate 12% Gypsum 54% Matrix 29% Non-fibrous (Other)	None Detected
395-E 062014482-0019	Building W, East Side, by Drain, Exterior Siding on Concrete - Texture	White/Green Non-Fibrous Heterogeneous		8% Ca Carbonate 9% Gypsum 50% Matrix 33% Non-fibrous (Other)	None Detected
396 062014482-0020	Building W, Roof, Northeast Side - Gray-Tan Composition Shingle Roofing	Black Fibrous Heterogeneous	<1% Cellulose 5% Min. Wool	5% Quartz 2% Ca Carbonate 50% Matrix 38% Non-fibrous (Other)	None Detected
397 062014482-0021	Building W, Roof, Southwest Side - Gray-Tan Composition Shingle Roofing	Black Fibrous Heterogeneous	<1% Cellulose 4% Min. Wool	3% Quartz 2% Ca Carbonate 59% Matrix 32% Non-fibrous (Other)	None Detected
398 062014482-0022	Building W, HVAC Area - Gray Roof Mastic	Black Non-Fibrous Heterogeneous	<1% Cellulose	5% Ca Carbonate 80% Matrix 15% Non-fibrous (Other)	None Detected
399 062014482-0023	Building W, HVAC - White Seam Caulking	White Non-Fibrous Heterogeneous		25% Ca Carbonate 70% Matrix 5% Non-fibrous (Other)	None Detected

Analyst(s)

Erick Rosa (22)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/11/2020 15:38:35



NAL LOG-IN RECORD

Login # 43041

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 24

Paradise High School Bldg W:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-B (K)

Contact

No. of Samples 23

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	386	Building W, Room 117, Southwest Corner / 1X2 ACT with Pinhole & Fissures Ceiling Tile
2	387	Building W, Room 117 / 12" Brown Ceiling Tile Mastic
3	388	Building W, Office (300sf) / 2'x4' with Pinhole & Small Fissure Ceiling Tile
4	389	Building W, Office Attic, HVAC / Seam Tape/Mastic
5	390	Building W, Office (100sf) / 2'4' with Pinhole & Large Fissure Ceiling Tile
6	391-A	Building W, Room 118, South Wall (3200sf) / Texture
7	391-B	Building W, Room 117, West Wall, South Side / Texture
8	391-C	Building W, Office Entrance, South Wall / Texture
9	391-D	Building W, Pantry, North Wall / Texture
10	391-E	Building W, Storage, East Wall / Texture
11	392	Building W, Southwest Corner / 3" Dark Brown Cove Base Mastic
12	393-A	Building W, Room 118 (150sf) / 12" White Floor Tile
13	393-B	Building W, Room 118 / Black Mastic
14	394	Building W, Room 118 / Multi-Colored Carpet Yellow-Brown Mastic
15	395-A	Building W, Southwest Corner, Exterior Siding on Concrete / Texture
16	395-B	Building W, East Side, by North Drain, Exterior Siding on Concrete / Texture
17	395-C	Building W, West Side, North End, Exterior Siding on Concrete / Texture

20 AUG 10 11 51 AM
NATIONAL ANALYTICAL LABORATORIES, INC.

062014482

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: <i>9:00 AM</i>
Ron Plumb	08/04/20 12:00	<i>Nichole Dentis</i>	8/10/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Ron Plumb

8/11/20



NAL LOG-IN RECORD

Login # 43041

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 24

Paradise High School Bldg W:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

No. of Samples 23

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	395-D	Building W, West Side, South Exterior Siding on Concrete / Texture
19	395-E	Building W, East Side, by Drain, Exterior Siding on Concrete / Texture
20	396	Building W, Roof, Northeast Side / Gray/Tan Composition Shingle Roofing
21	397	Building W, Roof, Southwest Side / Gray/Tan Composition Shingle Roofing
22	398	Building W, HVAC Area / Gray Roof Mastic
23	399	Building W, HVAC / White Seam Caulking

cc **Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%**

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT *cc*

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 NATIONAL ANALYTICAL, INC.
 OFFICE PLACE, NY
 2020/08/10 AM 9:04

062014482

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	0804/20 12:00	<i>Michelle Natta</i>	8/10/20	9:45 AM
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Ron Plumb 8/11/20



NAL LOG-IN RECORD

Login # **43042**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 25

Paradise High School Bldg X:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/4/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 3

E-Mail Address

Turnaround: 48 hrs

Num.	Sample ID#	Location/Description
1	400	Building X, Roof, Center, Under Metal Roof / Roofing Felt
2	401	Building X, Roof / Black Roof Mastic
3	402	Building X, Roof (20sf) / Gray Roof Mastic

DO NOT POINT COUNT

062 014485

20 AUG 10 AM 9:02

RECEIVED
NALS ANALYTICAL, INC.
CARLE PLACE, NY

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8-6-2020	8/6/2020
Released By Signature	Date/Time	Received By Signature	Date/Time	At: 12:00

Ron Plumb 8/4/20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014495

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:01 AM

Analysis Date: 08/10/2020

Collected Date: 08/04/2020

Project: Paradise High School Bldg. Y: 5911 Maxwell Drive, Paradise, CA 95969, Log in #:43043

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
403 <small>062014495-0001</small>	Building Y, Room 138 - 2'x4' Ceiling Tile w./ Pinhole & Small Fissures	Gray/White Fibrous Heterogeneous	50% Cellulose 15% Glass	20% Gypsum 10% Perlite 5% Non-fibrous (Other)	None Detected
404 <small>062014495-0002</small>	Building Y, Room 138 - 4" Brown Cove Base - Mastic	Tan Non-Fibrous Homogeneous		30% Ca Carbonate 65% Matrix 5% Non-fibrous (Other)	None Detected
405A <small>062014495-0003</small>	Building Y, Room 138 - 12" Beige Floor Tile	Pink/Beige Non-Fibrous Homogeneous		55% Ca Carbonate 45% Matrix	None Detected
405B <small>062014495-0004</small>	Building Y, Room 138 - Yellow Mastic	Yellow Non-Fibrous Homogeneous	5% Cellulose	20% Ca Carbonate 75% Matrix	None Detected
406 <small>062014495-0005</small>	Building Y, Room 139 - 4" Brown Cove Base - Mastic	Beige Non-Fibrous Homogeneous		30% Ca Carbonate 70% Matrix	None Detected
407 <small>062014495-0006</small>	Building Y, Room 139 - Brown Carpet - Yellow Mastic	Brown/Yellow Non-Fibrous Homogeneous	10% Cellulose	10% Ca Carbonate 80% Matrix	None Detected
408 <small>062014495-0007</small>	Building Y, Roof, Center, Under Metal Roof - Roofing Felt	Black Fibrous Heterogeneous	90% Cellulose	10% Matrix	None Detected
409 <small>062014495-0008</small>	Building Y, Roof (6sf) - Gray Seam Mastic	Gray/Black Non-Fibrous Heterogeneous	10% Cellulose	20% Ca Carbonate 67% Matrix	3% Chrysotile

Analyst(s)

Omatie Ramrattan-Scarallo (8)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/10/2020 22:34:51



NAL LOG-IN RECORD

Login # 43043

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 26

Paradise High School Bldg Y:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/4/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 8

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	403	Building Y, Room 138 / 2'x4' w/ Pinhole & Small Fissures Ceiling Tile
2	404	Building Y, Rom 138 / 4" Brown Cove Base Mastic
3	405A	Building Y, Room 138 / 12" Beige Floor Tile
4	405B	Building Y, Room 138 / Yellow Mastic
5	406	Building Y, Room 139 / 4" Brown Cove Base Mastic
6	407	Building Y, Room 139 / Brown Carpet Yellow Mastic
7	408	Building Y, Roof, Center, Under Metal Roof / Roofing Felt
8	409	Building Y, Roof (6sf) / Gray Seam Mastic

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

062 014495

RECEIVED
 NATIONAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:01

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
Ron Plumb	08/04/20 12:00		8/10/2020 9:01	
Released By Signature	Date/Time	Received By Signature	Date/Time	

8/10/20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514

Tel/Fax: (516) 997-7251 / (516) 997-7528

<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014494

Customer ID: NAL51

Customer PO:

Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762

Phone: (916) 225-9631

Fax: (916) 361-0540

Received Date: 08/10/2020 9:01 AM

Analysis Date: 08/10/2020

Collected Date: 08/04/2020

Project: Paradise High School-Shack: 5911 Maxwell Drive, Paradise, CA 95969, Log in #:43072

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
410-A <small>062014494-0001</small>	Shack, Southwest Corner, Ceiling (100sf) - Texture	Brown/White Non-Fibrous Heterogeneous	2% Cellulose	32% Gypsum 61% Matrix 5% Non-fibrous (Other)	None Detected
410-B <small>062014494-0002</small>	Shack, Northeast Corner, Ceiling - Texture	Brown/White Non-Fibrous Homogeneous	4% Cellulose	20% Gypsum 60% Matrix 16% Non-fibrous (Other)	None Detected
410-C <small>062014494-0003</small>	Shack, Northwest Corner, Ceiling - Texture	White Non-Fibrous Homogeneous		35% Ca Carbonate 5% Mica 51% Matrix 9% Non-fibrous (Other)	None Detected
411 <small>062014494-0004</small>	Shack, Flooring (80sf) - Marble Pattern Sheet Vinyl	Brown/Gray Non-Fibrous Homogeneous	2% Glass	41% Ca Carbonate 52% Matrix 5% Non-fibrous (Other)	None Detected
412 <small>062014494-0005</small>	Shack, Flooring (301 - 4" Brown Cove Base Mastic	Brown/White Non-Fibrous Homogeneous	7% Cellulose	25% Ca Carbonate 62% Matrix 6% Non-fibrous (Other)	None Detected

Analyst(s)

Justin Valles (5)

Daniel Clarke, Asbestos Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 08/10/2020 22:41:48



NAL LOG-IN RECORD

Login # 43072

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 30

Paradise High School - Shack:

Date 8/7/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 8/4/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10467

No. of Samples 5

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	410-A	Shack, Southwest Corner, Ceiling (100sf) / Texture
2	410-B	Shack, Northeast Corner, Ceiling / Texture
3	410-C	Shack, Northwest Corner, Ceiling / Texture
4	411	Shack, Flooring (80sf) / Marble Pattern Sheet Vinyl
5	412	Shack, Flooring (30lf) / 4: Brown Cove Base Mastic

For All Floor files, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

062 014494

RECEIVED
 ENVS. ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:01

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8/10/2020 9:01	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062013



NAL LOG-IN RECORD

Login # 43025

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 8

Paradise High School Bldg E:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI *(initials)*

Contact

KS 10648

No. of Samples 14

E-Mail Address

Turnaround: 6 hours *(initials)*

Num.	Sample ID#	Location/Description
1	39	Building E, East Wall (140lf) / 4" Black Cove Base Mastic
2	33	Building E, Southeast Corner (8 each) / Mudded Elbow TSI
3	34	Building E, Southeast Corner (80lf) / Pipe Insulation TSI
4	35	Building E, South Wall / Pipe Insulation TSI
5	36	Building E, South Wall / Pipe Insulation TSI
6	37	Building E, Southeast Corner (2,000 sf) / Sheetrock-Joint Compound
7	38	Building E, Northwest Corner / Sheetrock-Joint Compound
8	40	Building E, Southwest Corner (15lf) / 4" Beige Cove Base Mastic
9	41A	Building E, Southwest Corner (100sf) / 12" Beige Floor Tile
10	41B	Building E, Southwest Corner (100sf) / 12" Beige Mastic
11	42	Building E, North Wall (50sf) / 12" Cream Floor Tile
12	43	Building E, Lower Roof, Southside (10sf) / Seam Mastic
13	44	Building E, Lower Roof, Eastside / Gray Seam Mastic
14	45	Building E, Southside, Between Bldg. D & E / Caulking

RECEIVED
 NALS ANALYTICAL LABS
 20 AUG - 11:45 AM
 DIRECTOR'S OFFICE

**Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%
 For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile**

DO NO POINT COUNT ANY MATERIAL

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
<i>Ron Plumb</i>	08/01/20 12:00	<i>Katherine Wood</i>	8-4-2020 11:45 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Ron Plumb

062014007

Katherine Wood
911120



NAL LOG-IN RECORD

Login # 43025

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 8

Paradise High School Bldg E:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI YES

Contact

KS 10648

No. of Samples 14

E-Mail Address

Turnaround: 6 hours YES

RECEIVED
 ENVIRONMENTAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG -4 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	Katherine Vladoj	8-4-20 11:45 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

[Signature]

8/3/20

062014007

[Signature]

9/1/20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514
Phone/Fax: (516) 997-7251 / (516) 997-7528
<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014007
Customer ID: NAL51
Customer PO:
Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762
Phone: (916) 225-9631
Fax: (916) 361-0540
Received: 08/04/2020 11:45 AM
Analysis Date: 09/01/2020
Collected: 07/29/2020
Project: Paradise High School Bldg E: 5911 Maxwell Drive, Paradise, CA 95969, KS 10648, Login #43025

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
37 062014007-0006	Building E, Southeast Corner (2,000 SF)/Sheetrock-Joint Compound	Brown/Tan/White Non-Fibrous Heterogeneous	2% Cellulose <1% Glass	15% Ca Carbonate 75% Gypsum 7.25% Non-fibrous (Other)	0.75% Chrysotile
38 062014007-0007	Building E, Northwest Corner/Sheetrock-Joint Compound	Brown/Tan/White Non-Fibrous Homogeneous	3% Cellulose <1% Glass	4% Ca Carbonate 85% Gypsum 7.25% Non-fibrous (Other)	0.75% Chrysotile

Analyst(s)

Erick Rosa (2)

Daniel Clarke, Asbestos Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 09/01/2020 14:40:26



NAL LOG-IN RECORD

Login # 43028

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 11

Paradise High School Bldg K:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI 

Contact

KS 10648

No. of Samples 19

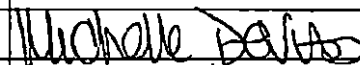
E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	122A	Building K, Southwest Corner (100sf) / 12" Beige Floor Tile
2	122B	Building K, Southwest Corner (100sf) / 12" Beige Mastic
3	123A	Building K, Southwest Corner (1,400sf) / 12" Cream Floor Tile
4	123B	Building K, Southwest Corner (1,400sf) / 12" Cream Mastic
5	124	Building K, Building K, Southeast Corner (1,400sf) / Sheetrock-Joint Compound
6	125	Building K, Building K, Southwest Corner (1,400sf) / Sheetrock-Joint Compound
7	126	Building K, Café (1,500sf) / 12" Pin Hole & Fissure Ceiling Tile
8	127A	Building K, Band Room, Northwest Corner / 12' Cream Floor Tile
9	127B	Building K, Building K, Band Room, Northwest Corner / 12" Cream Mastic
10	128	Building K, Band Room, Northwest Corner / 4" Brown Cove Base Mastic
11	129	Building K, Band Room Southeast Closet / Sheetrock-Joint Compound
12	130	Building K, , South Wall, Exterior / Window Glazing
13	131	Building K, South Wall / 4" Painted Cove Base Mastic
14	132	Building K, Band Room, North Wall / 12" Pin Hole w/ Fissure Ceiling Tile
15	133	Building K, Band Office Area, over Black Mastic (500sf) / Blue Carpet Yellow Mastic
16	134	Building K, Band Room, North Wall / 12" Ceiling Tile Mastic
17	135	Building K, Roof, Southeast Corner / Composition Rolled Roofing

RECEIVED
 ANALYTICAL
 CHARLE PLATE, INC.
 20 AUG - 11 AM 11-14

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00		8/14/20 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Tomás Montalvo 9/1/20

062014017

Justin Valles
8-4-20



NAL LOG-IN RECORD

Login # **43028**

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 11

Paradise High School Bldg K:

Date **7/28/2020**

Paradise Unified School District

6911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time **12:00:00 PM**

FAX Number

Type Of Work: **PLM-BI** M

Contact

KS 10648

No. of Samples **19**

E-Mail Address

Turnaround: **6 hours**

Num.	Sample ID#	Location/Description
18	136	Building K, Roof, Northeast Corner, Over Band Room / Composition Rolled Roofing
19	137	Building K, Roof over Cafeteria by HVAC / Roof Mastic

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

RECEIVED
 ENSL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG -4 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 8/4/20 11:44 AM
Ron Plumb	08/01/20 12:00	<i>Michael DeLuca</i>		
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

James Montalvo Deca 9/1/20

062014017

Justin Valles
8-4-20



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514
Phone/Fax: (516) 997-7251 / (516) 997-7528
<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014017
Customer ID: NAL51
Customer PO:
Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762
Project: Paradise High School Bldg K: 5911 Maxwell Drive, Paradise, CA 95969, Login #43028

Phone: (916) 225-9631
Fax: (916) 361-0540
Received: 08/04/2020 11:44 AM
Analysis Date: 09/01/2020
Collected: 07/29/2020

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
124 062014017-0005	Building K, Building K, Southeast Corner (1,400 sf)/Sheetrock-Joint Compound	Brown/Tan/White Fibrous Heterogeneous	8% Cellulose 15% Glass	25% Ca Carbonate 45% Gypsum 6% Mica 0.50% Non-fibrous (Other)	0.50% Chrysotile
Composite of sheetrock and joint compound layers.					
125 062014017-0006	Building K, Building K, Southwest Corner (1,400 sf)/Sheetrock-Joint Compound	Brown/Tan/White Fibrous Heterogeneous	8% Cellulose 12% Glass	25% Ca Carbonate 50% Gypsum 3% Mica 1.75% Non-fibrous (Other)	0.25% Chrysotile
Composite of sheetrock and joint compound layers.					
129 062014017-0011	Building K, Band Room Southeast Closet/Sheetrock-Joint Compound	Brown/Tan/White Fibrous Heterogeneous	12% Cellulose 10% Glass	25% Ca Carbonate 48% Gypsum 4% Mica 0.50% Non-fibrous (Other)	0.50% Chrysotile
Composite of sheetrock and joint compound layers.					

Analyst(s)

Tomas Montes De Oca (3)

Daniel Clarke, Asbestos Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 09/01/2020 16:00:50

062 014501



NAL LOG-IN RECORD

Login # 43034

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 17

Paradise High School Bldg P:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-B

Contact

No. of Samples 21

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	299-A	Building P, Room 131, North Wall, Center (-1800sf) / Texture
2	299-B	Building P, Room 131, South Wall / Texture
3	299-C	Building P, Room 131, West Wall / Texture
4	299-D	Building P, Room 132, Center, West Wall / Texture
5	299-E	Building P, Room 132, Center, South Wall / Texture
6	300	Building P, Room 132, Northwest Corner / Sheetrock-Joint Compound
7	301	Building P, Room 131, Southwest Corner / Sheetrock-Joint Compound
8	302	Building P, Room 131 / 12" w/ Pinhole & Fissures Ceiling Tile
9	303	Building P, Room 131 / 12" Ceiling Tile Brown Mastic
10	304	Building P, Room 131, Southeast Corner / 4" Brown Cove Base Mastic
11	305	Building P, Room 131 / Multi-Colored Carpet Yellow Mastic
12	306	Building P, Room 132 / Multi-Colored Carpet Yellow Mastic
13	307	Building P, HVAC / Gray Seam Mastic
14	308-A	Building P, Northeast Corners, Exterior Siding on Concrete / Texture
15	308-B	Building P, West Side, Exterior Siding on Concrete / Texture
16	308-C	Building P, South Side, Middle, Exterior Siding on Concrete / Texture
17	308-D	Building P, Southeast Corner, Exterior Siding on Concrete / Texture

20 AUG 10 AM 5:04
LISA A. ALBERTSON
CARLE PLACE, NY, NY

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: <u>8-10-2020 9:00am</u>
Ron Plumb	08/04/20 12:00			
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

9/1/20 8/10/20 20m
Page 1 Of 2

062 014501



NAL LOG-IN RECORD

Login # 43034

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 17
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg P:
 5911 Maxwell Drive
 Paradise, CA 95969
 KS 10468

Date 7/28/2020
 Sampling Date: 8/4/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 21
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	308-E	Building P, Southwest Corner, Exterior Siding on Concrete / Texture
19	309	Building P, Roof, Southeast by Ridge / Gray Composition Shingle Roofing
20	310	Building P, Roof, Northwest Corner / Gray Composition Shingle Roofing
21	311	Building P, HVAC Area / Gray Roofing Patch

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test fill First Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze floor tile

DO NOT POINT COUNT

RECEIVED
 NATIONAL ANALYTICAL, INC.
 MARLE PLACE, NY
 AUG 10 AM 9:04

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: 9/1/20
Ron Plumb	08/04/20 12:00	<i>[Signature]</i>	8/10/20	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

[Signature] 9/1/20 / 8/10/20 7:12



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514
Phone/Fax: (516) 997-7251 / (516) 997-7528
<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014501
Customer ID: NAL51
Customer PO:
Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762
Phone: (916) 225-9631
Fax: (916) 361-0540
Received: 08/10/2020 9:04 AM
Analysis Date: 09/01/2020
Collected: 08/04/2020
Project: Paradise High School, Bldg. P: 5911 Maxwell Drive, Paradise, CA 95969

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
299-B 062014501-0002	Building P, Room 131, South Wall - Texture	Brown/White Non-Fibrous Homogeneous		50% Ca Carbonate 12% Mica 20% Matrix 18.0% Non-fibrous (Other)	None Detected
300 062014501-0006	Building P, Room 132, Northwest Corner - Sheetrock - Joint Compound	Tan/White Non-Fibrous Homogeneous	7% Cellulose <1% Glass	25% Ca Carbonate 50% Gypsum 3% Mica 15.0% Non-fibrous (Other)	None Detected

Analyst(s)

Jimmy Encalada (2)

Daniel Clarke, Asbestos Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 09/01/2020 16:07:05



NAL LOG-IN RECORD

Login # 43036

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 19

Paradise High School Bldg R:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 37

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	90	Building R, Room 203 (1,00sf) / 2x4 Pin Hole w/ Fissure Ceiling Tile
2	91	Building R, Room 204, West wall (1,400sf) / Sheetrock-Joint Compound
3	92	Building R, Room 206, East Wall by door / Sheetrock-Joint Compound
4	93A	Building R, Room 205 Southwest Corner (250sf) / 12" Beige Floor Tile
5	93B	Building R, Room 205 Southwest Corner (250sf) / 12" Beige Mastic
6	94	Building R, Room 205 (70lf) / 4" Black Cove Base Mastic
7	95A	Building R, Room 206, Under Carpet (550sf) / Beige Ceiling Tile
8	95B	Building R, Room 206, Under Carpet (550sf) / Beige Mastic
9	96	Building R, Room 206 (550sf) / Blue Carpet Yellow Mastic
10	97	Building R, Room 206 (80lf) / 4" Beige Cove Base Mastic
11	98	Building R, Room 203 (450sf) / Brown Carpet Yellow Mastic
12	99	Building R, Library Northeast Corner / Sheetrock-Joint Compound
13	100	Building R, Room 208, East Wall / Sheetrock-Joint Compound
14	101	Building R, Room 208 / 2X4 Pin Holes / Fissure Ceiling Tile
15	102A	Building R, Room 210, 208 & 209 Server Room / 12" Beige Floor Tile
16	102B	Building R, Room 210, 208 & 209 Server Room / Black Mastic
17	103	Building R, Library, Northside, Kitchen (50sf) / Square Pattern Over Floor Tile Linoleum

20 AUG - 4 AM 11:44
 CHIEF OF POLICE
 CARLE PLACER
 NATIONAL ANALYTICAL INC.

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
	08/01/20 12:00		8/4/20 11:44 am	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

8/5/20
062014018

8/5/20 4:16pm
8/9/20
432



NAL LOG-IN RECORD

Login # 43036

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# **3911 / 19**

Paradise High School Bldg R:

Date **7/28/2020**

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: **7/29/2020**

Phone Number

Paradise, CA 95969

Sampling Time **12:00:00 PM**

FAX Number

Type Of Work: **PLM-BI**

Contact

KS 10468

No. of Samples **37**

E-Mail Address

Turnaround: **6 hours**

Num.	Sample ID#	Location/Description
18	104A	Building R, Between Library & Room 208 / Stair Tread
19	104B	Building R, Between Library & Room 208 / Mastic
20	105	Building R, Room 209, West Wall / 4" Black Cove Base Mastic
21	106	Building R, Library, Eastside under Carpet / Black Mastic
22	107	Building R, Library / Computer Room Under (3,400sf) / 2x2 Brown Carpet Squares Black Mastic
23	108	Building R, Room 208, Northside, Exterior / Window Glazing
24	109	Building R, Room 210, Southwest Corner / Sheetrock-Joint Compound
25	110	Building R, Northwest Corner / Composition Rolled Roofing
26	111	Building R, Northwest Corner / Composition Rolled Roofing
27	112	Building R, Center over Library / Composition Rolled Roofing
28	113	Building R, Southwest Corner / Composition Rolled Roofing
29	114	Building R, Northside Roof over Walkway / Composition Rolled Roofing
30	115	Building R, Southside, Lower roof over Walkway / Composition Rolled Roofing
31	116	Building R, Upper Room / Penetration Mastic
32	117A	Building R, Upper Roof Around Sleepers / Roof Patch Compound
33	117B	Building R, Drama Room, Southwest Corner / Sheetrock-Joint Compound
34	118	Building R, Girls Restroom / 4" White Ceramic Tile w/ Grout

RECEIVED
 NATIONAL ANALYTICAL INC.
 CARLE PLACE HWY
 20 AUG - 11 AM 11:45

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Unguis McCoy</i>	8/1/20 11:44 AM	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

Ron Plumb
8/1/20
062014018

Unguis McCoy 8/5/20 4:16pm
1/9/1/20 431~



NAL LOG-IN RECORD

Login # 43036

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 19

Paradise High School Bldg R:

Date 7/28/2020

Paradise Unified School District

5911 Maxwell Drive

Sampling Date: 7/29/2020

Phone Number

Paradise, CA 95969

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BI

Contact

KS 10468

No. of Samples 37

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
35	119	Building R, Girls Restroom / 1X2 Green Ceramic Tile w/ Grout
36	120	Building R, Boys Restroom / 4" White Ceramic Tile w/ Grout
37	121	Building R, Boys Restroom / 1X2 Green Ceramic Tile w/ Grout

Please analyze all Stucco, Texture, Plaster and Sheetrock-Joint Compound on a Test till First

Positive, Stop at First Positive Basis. Positive is >1%

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT ANY MATERIAL

Quilley
8/5/20

RECEIVED
EISL ANALYTICAL, INC.
CARLE PLACE, NY
20 AUG - 4 AM 11:44

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/01/20 12:00	<i>Unique McKay</i>	8/4/20 11:44 AM	At:
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

062014018

Quilley 8/5/20 4:16pm 9/1/20 4:30



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514
Phone/Fax: (516) 997-7251 / (516) 997-7528
<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014018
Customer ID: NAL51
Customer PO:
Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762
Project: Paradise High School Bldg R: 5911 Maxwell Drive, Paradise, CA 95969, Login # 43036

Phone: (916) 225-9631
Fax: (916) 361-0540
Received: 08/04/2020 11:44 AM
Analysis Date: 09/01/2020
Collected: 07/29/2020

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
91 062014018-0002	Building R, Room 204, West Wall (1,400sf) - Sheetrock - Joint Compound	Brown/White Non-Fibrous Homogeneous	5% Cellulose	15% Ca Carbonate 72% Gypsum 7.75% Non-fibrous (Other)	0.25% Chrysotile
92 062014018-0003	Building R, Room 206, East Wall by Door - Sheetrock - Joint Compound	Brown/White Fibrous Heterogeneous	5% Cellulose	37% Ca Carbonate 48% Gypsum 3% Mica 6.50% Non-fibrous (Other)	0.50% Chrysotile
99 062014018-0012	Building R, Library, Northeast Corner - Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Homogeneous	7% Cellulose <1% Glass	18% Ca Carbonate 65% Gypsum 9.75% Non-fibrous (Other)	0.25% Chrysotile
100 062014018-0013	Building R, Room 208, East Wall - Sheetrock - Joint Compound	Brown/Tan/White Non-Fibrous Homogeneous	6% Cellulose <1% Glass	24% Ca Carbonate 60% Gypsum 9.75% Non-fibrous (Other)	0.25% Chrysotile
109 062014018-0024	Building R, Room 210, Southwest Corner - Sheetrock - Joint Compound	Brown/Tan/White Fibrous Heterogeneous	5% Cellulose <1% Glass	20% Ca Carbonate 68% Gypsum 6.75% Non-fibrous (Other)	0.25% Chrysotile
117B 062014018-0033	Building R, Drama Room, Southwest Corner - Sheetrock - Joint Compound	Brown/Tan/White Fibrous Heterogeneous	6% Cellulose	24% Ca Carbonate 62% Gypsum 7.75% Non-fibrous (Other)	0.25% Chrysotile

Analyst(s)

Steve Juscuk (6)

Daniel Clarke, Asbestos Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 09/01/2020 18:28:07



EMSL Analytical, Inc.

528 Mineola Avenue Carle Place, NY 11514
Phone/Fax: (516) 997-7251 / (516) 997-7528
<http://www.EMSL.com> / carleplacelab@emsl.com

EMSL Order: 062014470
Customer ID: NAL51
Customer PO:
Project ID:

Attention: Paula Lee
National Analytical Laboratories (NAL)
2201 Francisco Dr.
Ste. 140-261
El Dorado Hills, CA 95762
Phone: (916) 225-9631
Fax: (916) 361-0540
Received: 08/10/2020 9:01 AM
Analysis Date: 09/01/2020
Collected: 08/04/2020
Project: Paradise High School Bldg U: 5911 Maxwell Drive, Paradise, CA 95969, Log in #: 43039

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
367	Building U, West Side	Brown/Tan/White	7% Cellulose	20% Ca Carbonate	0.50% Chrysotile
062014470-0004	Storage/Sheetrock-Joint Compound	Fibrous Heterogeneous	10% Glass	50% Gypsum 5% Mica 7.50% Non-fibrous (Other)	
Composite of sheetrock and joint compound layers.					

Analyst(s)

Tomas Montes De Oca (1)

Daniel Clarke, Asbestos Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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 must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 09/01/2020 16:11:55



NAL LOG-IN RECORD

Login # 43039

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 22

Paradise High School Bldg U:
5911 Maxwell Drive
Paradise, CA 95969

KS 10468

Date 7/28/2020

Paradise Unified School District

Sampling Date: 8/4/2020

Phone Number

Sampling Time 12:00:00 PM

FAX Number

Type Of Work: PLM-BY

Contact

No. of Samples 18

E-Mail Address

Turnaround: 6 hours

Num.	Sample ID#	Location/Description
1	366-A	Building U, Storage Area, South Wall (800sf) / Texture
2	366-B	Building U, Break Area, East Wall / Texture
3	366-C	Building U, Break Area, West Wall / Texture
4	367	Building U, West Side Storage / Sheetrock-Joint Compound
5	368	Building U, Break Area, Southwest Corner / Sheetrock-Joint Compound
6	369-A	Building U, Office, Bottom Layer / Green Floor Tile
7	369-B	Building U, Bottom Layer / Black Mastic
8	370	Building U, Office / Mauve Carpet Yellow Mastic
9	371	Building U, East Side, Exterior / Lightweight Concrete
10	372	Building U, West Side, Exterior / Window Caulking
11	373-A	Building U, Hallway to Office, South Side, Exterior Siding on Concrete / Texture
12	373-B	Building U, Northwest Corner, Exterior Siding on Concrete / Texture
13	373-C	Building U, Southeast Corner, Exterior Siding on Concrete / Texture
14	373-D	Building U, Exterior Siding, West Side on Concrete / Texture
15	373-E	Building U, East Side, Exterior Siding / Texture
16	374	Building U, Southeast Side, Roof / Composition Rolled Roofing
17	375	Building U, Upper Roof, East Side / Gray Composition Rolled Roofing

RECEIVED
ENVIRONMENTAL ANALYTICAL LAB., INC.
CARLE PLACE, NY
20 AUG 10 AM 9 01

062014470

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
Ron Plumb	08/04/20 12:00		8-10-20	
Released By Signature	Date/Time	Received By Signature	Date/Time	

James Martin DeDea 9/1/20

Justin Valles 8-10-20



NAL LOG-IN RECORD

Login # 43039

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 22
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg U:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 8/4/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 18
 Turnaround: 6 hours

Num.	Sample ID#	Location/Description
18	376	Building U, Roof, Northwest Corner / Composition Rolled Roofing

Please analyze all Texture, Plaster and Sheetrock-Joint Compound on a Test till First Positive, Stop at First Positive Basis, Positive is $\geq 1\%$

For All Floor tiles, Analyze Mastic First, If Mastic is Positive, Do not analyze Floor Tile

DO NOT POINT COUNT

RECEIVED
 ENVIRONMENTAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:01

062014470

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due: At:
Ron Plumb	08/04/20 12:00		8/4/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	

José Montalvo De Oca 9/1/20

*Anton Valles
8-10-20*



NAL LOG-IN RECORD

Login # 43039

Ph: 916.361.0555 Fx: 916.361.0540

National Analytical Laboratories, Inc.

Job Site/Job #:

Client#-Lot# 3911 / 22
 Paradise Unified School District
 Phone Number
 FAX Number
 Contact
 E-Mail Address

Paradise High School Bldg U:
 5911 Maxwell Drive
 Paradise, CA 95969

 KS 10468

Date 7/28/2020
 Sampling Date: 8/4/2020
 Sampling Time 12:00:00 PM
 Type Of Work: PLM-BI
 No. of Samples 18
 Turnaround: 6 hours

RECEIVED
 NAL ANALYTICAL, INC.
 CARLE PLACE, NY
 20 AUG 10 AM 9:01

062014470

Chain of Custody Information

Released By Signature	Date/Time	Received By Signature	Date/Time	Due:
Ron Plumb	08/04/20 12:00		8/4/2020	
Released By Signature	Date/Time	Received By Signature	Date/Time	At:

José Montoya De Oca & 9/1/20

Ruth Valle
 R-10-100



Login #: 43115

Brie Garagano
Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School - Room 401 Band
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/30/2020
 Date Report Submitted: 8/13/2020
 NAL ID # / Lot #: 3911 / 48

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Lab Tracking #:
 Total Samples: 5

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-48-1	White Paint	Band Room 401, Interior, Drywall Wall System, Various Areas	2558, 2559	<0.3
Sample ID #: 2 NAL ID: 3911-48-2	Blue-White Paint	Band Room 401, Interior, Metal Door/Casing/Jamb Systems, Various Areas	2560, 2561, 2562	<0.21
Sample ID #: 3 NAL ID: 3911-48-3	White Paint	Band Room 401, Interior, Wood Windowsill/Casing Systems, Various Areas	2563, 2564	<0.09
Sample ID #: 4 NAL ID: 3911-48-4	Green Paint	Band Room 401, Interior, Metal Locker System, Various Areas	2565, 2566, 2567	<0.03
Sample ID #: 5 NAL ID: 3911-48-5	White Paint	Band Room 401, Interior, Wood Cabinet Frame/Shelf System, Various Areas	2568, 2569	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

National Analytical Laboratories, Inc. 2201 Francisco Dr. Ste.140-261, El Dorado Hills, CA 95762
 Phone (916) 361-0555 Fax (916) 361-0540 Website www.NAL1.com



Login #: 43094

Brie Garagano
Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School Bldg. A
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/29/2020
 Date Report Submitted: 8/11/2020
 NAL ID # / Lot #: 3911 / 31

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 6

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-31-1	Green-Yellow-Brown Paint	Building A, Exterior, Metal Door/Casing/Jamb Systems, Various Areas	2200, 2206, 2219, 2201, 2221, 2205	<0.03
Sample ID #: 2 NAL ID:	White Paint	Building A, Exterior, Metal Wall at Handrail Systems, Various Areas	2210, 2204, 2199, 2198	<0.04
Sample ID #: 3 NAL ID:	White-Yellow-Brown Paint	Building A, Exterior, Wood Door/Jamb/Casing Systems, Various Areas	2209, 2208, 2220, 2207	<0.03
Sample ID #: 4 NAL ID:	Green Paint	Building A, Exterior, Wood Fascia at Handrail Systems, Various Areas	2213, 2215, 2217, 2202	<0.03
Sample ID #: 5 NAL ID:	White Paint	Building A, Exterior, Wood Soffit Systems, Various Areas	2214, 2216, 2218	<0.04
Sample ID #: 6 NAL ID:	White-Green Paint	Building A, Exterior, Wood Wall at Window Casing System, Various Areas	2203, 2211, 2212, 2222	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

National Analytical Laboratories, Inc. 2201 Francisco Dr. Ste.140-261, El Dorado Hills, CA 95762
Phone (916) 361-0555 Fax (916) 361-0540 Website www.NAL1.com



Login #: 43095

Brie Garagano
 Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax #: (916) 244-2755

Job Site:
 Paradise High School Bldg. B
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/29/2020
 Date Report Submitted: 8/11/2020
 NAL ID # / Lot #: 3911 / 32

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 9

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm ²
Sample ID #: 1 NAL ID: 3911-32-1	Paint	Building B, Concrete Footer System, Various Areas	2233, 2248, 2249	<0.03
Sample ID #: 2 NAL ID: 3911-32-2	White Paint	Building B, Interior, Drywall, Ceiling System, Various Areas	2240, 2241	<0.03
Sample ID #: 3 NAL ID: 3911-32-3	Green-White-Yellow Paint	Building B, Interior, Drywall, Wall System, Various Areas	2236, 2239, 2234, 2237, 2235, 2238	<0.03
Sample ID #: 4 NAL ID: 3911-32-4	Blue-Yellow Paint	Building B, Metal, Door System, Various Areas	2242, 2245, 2227	<0.03
Sample ID #: 5 NAL ID: 3911-32-5	Brown-Yellow Paint	Building B, Metal, Door Casing System, Various Areas	2244, 2247, 2228	<0.04
Sample ID #: 6 NAL ID: 3911-32-6	Green Paint	Building B, Metal, Door Jamb System, Various Areas	2243, 2246, 2229	<0.03
Sample ID #: 7 NAL ID: 3911-32-7	White Paint	Building B, Interior, Wood, Fascia System, Various Areas	2252, 2254, 2250	<0.03
Sample ID #: 8 NAL ID: 3911-32-8	Green-White Paint	Building B, Interior, Wood, Soffit System, Various Areas	2251, 2253, 2255	<0.03
Sample ID #: 9 NAL ID: 3911-32-9	Green Paint	Building B, Exterior, Wood Wall, Window Casing System, Various Areas	2223, 2225, 2230, 2224, 2226, 2231, 2232	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

National Analytical Laboratories, Inc. 2201 Francisco Dr. Ste.140-261, El Dorado Hills, CA 95762
 Phone (916) 361-0555 Fax (916) 361-0540 Website www.NAL1.com



Login #: 43096

Brie Garagano
 Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School Bldg. C
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/29/2020
 Date Report Submitted: 8/11/2020
 NAL ID # / Lot #: 3911 / 33

Attention: Brie Garagano
 Email:

Job Number
 KS 10648

Total Samples: 10

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm ²
Sample ID #: 1 NAL ID: 3911-33-1	Green-White Paint	Building C, Interior, Fiberboard, Wall System, Various Areas	2273, 2274, 2271, 2272	<0.03
Sample ID #: 2 NAL ID: 3911-33-2	Green-White Paint	Building C, Exterior, Metal, Bed Framing Systems, Various Areas	2281, 2282	<0.03
Sample ID #: 3 NAL ID: 3911-33-3	Green Paint	Building C, Exterior, Metal, Cabinet Locker System, Various Areas	2275, 2276	<0.03
Sample ID #: 4 NAL ID: 3911-33-4	Gray-Tan Paint	Building C, Exterior, Metal, Door System, Various Areas	2277, 2264	<0.03
Sample ID #: 5 NAL ID: 3911-33-5	Green-White Paint	Building C, Exterior, Metal, Door/Casing/Jamb Systems, Various Areas	2278, 2279, 2280, 2263	<0.03
Sample ID #: 6 NAL ID: 3911-33-6	Green Paint	Building C, Exterior, Metal, Gutter/Downspout Systems, Various Areas	2265, 2266, 2270	<0.03
Sample ID #: 7 NAL ID: 3911-33-7	Green Paint	Building C, Metal, Flashing System, Various Areas	2258, 2261	<0.03
Sample ID #: 8 NAL ID: 3911-33-8	Green Paint	Building C, Exterior, Metal, Handrail System, Various Areas	2268, 2269, 2270	<0.03
Sample ID #: 9 NAL ID: 3911-33-9	Tan-Green Paint	Building C, Exterior, Wood, Door Casing/Fascia Systems, Various Areas	2262, 2259	<0.03
Sample ID #: 10 NAL ID: 3911-33-10	Green-White Paint	Building C, Wood, Soffit/Wall Systems, Various Areas	2257, 2260, 2283	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

National Analytical Laboratories, Inc. 2201 Francisco Dr. Ste.140-261, El Dorado Hills, CA 95762
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Login #: 43109

Brie Garagano
 Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School - Bldg. D
 5911 Maxwell
 Paradise, 95969 CA

Date Samples Taken: 8/14/2020
 Date Report Submitted: 8/12/2020
 NAL ID # / Lot #: 3911 / 43

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 24

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm ²
Sample ID #: 1 NAL ID: 3911-43-1	Blue-Brown-Gray Paint	Building D, Interior, Girl's & Boy's Locker Rooms, Ceramic Floor Tile System, Various Areas	2438, 2395, 2406, 2436, 2444	<0.09
Sample ID #: 2 NAL ID: 3911-43-2	Green-Tan-White-Yellow Paint	Building D, Interior, Boy's Locker Room, Ceramic Wall Tile System, Various Areas	2405, 2371, 2404, 2407, 2408, 2396	5.1
Sample ID #: 3 NAL ID: 3911-43-3	Gray-Green-Lime Green-Tan Paint	Building D, Interior, Girl's Locker Room, Ceramic Wall Tile System, Various Areas	2372, 2442, 2435, 2437, 2434	10.2
Sample ID #: 4 NAL ID: 3911-43-4	Brown Paint	Building D, Interior, Boy's Locker Room, Concrete Floor System, Various Areas	2397, 2398, 2399	0.06
Sample ID #: 5 NAL ID: 3911-43-5	Green-White-Beige-Blue-Pink Paint	Building D, Interior-Exterior, Concrete Wall System, Various Areas	2333, 2334, 2335, 2329, 2332, 2378, 2367, 2368, 2370, 2377, 2365, 2366, 2382	0.18
Sample ID #: 6 NAL ID: 3911-43-6	Beige Paint	Building D, Interior, Room 301, Drywall Wall System	2391	<0.03
Sample ID #: 7 NAL ID: 3911-43-7	Beige Paint	Building D, Interior, Metal Bracket System	2376	<0.03
Sample ID #: 8 NAL ID: 3911-43-8	Blue-Yellow Paint	Building D, Interior-Exterior, Metal Door System, Various Areas	2373, 2336	<0.51
Sample ID #: 9 NAL ID: 3911-43-9	Blue-Yellow Paint	Building D, Interior, Boy's & Girl's Lobby, Metal Door System, Various Areas	2386, 2421, 2340	0.8
Sample ID #: 10 NAL ID: 3911-43-10	Beige-Gray-Tan-Yellow Paint	Building D, Interior-Exterior, Girl's & Boy's Lobby, Metal Door Casing/Jamb Systems, Various Areas	2374, 2422, 2387, 2388, 2384, 2337, 2375	<0.93

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Fax # (916) 244-2755

Job Site:
 Paradise High School - Bldg. D
 5911 Maxwell
 Paradise, 95969 CA

Date Samples Taken: 8/14/2020
 Date Report Submitted: 8/12/2020
 NAL ID # / Lot #: 3911 / 43

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 24

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 11 NAL ID: 3911-43-11	Beige-Tan-Yellow Paint	Building D, Interior-Exterior, Gil's Lobby, Metal Door Jamb System, Various Areas	2423, 2383, 2338, 2341	0.39
Sample ID #: 12 NAL ID: 3911-43-12	Gray Paint	Building D, Exterior, Metal Flashing System	2330	<0.54
Sample ID #: 13 NAL ID: 3911-43-13	Green Paint	Building D, Exterior, Metal Handrail System	2343	<0.03
Sample ID #: 14 NAL ID: 3911-43-14	Beige-Green Paint	Building D, Interior, Metal Locker System, Various Areas	2401, 2402, 2433, 2400, 2403, 2432	<0.11
Sample ID #: 15 NAL ID: 3911-43-15	White Paint	Building D, Exterior, Metal Window System, Various Areas	2356, 2359	<0.03
Sample ID #: 16 NAL ID: 3911-43-16	Yellow-Beige-Tan-White Paint	Building D, Interior-Exterior, Metal Window Apron/Frame Systems, Various Areas	2339, 2419, 2429, 2430, 2355, 2357, 2410	1.23
Sample ID #: 17 NAL ID: 3911-43-17	Tan-White Paint	Building D, Interior, Plaster Ceiling System, Various Areas	2441, 2389, 2431	<0.05
Sample ID #: 18 NAL ID: 3911-43-18	Beige-Forest-Lime Green-White Paint	Building D, Interior, Plaster Wall System, Various Areas	2439, 2414, 2415, 2385, 2424, 2425, 2426	<0.23
Sample ID #: 19 NAL ID: 3911-43-19	White Paint	Building D, Interior, Wood Awning Ceiling/Support Column Systems, Various Areas	2349, 2344, 2345	0.5
Sample ID #: 20 NAL ID: 3911-43-20	Forest-White Paint	Building D, Exterior, Office & Lobby, Wood Cabinet System, Various Areas	2412, 2413, 2420	<0.12
Sample ID #: 21 NAL ID: 3911-43-21	Tan-White-Yellow Paint	Building D, Interior-Exterior, Wood Door/Casing/Jamb Systems, Various Areas	2392, 2362, 2381, 2363, 2393, 2380, 2394, 2379	<0.54
Sample ID #: 22 NAL ID: 3911-43-22	White Paint	Building D, Exterior, Wood Fascia System, Various Areas	2346, 2347, 2348, 2361	0.6

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Paradise High School - Bldg. D
 5911 Maxwell
 Paradise, 95969 CA

Date Samples Taken: 8/14/2020
 Date Report Submitted: 8/12/2020
 NAL ID # / Lot #: 3911 / 43

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 24

XRF LEAD ANALYTICAL

<u>Sample ID #</u>	<u>Material</u>	<u>Location</u>	<u>XRF #'s</u>	<u>Mg/cm2</u>
Sample ID #: 23 NAL ID: 3911-43-23	Green-Tan Paint	Building D, Interior, Wood Stage/Window Systems, Various Areas	2369, 2440	<0.04
Sample ID #: 24 NAL ID: 3911-43-24	Beige-White-Tan Paint	Building D, Interior-Exterior, Wood Window Apron/Casing/Sill Systems, Various Areas	2417, 2350, 2351, 2418, 2428, 2352, 2353, 2411, 2416, 2427, 2354, 2409	0.51

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials



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Job Site:
 Paradise High School Bldg. E
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/29/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 60

Attention: Brie Garagano
 Email:

Job Number
 KS 10648

Total Samples: 14

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-60-1	Red Paint	Building E, Exterior, Concrete Slab System, Various Areas	2316, 2317, 2318	<0.03
Sample ID #: 2 NAL ID: 3911-60-2	Beige-Black-Green Paint	Building E, Interior, Concrete Wall System, Various Areas	2288, 2287, 2286	<0.12
Sample ID #: 3 NAL ID: 3911-60-3	White Paint	Building E, Interior, Drywall Wall System, Various Areas	2292, 2293, 2294	<0.04
Sample ID #: 4 NAL ID: 3911-60-4	White-Green Paint	Building E, Exterior, Metal Awning Fascia/Support Column Systems, Various Areas	2309, 2310, 2311	<0.03
Sample ID #: 5 NAL ID: 3911-60-5	Black-Blue-Yellow Paint	Building E, Interior, Metal Door System, Various Areas	2298, 2289, 2306	0.39
Sample ID #: 6 NAL ID: 3911-60-6	Beige-Yellow-Gray Paint	Building E, Exterior-Interior, Metal Door Casing/Jamb Systems, Various Areas	2290, 2307, 2291, 2299, 2308	0.32
Sample ID #: 7 NAL ID: 3911-60-7	Green-White Paint	Building E, Exterior, Metal Downspout System	2319	1.2
Sample ID #: 8 NAL ID: 3911-60-8	Tan Paint	Building E, Interior, Metal Electrical Panel System, Various Areas	2295, 2296, 2297	<0.36
Sample ID #: 9 NAL ID: 3911-60-9	Green-White Paint	Building E, Exterior, Metal Gutter System, Various Areas	2321, 2322, 2323, 2320, 2324, 2325	<0.03
Sample ID #: 10 NAL ID: 3911-60-10	Brown Paint	Building E, Interior, Metal Handrail System, Various Areas	2304, 2305, 2303	<0.17
Sample ID #: 11 NAL ID: 3911-60-11	Tan-White Paint	Building E, Interior, Metal HVAC Duct System, Various Areas	2300, 2301, 2302	<0.03
Sample ID #: 12 NAL ID: 3911-60-12	Green-White Paint	Building E, Exterior, Stucco Wall System, Various Areas	2312, 2314, 2313, 2315	<0.03
Sample ID #: 13 NAL ID: 3911-60-13	Green-White Paint	Building E, Exterior, Wood Fascia/Soffit Systems, Various Areas	2326, 2327	1

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. E
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/29/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 60

Attention: Brie Garagano
 Email:

Job Number
 KS 10648

Total Samples: 14

XRF LEAD ANALYTICAL

<u>Sample ID #</u>	<u>Material</u>	<u>Location</u>	<u>XRF #'s</u>	<u>Mg/cm2</u>
Sample ID #: 14 NAL ID: 3911-60-14	Beige-Black Paint	Building E, Interior, Wood Wall System, Various Areas	2285, 2284	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials



Login #: 43171

Brie Garagano
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 Phone # (530) 872-6495
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Job Site:
 Paradise High School Bldg. I
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/31/2020
 Date Report Submitted: 8/24/2020
 NAL ID # / Lot #: 3911 / 70

Attention: Brie Garagano
 Email:

Job Number
 KS 10648

Total Samples: 12

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm ²
Sample ID #: 1 NAL ID: 3911-70-1	Green Paint	Building I, Exterior, Concrete Footer System, Various Areas	2593, 2594, 2595, 2956	<0.03
Sample ID #: 2 NAL ID: 3911-70-2	Blue-White Paint	Building I, Interior, Rooms 402, 403, 408 & 409, Drywall Ceiling-Wall System, Various Areas	2616, 2617, 2618, 2627, 2628	<0.03
Sample ID #: 3 NAL ID: 3911-70-3	Blue-Black Paint	Building I, Interior-Exterior, Room 405 and Others, Metal Door, Various Areas	2624, 2583, 2588	<0.03
Sample ID #: 4 NAL ID: 3911-70-4	Black-Gray Paint	Building I, Interior, Room 406 and 407, Metal Door Jamb-Casings, Various Areas	2625, 2626, 2584, 2585, 25905	<0.03
Sample ID #: 5 NAL ID: 3911-70-5	Yellow-Green-Blue-White Paint	Building I, Exterior, Metal Downspout System, Various Areas	2597, 2598, 2599, 2600, 2613, 2614, 2615	1.96
Sample ID #: 6 NAL ID: 3911-70-6	Green Paint	Building I, Exterior, Metal Gutter System, Various Areas	2607, 2608, 2609	<0.03
Sample ID #: 7 NAL ID: 3911-70-7	Green Paint	Building I, Exterior, Metal Support Column System, Various Areas		<0.03
Sample ID #: 8 NAL ID: 3911-70-8	Blue-Brown Paint	Building I, Interior-Exterior, Metal Wall System, Various Areas	2587, 2592, 2619	<0.03
Sample ID #: 9 NAL ID: 3911-70-9	Black-Brown-Gray Paint	Building I, Interior, Room 402, 403 & 404, Metal Window Casing-Window Sill System, Various Areas	2586, 2591, 2620, 2621, 2622, 2623	<0.03
Sample ID #: 10 NAL ID: 3911-70-10	Green-Yellow-White Paint	Building I, Exterior, Stucco Wall-Soffit System, Various Areas	2577, 2578, 2579, 2580, 2581, 2582, 2601, 2602	<0.03
Sample ID #: 11 NAL ID: 3911-70-11	Green Paint	Building I, Exterior, Wood Facia System, Various Areas	2604, 2605, 2606	<0.12
Sample ID #: 12 NAL ID: 3911-70-12	Brown Paint	Building I, Interior, Room 402 & 403, Wood Support Column System, Various Areas	2629, 2630, 2631	<0.03

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Phone # (530) 872-6495
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Job Site:
 Paradise High School - Bldg. J
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/30/2020
 Date Report Submitted: 8/14/2020
 NAL ID # / Lot #: 3911 / 49

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 14

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-49-1	Peach Paint	Building J, Interior, Drywall Wall System, Various Areas	2546, 2547, 2548	0.22
Sample ID #: 2 NAL ID: 3911-49-2	Yellow Paint	Building J, Exterior, Metal Door System	2506	<0.03
Sample ID #: 3 NAL ID:	Green Paint	Building J, Exterior, Metal Downspout System	2520	2.3
Sample ID #: 4 NAL ID: 3911-49-4	Peach Paint	Building J, Interior, Metal Window Frame System	2549	2.3
Sample ID #: 5 NAL ID: 3911-49-5	White-Green Paint	Building J, Exterior, Stucco Awning-Support Column Systems, Various Areas	2503, 2505	<0.03
Sample ID #: 6 NAL ID: 3911-49-6	White-Green Paint	Building J, Exterior, Stucco Wall System, Various Areas	2498, 2509, 2499, 2500, 2510	0.8
Sample ID #: 7 NAL ID: 3911-49-7	Yellow Paint	Building J, Exterior, Stucco Window Casing-Apron Systems, Various Areas	2502, 2501	<0.2
Sample ID #: 8 NAL ID: 3911-49-8	Green Paint	Building J, Exterior, Wood Awning System	2522	<0.04
Sample ID #: 9 NAL ID: 3911-49-9	White Paint	Building J, Interior, Wood Cabinet Drawer-Frame System, Various Areas	2555, 2556	<0.39
Sample ID #: 10 NAL ID: 3911-49-10	Yellow-Peach-Gray Paint	Building J, Interior-Exterior, Wood Door-Casing-Jamb Systems, Various Areas	2552, 2515, 2553, 2496, 2507, 2516, 2554, 2497, 2508	<0.22
Sample ID #: 11 NAL ID: 3911-49-11	Green Paint	Building J, Exterior, Wood Facia System, Various Areas	2521, 2504	<0.03
Sample ID #: 12 NAL ID: 3911-49-12	Green Paint	Building J, Wood Wall Systems	2514	<0.03
Sample ID #: 13 NAL ID: 3911-49-13	White-Gray Paint	Building J, Exterior, Wood Window Apron-Casing-Frame Systems, Various Areas	2519, 2513, 2518, 2512, 2517, 2511	1.4

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Phone # (530) 872-6495

Fax #: (916) 244-2755

Job Site:

Paradise High School - Bldg. J

5911 Maxwell Drive

Paradise, 95969 CA

Date Samples Taken: 7/30/2020

Date Report Submitted: 8/14/2020

NAL ID # / Lot #: 3911 / 49

Attention: Brie GaraganoJob Number

Total Samples: 14

Email: KS 10468

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 14 NAL ID:	Peach Paint	Building J, Interior Wood Window Casing-Sill Systems, Various Areas	2550, 2557, 2551	<0.85

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

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 Phone # (530) 872-6495
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Job Site:
 Paradise High School - Bldgs. J-K
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/30/2020
 Date Report Submitted: 8/14/2020
 NAL ID # / Lot #: 3911 / 49

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 13

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-49-1	Beige-Teal-Peach	Buildings J-K, Interior-Exterior, Drywall Wall/Ceiling Systems, Various Areas	2523, 2524, 2525, 2534, 2535, 2546, 2547, 2548	0.22
Sample ID #: 2 NAL ID: 3911-49-2	Green Paint	Buildings J-K, Exterior, Metal Downspout System	2520	2.3
Sample ID #: 3 NAL ID: 3911-49-3	Yellow Paint	Buildings J-K, Exterior, Metal Door System, Various Areas	2495, 2506	1.52
Sample ID #: 4 NAL ID: 3911-49-4	Peach-White Paint	Buildings J-K, Interior-Exterior, Metal Window Frame System, Various Areas	2549, 2542	<0.14
Sample ID #: 5 NAL ID: 3911-49-5	White-Green-Yellow Paint	Buildings J-K, Exterior, Stucco Awning/Fascia/Support Column/Wall/Window Apron/Casing Systems, Various Areas	2503,2504,2505,2498, 2509,2499,2500,2510, 2502,2501	0.8
Sample ID #: 6 NAL ID: 3911-49-6	Green Paint	Buildings J-K, Exterior, Wood Awning System	2522	<0.04
Sample ID #: 7 NAL ID: 3911-49-7	White Paint	Buildings J-K, Interior, Wood Cabinet Frame/Drawer/Door Systems, Various Areas	2536, 2537, 2538, 2555, 2556	0.39
Sample ID #: 8 NAL ID: 3911-49-8	Green Paint	Buildings J-K, Interior, Wood Door System, Various Areas	2539, 2552, 2530	<0.11
Sample ID #: 9 NAL ID: 3911-49-9	Yellow-Gray-Beige-Red-White-Peach Paint	Buildings J-K, Exterior-Interior, Wood Door Casing/Jamb Systems, Various Areas	2496, 2497, 2507, 2508, 2515, 2516, 2529, 2531, 2532, 2533, 2554	0.83
Sample ID #: 10 NAL ID: 3911-49-10	Green Paint	Buildings J-K, Exterior, Wood Fascia/Wall Systems, Various Areas	2521, 2514	<0.03
Sample ID #: 11 NAL ID: 3911-49-11	White-Gray Paint	Buildings J-K, Exterior, Wood Frame/Casing/Apron Systems, Various Areas	2511, 2512, 2513, 2517, 2518, 2519	1.4

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Reviewed by: Michael Lee

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Job Site:
 Paradise High School - Bldgs. J-K
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/30/2020
 Date Report Submitted: 8/14/2020
 NAL ID # / Lot #: 3911 / 49

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 13

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 12 NAL ID: 3911-49-12	Beige-White-Peach Paint	Buildings J-K, Wood Window Casing/Apron Systems, Various Areas	2526, 2528, 2543, 2545, 2557	1.7
Sample ID #: 13 NAL ID: 3911-49-13	Peach-Beige-White Paint	Buildings J-K, Exterior-Interior, Wood Windowsill System, Various Areas	2550, 2527, 2551, 2544	0.85
Sample ID #: 14 NAL ID: 3911-49-14	White Paint	Building K - Band Room 401, Interior, Drywall Wall System, Various Areas	2558, 2559	<0.3
Sample ID #: 15 NAL ID: 3911-49-15	Blue-White Paint	Building K - Band Room 401, Interior, Metal Door/Casing/Jamb Systems, Various Areas	2560, 2561, 2562	<0.21
Sample ID #: 16 NAL ID: 3911-49-16	White Paint	Building K - Band Room 401, Interior, Wood Windowsill/Casing Systems, Various Areas	2563, 2564	<0.09
Sample ID #: 17 NAL ID: 3911-49-17	Green Paint	Building K - Band Room 401, Interior, Metal Locker System, Various Areas	2565, 2566, 2567	<0.03
Sample ID #: 18 NAL ID: 3911-49-18	White Paint	Building K - Band Room 401, Interior, Wood Cabinet Frame/Shelf System, Various Areas	2568, 2569	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Paradise Unified School District
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 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School Bldg. L
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/31/2020
 Date Report Submitted: 8/21/2020
 NAL ID # / Lot #: 3911 / 69

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 10

XRF LEAD ANALYTICAL

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-69-1	Gray Paint	Building L, Interior, Men's & Women's Restrooms, Ceramic Floor Tile System, Various Areas	2671, 2672	<0.03
Sample ID #: 2 NAL ID: 3911-69-2	Yellow Paint	Building L, Interior, Men's Restroom, Ceramic Wall Tile System	2670	2.9
Sample ID #: 3 NAL ID: 3911-69-3	Green Paint	Building L, Exterior, Metal Gutter System, Various Areas	2657, 2658, 2659, 2660	2.25
Sample ID #: 4 NAL ID: 3911-69-4	White Paint	Building L, Interior, Hall, Meeting Room, & Main Office, Plaster Wall System, Various Areas	2667, 2668, 2669	<0.26
Sample ID #: 5 NAL ID: 3911-69-5	Green-White Paint	Building L, Exterior, Stucco Wall System, Various Areas	2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639	0.5
Sample ID #: 6 NAL ID: 3911-69-6	White Paint	Building L, Exterior, Wood Awning/Support Column Systems, Various Areas	2646, 2647	0.2
Sample ID #: 7 NAL ID: 3911-69-7	Green-Tan Paint	Building L, Exterior-Interior, Main Office, Wood Door/Casing/Jamb Systems, Various Areas	2661, 2640, 2645, 2662, 2641, 2663, 2642	0.7
Sample ID #: 8 NAL ID: 3911-69-8	Green-White Paint	Building L, Exterior, Wood Fascia System, Various Areas	2650, 2651, 2648, 2649	0.7
Sample ID #: 9 NAL ID: 3911-69-9	Green Paint	Building L, Exterior, Wood Soffit System, Various Areas	2652, 2653, 2654, 2655	0.3
Sample ID #: 10 NAL ID: 3911-69-10	Green-Beige-White Paint	Building L, Exterior-Interior, Main Office & Meeting Room, Wood Soffit & Window Apron/Casing/Sill Systems, Various Areas	2665, 2666, 2644, 2664, 2643	1.2

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. M
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/31/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 55

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 9

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-55-1	White Paint	Building M, Interior, Hall, and Rooms 101, 104, Drywall Wall System, Various Areas	2694, 2695, 2696	<0.03
Sample ID #: 2 NAL ID: 3911-55-2	Brown-Yellow Paint	Building M, Interior-Exterior, Metal Door System, Various Areas	2697, 2698, 2705, 2706, 2677	<0.09
Sample ID #: 3 NAL ID: 3911-55-3	Brown-Yellow Paint	Building M, Interior-Exterior, Metal Door Casing/Jamb Systems, Various Areas	2700, 2707, 2678, 2699, 2708, 2679	<0.15
Sample ID #: 4 NAL ID: 3911-55-4	Green Paint	Building M, Exterior, Metal Downspout/Gutter Systems, Various Areas	2685, 2688, 2681	<1.04
Sample ID #: 5 NAL ID: 3911-55-5	Yellow Paint	Building M, Exterior, Exterior, Metal Handrail System, Various Areas	2686, 2687	<0.03
Sample ID #: 6 NAL ID: 3911-55-6	Green-White-Yellow Paint	Building M, Exterior, Metal Wall System, Various Areas	2689, 2691, 2690	0.7
Sample ID #: 7 NAL ID: 3911-55-7	Brown-Yellow Paint	Building M, Interior-Exterior, Metal Window Casing/Sill Systems, Various Areas	2702, 2703, 2680, 2701, 2704	<0.22
Sample ID #: 8 NAL ID: 3911-55-8	Green Paint	Building M, Exterior, Stucco Soffit System, Various Areas	2683, 2684	0.6
Sample ID #: 9 NAL ID: 3911-55-9	Green-White-Yellow Paint	Building M, Exterior, Stucco Wall System, Various Areas	2673, 2676, 2675, 2674	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. N
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/19/2020
 NAL ID # / Lot #: 3911 / 64

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 13

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-64-1	White Paint	Building N, Interior, Room 107, Drywall Wall System	2747	0.3
Sample ID #: 2 NAL ID: 3911-64-2	Green-White Paint	Building N, Interior, Room 107, Metal I Beam System, Various Areas	2755, 2757, 2756	0.2
Sample ID #: 3 NAL ID: 3911-64-3	Green Paint	Building N, Exterior, Metal Window Frame System, Various Areas	2720	<0.03
Sample ID #: 4 NAL ID: 3911-64-4	Green Paint	Building N, Room 107, Interior-Exterior, PVC Downspout System, Various Areas	2733, 2754	<0.45
Sample ID #: 5 NAL ID: 3911-64-5	Green-White-Yellow Paint	Building N, Exterior, Stucco Wall System, Various Areas	2728, 2717, 2727, 2729	0.09
Sample ID #: 6 NAL ID: 3911-64-6	Blue Paint	Building N, Rooms 105 & 107, Interior, Wood Door System, Various Areas	2741, 2742, 2751	0.45
Sample ID #: 7 NAL ID: 3911-64-7	Yellow Paint	Building N, Exterior, Wood Door System, Various Areas	2722, 2730	0.6
Sample ID #: 8 NAL ID: 3911-64-8	Beige-Green-Peach-Yellow-Gray Paint	Building N, Rooms 105 & 107, Interior-Exterior, Wood Door Casing/Jamb Systems, Various Areas	2743, 2731, 2740, 2752, 2723, 2744, 2732, 2725, 2739, 2753, 2724	1.3
Sample ID #: 9 NAL ID: 3911-64-9	Green Paint	Building N, Exterior, Wood Fascia System	2726	1.1
Sample ID #: 10 NAL ID: 3911-64-10	Green Paint	Building N, Exterior, Wood Support Column System, Various Areas	2734, 2735	0.4
Sample ID #: 11 NAL ID: 3911-64-11	Beige Paint	Building N, Interior, Room 105, Wood Wall System	2745	<0.04
Sample ID #: 12 NAL ID: 3911-64-12	Green-Peach Paint	Building N, Interior-Exterior, Wood Window Apron System, Various Areas	2738, 2750	<0.13

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Paradise High School Bldg. N
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/19/2020
 NAL ID # / Lot #: 3911 / 64

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 13

XRF LEAD ANALYTIC

<u>Sample ID #</u>	<u>Material</u>	<u>Location</u>	<u>XRF #'s</u>	<u>Mg/cm2</u>
Sample ID #: 13 NAL ID: 3911-64-13	Green-Peach-White- Beige Paint	Building N, Interior-Exterior, Wood Window Casing/Sill Systems, Various Areas	2719, 2736, 2748, 2721, 2746, 2718, 2737, 2749	1.1

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 56

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 11

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-56-1	Red Paint	Building O, Exterior, Concrete Floor System	2798	<0.03
Sample ID #: 2 NAL ID: 3911-56-2	Green Paint	Building O, Exterior, Metal Gutter System	2792	<0.03
Sample ID #: 3 NAL ID: 3911-56-3	Green-Yellow Paint	Building O, Exterior, PCM Downspout System, Various Areas	2790, 2791	<0.03
Sample ID #: 4 NAL ID: 3911-56-4	White-Yellow Paint	Building O, Exterior, Stucco Wall System, Various Areas	2795, 2796, 2797, 2793, 2794	0.6
Sample ID #: 5 NAL ID: 3911-56-5	Blue Paint	Building O, Interior, Wood Door System, Various Areas	2769, 2772	0.3
Sample ID #: 6 NAL ID: 3911-56-6	Yellow Paint	Building O, Exterior, Wood Door System, Various Areas	2784, 2785, 2786	1.4
Sample ID #: 7 NAL ID: 3911-56-7	White-Yellow Paint	Building O, Interior-Exterior, Wood Door Casing/Jamb Systems, Various Areas	2770, 2774, 2783, 2771, 2773, 2782	1.9
Sample ID #: 8 NAL ID: 3911-56-8	Green Paint	Building O, Exterior, Wood Fascia System, Various Areas	2787, 2789	5.4
Sample ID #: 9 NAL ID: 3911-56-9	Green Paint	Building O, Exterior, Wood Soffit/Wall Systems, Various Areas	2788, 2781	1.6
Sample ID #: 10 NAL ID: 3911-56-10	White Paint	Building O, Interior, Rooms 125 & 127, Wood Wall System, Various Areas	2765, 2776	<0.03
Sample ID #: 11 NAL ID: 3911-56-11	Green Paint	Building O, Exterior, Wood Window Casing/Sill Systems, Various Areas	2780, 2779	2.1
Sample ID #: 12 NAL ID: 3911-56-12	White Paint	Building O, Interior, Room 125/127, Wood Sill-Casing-Apron System, Various Areas	2768, 2778, 2767, 2777, 2766, 2775	0.6

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
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 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 57

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 9

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-57-1	White Paint	Building P, Interior, Rooms 131 & 132, Drywall Ceiling/Wall Systems, Various Areas	2801, 2815, 2799, 2800	<0.07
Sample ID #: 2 NAL ID: 3911-57-2	Blue-Yellow Paint	Building P, Interior-Exterior, Rooms 131 & 132, Metal Door System, Various Areas	2804, 2807, 2832	<0.03
Sample ID #: 3 NAL ID: 3911-57-3	Brown-Yellow-Gray Paint	Building P, Interior-Exterior, Rooms 131 & 132, Metal Door Casing/Jamb Systems, Various Areas	2805, 2808, 2833, 2806, 2809, 2834	<0.03
Sample ID #: 4 NAL ID: 3911-57-4	Green-White Paint	Building P, Exterior, Metal Downspout/Gutter Systems, Various Areas	2826, 2825, 2827	<0.03
Sample ID #: 5 NAL ID: 3911-57-5	White Paint	Building P, Exterior, Metal I Beam System, Various Areas	2829, 2830	<0.03
Sample ID #: 6 NAL ID: 3911-57-6	Brown Paint	Building P, Interior, Rooms 131 & 132, Metal Window Casing/Sill Systems, Various Areas	2803, 2811, 2802, 2810	<0.06
Sample ID #: 7 NAL ID: 3911-57-7	Green-White-Yellow Paint	Building P, Exterior, Stucco Wall/Soffit Systems, Various Areas	2816, 2831, 2836, 2822, 2823, 2824, 2817, 2818, 2819, 2820, 2821	<0.04
Sample ID #: 8 NAL ID: 3911-57-8	Green Paint	Building P, Interior, Room 132, Wood Chair Rail System, Various Areas	2812, 2813, 2814	<0.07
Sample ID #: 9 NAL ID: 3911-57-9	Green Paint	Building P, Exterior, Wood Fascia System, Various Areas	2828, 3285	<0.22

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. Q
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 52

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 8

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-52-1	Green Paint	Building Q, Exterior-Interior, Rooms 128 & 130, Metal Door System, Various Areas	2843, 2856, 2861	<0.03
Sample ID #: 2 NAL ID: 3911-52-2	Green Paint	Building Q, Exterior-Interior, Rooms 128 & 130, Metal Door Casing/Jamb Systems, Various Areas	2844, 2857, 2862, 2845, 2858, 2863	<0.03
Sample ID #: 3 NAL ID: 3911-52-3	Green Paint	Building Q, Exterior, Metal Flashing System, Various Areas	2850, 2853, 2854	<0.03
Sample ID #: 4 NAL ID: 3911-52-4	Green Paint	Building Q, Exterior, Metal Window Casing System, Various Areas	2846, 2847	<0.03
Sample ID #: 5 NAL ID: 3911-52-5	Green Paint	Building Q, Exterior, Wood Fascia System, Various Areas	2849, 2852, 2855	<0.03
Sample ID #: 6 NAL ID: 3911-52-6	White Paint	Building Q, Exterior, Wood Soffit System, Various Areas	2848, 2851	<0.03
Sample ID #: 7 NAL ID: 3911-52-7	Green-White-Yellow Paint	Building Q, Exterior, Wood Wall System, Various Areas	2837, 2840, 2839, 2842, 2838, 2841	<0.03
Sample ID #: 8 NAL ID: 3911-52-8	White Paint	Building Q, Interior, Rooms 128 & 130, Wood Window Casing System, Various Areas	2859, 2860	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. R
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 7/30/2020
 Date Report Submitted: 8/12/2020
 NAL ID # / Lot #: 3911 / 35

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 11

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-35-1	Green Paint	Building R, Interior, Concrete Floor System, Various Areas	2483, 2493	<0.03
Sample ID #: 2 NAL ID: 3911-35-2	Green Paint	Building R, Exterior, Concrete Footer System, Various Areas	2458, 2459, 2460	<0.03
Sample ID #: 3 NAL ID: 3911-35-3	Beige-Black-White Paint	Building R, Interior, Drywall Wall System, Various Areas	2491, 2484, 2494, 2481, 2482, 2490	<0.36
Sample ID #: 4 NAL ID: 3911-35-4	Green-White Paint	Building R, Exterior, Metal Awning Flashing & Support Column Systems, Various Areas	2463, 2477	<0.04
Sample ID #: 5 NAL ID: 3911-35-5	Yellow-Gray-Black-Green Yellow Paint	Building R, Metal Door/Casing/Jamb Systems, Various Areas	2455, 2472, 2466, 2457, 2467, 2473, 2486, 2468, 2488, 2456	0.18
Sample ID #: 6 NAL ID: 3911-35-6	Yellow-Green Paint	Building R, Metal Downspout & Flashing Systems, Various Areas	2469, 2478	1.8
Sample ID #: 7 NAL ID: 3911-35-7	Green Paint	Building R, Metal Gutter System, Various Areas	2479, 2480	<0.03
Sample ID #: 8 NAL ID: 3911-35-8	Green Paint	Building R, Metal Handrail System, Various Areas	2470, 2471	
Sample ID #: 9 NAL ID: 3911-35-9	Green-Yellow Paint	Building R, Exterior, Stucco Wall System, Various Areas	2452, 2453, 2454, 2464, 2465	<0.03
Sample ID #: 10 NAL ID: 3911-35-10	White Paint	Building R, Wood Awning & Support Column Systems, Various Areas	2461, 2474, 2476, 2462, 2475	<0.04
Sample ID #: 11 NAL ID: 3911-35-11	Black-White Paint	Building R, Wood Door/Casing Systems, Various Areas	2485, 2487, 2492	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. S
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/21/2020
 NAL ID # / Lot #: 3911 / 66

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 17

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-66-1	Blue Paint	Building S, Interior, Women's Restroom, Ceramic Floor Tile System	2906	<0.03
Sample ID #: 2 NAL ID: 3911-66-2	Blue-Off White-Tan Paint	Building S, Interior, Women's & Men's Restrooms, Ceramic Wall Tile System, Various Areas	2904, 903, 2907	6.4
Sample ID #: 3 NAL ID: 3911-66-3	White Paint	Building S, Interior, Rooms 111, 115, & Women's Restroom, Drywall Wall System, Various Areas	2890, 2901, 2902	<0.15
Sample ID #: 4 NAL ID: 3911-66-4	Green Paint	Building S, Exterior, Metal Butter System, Various Areas	2881, 2882, 2883, 2884	<0.06
Sample ID #: 5 NAL ID: 3911-66-5	Green Paint	Building S, Exterior, Metal Window System, Various Areas	2873, 2874, 2872	0.3
Sample ID #: 6 NAL ID: 3911-66-6	Green Paint	Building S, Exterior, Metal Window Frame System, Various Areas	2870, 2871	<0.03
Sample ID #: 7 NAL ID: 3911-66-7	Green Paint	Building S, Exterior, PVC Downspout System	2909	<0.03
Sample ID #: 8 NAL ID: 3911-66-8	Green-White Paint	Building S, Exterior, Stucco Wall System, Various Areas	2864, 2865, 2866, 2867	0.6
Sample ID #: 9 NAL ID: 3911-66-9	White Paint	Building S, Interior, Room 113, Wood Cabinet System	2908	<0.1
Sample ID #: 10 NAL ID: 3911-66-10	Blue-Peach Paint	Building S, Interior, Rooms 111 & 115, Wood Door System, Various Areas	2891, 2885	<0.6
Sample ID #: 11 NAL ID: 3911-66-11	Yellow Paint	Building S, Exterior, Wood Door System, Various Areas	2875, 2878	0.4
Sample ID #: 12 NAL ID: 3911-66-12	Green Paint	Building S, Interior, Women's Restroom, Wood Door System	2900	<0.07

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Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. S
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/3/2020
 Date Report Submitted: 8/21/2020
 NAL ID # / Lot #: 3911 / 66

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 17

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 13 NAL ID: 3911-66-13	Blue-Peach-White-Yellow Paint	Building S, Exterior-Interior, Rooms 111 & 115, & Women's Restroom, Wood Door Casing/Jamb Systems, Various Areas	2898, 2886, 2892, 2897, 2876, 2887, 2893, 2899, 2877	1.3
Sample ID #: 14 NAL ID: 3911-66-14	Green Paint	Building S, Exterior, Wood Fascia System	2880	0.9
Sample ID #: 15 NAL ID: 3911-66-15	White Paint	Building S, Interior, Women's Restroom, Wood Shelf	2905	<0.03
Sample ID #: 16 NAL ID: 3911-66-16	White Paint	Building S, Exterior, Wood Soffit System	2879	1.9
Sample ID #: 17 NAL ID: 3911-66-17	Green-Peach-White-Green/White Paint	Building S, Exterior-Interior, Rooms 111 & 115, Wood Window Casing/Sill Systems, Various Areas	2869, 2889, 2895, 2896, 2868, 2888, 2894	0.8

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Login #: 43150

Brie Garagano
 Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School - Shed
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/5/2020
 Date Report Submitted: 8/19/2020
 NAL ID # / Lot #: 3911 / 63

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 8

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-63-1	White Paint	Shed, Interior, Drywall Ceiling System, Various Areas	3395, 3396	<0.03
Sample ID #: 2 NAL ID: 3911-63-2	Green-Brown- Yellow-Gray Paint	Shed, Interior-Exterior, Wood/Metal Door/Casing/Jamb Systems, Various Areas	3382, 3403, 3381, 3405, 3404, 3383	<0.22
Sample ID #: 3 NAL ID: 3911-63-3	White Paint	Shed, Interior, Wood Cabinet Door/Drawer/Frame Systems, Various Areas	3399, 3398, 3397	<0.03
Sample ID #: 4 NAL ID: 3911-63-4	White Paint	Shed, Interior, Wood Fascia System, Various Areas	3387, 3388, 3389	<0.03
Sample ID #: 5 NAL ID: 3911-63-5	Gray Paint	Shed, Interior, Wood Soffit System, Various Areas	3390, 3391, 3392	<0.03
Sample ID #: 6 NAL ID: 3911-63-6	Green Paint	Shed, Interior, Wood Trim System, Various Areas	3384, 3385, 3386	<0.03
Sample ID #: 7 NAL ID: 3911-63-7	Gray-White- Yellow Paint	Shed, Interior-Exterior, Wood Wall System, Various Areas	3376, 3393, 3394, 3375, 3377	<0.03
Sample ID #: 8 NAL ID: 3911-63-8	Green-White Paint	Shed, Interior-Exterior, Wood Window Casing System, Various Areas	3378, 3379, 3380, 3400, 3401, 3402	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Phone # (530) 872-6495
 Fax #: (916) 244-2755

Job Site:
 Paradise High School Bldg. T
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/19/2020
 NAL ID # / Lot #: 3911 / 65

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 17

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-65-1	Gray-Peach-Yellow Paint	Building T, Interior, Men's Restroom, Ceramic Wall Tile System, Various Areas	2978, 297, 2977	29.4
Sample ID #: 2 NAL ID: 3911-65-2	Red Paint	Building T, Exterior, Concrete Floor System	2942	<0.03
Sample ID #: 3 NAL ID: 3911-65-3	Gray-Green Paint	Building T, Exterior, Concrete Footer System, Various Areas	2946, 2947, 2945	<0.03
Sample ID #: 4 NAL ID: 3911-65-4	Black-White Paint	Building T, Interior, Men's & Women's Restroom, Drywall Wall System, Various Areas	2975, 2979	<0.2
Sample ID #: 5 NAL ID: 3911-65-5	Green-Yellow Paint	Building T, Exterior, Metal Downspout System, Various Areas	2943, 2944	<1.18
Sample ID #: 6 NAL ID: 3911-65-6	Green Paint	Building T, Exterior, Metal Window Frame System	2927	0.4
Sample ID #: 7 NAL ID: 3911-65-7	Green Paint	Building T, Shop, Interior, Plaster Wall System, Various Areas	2980, 2981	0.4
Sample ID #: 8 NAL ID: 3911-65-8	Green Paint	Building T, Exterior, PVC Downspout System	2928	<0.03
Sample ID #: 9 NAL ID: 3911-65-9	Green-White-Yellow Paint	Building T, Exterior, Stucco Wall System, Various Areas	2917, 2918, 2922, 2923, 2924, 2919, 2920, 2921	0.13
Sample ID #: 10 NAL ID: 3911-65-10	Green-Peach-White Paint	Building T, Shop and Room 121, Interior, Wood Cabinet Door/Drawer/Frame/Shelf Systems, Various Areas	2983, 2964, 2984, 2982, 2963, 2965	0.27
Sample ID #: 11 NAL ID: 3911-65-11	Black-Blue-Peach-Peach/Green-Yellow Paint	Building T, Interior- Exterior, Rooms 119, 121, and 123, Wood Door System, Various Areas	2967, 2968, 2948, 2966, 2955, 2939	0.2
Sample ID #: 12 NAL ID: 3911-65-12	Black-Peach-Yellow Paint	Building T, Interior-Exterior, Wood Door Casing/Jamb Systems, Various Areas	2970, 2971, 2950, 2957, 2940, 2969, 2949, 2956, 2941	3.9

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Phone # (530) 872-6495
 Fax # (916) 244-2755

Job Site:
 Paradise High School Bldg. T
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/19/2020
 NAL ID # / Lot #: 3911 / 65

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 17

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 13 NAL ID: 3911-65-13	Green-White Paint	Building T, Exterior, Wood Fascia System, Various Areas	2930, 2931	1.2
Sample ID #: 14 NAL ID: 3911-65-14	White Paint	Building T, Exterior, Wood Soffit System, Various Areas	2932, 2933, 2934, 2395, 2936	7.2
Sample ID #: 15 NAL ID: 3911-65-15	Peach-White Paint	Building T, Interior, Rooms 121 & 123, Wood Wall System, Various Systems	2962, 2954	<0.46
Sample ID #: 16 NAL ID: 3911-65-16	Black-Peach Paint	Building T, Interior, Rooms 119, 121, 123, Wood Window Apron System, Various Areas	2973, 2953, 2959, 2960	0.32
Sample ID #: 17 NAL ID: 3911-65-17	Black-Green/White-Peach-White Paint	Building T, Interior-Exterior, Wood Window Casing System, Various Areas	2974, 2926, 2952, 2961, 2937, 2938	1.35

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

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Job Site:
 Paradise High School Bldg. U
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 59

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 15

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-59-1	Green Paint	Building U, Exterior, Concrete Wall System	3008	1.5
Sample ID #: 2 NAL ID: 3911-59-2	Beige-Green Paint	Building U, Interior, Drywall Ceiling/Wall Systems, Various Areas	3024, 3022, 3023, 3034	<0.06
Sample ID #: 3 NAL ID: 3911-59-3	Gray-Green Paint	Building U, Exterior, Metal Condensation Line/Conduit Systems, Various Areas	305, 3016, 3017	<0.53
Sample ID #: 4 NAL ID: 3911-59-4	Green-Blue Paint	Building U, Exterior, Metal Door/Casing/Jamb Systems, Various Areas	3009, 3010, 3011	<0.42
Sample ID #: 5 NAL ID: 3911-59-5	Green Paint	Building U, Exterior, Metal Downspout/Gutter Systems, Various Areas	3001, 2999, 3000	<0.03
Sample ID #: 6 NAL ID: 3911-59-6	Green Paint	Building U, Exterior, Metal Handrail System, Various Areas	2985, 3006, 3007	0.45
Sample ID #: 7 NAL ID: 3911-59-7	Green Paint	Building U, Exterior, Metal Support Column System	2986	<0.03
Sample ID #: 8 NAL ID: 3911-59-8	Green-Yellow Paint	Building U, Exterior, Stucco Wall System, Various Areas	2995, 2996, 2997, 2998	<0.96
Sample ID #: 9 NAL ID: 3911-59-9	White Paint	Building U, Interior, Wood Baseboard System, Various Areas	3031, 3032, 3033	<0.03
Sample ID #: 10 NAL ID: 3911-59-10	Beige-Blue-Yellow Paint	Building U, Exterior-Interior, Wood Door System, Various Areas	3025, 3018, 2992	0.45
Sample ID #: 11 NAL ID: 3911-59-11	Gray-Beige-White Paint	Building U, Exterior-Interior, Wood Door Casing/Jamb Systems, Various Areas	2994, 3026, 2993, 3020, 3021, 3019	<0.23
Sample ID #: 12 NAL ID: 3911-59-12	Green Paint	Building U, Exterior, Wood Fascia System, Various Areas	3002, 3003, 3004	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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 Fax #: (916) 244-2755

Job Site:
 Paradise High School Bldg. U
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 59

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 15

XRF LEAD ANALYTIC

<u>Sample ID #</u>	<u>Material</u>	<u>Location</u>	<u>XRF #'s</u>	<u>Mg/cm2</u>
Sample ID #: 13 NAL ID: 3911-59-13	Gray-Green-Pink-Yellow Paint	Building U, Exterior, Wood Wall System, Various Areas	3012, 3013, 2987, 3014, 3015, 2988	<0.52
Sample ID #: 14 NAL ID: 3911-59-14	Green-Beige-White-Yellow Paint	Building U, Exterior-Interior, Wood Window Apron/Casing/Frame Systems, Various Areas	2990, 3027, 2991, 3029, 3036, 3037	<0.47
Sample ID #: 15 NAL ID: 3911-59-15	Beige-Green-White Paint	Building U, Exterior-Interior, Wood Windowsill System, Various Areas	3028, 2989, 3030, 3035	0.42

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

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Job Site:
 Paradise High School Bldg. V
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 58

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 9

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-58-1	Green-Yellow Paint	Building V, Interior-Exterior, Rooms 133, 135, 137, Metal Door System, Various Areas	3069, 3070, 3075, 3078, 3044, 3047	<0.03
Sample ID #: 2 NAL ID: 3911-58-2	Green-Yellow Paint	Building V, Interior-Exterior, Rooms 133, 135, 137, Metal Door Casing/Jamb Systems, Various Areas	3076, 3079, 3072, 3077, 3080, 3046, 3049, 3071	<0.03
Sample ID #: 3 NAL ID: 3911-58-3	Green Paint	Building V, Exterior, Metal Downspout/Gutter Systems, Various Areas	3065, 3066, 3067	<0.03
Sample ID #: 4 NAL ID: 3911-58-4	Green Paint	Building V, Exterior, Metal Flashing System, Various Areas	3062, 3063, 3064	<0.03
Sample ID #: 5 NAL ID: 3911-58-5	White Paint	Building V, Exterior, Metal Soffit System, Various Areas	3056, 3057, 3058, 3059, 3061, 3068	<0.03
Sample ID #: 6 NAL ID: 3911-58-6	Green Paint	Building V, Exterior, Wood Door Casing System, Various Areas	3045, 3048	<0.03
Sample ID #: 7 NAL ID: 3911-58-7	Green Paint	Building V, Exterior, Wood Fascia System, Various Areas	3054, 3055, 3060	<0.03
Sample ID #: 8 NAL ID: 3911-58-8	Green-White-Yellow Paint	Building V, Exterior, Wood Wall System, Various Areas	3038, 3040, 3042, 3043, 3039, 3041	<0.03
Sample ID #: 9 NAL ID: 3911-58-9	Beige-Green-White Paint	Building V, Interior-Exterior, Rooms 133, 135, 137, Wood Window Casing System, Various Areas	3073, 3074, 3050, 3051, 3051, 3053, 3081	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Job Site:
 Paradise High School Bldg. W
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 54

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 13

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 1 NAL ID: 3911-54-1	Green Paint	Building W, Exterior, Concrete Footer System	3098	1.8
Sample ID #: 2 NAL ID: 3911-54-2	White Paint	Building W, Interior, Rooms 117, 118, & Office, Drywall Wall System, Various Areas	3110, 3111, 3116, 3121	<0.35
Sample ID #: 3 NAL ID: 3911-54-3	Brown-Green Paint	Building W, Interior, Rooms 117, 118, & Office, Metal Door System, Various Areas	3117, 3107, 3122	<0.03
Sample ID #: 4 NAL ID: 3911-54-4	Brown-Yellow Paint	Building W, Interior-Exterior, Rooms 117, 118, & Office, Metal Door Casing/Jamb Systems, Various Areas	3108, 3118, 3123, 3101, 3109, 3119, 3124	<0.11
Sample ID #: 5 NAL ID:	Green Paint	Building W, Exterior, Metal Downspout/Gutter Systems, Various Areas	3097, 3083, 3084, 3096	<0.3
Sample ID #: 6 NAL ID: 3911-54-6	White-Yellow Paint	Building W, Exterior, Metal I Beam Soffit System, Various Areas	3103, 3102	<0.05
Sample ID #: 7 NAL ID: 3911-54-7	White Paint	Building W, Exterior, Metal Soffit System	3085	<0.03
Sample ID #: 8 NAL ID: 3911-54-8	Brown-Green Paint	Building W, Interior-Exterior, Room 118 & Office, Metal Window Casing/Sill Systems, Various Areas	3112, 3115, 3120, 3099, 3113, 3114	<0.06
Sample ID #: 9 NAL ID: 3911-54-9	Green-White-Yellow Paint	Building W, Exterior, Stucco Wall System, Various Areas	3086, 3087, 3088, 3089, 3092, 3094, 3095, 3090, 3093	<0.03
Sample ID #: 10 NAL ID: 3911-54-10	Yellow Paint	Building W, Exterior, Wood Door System	3100	<0.03
Sample ID #: 11 NAL ID: 3911-54-11	Green Paint	Building W, Exterior, Wood Fascia System, Various Areas	3082, 3105, 3106	<0.12

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Paradise, CA 95969
 Phone # (530) 872-6495
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Job Site:
 Paradise High School Bldg. W
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 54

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 13

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm2
Sample ID #: 12 NAL ID: 3911-54-12	White Paint	Building W, Exterior, Wood Soffit System	3104	1.8
Sample ID #: 13 NAL ID: 3911-54-13	Yellow Paint	Building W, Exterior, Wood Window Casing System	3091	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm2 are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm2 total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Login #: 43137

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 Paradise, CA 95969
 Phone # (530) 872-6495
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Job Site:
 Paradise High School Bldg. X
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 53

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 11

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm ²
Sample ID #: 1 NAL ID: 3911-53-1	Blue-Yellow Paint	Building X, Interior-Exterior, Metal Door System, Various Areas	3149, 3129	<0.03
Sample ID #: 2 NAL ID: 3911-53-2	Brown-Yellow Paint	Building X, Interior-Exterior, Metal Door Casing/Jamb Systems, Various Areas	3150, 3151, 3131	<0.03
Sample ID #: 3 NAL ID: 3911-53-3	Green-White Paint	Building X, Exterior, Metal Downspout/Gutter Systems, Various Areas	3138, 3140, 3139	<0.03
Sample ID #: 4 NAL ID: 3911-53-4	Green-White Paint	Building X, Exterior, Metal Electrical Panel Systems, Various Areas	3147, 3148	<0.03
Sample ID #: 5 NAL ID: 3911-53-5	Green Paint	Building X, Exterior, Metal Handrail System, Various Areas	3136, 3137	<0.03
Sample ID #: 6 NAL ID: 3911-53-6	Yellow Paint	Building X, Exterior, Wood Door Casing System	3130	<0.03
Sample ID #: 7 NAL ID: 3911-53-7	Green-White Paint	Building X, Exterior, Wood Fascia System, Various Areas	3141, 3142, 3143	<0.03
Sample ID #: 8 NAL ID: 3911-53-8	Brown Paint	Building X, Exterior, Wood Ramp-ADA System, Various Areas	3134, 3135	<0.03
Sample ID #: 9 NAL ID: 3911-53-9	White Paint	Building X, Exterior, Wood Soffit System, Various Areas	3144, 3145, 3146	<0.05
Sample ID #: 10 NAL ID: 3911-53-10	Green-White Paint	Building X, Exterior, Wood Wall System, Various Areas	3125, 3126, 3127, 3128	<0.03
Sample ID #: 11 NAL ID: 3911-53-11	Green Paint	Building X, Exterior, Wood Window Casing System, Various Areas	3132, 3133	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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Login #: 43145

Brie Garagano
 Paradise Unified School District
 6696 Clark Road
 Paradise, CA 95969
 Phone # (530) 872-6495
 Fax #: (916) 244-2755

Job Site:
 Paradise High School Bldg. Y
 5911 Maxwell Drive
 Paradise, 95969 CA

Date Samples Taken: 8/4/2020
 Date Report Submitted: 8/18/2020
 NAL ID # / Lot #: 3911 / 61

Attention: Brie Garagano
 Email:

Job Number
 KS 10468

Total Samples: 14

XRF LEAD ANALYTIC

Sample ID #	Material	Location	XRF #'s	Mg/cm ²
Sample ID #: 1 NAL ID: 3911-61-1	Gray-Yellow Paint	Building Y, Interior-Exterior, Metal Door System, Various Areas	3152, 3159	<0.03
Sample ID #: 2 NAL ID: 3911-61-2	Blue-Yellow Paint	Building Y, Interior-Exterior, Metal Door Casing/Jamb Systems, Various Areas	3153, 3161, 3154, 3160	<0.03
Sample ID #: 3 NAL ID: 3911-61-3	Green-White Paint	Building Y, Exterior, Metal Downspout System, Various Areas	3172, 3173	<0.03
Sample ID #: 4 NAL ID: 3911-61-4	Green-White Paint	Building Y, Exterior, Metal Electrical Panel System, Various Areas	3166, 3165	<0.03
Sample ID #: 5 NAL ID: 3911-61-5	Green Paint	Building Y, Exterior, Metal Flashing System, Various Areas	3182, 3183, 3184	<0.03
Sample ID #: 6 NAL ID: 3911-61-6	Green Paint	Building Y, Exterior, Metal Footer System, Various Areas	3175, 3176, 3177, 3186, 3187, 3188	<0.03
Sample ID #: 7 NAL ID: 3911-61-7	Green-White Paint	Building Y, Exterior, Metal Framing System, Various Areas	3178, 3179, 3174	<0.03
Sample ID #: 8 NAL ID: 3911-61-8	Green Paint	Building Y, Exterior, Metal Handrail System, Various Areas	3155, 3156	<0.15
Sample ID #: 9 NAL ID: 3911-61-9	White Paint	Building Y, Exterior, Metal Soffit System	3181	<0.03
Sample ID #: 10 NAL ID: 3911-61-10	Brown Paint	Building Y, Exterior, Wood Platform System	3158	<0.03
Sample ID #: 11 NAL ID: 3911-61-11	Brown Paint	Building Y, Exterior, Wood Ramp-ADA System	3157	<0.03
Sample ID #: 12 NAL ID: 3911-61-12	White Paint	Building Y, Exterior, Wood Soffit System, Various Areas	3180, 3185	<0.03
Sample ID #: 13 NAL ID: 3911-61-13	Green-White Paint	Building Y, Exterior, Wood Wall System, Various Areas	3168, 3169, 3167, 3170	<0.03
Sample ID #: 14 NAL ID: 3911-61-14	Green Paint	Building Y, Exterior, Wood Window Casing System, Various Areas	3162, 3163, 3164	<0.03

KEY: *Samples above the California OSHA Threshold Level of 0.06% or 600 ppm's or .06 mg/cm² are considered lead containing. Sample results denoted with a "less than" (<) sign contain less than .059 mg/cm² total lead based on sample volume or XRF reading.

Reviewed by: Michael Lee

Niton XLP3 Analyzer was used to determine the lead content of the different systems and paint materials

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