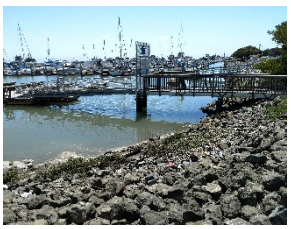
GHD Report for
City of San Leandro
San Leandro Marina

Marina Facilities Decommissioning Assessment





March 2018

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San Leandro Marina

City of San Leandro
Public Works Department
14200 Chapman Road
San Leandro, California 94578

GHD | 5900 Hollis Street, Emeryville, CA 94608
11119148| Report No 6 | March 12, 2018

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Table of Contents

Figure Index

Table Index

Appendix Index

1. Introduction

GHD Inc. (GHD) was retained by the City of San Leandro (City) to perform a Decommissioning and Demolition Study for the San Leandro Marina (Project) located at 40 Mulford Point Drive, San Leandro, California. A site plan showing the San Leandro Marina and limits of work is shown on Figure 2. This Study presents a general overview of project plans and includes discussions of the decommissioning and demolition strategy and methods, cost estimates and a summary of relevant environmental regulations and permits required for the work.

1.1 Project Objectives

The goal of the Project is to decommission and remove all marina infrastructure from the harbor basin, which includes the removal of the 462 berths. In conjunction with the proposed Shoreline Development project, the harbor basin will instead become an area for human-powered watercraft and recreation and allow interaction with San Francisco Bay without removal of sediments from the harbor basin.

1.2 Background

The San Leandro Marina has operated since the 1960s as a small boat basin and has approximately 25 percent of the 462 berths currently occupied. The Federal Channel leading into/out of the harbor received a partial dredge in late 2009, but the harbor basin itself has not been fully dredged since 1997, and there is no near-term funding identified to dredge it. A previous Alternatives Study for the Harbor Basin developed alternative configurations to retain aquatic recreational opportunities and mesh with existing and potential landside uses. Following the study, the City Council directed staff to move forward with a plan for closure of the Marina, to be implemented at such time that siltation accumulation precluded vessel movement into/out of the basin and/or funding for maintenance work could not be allocated. The San Leandro Shoreline Development Project contemplates, in part, decommissioning and removal of the existing motorized vessel facilities and appurtenances in the harbor basin to allow for passive recreational uses. The project would require removal of structures and features including the timber and concrete docks and associated piers, restrooms, fuel dock (decommissioned), Harbor Master's office, remnants of the Blue Dolphin restaurant platform, and rip-rap in select locations. The Marina Decommissioning and Demolition Plan is focused on only waterside features of the project which will be removed and either recycled, reused, sold or disposed.

1.3 Project Location

The San Leandro Marina is generally located on the east shore of the San Francisco Bay between the City of Oakland to the north and the City of Hayward to the south as illustrated in Figure 1. The redevelopment would include the Harbor Basin (which would be undertaken by the City) as well as the surrounding shoreline areas (which would be undertaken by a private developer).

1.4 Scope of Marina Facilities Decommissioning Assessment Study

GHD is working under contract to the City of San Leandro Public Works Department for engineering and professional services to develop a Decommissioning and Demolition Plan for the San Leandro Marina. This project is undertaken in support of the San Leandro Shoreline Development Project currently in progress by the City and Cal-Coast Development.

The project includes field investigation and engineering activities required to evaluate observable physical and environmental conditions of the facilities to provide for development of a Decommissioning and Demolition Plan. A physical inventory of marina facilities will be prepared including floating docks, fixed piers, buildings on fixed piers, subsurface support structures, utilities, Harbor Master's office and a limited amount of rock revetment or rip-rap. Field investigation requires access to buildings and improvements by GHD engineers. Documentation of existing utility components (water, electrical, sewer and/or communications) will be included in the inventory. A table and drawing will be prepared identifying quantities of materials that will be demolished, recycled, sold or reused.

Existing as-built engineering drawings provided by the City will be reviewed as a component of the Marina Facilities Decommissioning Assessment to identify construction methods and materials of existing marina appurtenances.

A Hazardous Materials survey will be conducted to identify and quantify potential hazardous materials associated with the marina facilities including fluorescent light fixtures, mercury-containing equipment, battery devices, creosote pilings and potential lead and asbestos containing materials. The Hazardous Materials survey will identify sample locations and parameters that may include polychlorinated biphenyls (PCBs), total Resource Conservation and Recovery Act (RCRA) metals, RCRA semi-volatile organic compounds (SVOCs) and RCRA volatile organic compounds (VOCs). Photo documentation will be completed as part of this task, in a format acceptable to the City. GHD will prepare a Health and Safety Plan (HASP) to address project-specific hazards associated with completing the scope of work outlined in this section.

As part of this task, a format will be developed to capture and report piling and foundation removal and disposal costs, identification of acceptable disposal sites, associated restoration activities and quantification and cataloging of building material types, which will be presented in demolition quantity tables.

Decommissioning Permits Assessment

GHD will determine Resource Agency permitting needs for Phase II Demolition as part of this assessment. Based on our current understanding of the Project, resource agencies that would have permitting authority over demolition of the existing marina would include:

- Army Corps of Engineers (ACE)
- Regional Water Quality Control Board (RWQCB)
- Bay Conservation and Development Commission (BCDC)
- California Department of Fish & Wildlife (CDFW)

GHD proposes to contact each agency to discuss the appropriate permitting approach in light of the demolition work and in context of the overall Shoreline Development. For each agency, a written summary will be provided that includes the type of permit anticipated, supporting documentation that will be required, expectation on Best Management Practices (BMPs) to be incorporated into the project, such as work windows and turbidity controls, as well as an overall approach.

Although some agencies are already aware of the project, as is indicated by comments made on the San Leandro Shoreline Development Project Draft Environmental Impact Report (DEIR), the project elements and phases need to be described carefully so as not to give the impression of "piece-mealing" the project. Typically, resource agencies will want to permit the whole of the action. GHD believes that there is justification in permitting the project in phases, as currently proposed by the City. In addition, it is worth discussing how the overall Shoreline Development could receive credit for removal of the existing marina, even though the demolition and development will be led by two different entities on different time schedules.

In-person meetings may be beneficial for some agencies, such as BCDC. Other discussions will be held with conference calls.

There is likely an existing BCDC Major Permit for the marina. GHD will review the conditions of the permit related to decommission and demolition of the marina.

1.5 Criteria

The criteria applied to the various media assessed is generally for waste disposal classification.

2. Existing Conditions and Facilities

The Harbor Basin contains various structures and infrastructure as shown on Figure 3. Infrastructure includes floating docks, guide piles, utilities, access gangways, and fencing.

2.1 Floating Docks

There are three different materials of floating docks: plastic lumber, concrete, and timber.

2.1.1 Plastic Lumber

The floating docks just south of Pier A was originally the refueling dock that has been decommissioned. It was constructed of approximately 1,760 square feet of plastic lumber but is in poor condition and does not appear to be salvageable. There is a significant and noticeable deflection and rebound while walking on the refueling dock.

2.1.2 Concrete

Piers A through H were renovated in 1990 where existing timber floating docks were removed and replaced with new concrete floating docks. There are approximately 58,520 square feet of concrete floats and fingers, and are generally in good working condition and salvageable.

2.1.3 Timber

The remaining Piers J through Q consist of timber floating docks and fingers. There are approximately 48,700 square feet of timber floating docks and generally are in poor condition. Piers P and Q were considered unsafe and are currently closed to the public. While the remaining timber docks are in use, they do not appear to be salvageable.

2.2 Dock Guide Piles

Each type of floating dock has a unique type of guide pile: steel, concrete, and timber.

2.2.1 Steel

There are four steel guide piles at the old refueling dock and they appear to be in good condition without any noticeable corrosion or section loss. These piles are expected to be fairly straightforward to remove in one piece, and are valuable as scrap metal.

2.2.2 Concrete

When Piers A through H were renovated in 1990, the existing timber piles were removed and replaced with 15-inch octagonal precast and pre-stressed concrete piles that were 45 feet long. The access piers on the land side were also replaced with new concrete piers and piles which were 30 feet long. There are a total of 189 concrete guide piles and 16 concrete access pier piles. These may be salvageable if it is possible to remove them without damage.

2.2.3 Timber

At the remaining Piers J through Q, instead of individual guide piles, four timber piles were bundled together to form a single structure (dolphin) to secure the docks. Many piles appear to have been repaired in the past, such as fiberglass jackets to prevent further section loss, or new steel or concrete caps to restore the upper portion of the timber piles. Per the as-built drawings, the dolphins are 16 inches in diameter and 50 feet long, and comprised of 112 individual piles.

At the access piers, there are a total of twelve 16-inch diameter timber piles. Total length of the piles is unknown and the timber piles are not considered salvageable.

There are five additional restroom/storage structures supported on timber piles over the marina or embankment. Each restroom is supported by eight timber piles that are 16 inches in diameter and having an unknown length. The Harbor Master's office building is supported by 20 vertical timber piles that are 12 inches in diameter and approximately 55 feet long. There are also eight battered timber piles that are 12 inches in diameter and 60 feet long. Additionally, there is also a ramp leading to the Harbormaster's office which is supported by eight straight timber piles, 12 inches in diameter with unknown lengths.

North of Pier A is what remains of the Blue Dolphin Restaurant. The previous building owner closed his business and left the building to rot and all that remains are the piles and pile-supported foundation. Due to the highly deteriorated state, it was not safe to inspect or quantify the piles.

The timber piles are not anticipated to be salvageable and due to deterioration it may be difficult to completely remove the piles without damage.

2.3 Access Piers

At each dock or group of docks, there is an access pier that is supported by piles over the rip-rap and connected to the docks with an aluminum ramp. At docks A, B-D, E/F, and G/H, the access pier consist of a concrete apron, and precast concrete beams connected to concrete piles and concrete bent cap. At docks J, K, L/M, N/O, and P/Q, the access pier consist of a concrete apron, and timber beams and decking connected to timber piles and bent caps.

2.4 Gangways

All ten gangways were replaced during the 1990 renovation and are 38-feet long aluminum structures. They appear to be in serviceable condition and without any noticeable deterioration or corrosion.

2.5 Buildings

The Harbor Master's office and two over-water restrooms are pile-supported over the marina. They appear to be typical wood-framed structures. The Harbor Master's office is accessed by a timber ramp, which consist of timber beams, piles, and bent caps. At the restrooms, timber beams and decking connect the restroom directly to the sidewalk.

In addition, there are a two other structures supported by piles over the water, namely the Blue Dolphin Restaurant and a former observation deck (now closed), located north and south of Pier A, respectively. The observation deck was heavily damaged by fire, with only the foundation and piles still remaining.

2.6 Utilities

Site utilities systems are as described in the subsequent sections.

2.6.1 Sanitary Sewer

Sanitary sewer services at the Site convey sewage to the City of San Leandro's municipal system. The services that are to be demolished include those at the Harbor Master's office, refueling dock, restroom facilities, and Blue Dolphin platform. See the Site Map in Appendix A for locations.

The Harbor Master's office sewer system is comprised of a gravity pipe running below the suspended deck and gangway, to a location on shore where it connects to a City main. Demolition of the Harbor Master's service shall include removal of all pipe to a point five (5) feet on the land-side of the top of bank. The existing service pipe is to be capped at that location.

The floating docks do not contain individual sanitary sewer services for each slip. Rather, the refueling dock serves as a sewage pumping station for vessels, utilizing two (2) pumps located on the refueling dock deck. Both pumps shall be removed and salvaged, including pump cabinets, hoses, valves, electrical services, and other related appurtenances. The piping shall be removed to a point no less than five (5) feet inside the top of bank and capped at that location.

The five (5) restroom facilities' ('A' through 'F') sewer system services were buried and not observable at the time of inspection. The services are assumed to be four (4) or six (6) inches in diameter and connected to the municipal main on shore. Demolition of the restroom facilities'

services will include removal of all pipe to a point five (5) feet beyond the footprint of the existing restroom buildings. The existing service pipes are to be capped at ends.

As it was not accessible at the time of inspection, it is assumed that the Blue Dolphin platform's sewer service is comprised of a four (4) or six (6) inch gravity pipe that runs below the suspended deck to a location on shore where it connects to a City main. Demolition of the service will include removal of all pipe to a point five (5) feet inside the top of bank, or five (5) feet outside the footprint of the platform, whichever is greater. The existing service pipe is to be capped at that location.

Upon decommissioning, sanitary sewers should be cleaned and inspected prior to abandoning or removal.

2.6.2 Sewage Lift Station

A sewage lift station with pre-packaged wet well and pump system is identified adjacent to the Blue Dolphin site. The lift station, along with its components, such as cover, base, vault, duplex pump system, duplex control panel, valves, conduits, and other fixtures, are to be cleaned, removed, and salvaged from the Site. The lift station effluent pipe diameter is determined to be four (4) inches stainless steel. Conduits found at the lift station are one (1) inch in diameter. The existing four (4) inch diameter gravity sanitary sewer line should be disconnected and removed to a point five (5) feet outside the pump station structure, or to the nearest sanitary sewer manhole whichever is nearer. The remaining service pipe is to be capped and abandoned.

All salvaged materials will be delivered to the City of San Leandro by the contractor.

2.6.3 Water Systems

Potable water service is provided by the East Bay Municipal Utility District (EBMUD) at facilities shown on the Site Map in Appendix A, including restrooms, Harbor Master's office, floating docks, and finger piers. The size of the service pipes varies and are assumed to be up to two (2) inches in diameter.

The water distribution system on the floating docks and finger piers consists of pipes running along the underside of the floating docks to individual service points (service cabinets) at boat slips, approximately 462 total.

The floating docks also include approximately twenty (20) fire hydrants, as described further in Section 2.6.8.

The floating docks' water system should be removed to a point five (5) feet inside the top of bank or to the water meter, whichever is nearer. The existing service pipe is to be capped at that location.

Water meters serving the docks, Harbor Master's office, and restrooms on the top of bank are to be removed and salvaged. All salvaged materials will be delivered to EBMUD by the contractor.

The five (5) restroom facilities' water system services are buried and were not accessible at the time of inspection. The services are assumed to be one (1) or two (2) inches in diameter and connect to the water mains in Pescador Point Drive and Mulford Point Drive. Demolition of the restroom facilities' services will include removal of all pipes to a point (5) feet beyond the footprint of the existing restroom buildings or to the water meter, whichever is nearer. The existing water pipes are to be capped.

As it was not accessible at the time of inspection, it is assumed that the Blue Dolphin platform's water service is disconnected and meter removed. The service is likely comprised of a one (1) or two (2) inch metal pipe suspended below the existing platform, running to a location on shore where it connects to the original meter box location. Demolition of the water service shall include removal of all pipe to the original meter box, or to a point five (5) feet outside the footprint of the platform, whichever is greater. The existing service connection to the water main is to be capped at that location, if not already capped.

2.6.4 Natural Gas

Direct gas service to the Harbor Master's office is provided by a standalone butane tank located in a cabinet on at the entrance ramp to the office. The gas system is comprised of a pipe that runs below the suspended deck and gangway, from the tank to the office interior. Demolition of the Harbor Master's gas service shall include removal of the butane tank, cabinet, and all pipes.

No other natural gas services were observed at the project site.

2.6.5 Electrical Systems

Pacific Gas and Electric (PG&E) supplies and distributes electricity to the Site. Electrical service is provided at various facilities shown on the Site Map in Appendix A, including restrooms, Harbor Master's office, floating docks, refueling dock, finger piers, and the sewage pump station. The sizes of the conduits vary from 1" to 2" and are subject to field investigation before removal.

All electrical systems should be deactivated prior to the start of decommission work.

The electrical distribution system on the docks and piers consists of conduits running below the floating docks to service points, dock lighting fixtures. A few of the docks on the north end of the marina contain walkway lighting, utilizing ankle-high luminaires mounted to the deck. Thirteen (13) luminaires were counted, in total. The entire floating dock electrical and lighting distribution network should be removed and salvaged, including conduit, conductors, meters, junction boxes, cabinets/transformers, and other related appurtenances. The on-shore conductors, meters, pull boxes, and related appurtenances will be removed and salvaged up to the nearest remaining service cabinets/switchboards/transformers on shore. All salvaged materials will be delivered to PG&E by the contractor.

The five (5) restroom facilities electrical services are buried and were not accessible at the time of inspection. Demolition of the restroom facilities' services will include removal and salvage of all electrical conductors to its nearest meter or junction box. All salvaged materials will be delivered to PG&E by the contractor.

The refueling dock has been served by an on-shore plywood shed (approximately 6'L x 4'W x 8'H) containing electrical panels and pump controllers for pumps and tanks that no longer exist. The entire shed will be demolished to its foundation. The demolition shall include the removal of electrical panels, switches, light fixtures, controllers, and other related appurtenances, including the conduit and conductors attached to the outside and underside of the pile-supported deck.

Electrical components are also found at the sewage lift station at the Blue Dolphin site, which includes a duplex pump control panel, electrical conduits and wiring, switches, and wall-mounted light fixture. The lift station and its electrical components are to be removed and salvaged from the

site. All salvaged materials are to be delivered to the San Leandro Public Works Department by the contractor. Refer to section 2.6.2 for more information regarding the sewage lift station.

2.6.6 Telecommunications

Telecommunications service to the project site is currently provided by Comcast. Services are provided at various facilities shown on the Site Map in Appendix A, including Harbor Master's office, floating docks, and finger piers. The materials and sizes of the conduits and conductors vary and are subject to field investigation before removal.

The telecommunications distribution system below the floating docks provides services to the approximately four hundred (400) individual service points at the head of each slip. The entire telecommunications network, including service terminals, conduits, conductors, junction boxes and related appurtenances on the floating docks shall be removed. On the landside, the conduits and conductors shall be removed to a point five (5) feet inside the top of bank, or to the closest on-shore junction box, or whichever is nearest.

2.6.7 Weather Stations

One (1) of the restroom buildings contains a weather station owned by Alameda County. The weather station is to be removed and reinstalled at a location determined by Alameda County.

2.6.8 Fire Suppression Systems

The floating docks and finger piers contain approximately fifty (50) hydrants, extinguishers, and hose cabinets as depicted in the example photos included in Appendix G. All hydrants, extinguishers, hoses, and hose cabinets are to be removed and salvaged. All salvaged materials shall be delivered to the City of San Leandro by the contractor.

2.6.9 Noise Monitor

One (1) of the restroom buildings contains a noise monitor owned by Oakland Airport. The noise monitor is to be removed and reinstalled at a location determined by the Oakland Airport.

2.7 Rock Slope Protection

Current Rock Slope Protection (RSP) at the project site is primarily composed of layered riprap rock of various sizes on the harbor basin slopes. Visual inspection suggests most riprap is in acceptable condition. Restoration of existing RSP is expected following the decommissioning of the marina due to disturbance of existing RSP. Additional restoration, via import of new riprap, will be necessary in the voids left by removal of structures, those being the pile-supported restrooms, Blue Dolphin platform, Harbor Master's office, pile-supported deck, and elevated gangways at the locations where the floating docks connect to shore.

Damaged and/or disturbed RSP during the decommissioning of the site should be removed from the site. The contractor should provide new RSP riprap at these locations as well as at void areas. Each new layer of the new RSP at the Site should match in size, thickness, slope, and appearance with the existing RSP and in accordance with Section 72 of the Caltrans Standard Specifications.

Existing RSP and fill at the site should be inspected prior to the decommissioning to determine the size, gradation, and other characteristics of the riprap and soil.

2.7.1 Quantities

An inventory and estimated quantities of items related to the marina decommissioning is presented in **Table 2-1**.

3. Hazardous Materials Assessment

3.1 Asbestos Survey

On September 20 and 21, 2017, GHD coordinated an asbestos bulk sampling survey of the interior and exterior of specific marina structures. The results and conclusions of that survey are provided in Appendix F in the Hazardous Materials Limited Assessment Survey Report.

As described in Appendix E numerous building materials sampled for this survey were reported by the analyzing laboratory to contain asbestos. Asbestos material is subject to governmental regulations, including Title 8 California Code of Regulations Section 1529 (8 CCR 1529).

GHD recommends that asbestos materials be appropriately removed by a licensed abatement contractor prior to the commencement of any renovation or demolition work at the project site. GHD recommends that interior work affecting asbestos-containing materials (ACM) or asbestos-containing construction material (ACCM) (other than thermal system insulation (TSI) and surfacing material) be performed using Class II protocols within sealed, negatively pressurized containments. Exterior work affecting ACM or ACCM (other than TSI and surfacing material) should be performed using, at minimum, Class II work protocols such as wetting down materials after removal. Surfacing material and TSI should be removed using Cal/OSHA Class I work protocols, regardless of the work location.

3.2 Lead Paint Investigation

During the initial site reconnaissance, GHD identified several structures with aged, flaking paint that had the potential to be lead-based due to initial construction dates that preceded the removal of lead as an additive in paint by the United States Environmental Protection Agency (EPA) in 1978. Today, waste materials containing lead-based paint must be disposed of in accordance with specific state and federal waste regulations. As such, GHD collected seven samples of paint representative of the closed observation deck, utility shed, Harbor Master's office, and bathrooms, which are all scheduled for removal as part of the Project. Samples were collected and sent to Test America Labs in Pleasanton, California to be analyzed by EPA Method 6010 for lead.

The results of the Test America analysis are summarized in **Table 3.2.1** Lead Paint Sample Results and included in full in Appendix E.

The California Department of Toxic Substances Control (DTSC) identifies lead as a toxic substance when present in concentrations over 1,000 mg/kg TTLC (Total Threshold Limit Concentration). The only paint sample to exceed this threshold was sample PAINT-HM-2 (4,100 mg/kg) collected from the raised walkway leading to the Harbor Master's office.

Sample PAINT-HM-1, collected from an exterior wall of the Harbor Master's office, also had an elevated concentration of lead (850 mg/kg). While this concentration is not above the DTSC Hazardous Waste threshold it could be representative of paint that was once primarily lead-based but was subsequently painted over.

GHD recommends that all painted wood removed from the Harbor Master's office, including the raised walkway between the parking lot and the main building, be disposed of as hazardous waste at an appropriately permitted disposal facility.

3.3 Marina Sediment Analysis

GHD collected 12 samples of marina sediments to characterize three areas of the Site: the pile-supported deck, the building pad (formerly the Blue Dolphin), and the northeastern corner of the marina. The sediments in each area were characterized using four samples collected using a ponar dredge sampler and analyzed by Test America Laboratories in Pleasanton, California for polychlorinated biphenyls (PCBs) by EPA Method 8082 and the following metals by EPA Method 6010,

- Antimony
- Arsenic
- Barium
- Cadmium
- Chromium (total)
- Cobalt
- Copper
- Lead
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Vanadium
- Zinc

The results of the sediment sample analysis are summarized in Table 3.3.1: Sediment Analytical Results. The full Test America analytical report has also been provided in Appendix E.

None of the constituents reported in the sediment sample results were found to be present in sufficient concentrations as to require additional environmental consideration. If marine sediment is to be removed at a later date, further evaluation should be conducted.

3.4 Treated Wood Waste

Many of the structures found throughout the marina are constructed using treated wood, which has historically been used in outdoor environments where exposure to the elements would otherwise rapidly degrade untreated wood. The wood treatment process includes the addition of a number of known hazardous substances to raw wood. These substances are recognized by the DTSC as a hazardous waste requiring special consideration during handling, transport, and disposal. However,

due to the large volume of treated wood waste (TWW) in California, the DTSC has streamlined the disposal process to ensure all TWW can be managed appropriately (DTSC 2011).

During demolition of the marina, all wood waste should be handled, transported, and disposed of as TWW in accordance with California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 34.

3.5 Universal Waste

In accordance with DTSC regulations, universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers, and other electronic devices as well as batteries, fluorescent lamps, mercury thermostats, and other mercury-containing equipment, among others (DTSC 2010).

During GHD's site reconnaissance, a number of universal waste items were identified throughout the marina. These items will need to be disposed of as Universal Waste in accordance with universal waste regulations found in CCR, Title 22, Division 4.5, Chapter 23.

4. Project Permitting Considerations

Decommissioning of the San Leandro Marina is planned in coordination with implementation of the San Leandro Shoreline Development Project (Shoreline Development). While elsewhere in this report the focus is on decommissioning only, Section 4 Project Permitting Considerations looks at the Shoreline Development project as whole. While it would be feasible to separate the decommissioning phase from the development phase if there were justification, in general the resource agencies will want to review and permit the project as a whole. If there were considerations, such as funding sources or schedule, that would warrant permitting the phases separately, it would not be out of the question to do so. However, at this time it is GHD's understanding that the City intends to move forward with the Project as a whole in the context of resource agency permitting.

The following documents and sources were reviewed in preparation of this section: *San Leandro Shoreline Development Project EIR* (City of San Leandro 2015); *Shoreline Development Update* (City of San Leandro 2017); BCDC Design Review Board Staff Reports (2016); and existing BCDC permits covering facilities at the San Leandro Marina.

4.1 U.S. Army Corps of Engineers

The Army Corps of Engineers (USACE) has permitting authority over activities affecting waters of the United States. Under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, the USACE has authority over all waters including wetlands that have sufficient nexus to interstate commerce (e.g., navigable waters and their tributaries). If jurisdictional waters (i.e., below the ordinary high water line or mean high water line, depending on the type of water) or wetlands are impacted during construction or operation of the project, then a Corps Section 10/404 permit would be required. Depending on the extent of the activity, the project could require an Individual Permit (generally, solid fill greater than 0.5 acre) or qualify for a Nationwide Permit. It is acceptable to use a combination of Nationwide Permits as long as the fill collectively does not exceed 0.5 acre.

4.1.1 Applicability – U.S. Army Corps of Engineers

The 2015 San Leandro Shoreline Development Project EIR identified two jurisdictional water features (intertidal mudflat and open water) and two possible jurisdictional features (lakes/ponds and a drainage basin). Implementation of the project was found to result in both direct and indirect effects on jurisdictional wetlands and other waters from demolition and new construction. Since certification of the EIR the footprint of the project has been substantially reduced along the shoreline. However, demolition and construction activities would still result in fill of jurisdictional waters. During demolition some areas of the shoreline would be exposed and require the placement of riprap along the shoreline to prevent erosion, consistent with existing riprap around the harbor. Project construction may include new recreation facilities within the harbor including two boat launches, a pedestrian bridge, and a non-motorized vessel docking facility. Preliminary review of the solid fill to be removed and the solid fill to be added indicates a net increase of approximately 0.25 acre. Because the solid fill is less than 0.5 acre, an Individual Permit likely would not be required. The amounts would likely exceed the quantities that trigger a Pre-construction Notification, thus disallowing completion of the Application for Department of the Army Permit Form. The placement of riprap could qualify for a NMP 13 Bank Stabilization and the new docking facilities could qualify for NWP 36 Boat Ramps.

4.1.1.1 Section 106 Consultation (SHPO)

The project site includes part of the San Leandro Marina that is the former site of oyster beds and is listed as California Historical Landmark #824 (CHL #824). However, it does not appear that there are any federally listed, or potentially eligible, buildings or structures within the project site. The Corps would make the final determination as to whether Section 106 Consultation is necessary.

4.1.1.2 Section 7 Consultation (F&WS and NMFS)

Section 7 consultation may be required with Fish & Wildlife Service for impacts to the threatened Delta smelt (*Hypomesus transpacificus*).

Spawning and rearing habitat is not present at the project site. However, Section 7 consultation may still be required with National Marine Fisheries Service for impacts to steelhead (*Oncorhynchus mykiss*), green sturgeon (*Acipenser medirostris*), and Delta smelt (*Hypomesus transpacificus*), as these species could occasionally disperse or be seasonally present along the shoreline.

At this time it is unclear whether project activities would result in formal consultation, requiring the preparation of a Biological Opinion, or informal consultation supported by a basic habitat assessment. However, the project has been significantly reduced in scope (improvements along the shoreline have been scaled back since originally proposed), so informal consultation is a possibility. While the applicant can propose an approach with supporting documentation, ultimately it would be the decision of the agencies to recommend a course of action regarding Section 7 Consultation.

4.1.2 Application Process

A Pre-construction Notification package would be prepared and submitted. The package would require the following field surveys and supporting documentation:

- Project description and site plan
- Quantification of fill to be removed
- Quantification of temporary and permanent fill impacts
- Proposed mitigation (if needed, the project may mitigate itself)
- Wetland delineation
- Biological resource studies (may require Biological Opinion)
- Fee (if submitted by non-governmental entity)

4.1.3 Schedule

The USACE has 30 days to make a determination of whether the application is complete. It can take eight to 10 months to receive a permit from the Corps. It is anticipated that the project would require federal consultation with National Marine Fisheries Service and Fish & Wildlife Service. If formal consultation is required, the review period would be extended.

4.2 SF Bay Regional Water Quality Control Board

Managed by local Regional Water Quality Control Boards, Section 401 Water Quality Certifications are required when the activity results in fill or discharge directly below the mean high water (tidal areas) or ordinary high water of waters of the United States and is required in support of a Section 10/404 permit with the Corps. Activities that result or may result in a discharge that directly or indirectly impacts waters of the State or the beneficial uses of those waters, are subject to Waste Discharge Requirements (WDRs) under California's Porter-Cologne Water Quality Control Act (Porter-Cologne). The application process for either a Section 401 Water Quality Certification or WDRs are the same. Because the project requires a Section 10/404 Corps Application, and there does not appear to be any State-only jurisdictional waters, the project would require a Section 401 Water Quality Certification.

4.2.1 Applicability – Regional Water Quality Control Board

Refer to the discussion under 4.1.1 Applicability – U.S. Army Corps. The Section 401 Water Quality Certification applies to all federal jurisdictional waters.

4.2.2 Application Process

Prepare and submit a 401 Certification Application form, including the following information:

- Project description and site plan (including low impact development features)
- CEQA document and Notice of Determination
- Quantification of fill to be removed
- Quantification of temporary and permanent fill impacts
- Proposed mitigation (if needed, the project may mitigate itself)
- Payment of fees (based on quantity of fill)

4.2.3 Schedule

In accordance with guidance issued by the State Water Resources Control Board, the RWQCB is required to make a determination of whether the application package is complete within 30 days of receipt. However, sometimes the San Francisco RWQCB takes longer to respond and make a determination. Once the application is determined complete, a permit is required to be issued within 60 days.

4.3 California Department of Fish & Wildlife

4.3.1 Background

Section 2081 subdivision (b) of the California Fish and Game Code allows the California Department of Fish and Wildlife (CDFW) to issue Incidental Take Permits for any species listed under the California Endangered Species Act (CESA) as endangered, threatened, or candidate as long as the authorized take is incidental to an otherwise lawful activity. If the project impacts any species that are listed under the CESA as endangered, threatened, or candidate, an Incidental Take Permit would be required.

4.3.2 Applicability

The project could potentially impact species that are listed under the CESA as endangered, threatened, or candidate. The species that could potentially be impacted include the state endangered Delta smelt (*Hypomesus transpacificus*), the state threatened Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), and the state threatened longfin smelt (*Spirinchus thaleichthys*). The open water habitat of the bay could be affected by construction and could result in inadvertent injury or loss of individual fish species if present within the construction zone.

4.3.3 Application Process

There is not a specified application for Incidental Take Permit process, but there is a set of required information. This information is typically placed into a report-style document. The required information would include:

- Project description, location, and site plan
- Common and scientific names of species to be covered and status under CESA
- Analysis of impacts of proposed taking on the species
- Analysis of whether issuance of incidental take permit would jeopardize continued existence of a species
- Proposed measures to minimize and fully mitigate the impacts of proposed take
- A proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures
- Payment of fees (based on project cost)

4.3.4 Schedule

Review and issuance of an Incidental Take Permit can take eight to 10 months.

4.4 Bay Conservation Development Commission

BCDC has two jurisdictional areas: within the Bay (below mean high water) and the 100-foot shoreline band (100 feet inland from mean high water). Areas with tidal marshland are measured differently. However, the project site does not have tidal marshland, therefore the mean high water line is the boundary between the Bay jurisdiction and the start of the 100-foot shoreline band. BCDC has three different permit types: Major Permit, Administrative Permit, and Region-wide Permit. As originally proposed, the project would have required a Major Permit as a result of the scope of the improvements. Although the project's building footprint within BCDC's jurisdiction has been significantly reduced, because of the overall size of the site, it is anticipated a Major Permit will still be required.

4.4.1 Applicability

Improvements in and around the San Leandro Marina are covered by more than a half a dozen BCDC permits, each with multiple amendments, spanning more than 40 years. Two of the permits (1978.006.07 and 1989.014.05) speak to abandonment and removal of facilities. However, both define abandoned as a period of two years or more, or if the harbor improvements have deteriorated to the point that public health, safety or welfare is adversely affected. Therefore, it is unclear if removal of the harbor facilities could occur under these existing permits, or if they would be covered under amended or new permits.

A permit from BCDC is required for all work within the Bay jurisdiction and 100-foot shoreline band. The Shoreline Development project proposes improvements both within the Bay and 100-foot shoreline band.

4.4.2 Application Process

Prepare and submit a Major Permit application form, including the following information:

- Project description and site plan (including low impact development features)
- CEQA document and Notice of Determination
- Quantification of fill (solid, floating, cantilevered, piles-supported) to be removed within bay
- Quantification of fill (solid, floating, cantilevered, piles-supported) to be constructed within bay
- Breakdown of all improvements within 100-foot shoreline band
- Analysis of topography and predicted sea level rise, depicted on a project profile
- Proposed mitigation (Project may mitigate itself)
- Payment of fees (based on cost of project)

4.4.3 Schedule

Once submitted, the Commission has 30 days to determine whether the application is complete. Specific to Major Permits, and once the application is determined complete, staff distributes a summary of the application to the Commission and the public. No sooner than 28 days after the application has been filed and at least 10 days after the application summary has been distributed, the Commission holds a public hearing on the application. If the application is not complete, the commission staff will respond in writing within 30 days notifying the applicant of the information needs. The Commission has a maximum of 90 days to act on an application once it is determined to be complete.

Some projects also are required to go through Design Review Board and Engineering Criteria Review Board. The Shoreline Development project has been before the Design Review Board twice, and is expected to be presented a third time. This process is being led by Cal-Coast Development. The Shoreline Development does not include the type of buildings or structures that would normally be required to go before the Engineering Criteria Review Board; therefore, this review is not anticipated to be necessary.

4.5 Mitigation Plan

RWQCB, CDFW, and BCDC will require a mitigation plan for the net fill impacts that result from the implementation of the Project. In developing a mitigation plan it will be important to document the fill being removed, so that a net impact can be determined. This includes floating fill and cantilevered fill. If the fill being removed is greater than the fill being added, it may be that the Project can mitigate itself, and that no off-site mitigation would be required. This scenario applies only to fill, and may not qualify for impacts to special-status species.

A preliminary inventory of the fill to be removed is shown in Table 4.1. Although the fill types are not equal, in general the fill being removed would be significantly greater than the fill being placed. In addition, the removed and placed fill would occur in the same spot, with the removed fill providing a greater beneficial impact to the water and shoreline than the impact of the placement of fill. Removal would have benefits from less shade, more open water, and better water quality.

5. Marina Demolition and Decommissioning Methods

5.1 Landside

The landside restrooms and other structures are anticipated to be demolished using standard methods with minor controls to ensure debris and runoff do not spill into the marina. The overwater restrooms and access piers may also be easily accessible from the land side with more careful consideration of debris and runoff collection.

5.2 Marina Side

The marina demolition would most likely be in reverse order of the construction process with the following tasks:

5.2.1 Floats

The concrete and timber floats are disconnected from the guide piles and broken into smaller sections. Using a barge-mounted crane, the timber floats can be loaded for offsite recycling or disposal, and the concrete floats can be salvaged.

5.2.2 Building Structures

The Harbor Master's office would require careful demolition to prevent debris from falling into the water. The Blue Dolphin and former observation deck would require careful planning for safety. For these structures, a landside crane and/or barge-mounted crane may assist in removing pieces for offsite recycling or disposal.

5.2.3 Piles

After the floats, access piers, and buildings have been removed, barge-mounted vibratory extractors can be used to remove the piles. The concrete and steel piles are expected to be straightforward to remove, and may be salvaged. However, there is a risk that the timber piles may break during the extraction process, especially at the piles that were repaired with an FRP jacket or concrete top. These retrofits are designed to improve the bending and bearing capacity of the piles, not tensile capacity. Therefore, it may be necessary to cut the timber piles to below the retrofit to allow the extractor to grip onto the original timber section. Where the piles cannot be removed without breakage, divers may be needed to cut the piles at the mudline.

5.2.4 Rip-Rap

Finally, after all the structures are removed from the marina, the rip-rap on the harbor basin slopes under the access piers and building structures would need to be repaired. This may be accomplished from the landside using long reach excavators.

6. Cost Estimates

An Engineer's estimate of probable demolition cost is provided in Appendix C. The estimate includes the demolition/construction activities necessary for decommissioning of the site, along with estimated costs associated with permitting the work (permit fees, project management and consultant fees). This estimate is based on GHD's research of similar projects and general cost estimating principles using 2017 market assumptions. The estimate does not reflect all local market conditions, such as contractor and resource availability at the time of contractor bid.

7. Summary and Recommendations

It is recommended that this report be provided to contractors and personnel who may bid on or conduct work at the project site potentially affecting hazardous materials, primarily including the lead and asbestos materials described herein. It is further recommended that the City maintain copies of this report for as long as the hazardous materials identified herein are present at the project site.

7.1 Decommissioning Schedule

The following presents an approximate sequence and schedule for decommissioning and demolition of the Marina. Many items may occur concurrently. An estimated project timeline is provided in Appendix D. This assumes a separate contract through the City. Timing of specific demolition activities may be affected by regulatory requirements.

A. Prepare Bid Documents (approximately 3 months)

B. Prepare and submit permit application packages (eight to 10 months for approval, from time of submittal)

C. Bid Notice to prospective Contractors for planning, permitting, and performance of demolition and decommissioning

D. Award Bid (approximately three months)

E. Demolition/Decommissioning activities (approximately six months)
   - Pre-decommissioning removal of miscellaneous waste containers and universal wastes
   - Cleaning and decommissioning of pipes, wet wells, sumps, trenches
   - Cleaning of gross contamination of concrete
   - All utility cuts and caps are completed
   - Abatement of lead and asbestos containing materials, if necessary
   - Removal of structures, utilities, weather stations, and related appurtenances
   - Restoration of disturbed areas including minimal grading, patching, and riprap restoration

GHD recommends that materials reported to contain detectable concentrations of asbestos (Category I and II ACM, RACM, ACCM and/or Presumed ACM) should be removed by a licensed abatement contractor as described further in this report.

Work at the project site is understood to meet the Cal/OSHA definition of construction work (8 CCR 1532.1[a]) and includes the planned impaction of known or presumed lead containing surface

coatings, thus, is subject to lead regulations established by applicable governmental agencies and standards.

8. References

Bay Conservation and Development Commission. Permit #1978.006.007 and Permit # 1989.014.05.

Bay Conservation and Development Commission. 2016. Design Review Board Staff Reports.

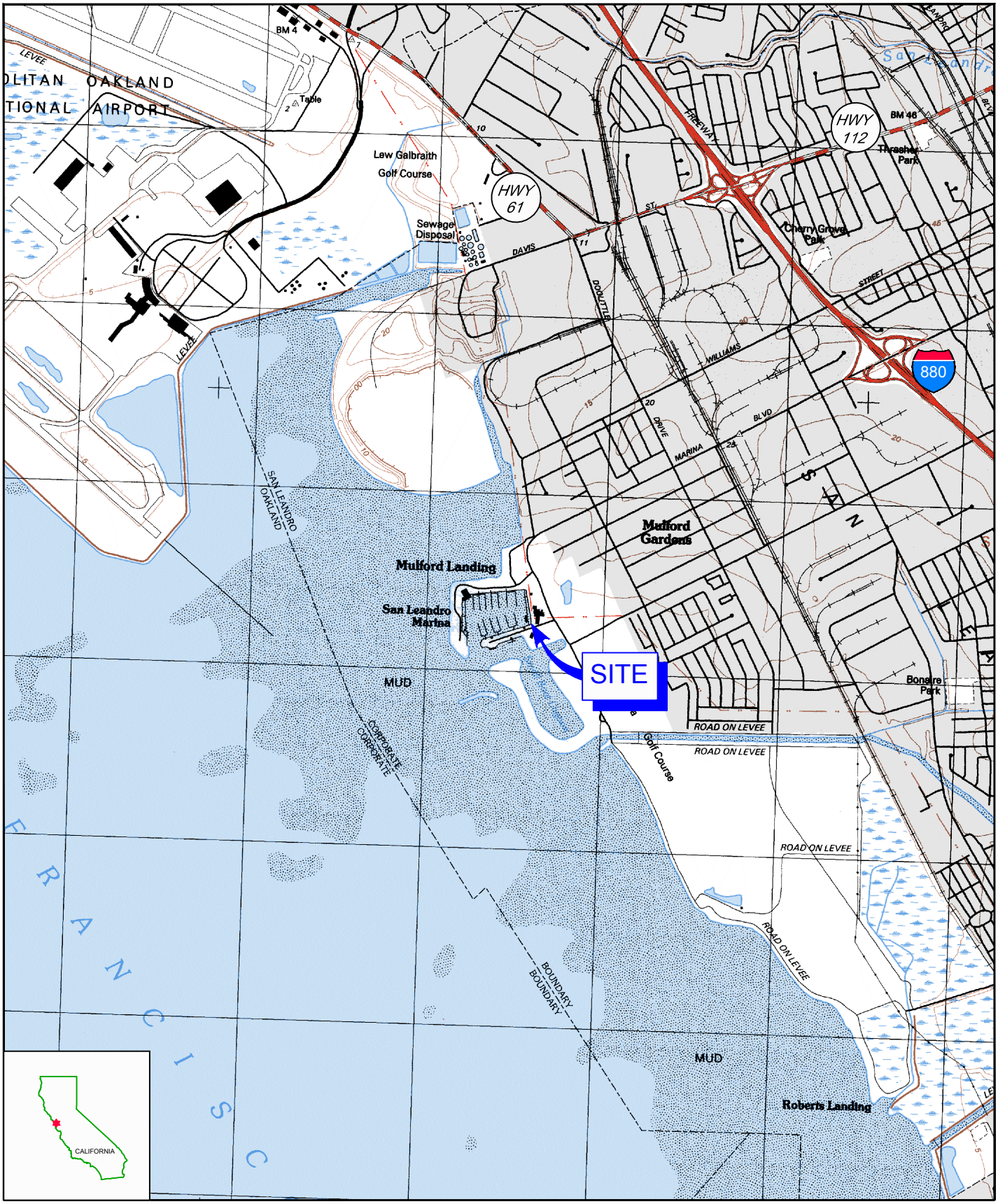
Department of Toxic Substances Control (DTSC). 2010. *Universal Waste Fact Sheet.*

Department of Toxic Substances Control (DTSC). 2011. *Treated Wood Waste Management in California: AB 1353 Implementation Report.*

San Leandro, City of. 2015. *San Leandro Shoreline Development Project EIR*

San Leandro, City of. 2017. From City of San Leandro website: *Shoreline Development Update*.

Figures



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CITY OF SAN LEANDRO
40 MULFORD POINT DRIVE
SAN LEANDRO, CALIFORNIA

11119148-06

Marc□ 12, 2018

REGIONAL CONTEXT MAP

FIGURE 1

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Source: Microsoft Product Screen Shot(s) Reprinted with permission from Microsoft Corporation, Acquisition Date Oct/2013 - Nov/2013, Accessed: 2017

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Coordinate System:
California State
Plane Zone 3

LEGEND

PROJECT AREA BOUNDARY

CITY OF SAN LEANDRO
40 MULFORD POINT DRIVE
SAN LEANDRO, CALIFORNIA

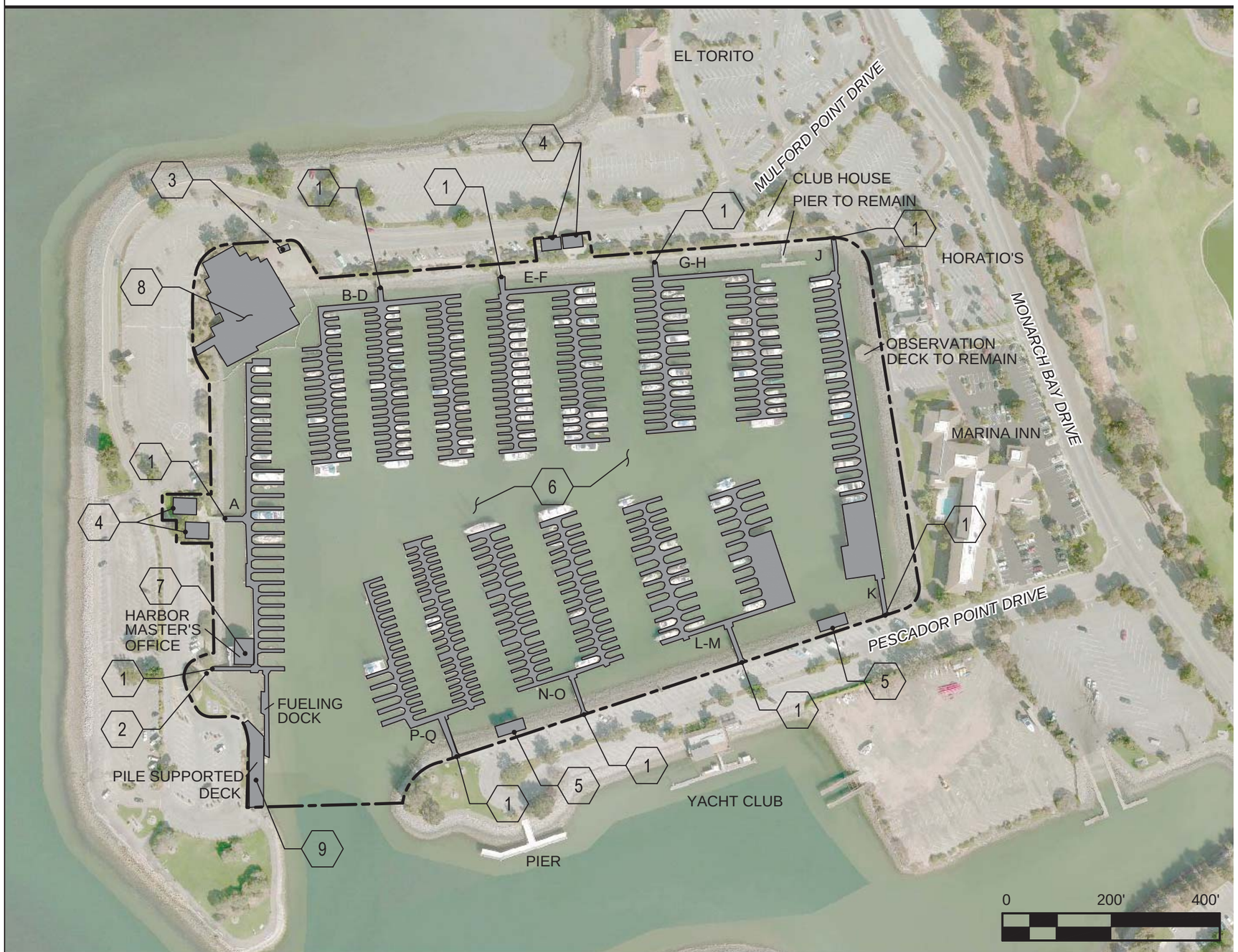
SITE PLAN

11119148-2017

March 12, 2018

FIGURE 2

CAD File: 11119148-2017(PRES001)GN-SO002.DWG



SHEET KEYNOTES

1. REMOVE PIER SECURITY GATE AND ACCESS GANGWAY AND RESTORE RIP-RAP
2. REMOVE BUTANE TANK AND ENCLOSURE
3. REMOVE AND SALVAGE SEWER LIFT STATION
4. DEMOLISH LANDSIDE RESTROOM
5. DEMOLISH PILE-SUPPORTED RESTROOM AND RESTORE RIP-RAP
6. REMOVE FLOATING DOCKS, FINGER PIERS, PILES, AND ALL ATTACHED UTILITIES
7. DEMOLISH AND REMOVE HARBORMASTER'S OFFICE AND RESTORE RIP-RAP
8. DEMOLISH BLUE DOLPHIN PLATFORM AND FOUNDATION AND RESTORE RIP-RAP
9. DEMOLISH PILE SUPPORTED DECK (TIMBER WHARF) AND RESTORE RIP-RAP

SHEET LEGEND

DEMOLISH/REMOVE/SALVAGE MARINA FACILITIES AS DIRECTED PER KEYNOTES

LIMIT OF PROPOSED DECOMMISSIONING WORK

No.	Issue	Drawn	Approved	Date

Bar is one inch on original size sheet
0 1"

GHD Inc.
5900 Hollis Street Suite A
Emeryville California 94608 USA
T 1 510 420 0700 W www.ghd.com

Drawn	J. ZHANG	Designer	
Drafting Check	M. BEUTLER	Design Check	
Project Manager	RL	Date	MARCH 12, 2018
This document shall not be used for construction unless signed and sealed for construction.		Scale	1" = 200'

Client CITY OF SAN LEANDRO
Project SAN LEANDRO MARINA DECOMMISSIONING PROJECT
Title FIGURE 3
DEMOLITION SUMMARY
Project No. 11119148

Original Size ANSI B | Sheet No. - | Sheet - of

Plot Date: 13 March 2018 - 5:32 PM Plotted By: Jay Zhang Filename: N:\US\Emeryville\Projects\IR\8-chars\1111----\11119148-SAN LEANDRO MARINA DECOMM\06-CAD\Figures\11119148-Figure-003.dwg

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Coordinate System:
California State
Plane Zone 3

LEGEND

- PAINT SAMPLES
- SEDIMENT SAMPLES
- PROJECT AREA BOUNDARY

CITY OF SAN LEANDRO
40 MULFORD POINT DRIVE
SAN LEANDRO, CALIFORNIA

11119148-06

March 12, 2018

SAMPLING AND ANALYSIS PLAN

FIGURE 4

CAD File: 11119148-06(PRES001)GN-SO004.DWG

Tables

Table 2.1: Inventory and Quantities

1	Pier Security Gate	10	Ea	Dispose
2	Butane Tank	1	Ea	Dispose
3	1" Gas Service	150	Lf	Dispose
4	4" SS Lateral	800	Lf	Dispose
5	2" Water Service	10,400	Lf	Dispose
6	2" - 2-1/2" Electrical Conduit	10,800	Lf	Dispose
7	Telecom Conduit	10,100	Lf	Dispose
8	Electrical Service Pedestal	12	Ea	Dispose
9	Utility Post With Water Meter	107	Ea	Dispose
10	Dock Lighting Fixture	30	Ea	Dispose
11	Miscellaneous Utility Post	8	Ea	Dispose
12	Dock Luminaire	13	Ea	Dispose
13	Water Faucet	258	Ea	Dispose
14	Fire Extinguisher Enclosure	26	Ea	Dispose
15	Wharf Hydrant	19	Ea	Dispose
16	Storage Box With Utility Access	258	Ea	Dispose
17	Storage Box	169	Ea	Dispose
18	Sewer Lift Station	1	Ea	Dispose
19	Landside Restroom	4	Ea	Demolish & Dispose
20	Pile-Supported Restroom	2	Ea	Demolish & Dispose
21	Concrete Piles	205	Ea	Salvagaeable
22	Timber Piles	176	Ea	Recycle/Dispose
23	Steel Piles	4	Ea	Salvageable
24	Concrete Floating Docks	58,516	Sf	Salvageable
25	Timber Floating Docks	50,459	Sf	Recycle/Dispose
26	Covered Berths	13,714	Sf	Recycle/Dispose
27	Aluminum Gangways	10	Ea	Salvageable
28	Access Pier	2,140	Sf	Recycle/Dispose
29	Rip Rap On Marina Basin Slopes	2,650	Ton	Recycle
30	Harbor Master's Office	1,530	Sf	Demolish & Dispose
31	Blue Dolphin Restaurant Wharf And Foundation	24,670	Sf	Demolish & Dispose
32	Former Observation Deck	4,100	Sf	Demolish & Dispose

Table 3.1

Lead Paint Analytical Results
Marina Facilities Decommissioning Assessment
San Leandro Marina
San Leandro, California

Sample ID	Sample Date	Lead mg/Kg
PAINT-HM-1	9/12/2017	850
PAINT-HM-2	9/12/2017	4,100
PAINT-US-1	9/12/2017	180
PAINT-OD-1	9/12/2017	560
PAINT-OD-2	9/12/2017	470
PAINT-BR-1	9/12/2017	12
PAINT-BR-2	9/12/2017	45

Notes:
Lead analyzed by Method 6010B

Table 3.2

Sediment Analytical Results
Marina Facilities Decommissioning Assessment
San Leandro Marina
San Leandro, California

Sample ID	Sample Date	PCB mg/Kg	Antimony mg/Kg	Arsenic mg/Kg	Barium mg/Kg	Beryllium mg/Kg	Cadmium mg/Kg	Chromium mg/Kg	Cobalt mg/Kg	Copper mg/Kg	Lead mg/Kg	Molybdenum mg/Kg	Nickel mg/Kg	Selenium mg/Kg	Silver mg/Kg	Thallium mg/Kg	Vanadium mg/Kg	Zinc mg/Kg	Mercury mg/Kg
SED-FD-1	9/12/2017	<0.05	<1.8	<3.6	37	<0.36	<0.45	40	6.0	20	9.4	<1.8	40	<3.6	<0.91	<1.8	29	53	0.087
SED-FD-2	9/12/2017	<0.049	<1.9	<3.8	28	<0.38	<0.48	40	5.6	17	9.0	<1.9	37	<3.8	<0.95	<1.9	29	49	0.081
SED-FD-3	9/12/2017	<0.049	<1.3	3.2	26	<0.26	<0.32	36	5.1	16	8.3	<1.3	34	<2.6	<0.65	<1.3	27	51	0.072
SED-FD-4	9/12/2017	<0.05	<1.4	3.3	33	<0.27	<0.34	37	5.6	18	8.9	<1.4	37	<2.7	<0.68	<1.4	27	49	0.075
SED-BD-1	9/12/2017	<0.049	<1.7	<3.4	27	<0.34	<0.43	33	4.7	16	7.5	<1.7	32	<3.4	<0.86	<1.7	24	43	0.065
SED-BD-2	9/12/2017	<0.049	<1.7	<3.4	22	<0.34	<0.42	35	4.5	19	9.9	<1.7	32	<3.4	<0.85	<1.7	26	57	0.084
SED-BD-3	9/12/2017	<0.049	<1.1	2.3	23	0.23	<0.27	35	4.7	16	7.8	<1.1	33	<2.2	<0.55	<1.1	25	45	0.076
SED-BD-4	9/12/2017	<0.05	<1.2	2.5	25	0.23	<0.29	33	4.5	15	7.3	<1.2	32	<2.3	<0.58	<1.2	24	42	0.066
SED-NW-1	9/12/2017	<0.049	<1.6	<3.3	21	<0.33	<0.41	30	4.0	15	6.7	<1.6	29	<3.3	<0.81	<1.6	21	41	0.057
SED-NW-2	9/12/2017	<0.049	<1.6	<3.3	22	<0.33	<0.41	28	3.8	16	6.6	<1.6	28	<3.3	<0.82	<1.6	20	40	0.063
SED-NW-3	9/12/2017	<0.05	<1.7	<3.4	23	<0.34	<0.42	29	3.8	16	7.7	<1.7	28	<3.4	<0.84	<1.7	21	42	0.073
SED-NW-4	9/12/2017	<0.049	<1.6	<3.3	22	<0.33	<0.41	29	4.0	15	6.4	<1.6	28	<3.3	<0.81	<1.6	20	39	0.055

Notes:
PCB = Polychlorinated Biphenyls analyzed by EPA Method 8082
mg/kg = Milligrams per kilogram
CAM 17 Metals analyzed by EPA Method 6010

Table 4.1 Preliminary Fill Removed and Placed

Fill Removed			
Floating Fill		129,016	2.96
Pile-Supported Fill (Over-Water)		27,442	0.63
Cantilevered Fill (Over Water)		2,204	0.05
Solid Fill		481	0.01
	SUBTOTAL	159,143	3.65
Fill Placed[1]			
Solid Fill/Rip Rap		12,472	0.29
	SUBTOTAL	12,472	0.29
	NET TOTAL	**-146,671**	**-3.33**

1. Potential fill related to the proposed recreational, non-motorized boat docks has not been calculated but is expected to be well below the solid and floating fill to be removed as part of demolition.

Appendices

Appendix A
Drawings

SHEET KEYNOTES

1. REMOVE PIER SECURITY GATE AND ACCESS GANGWAY AND RESTORE RIP-RAP
2. REMOVE BUTANE TANK AND ENCLOSURE
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9. DEMOLISH PILE SUPPORTED DECK (TIMBER WHARF) AND RESTORE RIP-RAP

SHEET LEGEND

DEMOLISH, REMOVE AND SALVAGE MARINA FACILITIES AS DIRECTED PER KEYNOTES

LIMIT OF PROPOSED DECOMMISSIONING AND DEMOLITION

No.	Issue	Drawn	Approved	Date

Bar is one inch on original size sheet
0 1"

GHD Inc.
5900 Hollis Street Suite A
Emeryville California 94608 USA
T 1 510 420 0700 W www.ghd.com

Drawn	J. ZHANG	Designer	
Drafting Check	M. BEUTLER	Design Check	
Project Manager	RL	Date	DEC.16 2017
This document shall not be used for construction unless signed and sealed for construction.		Scale	1" = 200'

Client CITY OF SAN LEANDRO
Project SAN LEANDRO MARINA DECOMMISSIONING PROJECT
Title APPENDIX A
SITE PLAN
Project No. 11119148

Original Size ANSI B | Sheet No. - | Sheet - of

Plot Date: 5 December 2017 - 4:12 PM Plotted By: Jay Zhang
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Appendix B
Marina Infrastructure Inventory

City of San Leandro - Marina Decommissioning Project
Marina Infrastructure Inventory

INVENTORY				DOCK									
ITEM	ITEM DESCRIPTION	UNIT	BLDGS	A	B-D	E-F	G-H	J/K	L-M	N-O	P-Q	TOTAL QTY	NOTES
1	PIER SECURITY GATE	EA		2	1	1	1	2	1	1	1	10	
2	BUTANE TANK	EA		1								1	
3	1" GAS SERVICE	LF		150								150	
4	4" SS LATERAL	LF	800									800	Harbormaster's Office and Restrooms
5	2" WATER SERVICE	LF		1,220	1,705	1,160	1,130	830	965	1,120	1,755	10,400	
6	2" - 2-1/2" ELECTRICAL CONDUIT	LF		1,220	1,705	1,160	1,130	830	965	1,120	2,085	10,800	
7	TELECOM CONDUIT	LF		1,220	1,705	1,160	1,130	830	965	1,120	1,485	10,100	
	UTILITY BOXES	EA		31	47	38	35					151	
8	ELECTRICAL SERVICE PEDESTAL	EA		4	2	2	2	2				12	
9	UTILITY POST WITH WATER METER	EA						16	28	28	35	107	Blue fixture
10	DOCK LIGHTING FIXTURE	EA			8	4	6		4	4	4	30	lights at the main isle
11	MISCELLANEOUS UTILITY POST	EA		1	3	2	2					8	different utility post at the end of concrete piers
12	DOCK LUMINAIRE	EA		5	2	1	1	1	1	1	1	13	Regular street lights on landside
13	WATER FAUCET	EA		27	103	70	58					258	
14	FIRE EXTINGUISHER ENCLOSURE	EA						8	6	6	6	26	
15	WHARF HYDRANT	EA		3	6	5	5					19	
16	STORAGE BOX WITH UTILITY ACCES	EA		27	103	70	58					258	
17	STORAGE BOX	EA						35	44	40	50	169	
18	SEWER LIFT STATION	EA	1									1	
19	LANDSIDE RESTROOM	EA	4									4	
20	PILE-SUPPORTED RESTROOM	EA	2									2	
21	CONCRETE PILES	EA		32	55	47	71					205	
22	TIMBER PILES	EA	52					30	30	34	30	176	
23	STEEL PILES	EA		4								4	
24	CONCRETE FLOATING DOCKS	SF		9,528	18,616	14,804	15,568					58,516	
25	TIMBER FLOATING DOCKS	SF		1,760				9,169	12,742	13,924	12,864	50,459	Includes plastic lumber at refueling dock
26	COVERED BERTHS	SF						7,774	5,940			13,714	
27	ALUMINUM GANGWAYS	EA	1	1	1	1	1	2	1	1	1	10	
28	ACCESS PIER	SF	785	175	168	168	168	200	140	168	168	2,140	
29	RIP RAP ON MARINA BASIN SLOPES	TON	2,650									2,650	
30	HARBORMASTER'S OFFICE	SF	1,530									1,530	
31	BLUE DOLPHIN RESTAURANT WHARF AND FOUNDATION	SF	24,670									24,670	
32	FORMER OBSERVATION DECK	SF	4,100									4,100	

Appendix C
Cost Estimates

City of San Leandro - Marina Decommissioning Project
Engineer's Opinion of Probable Construction Cost

		QUANTITY		COST	
ITEM NO.	DESCRIPTION	NUMBER	UNIT	UNIT COST	TOTAL
1	REMOVE PIER SECURITY GATE	10	EA	$3,000.00	$30,000.00
2	REMOVE BUTANE TANK AND ENCLOSURE	1	EA	$5,000.00	$5,000.00
3	REMOVE 1" GAS SERVICE	150	LF	$50.00	$7,500.00
4	REMOVE 4" SANITARY SEWER PIPE	800	LF	$15.00	$12,000.00
5	REMOVE 2" WATER SERVICE PIPE	10,400	LF	$15.00	$156,000.00
6	REMOVE ELECTRICAL CONDUIT AND CONDUCTOR	10,800	LF	$10.00	$108,000.00
7	REMOVE TELECOM CONDUIT AND CONDUCTOR	10,100	LF	$10.00	$101,000.00
8	DISCONNECT AND REMOVE ELECTRICAL SERVICE PEDESTAL	12	EA	$400.00	$4,800.00
9	REMOVE UTILITY POST WITH WATER METER	107	EA	$100.00	$10,700.00
10	REMOVE DOCK LIGHTING FIXTURE	30	EA	$400.00	$12,000.00
11	REMOVE MISC. UTILITY POST	8	EA	$100.00	$800.00
12	REMOVE DOCK LUMINAIRE	13	EA	$1,000.00	$13,000.00
13	REMOVE SLIP WATER SERVICE	258	EA	$100.00	$25,800.00
14	REMOVE FIRE EXTINGUISHER ENCLOSURE	26	EA	$50.00	$1,300.00
15	REMOVE WHARF HYDRANT	19	EA	$500.00	$9,500.00
16	REMOVE LOCKER BOX WITH UTILITY ACCESS	258	EA	$50.00	$12,900.00
17	REMOVE LOCKER BOX	169	EA	$30.00	$5,070.00
18	REMOVE AND SALVAGE SEWER LIFT STATION	1	LS	$5,000.00	$5,000.00
19	DEMO LANDSIDE RESTROOM	4	EA	$50,000.00	$200,000.00
20	DEMO PILE-SUPPORTED RESTROOM	2	EA	$35,000.00	$70,000.00
21	REMOVE AND DISPOSE - CONCRETE PILES	205	EA	$1,100.00	$225,500.00
22	REMOVE AND DISPOSE - TIMBER PILES	176	EA	$900.00	$158,400.00
23	REMOVE STEEL PILES	4	EA	$1,200.00	$4,800.00
24	REMOVE CONCRETE FLOATING DOCKS	58,520	SF	$20.00	$1,170,400.00
25	REMOVE TIMBER FLOATING DOCKS	50,460	SF	$18.00	$908,280.00
26	REMOVE AND DISPOSE COVERED BERTHS	13,720	SF	$30.00	$411,600.00
27	REMOVE GANGWAYS	10	EA	$1,300.00	$13,000.00
28	REMOVE CONCRETE ACCESS PIERS	2,140	SF	$20.00	$42,800.00
29	RESTORE RIP RAP ON MARINA BASIN SLOPES	2,650	TON	$115.00	$304,750.00
30	DEMO AND REMOVE HARBORMASTER'S OFFICE	1,530	SF	$35.00	$53,550.00
31	DEMO BLUE DOLPHIN RESTAURANT WHARF AND FOUNDATION	24,670	SF	$15.00	$370,050.00
32	DEMO FORMER OBSERVATION DECK	4,100	SF	$15.00	$61,500.00
	Subtotal				$4,515,000.00
	General Conditions	12%			$541,800.00
	General Contractor's Fee (OH & P)	8%			$361,200.00
	Subtotal				$5,418,000.00
	Bond & Insurance	3%			$162,540.00
	Design, Permitting, Owner Administration and Construction Management	5%			$270,900.00
	SUBTOTAL				**$5,851,440.00**
	ADDITIONAL ESTIMATING CONTINGENCY (15%)				**$877,716.00**
	TOTAL				**$6,729,156.00**

Appendix D
Demolition and Decommissioning Schedules

San Leandro Marina - Decommissioning and Demolition Project	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct
	2018				2019									
Project Bid Documents (Plans & Specifications)														
Permitting Applications & Agency Coordination														
Bid Notice														
Project Bidding														
Decommissioning/ Demolition (Marina Basin activities)														
Decommissioning/ Demolition (Landside activities)														
Project Close Out														

Appendix E
Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 720-81841-1
Client Project/Site: San Leandro Marina Decom

For:
GHD Services Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Mr. Robert Larsen

Authorized for release by:
9/21/2017 1:07:00 PM
David Alltucker, Project Manager I
(916)374-4383
david.alltucker@testamericainc.com

Designee for

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

Table of Contents

Glossary

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

Job ID: 720-81841-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-81841-1

Receipt
The samples were received on 9/12/2017 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2º C.

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

Detection Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-HM-1 — Lab Sample ID: 720-81841-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	850		4.4		mg/Kg	10		6010B	Total/NA

Client Sample ID: PAINT-HM-2 — Lab Sample ID: 720-81841-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4100		3.9		mg/Kg	10		6010B	Total/NA

Client Sample ID: PAINT-US-1 — Lab Sample ID: 720-81841-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	180		4.7		mg/Kg	10		6010B	Total/NA

Client Sample ID: PAINT-OD-1 — Lab Sample ID: 720-81841-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	560		4.3		mg/Kg	10		6010B	Total/NA

Client Sample ID: PAINT-OD-2 — Lab Sample ID: 720-81841-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	470		4.1		mg/Kg	10		6010B	Total/NA

Client Sample ID: PAINT-BR-1 — Lab Sample ID: 720-81841-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	12		4.7		mg/Kg	10		6010B	Total/NA

Client Sample ID: PAINT-BR-2 — Lab Sample ID: 720-81841-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	45		4.9		mg/Kg	10		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-HM-1
Date Collected: 09/12/17 10:27
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	850		4.4		mg/Kg		09/14/17 17:34	09/15/17 23:51	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-HM-2
Date Collected: 09/12/17 10:40
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4100		3.9		mg/Kg		09/14/17 17:34	09/15/17 23:56	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-US-1
Date Collected: 09/12/17 10:05
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	180		4.7		mg/Kg		09/14/17 17:34	09/16/17 00:02	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-OD-1
Date Collected: 09/12/17 09:15
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	560		4.3		mg/Kg		09/14/17 17:34	09/16/17 00:18	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-OD-2
Date Collected: 09/12/17 09:25
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	470		4.1		mg/Kg		09/14/17 17:34	09/16/17 00:23	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-BR-1
Date Collected: 09/12/17 13:48
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		4.7		mg/Kg		09/14/17 17:34	09/16/17 00:29	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-BR-2
Date Collected: 09/12/17 14:01
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	45		4.9		mg/Kg		09/14/17 17:34	09/16/17 00:34	10

QC Sample Results

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-230118/1-A
Matrix: Solid
Analysis Batch: 230269

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50		mg/Kg		09/14/17 17:34	09/15/17 22:42	1

Lab Sample ID: LCS 720-230118/2-A
Matrix: Solid
Analysis Batch: 230269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	50.0		mg/Kg		100	80 - 120

QC Association Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Metals

Prep Batch: 230118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81841-1	PAINT-HM-1	Total/NA	Solid	3050B	
720-81841-2	PAINT-HM-2	Total/NA	Solid	3050B	
720-81841-3	PAINT-US-1	Total/NA	Solid	3050B	
720-81841-4	PAINT-OD-1	Total/NA	Solid	3050B	
720-81841-5	PAINT-OD-2	Total/NA	Solid	3050B	
720-81841-6	PAINT-BR-1	Total/NA	Solid	3050B	
720-81841-7	PAINT-BR-2	Total/NA	Solid	3050B	
MB 720-230118/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-230118/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 230269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81841-1	PAINT-HM-1	Total/NA	Solid	6010B	230118
720-81841-2	PAINT-HM-2	Total/NA	Solid	6010B	230118
720-81841-3	PAINT-US-1	Total/NA	Solid	6010B	230118
720-81841-4	PAINT-OD-1	Total/NA	Solid	6010B	230118
720-81841-5	PAINT-OD-2	Total/NA	Solid	6010B	230118
720-81841-6	PAINT-BR-1	Total/NA	Solid	6010B	230118
720-81841-7	PAINT-BR-2	Total/NA	Solid	6010B	230118
MB 720-230118/1-A	Method Blank	Total/NA	Solid	6010B	230118
LCS 720-230118/2-A	Lab Control Sample	Total/NA	Solid	6010B	230118

Lab Chronicle

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-HM-1
Date Collected: 09/12/17 10:27
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/15/17 23:51	ASB	TAL PLS

Client Sample ID: PAINT-HM-2
Date Collected: 09/12/17 10:40
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/15/17 23:56	ASB	TAL PLS

Client Sample ID: PAINT-US-1
Date Collected: 09/12/17 10:05
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/16/17 00:02	ASB	TAL PLS

Client Sample ID: PAINT-OD-1
Date Collected: 09/12/17 09:15
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/16/17 00:18	ASB	TAL PLS

Client Sample ID: PAINT-OD-2
Date Collected: 09/12/17 09:25
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/16/17 00:23	ASB	TAL PLS

Client Sample ID: PAINT-BR-1
Date Collected: 09/12/17 13:48
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/16/17 00:29	ASB	TAL PLS

Lab Chronicle

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Client Sample ID: PAINT-BR-2

Date Collected: 09/12/17 14:01
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81841-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			230118	09/14/17 17:34	JNG	TAL PLS
Total/NA	Analysis	6010B		10	230269	09/16/17 00:34	ASB	TAL PLS

Laboratory References:

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

Accreditation/Certification Summary

Client: GHD Services Inc. TestAmerica Job ID: 720-81841-1
Project/Site: San Leandro Marina Decom

Laboratory: TestAmerica Pleasanton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Method Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81841-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-81841-1	PAINT-HM-1	Solid	09/12/17 10:27	09/12/17 16:00
720-81841-2	PAINT-HM-2	Solid	09/12/17 10:40	09/12/17 16:00
720-81841-3	PAINT-US-1	Solid	09/12/17 10:05	09/12/17 16:00
720-81841-4	PAINT-OD-1	Solid	09/12/17 09:15	09/12/17 16:00
720-81841-5	PAINT-OD-2	Solid	09/12/17 09:25	09/12/17 16:00
720-81841-6	PAINT-BR-1	Solid	09/12/17 13:48	09/12/17 16:00
720-81841-7	PAINT-BR-2	Solid	09/12/17 14:01	09/12/17 16:00

178262

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566-4756
phone 925 484.1919 fax 925 600 3002

Chain of Custody Record

720-81841

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Robert Larsen	Site Contact: Nick Colley	Date: 9/12/17	COC No
GHD Services Inc	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
5900 Hollis Street Suite A	Analysis Turnaround Time			Sampler: Nick Colley
Emeryville, CA 94608	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(510) 420-0700 Phone	TAT if different from Below			Walk-in Client
(xxx) xxx-xxxx FAX	☑ 2 weeks			Lab Sampling
Project Name San Leandro Manna Decom	☐ 1 week			
Site:	☐ 2 days			Job / SDG No
P O # 34018752	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Lead - EPA 6010	Sample Specific Notes
~~PAINT-BD-1~~								X	Not collected
~~PAINT-BD-2~~								X	Not Collected
PAINT-HM-1	9/12/17	1027	G	S	1			X	
PAINT-HM-2		1040						X	
PAINT-US-1		1005						X	
PAINT-OD-1		915						X	
PAINT-OD-2		925						X	
PAINT-BR-1		1348						X	
PAINT-BR-2		1401						X	

720-81841 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☑Disposal by Lab ☑Archive for 3 Months

Special Instructions/QC Requirements & Comments:

5.2°C

Custody Seals Intact ☐ Yes ☐ No	Custody Seal No :		Cooler Temp (°C) Obs'd:	Corr'd	Therm ID No
Relinquished by Nick Colley	Company GHD	Date/Time 9/12/17 1600	Received by	Company TA	Date/Time 9/12/17 1600
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 720-81841-1

Login Number: 81841
List Number: 1
Creator: Thibodeaux, Summer J

List Source: TestAmerica Pleasanton

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 720-81842-1
Client Project/Site: San Leandro Marina Decom

For:
GHD Services Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Mr. Robert Larsen

Authorized for release by:
9/25/2017 2:19:29 PM

Micah Smith, Project Manager II
(916)374-4302
micah.smith@testamericainc.com

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

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

Table of Contents

Glossary

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

Job ID: 720-81842-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-81842-1

Comments
No additional comments.

Receipt
The samples were received on 9/12/2017 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2º C.

GC Semi VOA
Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: SED-FD-1 (720-81842-1), SED-FD-2 (720-81842-2), SED-FD-3 (720-81842-3), SED-FD-4 (720-81842-4), SED-BD-1 (720-81842-5), SED-BD-2 (720-81842-6), SED-BD-3 (720-81842-7), SED-BD-4 (720-81842-8), SED-NW-1 (720-81842-9), SED-NW-2 (720-81842-10), SED-NW-3 (720-81842-11), SED-NW-4 (720-81842-12), (LCS 720-230322/2-A), (MB 720-230322/1-A), (LCS 720-230252/2-A) and (MB 720-230252/1-A).

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

Metals
Method(s) 6010B: The following sample was diluted due to the abundance of non-target analytes: SED-BD-3 (720-81842-7). Elevated reporting limits (RLs) are provided.

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

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

Detection Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-FD-1 — Lab Sample ID: 720-81842-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	37		1.8		mg/Kg	4		6010B	Total/NA
Chromium	40		1.8		mg/Kg	4		6010B	Total/NA
Cobalt	6.0		0.73		mg/Kg	4		6010B	Total/NA
Copper	20		5.5		mg/Kg	4		6010B	Total/NA
Lead	9.4		1.8		mg/Kg	4		6010B	Total/NA
Nickel	40		1.8		mg/Kg	4		6010B	Total/NA
Vanadium	29		1.8		mg/Kg	4		6010B	Total/NA
Zinc	53		5.5		mg/Kg	4		6010B	Total/NA
Mercury	0.087		0.016		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-FD-2 — Lab Sample ID: 720-81842-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	28		1.9		mg/Kg	4		6010B	Total/NA
Chromium	40		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	5.6		0.76		mg/Kg	4		6010B	Total/NA
Copper	17		5.7		mg/Kg	4		6010B	Total/NA
Lead	9.0		1.9		mg/Kg	4		6010B	Total/NA
Nickel	37		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	29		1.9		mg/Kg	4		6010B	Total/NA
Zinc	49		5.7		mg/Kg	4		6010B	Total/NA
Mercury	0.081		0.017		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-FD-3 — Lab Sample ID: 720-81842-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.2		2.6		mg/Kg	4		6010B	Total/NA
Barium	26		1.3		mg/Kg	4		6010B	Total/NA
Chromium	36		1.3		mg/Kg	4		6010B	Total/NA
Cobalt	5.1		0.52		mg/Kg	4		6010B	Total/NA
Copper	16		3.9		mg/Kg	4		6010B	Total/NA
Lead	8.3		1.3		mg/Kg	4		6010B	Total/NA
Nickel	34		1.3		mg/Kg	4		6010B	Total/NA
Vanadium	27		1.3		mg/Kg	4		6010B	Total/NA
Zinc	51		3.9		mg/Kg	4		6010B	Total/NA
Mercury	0.072		0.014		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-FD-4 — Lab Sample ID: 720-81842-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.3		2.7		mg/Kg	4		6010B	Total/NA
Barium	33		1.4		mg/Kg	4		6010B	Total/NA
Chromium	37		1.4		mg/Kg	4		6010B	Total/NA
Cobalt	5.6		0.54		mg/Kg	4		6010B	Total/NA
Copper	18		4.1		mg/Kg	4		6010B	Total/NA
Lead	8.9		1.4		mg/Kg	4		6010B	Total/NA
Nickel	37		1.4		mg/Kg	4		6010B	Total/NA
Vanadium	27		1.4		mg/Kg	4		6010B	Total/NA
Zinc	49		4.1		mg/Kg	4		6010B	Total/NA
Mercury	0.075		0.014		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-BD-1 — Lab Sample ID: 720-81842-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	27		1.7		mg/Kg	4		6010B	Total/NA
Chromium	33		1.7		mg/Kg	4		6010B	Total/NA
Cobalt	4.7		0.69		mg/Kg	4		6010B	Total/NA
Copper	16		5.2		mg/Kg	4		6010B	Total/NA
Lead	7.5		1.7		mg/Kg	4		6010B	Total/NA
Nickel	32		1.7		mg/Kg	4		6010B	Total/NA
Vanadium	24		1.7		mg/Kg	4		6010B	Total/NA
Zinc	43		5.2		mg/Kg	4		6010B	Total/NA
Mercury	0.065		0.016		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-BD-2 — Lab Sample ID: 720-81842-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	22		1.7		mg/Kg	4		6010B	Total/NA
Chromium	35		1.7		mg/Kg	4		6010B	Total/NA
Cobalt	4.5		0.68		mg/Kg	4		6010B	Total/NA
Copper	19		5.1		mg/Kg	4		6010B	Total/NA
Lead	9.9		1.7		mg/Kg	4		6010B	Total/NA
Nickel	32		1.7		mg/Kg	4		6010B	Total/NA
Vanadium	26		1.7		mg/Kg	4		6010B	Total/NA
Zinc	57		5.1		mg/Kg	4		6010B	Total/NA
Mercury	0.084		0.014		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-BD-3 — Lab Sample ID: 720-81842-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3		2.2		mg/Kg	4		6010B	Total/NA
Barium	23		1.1		mg/Kg	4		6010B	Total/NA
Beryllium	0.23		0.22		mg/Kg	4		6010B	Total/NA
Chromium	35		1.1		mg/Kg	4		6010B	Total/NA
Cobalt	4.7		0.44		mg/Kg	4		6010B	Total/NA
Copper	16		3.3		mg/Kg	4		6010B	Total/NA
Lead	7.8		1.1		mg/Kg	4		6010B	Total/NA
Nickel	33		1.1		mg/Kg	4		6010B	Total/NA
Vanadium	25		1.1		mg/Kg	4		6010B	Total/NA
Zinc	45		3.3		mg/Kg	4		6010B	Total/NA
Mercury	0.076		0.016		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-BD-4 — Lab Sample ID: 720-81842-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.5		2.3		mg/Kg	4		6010B	Total/NA
Barium	25		1.2		mg/Kg	4		6010B	Total/NA
Beryllium	0.23		0.23		mg/Kg	4		6010B	Total/NA
Chromium	33		1.2		mg/Kg	4		6010B	Total/NA
Cobalt	4.5		0.47		mg/Kg	4		6010B	Total/NA
Copper	15		3.5		mg/Kg	4		6010B	Total/NA
Lead	7.3		1.2		mg/Kg	4		6010B	Total/NA
Nickel	32		1.2		mg/Kg	4		6010B	Total/NA
Vanadium	24		1.2		mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-BD-4 (Continued) — Lab Sample ID: 720-81842-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	42		3.5		mg/Kg	4		6010B	Total/NA
Mercury	0.066		0.015		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-NW-1 — Lab Sample ID: 720-81842-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	21		1.6		mg/Kg	4		6010B	Total/NA
Chromium	30		1.6		mg/Kg	4		6010B	Total/NA
Cobalt	4.0		0.65		mg/Kg	4		6010B	Total/NA
Copper	15		4.9		mg/Kg	4		6010B	Total/NA
Lead	6.7		1.6		mg/Kg	4		6010B	Total/NA
Nickel	29		1.6		mg/Kg	4		6010B	Total/NA
Vanadium	21		1.6		mg/Kg	4		6010B	Total/NA
Zinc	41		4.9		mg/Kg	4		6010B	Total/NA
Mercury	0.057		0.015		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-NW-2 — Lab Sample ID: 720-81842-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	22		1.6		mg/Kg	4		6010B	Total/NA
Chromium	28		1.6		mg/Kg	4		6010B	Total/NA
Cobalt	3.8		0.66		mg/Kg	4		6010B	Total/NA
Copper	16		4.9		mg/Kg	4		6010B	Total/NA
Lead	6.6		1.6		mg/Kg	4		6010B	Total/NA
Nickel	28		1.6		mg/Kg	4		6010B	Total/NA
Vanadium	20		1.6		mg/Kg	4		6010B	Total/NA
Zinc	40		4.9		mg/Kg	4		6010B	Total/NA
Mercury	0.063		0.017		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-NW-3 — Lab Sample ID: 720-81842-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	23		1.7		mg/Kg	4		6010B	Total/NA
Chromium	29		1.7		mg/Kg	4		6010B	Total/NA
Cobalt	3.8		0.67		mg/Kg	4		6010B	Total/NA
Copper	16		5.0		mg/Kg	4		6010B	Total/NA
Lead	7.7		1.7		mg/Kg	4		6010B	Total/NA
Nickel	28		1.7		mg/Kg	4		6010B	Total/NA
Vanadium	21		1.7		mg/Kg	4		6010B	Total/NA
Zinc	42		5.0		mg/Kg	4		6010B	Total/NA
Mercury	0.073		0.015		mg/Kg	1		7471A	Total/NA

Client Sample ID: SED-NW-4 — Lab Sample ID: 720-81842-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	22		1.6		mg/Kg	4		6010B	Total/NA
Chromium	29		1.6		mg/Kg	4		6010B	Total/NA
Cobalt	4.0		0.65		mg/Kg	4		6010B	Total/NA
Copper	15		4.9		mg/Kg	4		6010B	Total/NA
Lead	6.4		1.6		mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-NW-4 (Continued)

Lab Sample ID: 720-81842-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	28		1.6		mg/Kg	4		6010B	Total/NA
Vanadium	20		1.6		mg/Kg	4		6010B	Total/NA
Zinc	39		4.9		mg/Kg	4		6010B	Total/NA
Mercury	0.055		0.016		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SED-FD-1

Date Collected: 09/12/17 08:24
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1
PCB-1221	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1
PCB-1232	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1
PCB-1242	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1
PCB-1248	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1
PCB-1254	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1
PCB-1260	ND		50		ug/Kg		09/16/17 10:25	09/19/17 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*45 - 132*	*09/16/17 10:25*	*09/19/17 16:27*	*1*
DCB Decachlorobiphenyl	*77*		*42 - 146*	*09/16/17 10:25*	*09/19/17 16:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Arsenic	ND		3.6		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Barium	**37**		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Beryllium	ND		0.36		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Cadmium	ND		0.45		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Chromium	**40**		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Cobalt	**6.0**		0.73		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Copper	**20**		5.5		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Lead	**9.4**		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Molybdenum	ND		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Nickel	**40**		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Selenium	ND		3.6		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Silver	ND		0.91		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Thallium	ND		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Vanadium	**29**		1.8		mg/Kg		09/14/17 10:45	09/14/17 22:19	4
Zinc	**53**		5.5		mg/Kg		09/14/17 10:45	09/14/17 22:19	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.087**		0.016		mg/Kg		09/22/17 13:10	09/22/17 17:55	1

Client Sample ID: SED-FD-2

Date Collected: 09/12/17 08:40
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*45 - 132*	*09/16/17 10:25*	*09/19/17 16:44*	*1*
DCB Decachlorobiphenyl	*80*		*42 - 146*	*09/16/17 10:25*	*09/19/17 16:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Arsenic	ND		3.8		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Barium	**28**		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Beryllium	ND		0.38		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Cadmium	ND		0.48		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Chromium	**40**		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Cobalt	**5.6**		0.76		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Copper	**17**		5.7		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Lead	**9.0**		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Molybdenum	ND		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Nickel	**37**		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Selenium	ND		3.8		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Silver	ND		0.95		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Thallium	ND		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Vanadium	**29**		1.9		mg/Kg		09/14/17 10:45	09/14/17 22:25	4
Zinc	**49**		5.7		mg/Kg		09/14/17 10:45	09/14/17 22:25	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.081**		0.017		mg/Kg		09/22/17 13:10	09/22/17 17:57	1

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-FD-3

Date Collected: 09/12/17 14:20
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*45 - 132*	*09/16/17 10:25*	*09/19/17 17:00*	*1*
DCB Decachlorobiphenyl	*81*		*42 - 146*	*09/16/17 10:25*	*09/19/17 17:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Arsenic	**3.2**		2.6		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Barium	**26**		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Beryllium	ND		0.26		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Cadmium	ND		0.32		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Chromium	**36**		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Cobalt	**5.1**		0.52		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Copper	**16**		3.9		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Lead	**8.3**		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Molybdenum	ND		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Nickel	**34**		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Selenium	ND		2.6		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Silver	ND		0.65		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Thallium	ND		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Vanadium	**27**		1.3		mg/Kg		09/14/17 10:45	09/14/17 22:30	4
Zinc	**51**		3.9		mg/Kg		09/14/17 10:45	09/14/17 22:30	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.072**		0.014		mg/Kg		09/22/17 13:10	09/22/17 17:59	1

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-FD-4

Date Collected: 09/12/17 14:30
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1
PCB-1221	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1
PCB-1232	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1
PCB-1242	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1
PCB-1248	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1
PCB-1254	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1
PCB-1260	ND		50		ug/Kg		09/16/17 10:25	09/19/17 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*45 - 132*	*09/16/17 10:25*	*09/19/17 17:17*	*1*
DCB Decachlorobiphenyl	*81*		*42 - 146*	*09/16/17 10:25*	*09/19/17 17:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Arsenic	**3.3**		2.7		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Barium	**33**		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Beryllium	ND		0.27		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Cadmium	ND		0.34		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Chromium	**37**		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Cobalt	**5.6**		0.54		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Copper	**18**		4.1		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Lead	**8.9**		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Molybdenum	ND		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Nickel	**37**		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Selenium	ND		2.7		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Silver	ND		0.68		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Thallium	ND		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Vanadium	**27**		1.4		mg/Kg		09/14/17 10:45	09/14/17 22:35	4
Zinc	**49**		4.1		mg/Kg		09/14/17 10:45	09/14/17 22:35	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.075**		0.014		mg/Kg		09/22/17 13:10	09/22/17 18:01	1

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-BD-1
Date Collected: 09/12/17 11:00
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*45 - 132*	*09/16/17 10:25*	*09/19/17 17:34*	*1*
DCB Decachlorobiphenyl	*82*		*42 - 146*	*09/16/17 10:25*	*09/19/17 17:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Arsenic	ND		3.4		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Barium	**27**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Beryllium	ND		0.34		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Cadmium	ND		0.43		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Chromium	**33**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Cobalt	**4.7**		0.69		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Copper	**16**		5.2		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Lead	**7.5**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Molybdenum	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Nickel	**32**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Selenium	ND		3.4		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Silver	ND		0.86		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Thallium	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Vanadium	**24**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:41	4
Zinc	**43**		5.2		mg/Kg		09/14/17 10:45	09/14/17 22:41	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.065**		0.016		mg/Kg		09/22/17 13:10	09/22/17 18:04	1

Client Sample ID: SED-BD-2

Date Collected: 09/12/17 11:15
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*45 - 132*	*09/16/17 10:25*	*09/19/17 18:39*	*1*
DCB Decachlorobiphenyl	*90*		*42 - 146*	*09/16/17 10:25*	*09/19/17 18:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Arsenic	ND		3.4		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Barium	**22**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Beryllium	ND		0.34		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Cadmium	ND		0.42		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Chromium	**35**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Cobalt	**4.5**		0.68		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Copper	**19**		5.1		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Lead	**9.9**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Molybdenum	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Nickel	**32**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Selenium	ND		3.4		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Silver	ND		0.85		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Thallium	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Vanadium	**26**		1.7		mg/Kg		09/14/17 10:45	09/14/17 22:46	4
Zinc	**57**		5.1		mg/Kg		09/14/17 10:45	09/14/17 22:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.084**		0.014		mg/Kg		09/22/17 13:10	09/22/17 18:06	1

Client Sample ID: SED-BD-3

Date Collected: 09/12/17 11:45
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*45 - 132*	*09/16/17 10:25*	*09/19/17 18:55*	*1*
DCB Decachlorobiphenyl	*80*		*42 - 146*	*09/16/17 10:25*	*09/19/17 18:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Arsenic	**2.3**		2.2		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Barium	**23**		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Beryllium	**0.23**		0.22		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Cadmium	ND		0.27		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Chromium	**35**		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Cobalt	**4.7**		0.44		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Copper	**16**		3.3		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Lead	**7.8**		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Molybdenum	ND		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Nickel	**33**		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Selenium	ND		2.2		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Silver	ND		0.55		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Thallium	ND		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Vanadium	**25**		1.1		mg/Kg		09/14/17 10:45	09/14/17 22:51	4
Zinc	**45**		3.3		mg/Kg		09/14/17 10:45	09/14/17 22:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.076**		0.016		mg/Kg		09/22/17 13:10	09/22/17 18:08	1

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-BD-4

Date Collected: 09/12/17 12:00
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1
PCB-1221	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1
PCB-1232	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1
PCB-1242	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1
PCB-1248	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1
PCB-1254	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1
PCB-1260	ND		50		ug/Kg		09/16/17 10:25	09/19/17 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*45 - 132*	*09/16/17 10:25*	*09/19/17 19:12*	*1*
DCB Decachlorobiphenyl	*88*		*42 - 146*	*09/16/17 10:25*	*09/19/17 19:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Arsenic	**2.5**		2.3		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Barium	**25**		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Beryllium	**0.23**		0.23		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Cadmium	ND		0.29		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Chromium	**33**		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Cobalt	**4.5**		0.47		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Copper	**15**		3.5		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Lead	**7.3**		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Molybdenum	ND		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Nickel	**32**		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Selenium	ND		2.3		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Silver	ND		0.58		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Thallium	ND		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Vanadium	**24**		1.2		mg/Kg		09/14/17 10:45	09/14/17 23:07	4
Zinc	**42**		3.5		mg/Kg		09/14/17 10:45	09/14/17 23:07	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.066**		0.015		mg/Kg		09/22/17 13:10	09/22/17 18:11	1

Client Sample ID: SED-NW-1

Date Collected: 09/12/17 12:45
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*45 - 132*	*09/16/17 10:25*	*09/19/17 19:29*	*1*
DCB Decachlorobiphenyl	*84*		*42 - 146*	*09/16/17 10:25*	*09/19/17 19:29*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Arsenic	ND		3.3		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Barium	**21**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Beryllium	ND		0.33		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Cadmium	ND		0.41		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Chromium	**30**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Cobalt	**4.0**		0.65		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Copper	**15**		4.9		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Lead	**6.7**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Molybdenum	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Nickel	**29**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Selenium	ND		3.3		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Silver	ND		0.81		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Thallium	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Vanadium	**21**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:13	4
Zinc	**41**		4.9		mg/Kg		09/14/17 10:45	09/14/17 23:13	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.057**		0.015		mg/Kg		09/22/17 13:10	09/22/17 18:18	1

Client Sample ID: SED-NW-2

Date Collected: 09/12/17 12:55
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1
PCB-1221	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1
PCB-1232	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1
PCB-1242	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1
PCB-1248	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1
PCB-1254	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1
PCB-1260	ND		49		ug/Kg		09/16/17 10:25	09/19/17 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*45 - 132*	*09/16/17 10:25*	*09/19/17 19:45*	*1*
DCB Decachlorobiphenyl	*87*		*42 - 146*	*09/16/17 10:25*	*09/19/17 19:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Arsenic	ND		3.3		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Barium	**22**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Beryllium	ND		0.33		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Cadmium	ND		0.41		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Chromium	**28**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Cobalt	**3.8**		0.66		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Copper	**16**		4.9		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Lead	**6.6**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Molybdenum	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Nickel	**28**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Selenium	ND		3.3		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Silver	ND		0.82		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Thallium	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Vanadium	**20**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:18	4
Zinc	**40**		4.9		mg/Kg		09/14/17 10:45	09/14/17 23:18	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.063**		0.017		mg/Kg		09/22/17 13:10	09/22/17 18:20	1

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-NW-3

Date Collected: 09/12/17 13:15
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1
PCB-1221	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1
PCB-1232	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1
PCB-1242	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1
PCB-1248	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1
PCB-1254	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1
PCB-1260	ND		50		ug/Kg		09/18/17 16:30	09/20/17 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*45 - 132*	*09/18/17 16:30*	*09/20/17 20:59*	*1*
DCB Decachlorobiphenyl	*89*		*42 - 146*	*09/18/17 16:30*	*09/20/17 20:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Arsenic	ND		3.4		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Barium	**23**		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Beryllium	ND		0.34		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Cadmium	ND		0.42		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Chromium	**29**		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Cobalt	**3.8**		0.67		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Copper	**16**		5.0		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Lead	**7.7**		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Molybdenum	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Nickel	**28**		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Selenium	ND		3.4		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Silver	ND		0.84		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Thallium	ND		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Vanadium	**21**		1.7		mg/Kg		09/14/17 10:45	09/14/17 23:23	4
Zinc	**42**		5.0		mg/Kg		09/14/17 10:45	09/14/17 23:23	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.073**		0.015		mg/Kg		09/22/17 13:10	09/22/17 18:22	1

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-NW-4
Date Collected: 09/12/17 13:25
Date Received: 09/12/17 16:00

Lab Sample ID: 720-81842-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1
PCB-1221	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1
PCB-1232	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1
PCB-1242	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1
PCB-1248	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1
PCB-1254	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1
PCB-1260	ND		49		ug/Kg		09/18/17 16:55	09/20/17 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*53*		*45 - 132*	*09/18/17 16:55*	*09/20/17 12:54*	*1*
DCB Decachlorobiphenyl	*71*		*42 - 146*	*09/18/17 16:55*	*09/20/17 12:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Arsenic	ND		3.3		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Barium	**22**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Beryllium	ND		0.33		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Cadmium	ND		0.41		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Chromium	**29**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Cobalt	**4.0**		0.65		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Copper	**15**		4.9		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Lead	**6.4**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Molybdenum	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Nickel	**28**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Selenium	ND		3.3		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Silver	ND		0.81		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Thallium	ND		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Vanadium	**20**		1.6		mg/Kg		09/14/17 10:45	09/14/17 23:29	4
Zinc	**39**		4.9		mg/Kg		09/14/17 10:45	09/14/17 23:29	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.055**		0.016		mg/Kg		09/22/17 13:10	09/22/17 18:24	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)								
720-81842-1	SED-FD-1	77	77								
720-81842-2	SED-FD-2	79	80								
720-81842-3	SED-FD-3	75	81								
720-81842-4	SED-FD-4	75	81								
720-81842-5	SED-BD-1	75	82								
720-81842-6	SED-BD-2	83	90								
720-81842-7	SED-BD-3	76	80								
720-81842-8	SED-BD-4	83	88								
720-81842-9	SED-NW-1	78	84								
720-81842-10	SED-NW-2	79	87								
720-81842-11	SED-NW-3	71	89								
720-81842-12	SED-NW-4	53	71								
LCS 720-230252/2-A	Lab Control Sample	78	93								
LCS 720-230322/2-A	Lab Control Sample	81	86								
MB 720-230252/1-A	Method Blank	76	89								
MB 720-230322/1-A	Method Blank	92	87								

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 720-230252/1-A
Matrix: Solid
Analysis Batch: 230272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1
PCB-1221	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1
PCB-1232	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1
PCB-1242	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1
PCB-1248	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1
PCB-1254	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1
PCB-1260	ND		50		ug/Kg		09/16/17 08:30	09/18/17 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*45 - 132*	*09/16/17 08:30*	*09/18/17 15:34*	*1*
DCB Decachlorobiphenyl	*89*		*42 - 146*	*09/16/17 08:30*	*09/18/17 15:34*	*1*

Lab Sample ID: LCS 720-230252/2-A
Matrix: Solid
Analysis Batch: 230272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230252

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			133	105		ug/Kg		78	65 - 121		
PCB-1260			133	108		ug/Kg		81	68 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*45 - 132*
DCB Decachlorobiphenyl	*93*		*42 - 146*

Lab Sample ID: MB 720-230322/1-A
Matrix: Solid
Analysis Batch: 230473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1
PCB-1221	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1
PCB-1232	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1
PCB-1242	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1
PCB-1248	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1
PCB-1254	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1
PCB-1260	ND		50		ug/Kg		09/18/17 16:29	09/20/17 16:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*45 - 132*	*09/18/17 16:29*	*09/20/17 16:48*	*1*
DCB Decachlorobiphenyl	*87*		*42 - 146*	*09/18/17 16:29*	*09/20/17 16:48*	*1*

Lab Sample ID: LCS 720-230322/2-A
Matrix: Solid
Analysis Batch: 230473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			133	106		ug/Kg		79	65 - 121		

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

Lab Sample ID: LCS 720-230322/2-A
Matrix: Solid
Analysis Batch: 230473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			133	122		ug/Kg		92	68 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*45 - 132*
DCB Decachlorobiphenyl	*86*		*42 - 146*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-230107/1-A
Matrix: Solid
Analysis Batch: 230231

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Arsenic	ND		1.0		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Barium	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Beryllium	ND		0.10		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Cadmium	ND		0.13		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Chromium	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Cobalt	ND		0.20		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Copper	ND		1.5		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Lead	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Molybdenum	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Nickel	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Selenium	ND		1.0		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Silver	ND		0.25		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Thallium	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Vanadium	ND		0.50		mg/Kg		09/14/17 10:45	09/15/17 12:40	1
Zinc	ND		1.5		mg/Kg		09/14/17 10:45	09/15/17 12:40	1

Lab Sample ID: LCS 720-230107/2-A
Matrix: Solid
Analysis Batch: 230174

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230107

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			50.0	48.3		mg/Kg		97	80 - 120		
Arsenic			50.0	49.4		mg/Kg		99	80 - 120		
Barium			50.0	51.5		mg/Kg		103	80 - 120		
Beryllium			50.0	51.0		mg/Kg		102	80 - 120		
Cadmium			50.0	50.1		mg/Kg		100	80 - 120		
Chromium			50.0	50.8		mg/Kg		102	80 - 120		
Cobalt			50.0	50.6		mg/Kg		101	80 - 120		
Copper			50.0	50.5		mg/Kg		101	80 - 120		
Lead			50.0	50.9		mg/Kg		102	80 - 120		
Molybdenum			50.0	50.5		mg/Kg		101	80 - 120		
Nickel			50.0	50.1		mg/Kg		100	80 - 120		
Selenium			50.0	47.4		mg/Kg		95	80 - 120		
Silver			25.0	24.7		mg/Kg		99	80 - 120		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-230107/2-A
Matrix: Solid
Analysis Batch: 230174

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	50.0	51.3		mg/Kg		103	80 - 120
Vanadium	50.0	50.6		mg/Kg		101	80 - 120
Zinc	50.0	50.0		mg/Kg		100	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-230442/1-A
Matrix: Solid
Analysis Batch: 230723

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 230442

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.017		mg/Kg		09/22/17 13:10	09/22/17 17:23	1

Lab Sample ID: LCS 720-230442/2-A
Matrix: Solid
Analysis Batch: 230723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 230442

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.794		mg/Kg		95	80 - 120

GC Semi VOA

Prep Batch: 230252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-1	SED-FD-1	Total/NA	Solid	3546	
720-81842-2	SED-FD-2	Total/NA	Solid	3546	
720-81842-3	SED-FD-3	Total/NA	Solid	3546	
720-81842-4	SED-FD-4	Total/NA	Solid	3546	
720-81842-5	SED-BD-1	Total/NA	Solid	3546	
720-81842-6	SED-BD-2	Total/NA	Solid	3546	
720-81842-7	SED-BD-3	Total/NA	Solid	3546	
720-81842-8	SED-BD-4	Total/NA	Solid	3546	
720-81842-9	SED-NW-1	Total/NA	Solid	3546	
720-81842-10	SED-NW-2	Total/NA	Solid	3546	
MB 720-230252/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-230252/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 230272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-230252/1-A	Method Blank	Total/NA	Solid	8082	230252
LCS 720-230252/2-A	Lab Control Sample	Total/NA	Solid	8082	230252

Prep Batch: 230322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-11	SED-NW-3	Total/NA	Solid	3546	
720-81842-12	SED-NW-4	Total/NA	Solid	3546	
MB 720-230322/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-230322/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 230361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-1	SED-FD-1	Total/NA	Solid	8082	230252
720-81842-2	SED-FD-2	Total/NA	Solid	8082	230252
720-81842-3	SED-FD-3	Total/NA	Solid	8082	230252
720-81842-4	SED-FD-4	Total/NA	Solid	8082	230252
720-81842-5	SED-BD-1	Total/NA	Solid	8082	230252
720-81842-6	SED-BD-2	Total/NA	Solid	8082	230252
720-81842-7	SED-BD-3	Total/NA	Solid	8082	230252
720-81842-8	SED-BD-4	Total/NA	Solid	8082	230252
720-81842-9	SED-NW-1	Total/NA	Solid	8082	230252
720-81842-10	SED-NW-2	Total/NA	Solid	8082	230252

Analysis Batch: 230473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-12	SED-NW-4	Total/NA	Solid	8082	230322
MB 720-230322/1-A	Method Blank	Total/NA	Solid	8082	230322
LCS 720-230322/2-A	Lab Control Sample	Total/NA	Solid	8082	230322

Analysis Batch: 230488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-11	SED-NW-3	Total/NA	Solid	8082	230322

Metals

Prep Batch: 230107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-1	SED-FD-1	Total/NA	Solid	3050B	
720-81842-2	SED-FD-2	Total/NA	Solid	3050B	
720-81842-3	SED-FD-3	Total/NA	Solid	3050B	
720-81842-4	SED-FD-4	Total/NA	Solid	3050B	
720-81842-5	SED-BD-1	Total/NA	Solid	3050B	
720-81842-6	SED-BD-2	Total/NA	Solid	3050B	
720-81842-7	SED-BD-3	Total/NA	Solid	3050B	
720-81842-8	SED-BD-4	Total/NA	Solid	3050B	
720-81842-9	SED-NW-1	Total/NA	Solid	3050B	
720-81842-10	SED-NW-2	Total/NA	Solid	3050B	
720-81842-11	SED-NW-3	Total/NA	Solid	3050B	
720-81842-12	SED-NW-4	Total/NA	Solid	3050B	
MB 720-230107/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-230107/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 230174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-1	SED-FD-1	Total/NA	Solid	6010B	230107
720-81842-2	SED-FD-2	Total/NA	Solid	6010B	230107
720-81842-3	SED-FD-3	Total/NA	Solid	6010B	230107
720-81842-4	SED-FD-4	Total/NA	Solid	6010B	230107
720-81842-5	SED-BD-1	Total/NA	Solid	6010B	230107
720-81842-6	SED-BD-2	Total/NA	Solid	6010B	230107
720-81842-7	SED-BD-3	Total/NA	Solid	6010B	230107
720-81842-8	SED-BD-4	Total/NA	Solid	6010B	230107
720-81842-9	SED-NW-1	Total/NA	Solid	6010B	230107
720-81842-10	SED-NW-2	Total/NA	Solid	6010B	230107
720-81842-11	SED-NW-3	Total/NA	Solid	6010B	230107
720-81842-12	SED-NW-4	Total/NA	Solid	6010B	230107
LCS 720-230107/2-A	Lab Control Sample	Total/NA	Solid	6010B	230107

Analysis Batch: 230231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-230107/1-A	Method Blank	Total/NA	Solid	6010B	230107

Prep Batch: 230442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-1	SED-FD-1	Total/NA	Solid	7471A	
720-81842-2	SED-FD-2	Total/NA	Solid	7471A	
720-81842-3	SED-FD-3	Total/NA	Solid	7471A	
720-81842-4	SED-FD-4	Total/NA	Solid	7471A	
720-81842-5	SED-BD-1	Total/NA	Solid	7471A	
720-81842-6	SED-BD-2	Total/NA	Solid	7471A	
720-81842-7	SED-BD-3	Total/NA	Solid	7471A	
720-81842-8	SED-BD-4	Total/NA	Solid	7471A	
720-81842-9	SED-NW-1	Total/NA	Solid	7471A	
720-81842-10	SED-NW-2	Total/NA	Solid	7471A	
720-81842-11	SED-NW-3	Total/NA	Solid	7471A	
720-81842-12	SED-NW-4	Total/NA	Solid	7471A	
MB 720-230442/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-230442/2-A	Lab Control Sample	Total/NA	Solid	7471A	

QC Association Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Analysis Batch: 230723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-81842-1	SED-FD-1	Total/NA	Solid	7471A	230442
720-81842-2	SED-FD-2	Total/NA	Solid	7471A	230442
720-81842-3	SED-FD-3	Total/NA	Solid	7471A	230442
720-81842-4	SED-FD-4	Total/NA	Solid	7471A	230442
720-81842-5	SED-BD-1	Total/NA	Solid	7471A	230442
720-81842-6	SED-BD-2	Total/NA	Solid	7471A	230442
720-81842-7	SED-BD-3	Total/NA	Solid	7471A	230442
720-81842-8	SED-BD-4	Total/NA	Solid	7471A	230442
720-81842-9	SED-NW-1	Total/NA	Solid	7471A	230442
720-81842-10	SED-NW-2	Total/NA	Solid	7471A	230442
720-81842-11	SED-NW-3	Total/NA	Solid	7471A	230442
720-81842-12	SED-NW-4	Total/NA	Solid	7471A	230442
MB 720-230442/1-A	Method Blank	Total/NA	Solid	7471A	230442
LCS 720-230442/2-A	Lab Control Sample	Total/NA	Solid	7471A	230442

Lab Chronicle

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-FD-1

Lab Sample ID: 720-81842-1

Date Collected: 09/12/17 08:24

Matrix: Solid

Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 16:27	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:19	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 17:55	OBI	TAL PLS

Client Sample ID: SED-FD-2

Lab Sample ID: 720-81842-2

Date Collected: 09/12/17 08:40

Matrix: Solid

Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 16:44	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:25	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 17:57	OBI	TAL PLS

Client Sample ID: SED-FD-3

Lab Sample ID: 720-81842-3

Date Collected: 09/12/17 14:20

Matrix: Solid

Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 17:00	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:30	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 17:59	OBI	TAL PLS

Client Sample ID: SED-FD-4

Lab Sample ID: 720-81842-4

Date Collected: 09/12/17 14:30

Matrix: Solid

Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 17:17	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:35	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:01	OBI	TAL PLS

Lab Chronicle

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-BD-1

Lab Sample ID: 720-81842-5

Date Collected: 09/12/17 11:00
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 17:34	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:41	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:04	OBI	TAL PLS

Client Sample ID: SED-BD-2

Lab Sample ID: 720-81842-6

Date Collected: 09/12/17 11:15
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 18:39	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:46	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:06	OBI	TAL PLS

Client Sample ID: SED-BD-3

Lab Sample ID: 720-81842-7

Date Collected: 09/12/17 11:45
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 18:55	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 22:51	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:08	OBI	TAL PLS

Client Sample ID: SED-BD-4

Lab Sample ID: 720-81842-8

Date Collected: 09/12/17 12:00
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 19:12	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 23:07	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:11	OBI	TAL PLS

Lab Chronicle

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Client Sample ID: SED-NW-1

Lab Sample ID: 720-81842-9

Date Collected: 09/12/17 12:45
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 19:29	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 23:13	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:18	OBI	TAL PLS

Client Sample ID: SED-NW-2

Lab Sample ID: 720-81842-10

Date Collected: 09/12/17 12:55
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230252	09/16/17 10:25	NDU	TAL PLS
Total/NA	Analysis	8082		1	230361	09/19/17 19:45	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 23:18	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:20	OBI	TAL PLS

Client Sample ID: SED-NW-3

Lab Sample ID: 720-81842-11

Date Collected: 09/12/17 13:15
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230322	09/18/17 16:30	LRC	TAL PLS
Total/NA	Analysis	8082		1	230488	09/20/17 20:59	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 23:23	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:22	OBI	TAL PLS

Client Sample ID: SED-NW-4

Lab Sample ID: 720-81842-12

Date Collected: 09/12/17 13:25
Matrix: Solid
Date Received: 09/12/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			230322	09/18/17 16:55	LRC	TAL PLS
Total/NA	Analysis	8082		1	230473	09/20/17 12:54	DCH	TAL PLS
Total/NA	Prep	3050B			230107	09/14/17 10:45	AJS	TAL PLS
Total/NA	Analysis	6010B		4	230174	09/14/17 23:29	ASB	TAL PLS
Total/NA	Prep	7471A			230442	09/22/17 13:10	AJS	TAL PLS
Total/NA	Analysis	7471A		1	230723	09/22/17 18:24	OBI	TAL PLS

Lab Chronicle

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Laboratory References:

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

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Laboratory: TestAmerica Pleasanton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Method Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: GHD Services Inc.
Project/Site: San Leandro Marina Decom

TestAmerica Job ID: 720-81842-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-81842-1	SED-FD-1	Solid	09/12/17 08:24	09/12/17 16:00
720-81842-2	SED-FD-2	Solid	09/12/17 08:40	09/12/17 16:00
720-81842-3	SED-FD-3	Solid	09/12/17 14:20	09/12/17 16:00
720-81842-4	SED-FD-4	Solid	09/12/17 14:30	09/12/17 16:00
720-81842-5	SED-BD-1	Solid	09/12/17 11:00	09/12/17 16:00
720-81842-6	SED-BD-2	Solid	09/12/17 11:15	09/12/17 16:00
720-81842-7	SED-BD-3	Solid	09/12/17 11:45	09/12/17 16:00
720-81842-8	SED-BD-4	Solid	09/12/17 12:00	09/12/17 16:00
720-81842-9	SED-NW-1	Solid	09/12/17 12:45	09/12/17 16:00
720-81842-10	SED-NW-2	Solid	09/12/17 12:55	09/12/17 16:00
720-81842-11	SED-NW-3	Solid	09/12/17 13:15	09/12/17 16:00
720-81842-12	SED-NW-4	Solid	09/12/17 13:25	09/12/17 16:00

178261

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566-4756
phone 925 484.1919 fax 925 600.3002

Chain of Custody Record

720-81842

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other

Client Contact	Project Manager: Robert Larsen	Site Contact: Nick Colley	Date: 9/12/17	COC No:
GHD Services Inc	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
5900 Hollis Street Suite A	Analysis Turnaround Time			Sampler Nick Colley
Emeryville, CA 94608	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(510) 420-0700 Phone	TAT if different from Below			Walk-in Client
(xxx) xxx-xxxx FAX	☑ 2 weeks			Lab Sampling
Project Name. San Leandro Marina Decom	☐ 1 week			
Site	☐ 2 days			Job / SDG No..
P O # 34018752	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	PCBs - EPA 8082	CAM 17 Metals - EPA 6010	Sample Specific Notes.
SED-FD-1	9/12/17	0824	G	S	1			X	X	
SED-FD-2		0840						X	X	
SED-FD-3		1420						X	X	
SED-FD-4		1430						X	X	
SED-BD-1		1100						X	X	
SED-BD-2		1115						X	X	
SED-BD-3		1145						X	X	
SED-BD-4		1200						X	X	
SED-NW-1		1245						X	X	
SED-NW-2		1255						X	X	
SED-NW-3		1315						X	X	
SED-NW-4		1325						X	X	

720-81842 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? *Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample*

☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☑Disposal by Lab ☑Archive for 3 Months

Special Instructions/QC Requirements & Comments:

5.2°C

Custody Seals Intact ☐ Yes ☐ No	Custody Seal No..		Cooler Temp. (°C) Obs'd: _____ Corr'd: _____		Therm ID No _____
Relinquished by Nick Colley	Company GHD	Date/Time 9/12/17 1600	Received by	Company TA	Date/Time 9/12/17 16:00
Relinquished by	Company:	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time:

Form No. CA-C-WI-002, Rev. 4.7, dated 11/02/2015

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 720-81842-1

Login Number: 81842
List Number: 1
Creator: Thibodeaux, Summer J

List Source: TestAmerica Pleasanton

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

Appendix F
GHD Hazardous Materials Limited Assessment Survey Report

Hazardous Materials Limited Assessment Survey Report

City of San Leandro

San Leandro Public Marina

City of San Leandro Public Works Department Public Marina Demolition Project

November 22, 2017

GHD | 5900 Hollis Street | Emeryville, California | 94608

Report **Draft** | Project Number 1119148 | Phase 01 |

Executive Summary

On September 20 and 21, 2017, GHD Inc. (GHD) coordinated a limited hazardous material survey at the City of San Leandro (the City) San Leandro Public Marina (Marina) located in San Leandro, California. The project site hazardous materials assessment (survey) included an asbestos bulk sampling survey.

The survey included the interior and exterior of specific Marina structures (collectively defined as the project site) and was conducted in association with planned Marina demolition project on behalf of the City. The survey included assessment of potentially hazardous materials located at the project site, specifically suspect asbestos materials representative of those to be impacted by the project as defined by the City. This report is subject to, and must be read in conjunction with the limitations and the assumptions and qualifications contained throughout the report.

Plan-view schematics, Figures 1 – 5 – Project Site Sample Location Maps (Figures 1 – 5), depicting the project site and location of samples collected for this survey are included with this report in Appendix A. Photographs of the project site generally depicting the asbestos materials identified at the project site are located in Appendix B. The laboratory analytical reports produced for this survey are located in Appendix C (asbestos).

As described in Table 5.1 Asbestos Laboratory Data and Quantification Summary located in Section 5, numerous building materials sampled for this survey were reported by the analyzing laboratory to contain asbestos. Asbestos material is subject to governmental regulations, including Title 8 California Code of Regulations Section 1529 (8 CCR 1529) as summarized in Appendix D of this report.

Hazardous Materials Limited Assessment Survey Report

San Leandro Public Marina

Project No. 1119148.01

Prepared for:

City of San Leandro
Public Works Department
1400 Chapman Road
San Leandro, California 94578

Prepared by:

Scott Harris, CAC, CDPH, LEED GA
Project Manager

Reviewed by:

Misha Schwarz, CAC, CDPH
Senior Environmental Manager

5900 Hollis Street
Emeryville, California 94608
Phone: (510) 420-0700
Email: emeryville@ghd.com
Website: www.ghd.com

November 22, 2017

Table of Contents

Figure Index

Table Index

Appendix Index

1. Introduction

GHD Inc. (GHD) is pleased to provide the City of San Leandro (the City) with the following report detailing the findings of the limited hazardous material survey conducted on September 20 and 21, 2017 at the San Leandro Public Marina (Marina) structures to be impacted (collectively "project site") in association with the planned Marina demolition (collectively "the project"). The project site limited hazardous materials assessment ("the survey") included an asbestos bulk sampling survey. The following subsections provide pertinent contextual information regarding the survey.

1.1 Client

The survey described by this report was conducted at the request of and under contract with the City, whom shall herein be defined as the client. Client information specific to the project is as follows:

City of San Leandro

Public Works Department

835 East 14th Street

San Leandro, California 94577-3767

Client Representative: Debbie Pollart, Public Works Director

1.2 Project Site Location

The areas of Marina surveyed by GHD on September 20 and 21, 2017 listed below shall herein be defined as the project site. The project site is located at the following street address:

City of San Leandro

San Leandro Public Marina, including the following structures:

- Interior and exterior of Harbor Master's Office (HMO) building
- Interior and exterior of Restrooms A, B, C, D, E and F
- Docks A, B, C, D, K, L, M, O, N,

14200 Chapman Road

San Leandro, California 94578

The existing conditions encountered at the project site are described in Section 3.1.

1.3 Purpose of this Report

GHD, under contract with the City, coordinated a limited survey to identify hazardous materials at the project site. The purpose of this report is to transmit to the City the laboratory findings and conclusions resultant from the project site survey performed on September 20 and 21, 2017. This report has been prepared by GHD for the City and may only be used and relied on by the City for the agreed purpose as set out herein and in the contracting documents. The services undertaken by GHD in connection with preparing this report were limited as defined herein and are subject to the scope limitations set out herein and associated contracting documents.

2. Project Site Description

The surveyed portions of the City Marina as shown on Figures 1 – 5 – Project Site Sample Location Maps (Figures 1 – 5) located in Appendix A define the project site for the purpose of this report. The survey was limited to the following safely accessible areas of the project site:

1. Interior and exterior of Harbor Master's Office (HMO) building
2. Interior and exterior of Restrooms A, B, C, D, E and F
3. Docks A, B, C, D, K, L, M, O, N

This report includes the following information about the specific structure(s) and features surveyed in association with this survey, which shall further define the project site:

1. Approximate locations of general site features and bulk samples collected by GHD are shown on Figures 1 – 5 (Appendix A). The extent and distribution of sample points noted on Figures 1 – 5 shall define the survey boundary.
2. Photographs generally depicting the project site and some sampled materials are provided in Appendix B.
3. Descriptions of the sampled materials are summarized in Table 5.1 (Section 5) and noted on the laboratory analytical and chain of custody documentation located in Appendix C.

3. Survey Description

The project site survey was conducted by GHD at the request of, and on behalf of the City. The onsite survey work was conducted by GHD on September 20 and 21, 2017. The survey scope of work associated with this report was limited to the areas and suspect hazardous materials located at the project site as defined by Sections 2 and 3.2. The survey was conducted to assist the client with compliance with United States Environmental Protection Agency (USEPA) and California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) regulations governing asbestos, lead and universal waste related to the planned renovation project.

For the September 20 and 21, 2017 survey, the following number of bulk samples were collected from the project site and submitted under chain of custody to AmeriSci Laboratories (AmeriSci) for analysis via the referenced methodology:

- 159 total bulk material samples were analyzed for asbestos content via polarized light microscopy (PLM) methodology following USEPA method 600/R-93-116

Samples were submitted via overnight shipment to the laboratory for PLM or AAS analysis. See Figures 1 – 5 located in Appendix A for the approximate location of bulk samples collected at the project site. Photographs of the project site generally depicting the homogeneous areas of asbestos and/or lead material identified during this survey are located in Appendix B. The laboratory analytical reports and chain of custody documentation associated with this survey describe all of the materials sampled at the project site and are located in Appendix C.

3.1.1 Survey Regulatory Setting

This section summarizes hazardous materials regulatory background information applicable to the project. Further asbestos regulatory information is provided in Appendix D.

The USEPA enforces asbestos regulations authorized under the Clean Air Act and specifies work practices to be followed during demolition and/or renovation of all structures. Materials reported to contain greater than one percent (1%) asbestos by weight, therefore meeting the definition of Asbestos Containing Material (ACM) or Regulated Asbestos Containing Material (RACM), are regulated by the USEPA. In compliance with the USEPA National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations governing demolitions and renovations, as outlined in Title 40 Code of Federal Regulations (CFR) Section 61, Subpart A and Subpart M, the City contracted GHD to conduct a survey to identify suspect ACM/RACM[1] at the project site. The sampling survey methodology employed at the project site is further described in Section 4. The specific NESHAP notification requirements applicable to the project are described in Section 6.

The USEPA classifies material containing greater than 1% asbestos into three material categories (Category I Nonfriable ACM, Category II Nonfriable ACM, and RACM) according to the material's distinctive physical characteristics. Material containing less than 1% asbestos is not subject to USEPA asbestos regulations and is not assigned a USEPA material category.

Worker exposure to asbestos is regulated by Cal/OSHA. Employee protection protocols per Title 8 California Code of Regulations (CCR) Sections 1529 (8 CCR 1529) apply to disturbance of asbestos in any detectable concentration. Material known to contain asbestos is defined by Cal/OSHA as Asbestos Containing Material (ACM) or Asbestos Containing Construction Material (ACCM). Per Cal/OSHA, material containing greater than 1% asbestos is defined as ACM, while ACCM refers to material containing greater than 0.1% asbestos. Additionally, Cal/OSHA requires that thermal system insulation (TSI)[2] and surfacing material[3] located in buildings constructed no later than 1980 must be presumed to contain asbestos. Such material installed in buildings built prior to 1980 is defined as Presumed Asbestos Containing Material (PACM) and is understood to contain asbestos unless sampled and proven to be otherwise.

Work impacting ACM or ACCM is regulated by Cal/OSHA according to the specific material(s) to be disturbed and the size of the job. Cal/OSHA categorizes work disturbing ACM into four classes of asbestos work (Class I through IV), according to the specific nature of the work to be performed. Materials containing between 0.1% and 1.0% asbestos are regulated by Cal/OSHA, but are not assigned a specific asbestos work class (unclassified asbestos work). Materials reported to be ND

[1] Suspect asbestos material includes, but is not limited to, the following materials: mastics, caulking, base cove, Thermal System Insulation applied to pipes, boilers, or other components to prevent heat loss or gain; Surfacing Materials, including spray or troweled-on surface coatings and acoustic/decorative textures; cementitious products, including cement paneling/piping; roofing products, including associated mastics, felts, or coatings; resilient flooring; gaskets and lagging; drywall; joint compound; plasters; vibration cloths, or expansion joints.

[2] Thermal system insulation is defined by 8 CCR 1529 as ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

[3] Surfacing material is defined by 8 CCR 1529 as material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).

or NAD via PLM analysis are not subject to regulation by USEPA as ACM or RACM and are not regulated by Cal/OSHA as ACM or ACCM.

3.2 Assumptions

The content of this report is based on assumptions made by GHD as described in this report and associated contracting documents. GHD disclaims liability arising from any of the assumptions being incorrect. The findings and conclusions in this report are based on conditions encountered and information reviewed at the date of this report. GHD is not responsible for updating this report if site conditions change. The sampling survey performed at the project site is additionally governed by the following assumptions that further define GHD's scope of work for the survey:

1. The project included the sampling of suspect ACM and suspect lead coatings at the exterior roof. Sampling included the exterior roof only, as this was the only location to be impacted during the planned project site renovation as defined by the City.
2. Areas not surveyed by GHD (areas not in scope and/or not specifically defined in this report) are excluded from the definition of the project site. The areas and materials excluded from the scope of this limited survey included the following (areas and/or components not surveyed):
    a. Exterior walls, walkways, porticos, and/or parking areas
    b. Pressurized and/or potentially energized systems, including wiring
    c. Materials encased in concrete
    d. Interior of mechanical units, laboratory equipment and machinery
    e. Materials not to be disturbed during demolition, or other materials not specified in this report
    f. Suspect materials associated with components to be removed intact prior to renovation work
    g. Suspect materials located within permit-required confined spaces, underground areas, crawlspaces, plenums, and attic spaces
    h. Marina Dock F-E areas
    i. Marina Dock H-G areas
    j. Marina Dock Q-P areas

4. Survey Methodology

The following sampling protocol generally describes the sampling methodology employed for the asbestos and lead sampling surveys conducted at the project site. Copies of the applicable professional certifications for survey field staff and other key project personnel are included in Section 7. The following list summarizes the sampling procedures utilized:

1. Suspect ACM and lead-containing surface coatings were visually identified at the project site. Suspect ACM was categorized into homogeneous materials (note: homogeneous material is defined as being uniform in texture, color, and date of application).
2. A sampling scheme was developed based upon the location and quantity of the identified homogeneous materials. Representative suspect ACM was identified and selected for sampling in general accordance with NESHAP sampling guidelines.

3. Bulk samples were collected using appropriate sampling tools. Samples were placed in leak-tight containers and labeled with a unique numerical identifier (sample number). Multiple samples were taken of some suspect ACM found to be distributed throughout the project site.
4. The general location of each bulk sample was noted on a project site plan-view diagram.
5. Friability, the susceptibility of the dry material to be crumbled, pulverized or reduced to a powder using hand pressure, was determined for each sampled suspect ACM.
6. The sample number, collection location and a description of the physical attributes of each bulk sample were recorded on a Chain of Custody (COC) form. The COC accompanied all sample sets to the analyzing laboratory.
7. Decontamination of sampling tools was employed to prevent the spread of secondary contamination to subsequent bulk samples.
8. The bulk samples were submitted under chain of custody to the following laboratory for analysis of asbestos content via PLM analysis following USEPA method 600/R-93-116 or analysis of lead content via Atomic Absorption Spectrometry (AAS) via USEPA Method 3050B/7000B:
    a. AmeriSci Laboratories (AmeriSci) located in Carson, California.
    b. Copies of the laboratory accreditation documents are included in Appendix E.

5. Findings for Asbestos

Numerous materials collected as part of the September 20 and 21, 2017 asbestos sampling survey were reported by the analyzing laboratory to contain asbestos fibers. The materials sampled at the project site and reported to contain asbestos are described in Table 5.1 Asbestos Laboratory Data and Quantification Summary (Table 5.1) starting on page 7.

Table 5.1 lists the physical description, approximate location, estimated quantity, applicable regulatory definitions and the reported asbestos concentration for the identified asbestos materials. Materials that are homogeneous to (i.e., represented by) the materials listed in Table 5.1 shall be assumed to contain an equivalent amount of asbestos as that reported in Table 5.1.

Quantity estimates for the asbestos materials identified at the project site are provided in Table 5.1. The estimated quantities herein do not specifically define any partial quantity of material to be disturbed in association with limited renovation work impacting only discrete areas within the project site. The actual quantity of asbestos to be impacted in association with the project is undefined, as the scale of asbestos disturbance is dependent on unknown contractor means, methods and scope.

Materials sampled for the survey were reported to contain greater than 1% asbestos, thus the applicable USEPA asbestos material category and anticipated waste designation are listed in Table 5.1. Work practices and prohibitions mandated by Cal/OSHA per 8 CCR 1529 shall govern work impacting all asbestos materials listed in Table 5.1. The applicable Cal/OSHA work class and Cal/OSHA asbestos material category (ACM or ACCM) for each asbestos material is noted in Table 5.1.

The PLM analytical data associated with the survey is located in Appendix C. Materials that were not reported to contain asbestos fibers above the laboratory detection limit are noted on the PLM analytical reports as nondetect (ND), or no asbestos detected (NAD). Materials not reported to contain asbestos (noted in Appendix C as ND or NAD) are not listed in Table 5.1.

Table 5.1 Asbestos Laboratory Data and Quantification Summary
San Leandro Public Marina

Sample Number(s)	Material Description	Material Location	Asbestos %/Type	Estimated Quantity[1]	Asbestos Material Category[2]	Cal/OSHA Work Class[3]	Projected Waste Type[2]
11119148-7	Roof penetration mastic (black)	Restroom A – Roof – At roof penetrations throughout	4% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-18	Roof penetration mastic (black/grey)	Restroom B – Roof – At roof penetrations throughout	2% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-30	Roof penetration mastic (black/grey)	Restroom C – Roof – At roof penetrations throughout	4% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-37, 38	Roof penetration mastic (black/grey)	Restroom D – Roof – At roof penetrations throughout	4% – 5% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-53, 54, 55, 56, 57	Wall texture (white)	Restroom E – Interior – Textured walls throughout	<1% Chrysotile (Analyzed by Point Count 400)	650 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-62	Ceramic tile mastic (tan)	Restroom E – Interior – Perimeter walls at base	1.3% Chrysotile (Analyzed by Point Count 400)	600 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-67	Roof caulk (white)	Restroom F – Roof – At roof penetrations throughout	3% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste

Table 5.1 Asbestos Laboratory Data and Quantification Summary
San Leandro Public Marina

Sample Number(s)	Material Description	Material Location	Asbestos %/Type	Estimated Quantity[1]	Asbestos Material Category[2]	Cal/OSHA Work Class[3]	Projected Waste Type[2]
11119148-76, 77	Wall texture (white)	Restroom F – Interior – Textured walls throughout	<1% Chrysotile (Analyzed by Point Count 400)	650 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-82, 83	Ceramic tile mastic (tan)	Restroom F – Interior – Perimeter walls at base	1% – 1.1% Chrysotile (Analyzed by Point Count 400)	600 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-87, 88, 89	12”x12” Vinyl floor tile (grey, streaked) (black mastic is nondetect)	Harbor Master’s Office – Interior – Floor throughout (some under carpet)	3% Chrysotile	1,500 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-98, 100, 112	Mastic (brown) (associated with acoustic ceiling tiles)	Harbor Master’s Office – Interior – Ceiling throughout	<0.25% – 0.3% Chrysotile (Analyzed by Point Count 400)	10 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-106	Flashing sealant (black/grey)	Harbor Master’s Office – Roof – At flashing	5% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-107, 108	Roof penetration mastic (black/grey)	Harbor Master’s Office – Roof – At flashing	5% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste

Table 5.1 Asbestos Laboratory Data and Quantification Summary
San Leandro Public Marina

Sample Number(s)	Material Description	Material Location	Asbestos %/Type	Estimated Quantity[1]	Asbestos Material Category[2]	Cal/OSHA Work Class[3]	Projected Waste Type[2]
11119148-109, 110, 111	Joint compound (white) associated with drywall wall/ceiling systems	Harbor Master's Office – Interior – Drywall walls and ceilings throughout	<0.25% Chrysotile (Analyzed by Point Count 400)	20 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-115, 116, 117	Resilient sheet flooring (tan/gold)	Harbor Master's Office – Interior – Floor at kitchen, storage room, hall	10% - 15% Chrysotile	500 SF	RACM	Class II	California Hazardous Waste (non-RCRA)
11119148-120, 121, 122	Wall texture coat (white) associated with drywall systems	Harbor Master's Office – Interior – Drywall walls and ceilings throughout	<0.25% Chrysotile (Analyzed by Point Count 400)	80 SF	Not ACM or RACM	Unclassified (Recommend Class II Work)	Non-Hazardous Asbestos Waste
11119148-7	Roof penetration mastic (black)	Restroom A – Roof – At roof penetrations throughout	4% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-18	Roof penetration mastic (black/grey)	Restroom B – Roof – At roof penetrations throughout	2% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste
11119148-30	Roof penetration mastic (black/grey)	Restroom C – Roof – At roof penetrations throughout	4% Chrysotile	10 SF	Category I Nonfriable ACM	Class II	Non-Hazardous Asbestos Waste

Table 5.1 Asbestos Laboratory Data and Quantification Summary
San Leandro Public Marina

Sample Number(s)	Material Description	Material Location	Asbestos %/Type	Estimated Quantity[1]	Asbestos Material Category[2]	Cal/OSHA Work Class[3]	Projected Waste Type[2]

Acronyms:

- ACM = Asbestos Containing Material
- ACCM = Asbestos Containing Construction Material
- Cal/OSHA = California Department of Industrial Relations, Division of Occupational Safety and Health
- > = Symbol signifying “greater than”
- LF = Linear feet
- RACM = Regulated Asbestos Containing Material
- RCRA = Resource Conservation and Recovery Act
- SF = Square feet
- TSI = Thermal System Insulation
- USEPA = United States Environmental Protection Agency
- VFT = Vinyl Floor Tile

Annotations:

- [1] =The quantities provided are estimates of the amount of asbestos material present at the project site. The quantities provided herein are estimates of the total amount of each homogeneous asbestos material present at the project site. These quantities are estimates only and the actual amount of material to be removed should be verified by the contractor prior to bid.
- [2] = USEPA Category I and II nonfriable ACM that remains nonfriable during impaction shall be characterized as non-hazardous asbestos-containing waste. RACM shall be characterized as a California hazardous waste. The waste designation denoted herein assumes that nonfriable material will not become friable due to contractor removal practices. If nonfriable ACM is rendered friable (such as through the use of mechanical removal means), then such material shall be reclassified as RACM and disposed of as hazardous waste in California (non-RCRA hazardous waste).
- [3] = Cal/OSHA work classes differentiate asbestos removal operations into four levels, each with specific regulatory protocols. Class I through IV operations describe work impacting material contain greater than 1% asbestos. Unclassified operations include work impacting material containing less than 1% asbestos. Unclassified work does not meet the definition of Class I through IV work, but is subject to some Cal/OSHA requirements.
- [4] = Material analyzed by Point Count 400 methodology.
- [5] = Material contains less than 1% asbestos, thus is not regulated by USEPA as ACM or RACM. Material contains greater than 0.1% asbestos, thus is regulated by Cal/OSHA as ACCM.

Notes:

- Work impacting material homogeneous (visually similar) to that denoted in Table 5.1 shall be understood to impact asbestos.
- The asbestos regulatory environment governing the project, including applicable USEPA material categories and Cal/OSHA work classes, are further discussed in Appendix D.

6. NESHAP Jurisdiction and Regulatory Notifications

The limited Marina asbestos survey was conducted to assist the client with compliance with the USEPA National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos requirements in association with the Marina demolition project. The USEPA local authority with responsibility for administering the NESHAP regulations within the project site jurisdiction is the Bay Area Air Quality Management District (BAAQMD). Contact information for the BAAQMD is provided below:

Bay Area Air Quality Management District
375 Beale Street
San Francisco, California 94105
Phone: (415) 749-4900
Website: www.baaqmd.gov

Work meeting the NESHAP definition of a demolition and/or work impacting RACM in quantities above specific size thresholds necessitates the submittal of a NESHAP Notification form and associated fee to the BAAQMD. The BAAQMD RACM quantity thresholds necessitating NESHAP notification are greater than, or equal to the following:

1. 100 square feet, 100 linear feet (for pipe insulation), or 35 cubic feet (for amalgamated debris or waste)

The BAAQMD regulations stipulate that the project owner shall notify the BAAQMD at least 10 business days prior to the commencement of a renovation project, or commencement of work that impacts RACM in excess of the above-noted quantities. A NESHAP notification is required by the BAAQMD when a project includes one or more of the following element(s):

1. Project includes the impaction of RACM above the BAAQMD notification thresholds
2. Project includes the unweighting or removal of structural members meeting the NESHAP definition of a demolition project (note: a NESHAP notification is required for all demolitions and is not dependent on the presence or absence of ACM or RACM)

In addition to the NESHAP regulations enforced by the BAAQMD, work at the project site shall be conducted in accordance with applicable employee protection regulations enforced by Cal/OSHA, including 8 CCR 1529, 5203 341.6-341.14 and the California Health and Safety Code.

As required by 8 CCR 1529(r) and 5203, written notification must be made to the nearest Cal/OSHA District Enforcement Office with jurisdiction over the project site for Asbestos-Related Work. For planned work exposing employees to lead, a Lead-Work Pre-Job Notification is required per 8 CCR 1532.1(p). Cal/OSHA notification shall be made at least 24 hours prior to the start of hazardous material-related work and is required when the planned project scope includes the following elements:

1. Project includes the impaction of ACM and/or ACCM in excess of 100 square feet
2. Project includes the impaction of Lead Based Paint in excess of 100 square feet

The following table, Table 6.1 Pre-Work Regulatory Notifications (Table 6.1), summarizes the Cal/OSHA and BAAQMD notifications anticipated to be required for the project.

Table 6.1 Pre-Work Regulatory Notifications

Agency	Type of Notification	Anticipated Notification Requirements		Submittal Timeline
BAAQMD	NESHAP Renovation/ Renovation Notification	Notification:	☒ Required [1] ☐ Not anticipated [2]	≥10 Business Days Prior to Work Start
Cal/OSHA	Temporary Worksite Notification	Notification:	☒ Required [3] ☐ Not anticipated [4]	≥24 Hours Prior to Work Start

Notes:

- BAAQMD = Local USEPA-delegated authority with jurisdiction over the project site
- Cal/OSHA = California Department of Industrial Relations, Division of Occupational Safety and Health
- NESHAP = National Emissions Standards for Hazardous Air Pollutants
- USEPA = United States Environmental Protection Agency
- [1] = Assumption: Impaction/removal of structural members (demolition work) and/or impaction of RACM in excess of BAAQMD NESHAP thresholds **is** expected to occur during this project
- [2] = Assumption: Impaction/removal of structural members (demolition work) and/or impaction of RACM in excess of BAAQMD NESHAP thresholds **is not** expected to occur during this project
- [3] = Assumption: asbestos and/or lead-related work in excess of 100 square feet **is** expected to occur
- [4] = Assumption: asbestos and/or lead-related work in excess of 100 square feet **is not** expected to occur
- ≥ = Signifying “greater than, or equal to”

Further discussion of USEPA and Cal/OSHA regulations is provided in Appendix D.

7. Key Project Personnel

The Marina survey was conducted by appropriately trained and certified personnel. Key project personnel included State of California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Certified Asbestos Consultant (CAC) and California Department of Public Health (CDPH) Lead Inspector/Assessor (I/A) certified personnel. Certifications for staff performing survey and reporting work are included in this section.

The Marina survey conducted on September 20 and 21, 2017 was performed by the following onsite field personnel:

1. Onsite personnel:
    a. Scott Harris, CAC (#11-4713), CDPH I/A/M (#21408)
    b. Matt Tolley, USEPA Building Inspector (#41758 I)

Copies of applicable certifications for field personnel are included in Figure 7.1 (below).

Figure 7.1 Project Sampling Personnel Certifications

Project management and reporting for the survey was performed by the following GHD staff:

1. GHD QA/QC: Misha Schwarz, CAC (#97-2151), CDPH I/A/M (#7504)

This report was produced by GHD for the City. This report was authored by Mr. Harris and was reviewed by Mr. Schwarz. Copies of applicable certifications for key project administration personnel are included in Figure 7.2 (following page).

Figure 7.2 Project Administration Personnel Certifications

8. Conclusion

As described in Section 5, numerous materials sampled for this survey were reported by the analyzing laboratory to contain asbestos. The asbestos material identified in Table 5.1 is subject to applicable asbestos regulations, including those summarized in Appendix D. Agency notifications, as summarized in Section 6, should be submitted to the BAAQMD and Cal/OSHA by the contractor or the City, prior to the commencement of any renovation or demolition work at the project site.

GHD recommends that asbestos materials be appropriately removed by a licensed abatement contractor prior to the commencement of any renovation or demolition work at the project site. GHD recommends that interior work impacting ACM or ACCM (other than TSI and surfacing material) be performed using Class II protocols within sealed, negatively-pressurized containments. Exterior work impacting ACM or ACCM (other than TSI and surfacing material) should be performed using,

at minimum, Class II work protocols. Surfacing material and TSI should be removed using Cal/OSHA Class I work protocols, regardless of the work location.

If suspect ACM is discovered at the project site, beyond the material listed in Table 5.1, then such material shall be assumed to contain asbestos in a concentration of greater than 1% until appropriately sampled, analyzed and determined to be otherwise. If suspect asbestos material is discovered during site work, then work in that area shall stop, the material wetted and access to the area restricted until an appropriate asbestos characterization for the material can be made. Additional investigation of TSI associated with plumbing and mechanical systems is recommended prior to renovation, once the renovation scope is comprehensively defined.

Work at the project site is understood to meet the Cal/OSHA definition of construction work (8 CCR 1532.1[a]) and includes the impaction of known or presumed lead material. Paint and other suspect lead material present onsite should be assumed to contain lead, unless appropriately sampled, analyzed and determined not to contain lead. Material reported or presumed to contain lead is subject to applicable regulations, including 8 CCR 1532.1.

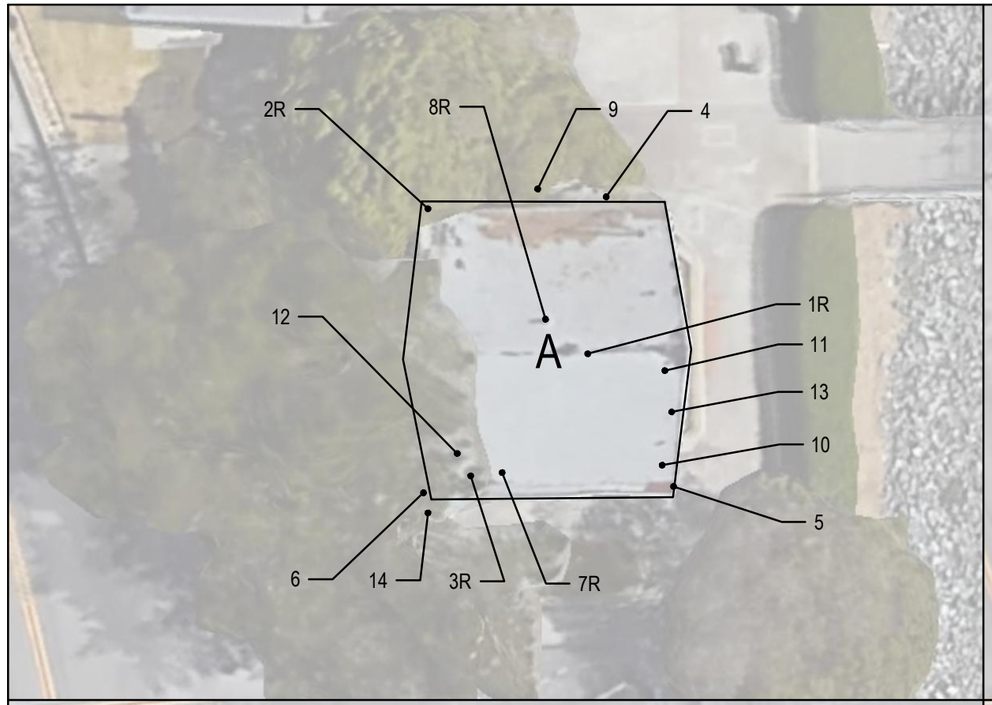
The findings in this report are based on information obtained from sampling at specific sample points as noted on Figures 1 – 5 (Appendix A) and described by the bulk sample documentation (Appendix C). Site conditions at other parts of the project site may be different from the conditions found at the specific sample points. This report should not be used to evaluate the potential disturbance of suspect hazardous materials in association with unsurveyed area(s), structure(s), and/or construction projects beyond the scope of the Marina demolition project.

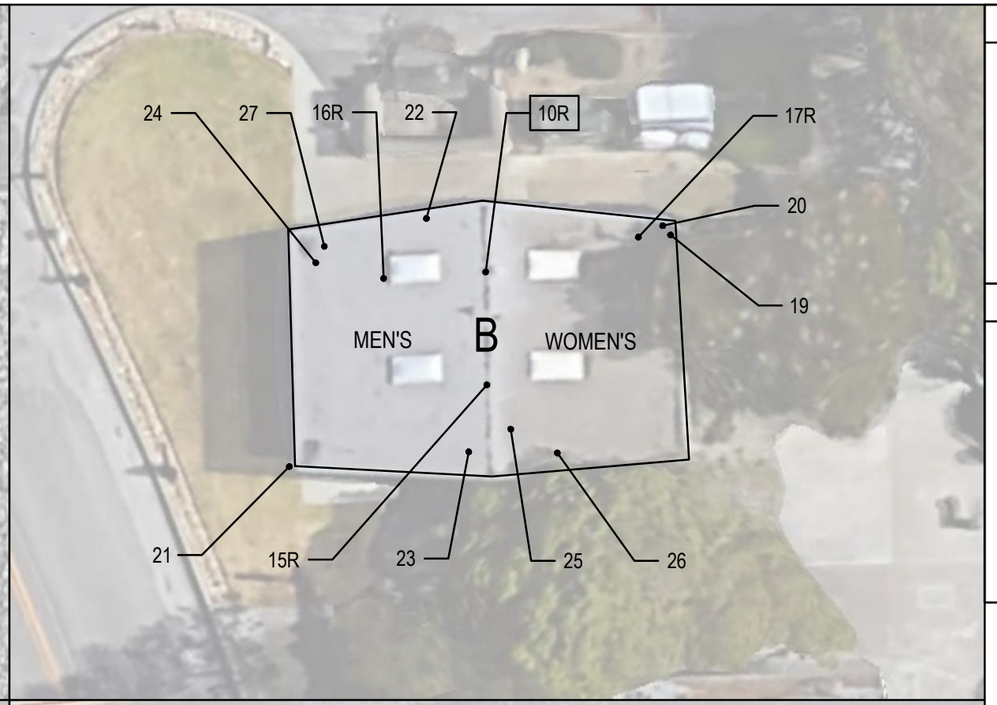
It is recommended that this report be provided to the City contractors and/or personnel who conduct work at the project site. It is recommended that the City maintain copies of this report for as long as the hazardous materials identified herein remain at the project site, plus an additional period of 30 years.

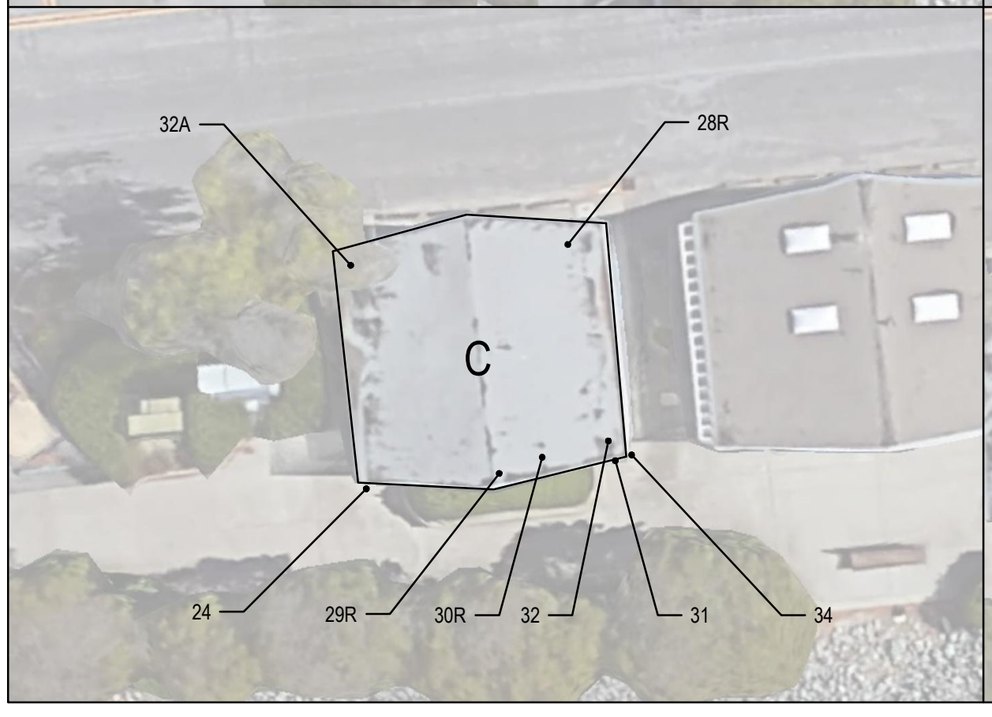
Appendices

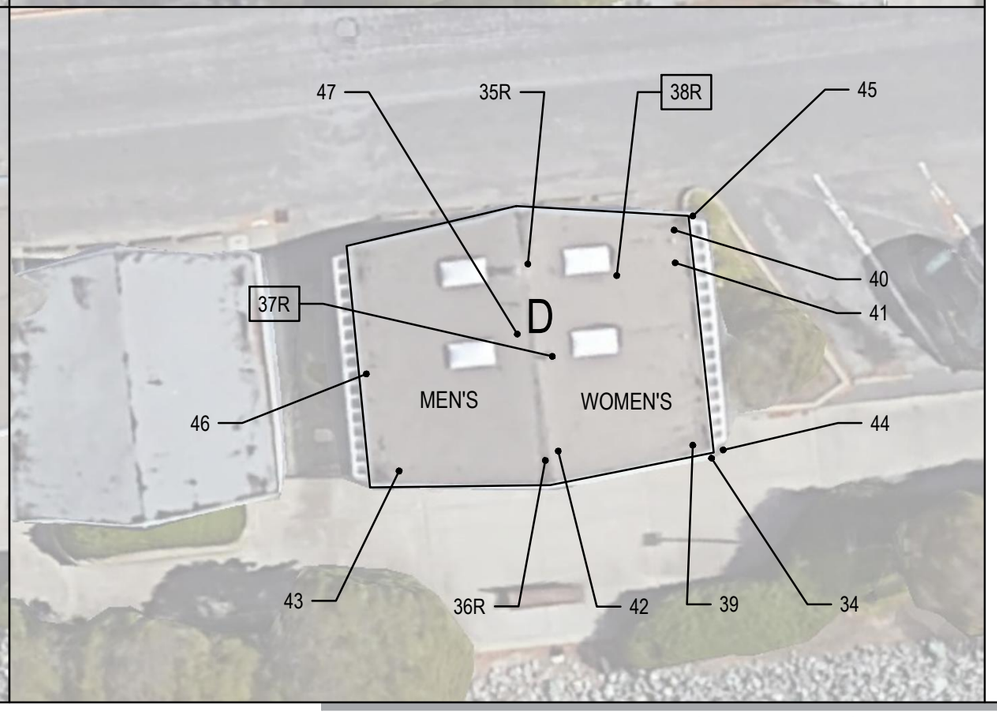
Appendix A – Figures

San Leandro Public Marina Figure(s) Depicting Bulk Sample Locations









SHEET GENERAL NOTES

1. DRA□ ING IS NOT TO SCALE.
2. ALL LOCATIONS ARE APPROXIMATE.
3. □. THIS SHEET TRANSMITS GHD SAMPLE LOCATIONS ONLY. NOT TO □E USED FOR CONSTRUCTION □ OR□.

LEGEND

- # — GHD SAMPLE 11119148-□ □ LOCATION OF □UL□ SAMPLE COLLECTED FOR AS□ESTOS ANALYSIS
- [#] — SAMPLE DETERMINED TO CONTAIN AS□ESTOS
- #R — SAMPLE LOCATION ON ROOF
- A — □ATHROOM IDENTIFIER

N

PROJECT NORTH

NOT TO SCALE

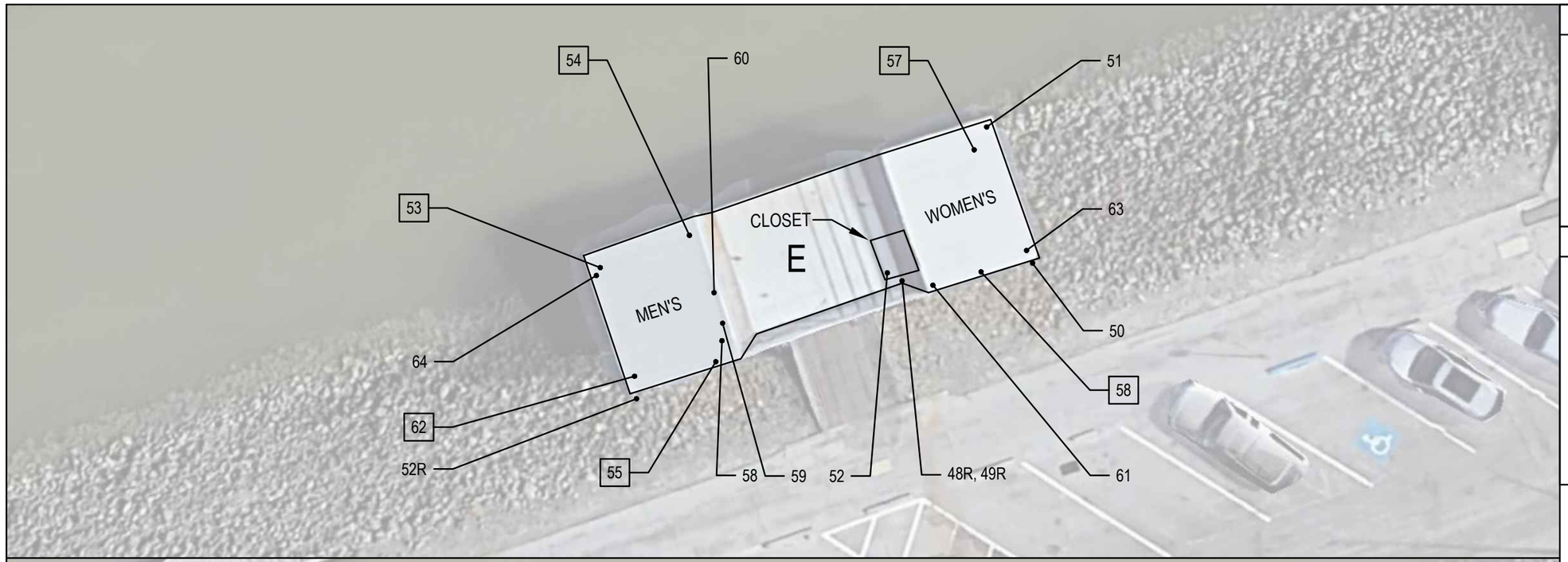
GHD

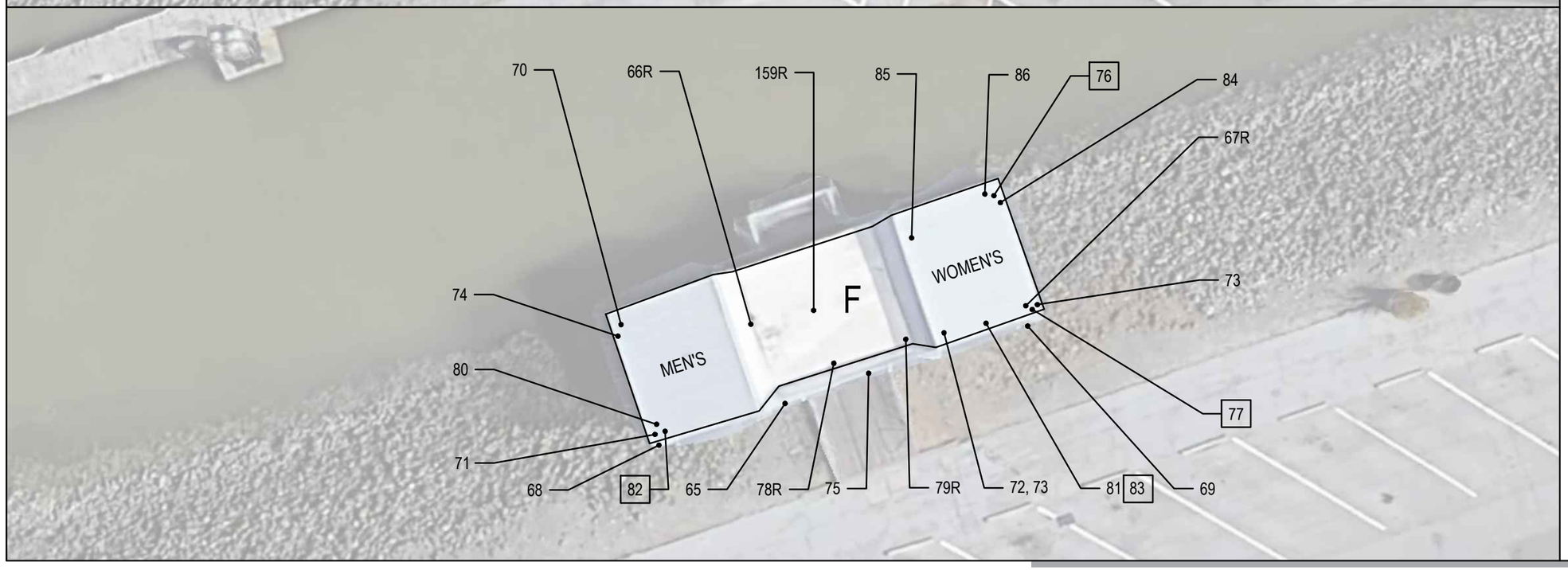
Project No. **11119148**
Report No.
Date **10/25/2017**

FIGURE 1

Filename: \\ghdnet\ghd\US\Emeryville\Projects\IR\8-chars\1111----\11119148-SAN LEANDRO MARINA DECOMM\04-Technical Work\04 - Asbestos Survey\SLM Figures\draft\11119148 - SLH BathroomsAD - Figure1.dwg
Plot Date: 25 October 2017 - 10:21 AM

Source:





SHEET GENERAL NOTES

1. DRA□ ING IS NOT TO SCALE.
2. ALL LOCATIONS ARE APPROXIMATE.
3. □. THIS SHEET TRANSMITS GHD SAMPLE LOCATIONS ONLY. NOT TO □E USED FOR CONSTRUCTION □ OR□.

LEGEND

- # — GHD SAMPLE 11119148-□□ LOCATION OF □UL□ SAMPLE COLLECTED FOR AS□ESTOS ANALYSIS
- [#] — SAMPLE DETERMINED TO CONTAIN AS□ESTOS
- #R — SAMPLE LOCATION ON ROOF
- E — □ATHROOM IDENTIFIER

N

PROJECT NORTH

NOT TO SCALE

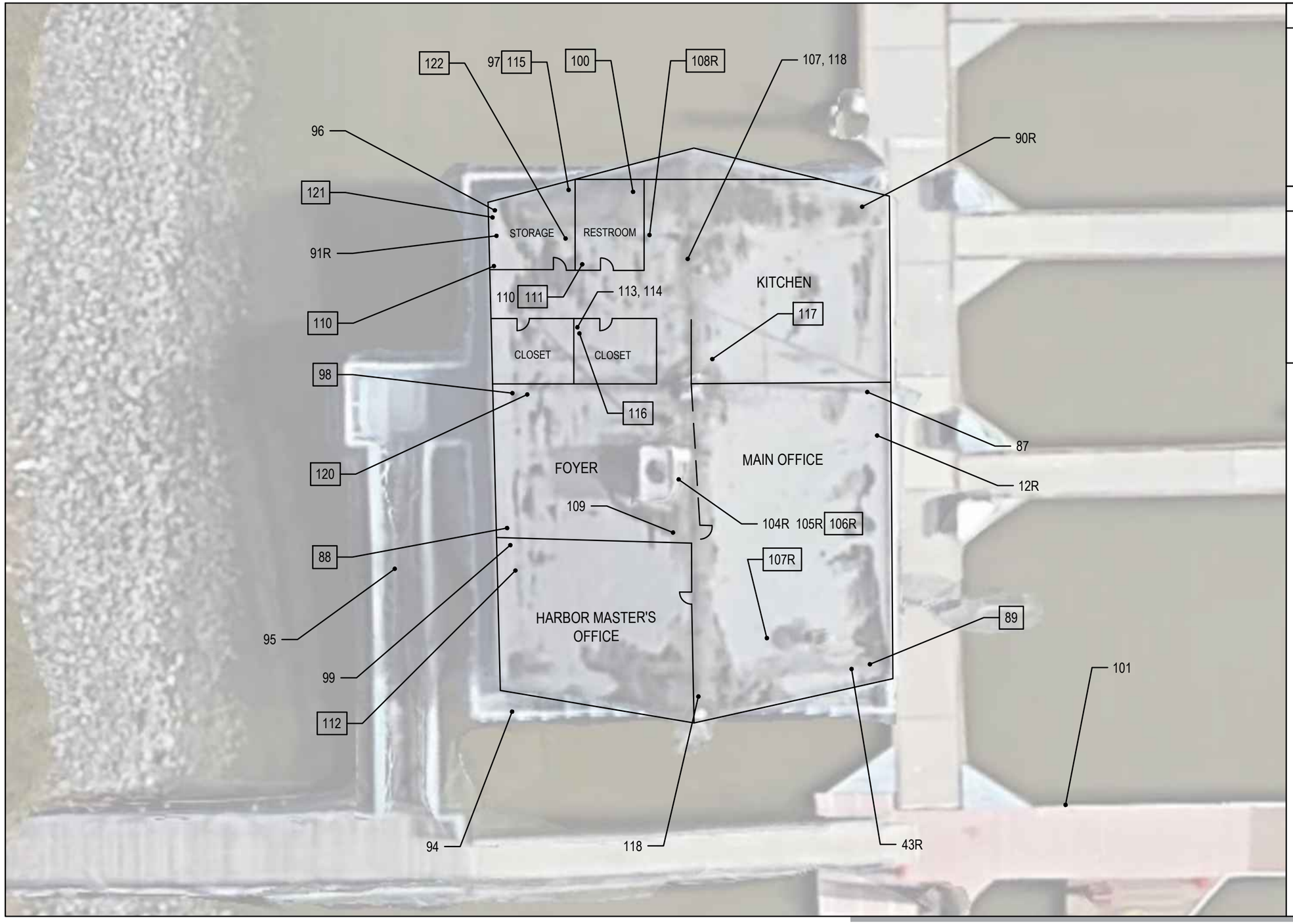
GHD

Project No. **11119148**
Report No.
Date **10/25/2017**

FIGURE 2

Filename: \\ghdnet\ghd\US\Emeryville\Projects\IR\8-chars\1111----\11119148-SAN LEANDRO MARINA DECOMM\04-Technical Work\04 - Asbestos Survey\SLM Figures\draft\11119148 - SLH BathroomsEF - Figure2.dwg
Plot Date: 27 October 2017 - 9:05 AM

Source:



SHEET GENERAL NOTES

1. DRA□ ING IS NOT TO SCALE.
2. ALL LOCATIONS ARE APPROXIMATE.
3. □. THIS SHEET TRANSMITS GHD SAMPLE LOCATIONS ONLY. NOT TO □E USED FOR CONSTRUCTION □ OR□.

LEGEND

- # — GHD SAMPLE 11119148-□□ LOCATION OF □UL□ SAMPLE COLLECTED FOR AS□ESTOS ANALYSIS
- [#] — SAMPLE DETERMINED TO CONTAIN AS□ESTOS
- #R — SAMPLE LOCATION ON ROOF

N

PROJECT NORTH

NOT TO SCALE

GHD

Project No. **11119148**
Report No.
Date **10/25/2017**

FIGURE 3

Filename: \\ghdnet\ghd\US\Emeryville\Projects\IR\8-chars\1111----\11119148-SAN LEANDRO MARINA DECOMM\04-Technical Work\04 - Asbestos Survey\SLM Figures\draft\11119148 - SLH Harbor Masters Office - Figure3.dwg
Plot Date: 27 October 2017 - 9:03 AM

Source:

SHEET GENERAL NOTES

1. DRA□ ING IS NOT TO SCALE.
2. ALL LOCATIONS ARE APPROXIMATE.
3. THIS SHEET TRANSMITS GHD SAMPLE LOCATIONS ONLY. NOT TO □E USED FOR CONSTRUCTION □ OR□.

LEGEND

— GHD SAMPLE 11119148-□□ LOCATION OF □UL□ SAMPLE COLLECTED FOR AS□ESTOS ANALYSIS

[#] — SAMPLE DETERMINED TO CONTAIN AS□ESTOS

N

PROJECT NORTH

NOT TO SCALE

GHD

Project No. **11119148**
Report No.
Date **10/25/2017**

FIGURE 4

Filename: \\ghdnet\ghd\US\Emeryville\Projects\IR\8-chars\1111----\11119148-SAN LEANDRO MARINA DECOMM\04-Technical Work\04 - Asbestos Survey\SLM Figures\draft\11119148 - SLH Blue Dolphin - Figure4.dwg
Plot Date: 27 October 2017 - 9:02 AM

Source:

SHEET GENERAL NOTES

1. DRA□ ING IS NOT TO SCALE.
2. ALL LOCATIONS ARE APPROXIMATE.
3. THIS SHEET TRANSMITS GHD SAMPLE LOCATIONS ONLY. NOT TO □E USED FOR CONSTRUCTION □ OR□.

LEGEND

- # — GHD SAMPLE 11119148-□□ LOCATION OF □UL□ SAMPLE COLLECTED FOR AS□ESTOS ANALYSIS
- # — SAMPLE DETERMINED TO CONTAIN AS□ESTOS
- PRO□ECT □OUNDARY

N
PROJECT NORTH

NOT TO SCALE

GHD

Project No. **11119148**
Report No.
Date **10/25/2017**

FIGURE 5

Filename: \\ghdnet\ghd\US\Emeryville\Projects\IR\8-chars\1111----\11119148-SAN LEANDRO MARINA DECOMM\04-Technical Work\04 - Asbestos Survey\SLM Figures\draft\11119148 - SLH Marina - Figure5.dwg
Plot Date: 27 October 2017 - 8:58 AM

Source:

Appendix B – Photographs

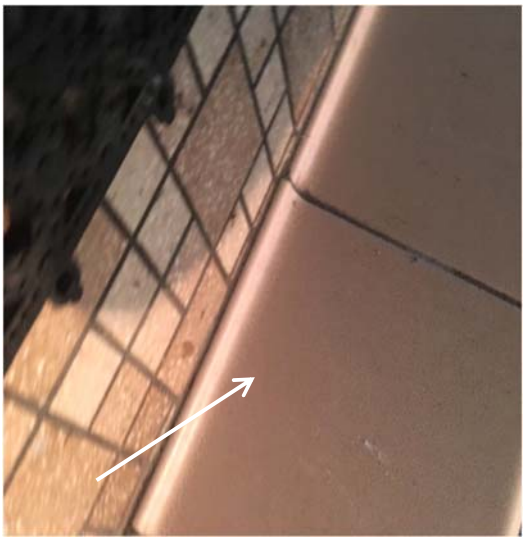
San Leandro Public Marina Photographs

Site Photographs

The photographs presented in the following section generally depict some of the materials reported to contain asbestos or lead as a result of the City San Leandro Public Marina survey described by this report.

Photograph 1 – Marina – Restroom A, B – Roof penetrations – Penetrations throughout (indicated by white arrow) reported to contain asbestos.

Photograph 2 – Marina – Restroom E, F – Wall texture (white) – Sampled at wall systems (indicated by white arrow) reported to contain asbestos.



Photograph 3 – Marina – Restrooms E interior – Ceramic tile mastic (tan) located underneath tile - associated with floor and wall systems (indicated by white arrow) reported to contain asbestos.

Photograph 4 – Marina – Harbor Master's Office – Resilient sheet flooring (tan/gold), 12"x12" vinyl floor tile (not shown, located underneath RSF) (indicated by white arrow) both reported to contain asbestos.

Photograph 5 – Marina – Harbor Master's Office – Roof – Roof Penetrations throughout (grey and black) (typical, indicated by white arrow) reported to contain asbestos.

Photograph 6 – Marina – Restroom F – Roof – Roof Caulk (white/grey) (typical, indicated by white arrow) at penetrations throughout reported to contain asbestos.

Photograph 7 – Marina – Harbor Master's Office – Flashing and sealant (grey) (typical, indicated by white arrow) and reported contain asbestos.

Appendix C – Asbestos Analytical Data

PLM Laboratory Analytical Reports and Associated Chain of Custody Documentation

Appendix D – Asbestos Regulatory Summary

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To: Scott Harris
GHD
Fax #:

Email: scott.harris@ghd.com,matt.tolley@ghd.com

From: Lateef MacIntosh
AmeriSci Job #: 917091613
Subject: PLM 5 day Results
Client Project: 11119148.04; City Of San Leandro; San Leandro Marina

Date: Tuesday, October 03, 2017
Time: 14:48:36
Comments:

Number of Pages: 66
(including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

GHD
Attn: Scott Harris
718 3rd Street

Eureka, CA 95501

Date Received 09/27/17 **AmeriSci Job #** 917091613
Date Examined 10/02/17 **P.O. #**

RE: 11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-1	917091613-01.1	*No*	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak

Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic
Asbestos Types:
Other Material: Non-fibrous 100 %

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-1	917091613-01.2	*No*	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak

Analyst Description: Black, Homogeneous, Fibrous, Roofing
Asbestos Types:
Other Material: Cellulose 60 %, Non-fibrous 40 %

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-1	917091613-01.3	*No*	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak

Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic
Asbestos Types:
Other Material: Non-fibrous 100 %

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-1	917091613-01.4	*No*	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak

Analyst Description: Black, Homogeneous, Fibrous, Roofing
Asbestos Types:
Other Material: Cellulose 60 %, Non-fibrous 40 %

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-1	917091613-01L5	*No*	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak

Analyst Description: Black, Homogeneous, Non-Fibrous, Tar
Asbestos Types:
Other Material: Non-fibrous 100 %

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-1	917091613-01L6	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-1	917091613-01L7	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-1	917091613-01L8	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-1	917091613-01L9	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof - Center E. At Peak			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-2	917091613-02.1	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			
11119148-2	917091613-02.2	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-2	917091613-02.3	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			
11119148-2	917091613-02.4	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-2	917091613-02L5	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			
11119148-2	917091613-02L6	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			
11119148-2	917091613-02L7	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At NW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-3	917091613-03.1	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-3	917091613-03.2	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-3	917091613-03.3	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-3	917091613-03.4	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-3	917091613-03L5	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom A - Roof At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-4	917091613-04.1	***No***	NAD
Location: Electrical Conduit Tape (Grey) & Insulation (Black) / Restroom A - North Wall At Slab			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tape			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-4	917091613-04.2	***No***	NAD
Location: Electrical Conduit Tape (Grey) & Insulation (Black) / Restroom A - North Wall At Slab			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Insulation			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-4	917091613-04.3	***No***	NAD
Location: Electrical Conduit Tape (Grey) & Insulation (Black) / Restroom A - North Wall At Slab			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-5	917091613-05	***No***	NAD
Location: Weather Barrier (Black) / Restroom A - Roof - Flashing At SE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Dark Brown/White, Homogeneous, Fibrous, Barrier Paper			
Asbestos Types:			
Other Material: Cellulose 60 %, Non-fibrous 40 %			
11119148-6	917091613-06	***No***	NAD
Location: Weather Barrier (Black) / Restroom A - Roof - Flashing At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Dark Brown/White, Homogeneous, Fibrous, Barrier Paper			
Asbestos Types:			
Other Material: Cellulose 60 %, Non-fibrous 40 %			
11119148-7	917091613-07	***Yes***	4 %
Location: Roof Vent Penetration Mastic (Black) / Restroom A - Ceiling At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Mastic			
Asbestos Types: Chrysotile 4.0 %			
Other Material: Non-fibrous 96 %			
11119148-8	917091613-08	***No***	NAD
Location: Ceiling Texture (White) / Restroom A - Roof - Vent At Center			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-9	917091613-09	***No***	NAD
Location: Exterior Paint (Red/Grey) / Restroom A - North Wall - Electrical Box At Center			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey/Red, Homogeneous, Non-Fibrous, Paint			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-10	917091613-10.1	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom A - Interior At SE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Mortar not found			
11119148-10	917091613-10.2	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom A - Interior At SE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout not found			
11119148-11	917091613-11.1	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom A - Interior At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-11	917091613-11.2	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom A - Interior At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-11	917091613-11.3	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom A - Interior At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Dark Grey, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-12	917091613-12.1	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom A - Interior - West Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-12	917091613-12.2	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom A - Interior - West Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-12	917091613-12.3	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom A - Interior - West Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Dark Grey, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-13	917091613-13.1	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom A - Interior - East Wall At Center			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout and patch not found			
11119148-13	917091613-13.2	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom A - Interior - East Wall At Center			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout and patch not found			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-14	917091613-14	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Concrete Stem Wall (Grey) / Restroom A - Exterior At SW Corner			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Concrete			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-15	917091613-15.1	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof - Center - South At Peak			
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-15	917091613-15.2	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof - Center - South At Peak			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-15	917091613-15.3	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof - Center - South At Peak			
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-15	917091613-15.4	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof - Center - South At Peak			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-15	917091613-15L5	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof - Center - South At Peak			
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-16	917091613-16.1	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Shingle			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-16	917091613-16.2	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-16	917091613-16.3	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-16	917091613-16.4	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-16	917091613-16L5	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-16	917091613-16L6	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-16	917091613-16L7	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			
11119148-16	917091613-16L8	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			
Analyst Description: Black, Homogeneous, Fibrous, Tar **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			
11119148-16	917091613-16L9	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NW Skylight			
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			
11119148-17	917091613-17.1	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NE Corner			
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			
11119148-17	917091613-17.2	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NE Corner			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-17	917091613-17.3	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NE Corner			
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 5 %, Non-fibrous 95 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-17	917091613-17.4	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-17	917091613-17L5	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom B - Roof At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-18	917091613-18.1	***No***	NAD
Location: Vent Penetration Mastic (Black) / Restroom B - Roof At Vent			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black/Silver, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non fibrous 100 %			
11119148-18	917091613-18.2	***Yes***	2 %
Location: Vent Penetration Mastic (Black) / Restroom B - Roof At Vent			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Black/Grey, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
11119148-19	917091613-19	***No***	NAD
Location: Exterior Paint (White) Over Wood / Restroom B - Exterior - Trim At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: White, Homogeneous, Non-Fibrous, Paint			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-20	917091613-20	***No***	NAD
Location: Concrete Stem Wall (Grey) / Restroom B - Exterior - North Wall At NE Corner			(by CVES) by Lateef MacIntosh on 10/02/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Concrete			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-21	917091613-21	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Concrete Stem Wall (Grey) / Restroom B - Exterior At SW Corner

Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Concrete
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-22	917091613-22	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Seam Caulk (Pink) / Restroom B - Interior Men's Shower At North Wall At Base

Analyst Description: Tan/Pink, Homogeneous, Non-Fibrous, Caulking
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-23	917091613-23	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Wall Texture (White) & Plaster (White) & Wood / Restroom B - Interior Men's At SE Corner

Analyst Description: Beige/Brown, Homogeneous, Non-Fibrous, Wood
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Texture and plaster not found

11119148-24	917091613-24	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Wall Texture (White) & Plaster (White) & Wood / Restroom B - Interior Ceiling At NW Corner

Analyst Description: Beige/Brown, Homogeneous, Non-Fibrous, Wood
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Texture and plaster not found

11119148-25	917091613-25	***No***	NAD (by CVES) by Lateef MacIntosh on 10/02/17

Location: Wall Texture (White) & Plaster (White) & Wood / Restroom B - Interior Women's - West Wall At SW Corner

Analyst Description: Beige/Brown, Homogeneous, Non-Fibrous, Wood
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Texture and plaster not found

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-26	917091613-26.1	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom B - Interior Women's South Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-26	917091613-26.2	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom B - Interior Women's South Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-26	917091613-26.3	***No***	NAD
Location: Floor Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) / Restroom B - Interior Women's South Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Dark Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-27	917091613-27.1	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom B - Interior Men's North Wall At NW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout not found			
11119148-27	917091613-27.2	***No***	NAD
Location: Wall Tile (Grey Marbled) & Grout (Brown) & Mortar (Grey) & Patch (Dark Grey) / Restroom B - Interior Men's North Wall At NW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout not found			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-28	917091613-28.1	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17
	Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner		
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-28	917091613-28.2	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17
	Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner		
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-28	917091613-28.3	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17
	Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner		
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-28	917091613-28.4	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17
	Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner		
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-28	917091613-28L5	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17
	Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner		
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-28	917091613-28L6	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17
	Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner		
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-28	917091613-28L7	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-28	917091613-28L8	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-28	917091613-28L9	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Roof At NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			
11119148-29	917091613-29.1	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-29	917091613-29.2	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-29	917091613-29.3	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-29	917091613-29.4	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 10 %, Non-fibrous 90 %			
11119148-29	917091613-29L5	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-29	917091613-29L6	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Cellulose 60 %, Non-fibrous 40 %			
11119148-29	917091613-29L7	***No***	NAD
Location: Tar & Gravel Roof System (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Cellulose 60 %, Non-fibrous 40 %			
11119148-30	917091613-30	***Yes***	4 %
Location: Vent Penetration Mastic (Black) / Restroom C - Center - South			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Mastic			
Asbestos Types: Chrysotile 4.0 %			
Other Material: Non-fibrous 96 %			
11119148-31	917091613-31	***No***	NAD
Location: Vapor Barrier (Black) / Restroom C - South Wall At SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Vapor Barrier			
Asbestos Types:			
Other Material: Cellulose 60 %, Non-fibrous 40 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-32	917091613-32.1	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom C - SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-32	917091613-32.2	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom C - SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-32	917091613-32.3	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom C - SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-32	917091613-32.4	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom C - SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Dark Grey, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-32A	917091613-33.1	***No***	NAD
Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) & Weather Barrier (Black) / Restroom C - NW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-32A	917091613-33.2	***No***	NAD
Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) & Weather Barrier (Black) / Restroom C - NW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Beige/Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-32A	917091613-33.3	***No***	NAD
Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) & Weather Barrier (Black) / Restroom C - NW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Dark Grey, Homogeneous, Non-Fibrous, Grout **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-33	917091613-34	***Yes***	Trace (<1 %)
Location: Concrete Stem Wall (Grey) / Restroom C - SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Concrete **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 %			
11119148-34	917091613-35	***No***	NAD
Location: Concrete Stem Wall (Grey) / Restroom D - SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Concrete **Asbestos Types:** **Other Material:** Non fibrous 100 %			
11119148-35	917091613-36.1	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - North Roof At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black/Beige, Homogeneous, Fibrous, Roofing/Gravel **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			
11119148-35	917091613-36.2	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - North Roof At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-35	917091613-36.3	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - North Roof At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing **Asbestos Types:** **Other Material:** Fibrous glass 10 %, Non-fibrous 90 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-35	917091613-36.4	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - North Roof At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-35	917091613-36L5	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - North Roof At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-35	917091613-36L6	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - North Roof At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-36	917091613-37.1	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-36	917091613-37.2	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			
11119148-36	917091613-37.3	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 5 %, Non-fibrous 95 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-36	917091613-37.4	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-36	917091613-37L5	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 15 %, Non-fibrous 85 %			
11119148-36	917091613-37L6	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-36	917091613-37.7	***No***	NAD
Location: Tar And Gravel Rolled Roofing (Black) / Restroom D - Roof - Center - South At Peak			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 15 %, Non-fibrous 85 %			
11119148-37	917091613-38	***Yes***	5 %
Location: Roof Penetration Mastic (Black) / Restroom D - Roof - Center At Vent			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black/Grey, Homogeneous, Fibrous, Mastic			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			
11119148-38	917091613-39	***Yes***	4 %
Location: Vent Penetration Mastic (Black) / Restroom D - Roof - NE Corner At Skylight			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black/Grey, Homogeneous, Fibrous, Mastic			
Asbestos Types: Chrysotile 4.0 %			
Other Material: Non-fibrous 96 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-39	917091613-40.1	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17

Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom D - East Wall At SE Corner

Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Grout not found

11119148-39	917091613-40.2	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17

Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom D - East Wall At SE Corner

Analyst Description: Light Grey, Homogeneous, Non-Fibrous, Mortar
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Grout not found

11119148-40	917091613-41.1	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17

Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom D - North Shower Wall At NE Corner

Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Tile
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-40	917091613-41.2	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17

Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom D - North Shower Wall At NE Corner

Analyst Description: Dark Grey, Homogeneous, Non-Fibrous, Grout
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-40	917091613-41.3	***No***	NAD (by CVES) by Lateef MacIntosh on 10/03/17

Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom D - North Shower Wall At NE Corner

Analyst Description: Grey, Homogeneous, Non-Fibrous, Mortar
Asbestos Types:
Other Material: Non-fibrous 100 %

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-41	917091613-42.1	***No***	NAD
Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark / Restroom D - Bathroom Wall At NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Brown/White, Homogeneous, Non-Fibrous, Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout not found			
11119148-41	917091613-42.2	***No***	NAD
Location: Ceramic Floor Tile (Grey) & Mortar (Light Grey) & Grout (Dark / Restroom D - Bathroom Wall At NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Grout not found			
11119148-42	917091613-43	***No***	NAD
Location: Wall Texture (White) & Plaster (White) & Wood / Restroom D - (W) Bathroom - West Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Paint Coating			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Texture and Plaster not found			
11119148-43	917091613-44	***No***	NAD
Location: Traction Coat (Tan) & Concrete (Grey) / Restroom D - (M) Bathroom Wall At SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Beige/Brown, Homogeneous, Non-Fibrous, Wood			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-44	917091613-45	***No***	NAD
Location: Weather Barrier (Black) / Restroom D - At SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White/Black, Heterogeneous, Non-Fibrous, Barrier Paper			
Asbestos Types:			
Other Material: Cellulose 20 %, Non-fibrous 80 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-45	917091613-46	***No***	NAD [1]
Location: Roof Caulking (White) & Flashing (Grey) / Restoom D - At NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White/Grey, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-46	917091613-47		NA
Location: Window Caulking (Cream) / Restroom D - West Wall At Center Window			
Analyst Description: Bulk Material			
Asbestos Types:			
Other Material:			
Comment: Sample not submitted			
11119148-47	917091613-48	***No***	NAD
Location: Caulking (White) / Restroom D - East Wall Above Wall Tile			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey/White, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-48	917091613-49	***No***	NAD
Location: Flat Roof Panel (Cream) / Restroom E. - Flat Roof At Sloped Transition			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Panel			
Asbestos Types:			
Other Material: Fibrous glass 20 %, Non-fibrous 80 %			
11119148-49	917091613-50	***No***	NAD
Location: Roof Fastener Caulking (Grey) / Restroom E - Flat Roof At Sloped Transition Btwn Upper / Lower			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-50	917091613-51	***No***	NAD
Location: Eexterior Paint (Grey) (Over Wood) / Restroom E - Exterior - South Wall At SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Paint			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-51	917091613-52	***No***	NAD [1]
Location: Mastic (Cream) & Caulking (Cream) / Restroom E - NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-52	917091613-53	***No***	NAD
Location: Weather Barrier (Black) / Restroom E - Center Closet - SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White/Black, Homogeneous, Fibrous, Barrier Paper			
Asbestos Types:			
Other Material: Cellulose 20 %, Non-fibrous 80 %			
11119148-52A	917091613-54	***No***	NAD
Location: Weather Barrier (Black) / Restroom E - SW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Barrier Paper			
Asbestos Types:			
Other Material: Cellulose 60 %, Non-fibrous 40 %			
11119148-53	917091613-55	***Yes***	2 % [1]
Location: Wall Texture (Yellow & Green) & JC (White) / Restroom E - Men's - NW Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
11119148-54	917091613-56	***Yes***	2 % [1]
Location: Wall Texture (Yellow & Green) & JC (White) / Restroom E - Men's - NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-55	917091613-57	***Yes***	2 % [1]
Location: Wall Texture (Yellow & Green) & JC (White) / Restroom E - Men's - South Wall At SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
11119148-56	917091613-58	***Yes***	2 % [1]
Location: Wall Texture (Yellow & Green) & JC (White) / Restroom E - Women's - South Wall At Center			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
11119148-57	917091613-59	***Yes***	2 % [1]
Location: Wall Texture (Yellow & Green) & JC (White) / Restroom E - Women's - NE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
11119148-58	917091613-60	***No***	NAD
Location: Drywall (White) & JC (White) & Wood / Restroom E - Men's - SE Corner			(by CVES) by Lateef MacIntosh on 10/03/17
Analyst Description: Beige/Brown, Homogeneous, Non-Fibrous, Wood			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-59	917091613-61.1	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Men's - East Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-59	917091613-61.2	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Men's - East Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-59	917091613-61.3	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Men's - East Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-60	917091613-62.1	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Men's - East Wall At Center			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-60	917091613-62.2	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Men's - East Wall At Center			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-60	917091613-62.3	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Men's - East Wall At Center			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-61	917091613-63.1	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Women's - West Wall At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-61	917091613-63.2	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Women's - West Wall At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-61	917091613-63.3	***No***	NAD
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Cream) / Restroom E - Women's - West Wall At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-62	917091613-64.1	***No***	NAD
Location: 6" Ceramic Base Tile (Brown) & Grout (Brown) & Mastic (Yellow) / Restroom E - SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-62	917091613-64.2	***No***	NAD
Location: 6" Ceramic Base Tile (Brown) & Grout (Brown) & Mastic (Yellow) / Restroom E - SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-62	917091613-64.3	***Yes***	Trace (<1 %)
Location: 6" Ceramic Base Tile (Brown) & Grout (Brown) & Mastic (Yellow) / Restroom E - SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types: Chrysotile <1. %			
Other Material: Non-fibrous 100 %			
11119148-63	917091613-65.1	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom E - SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Red, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-63	917091613-65.2	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom E - SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: Mortar not submitted			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-63	917091613-65.3	***No***	NAD
Location: Ceramic Wall Tile (Grey) & Mortar (Light Grey) & Grout (Dark Grey) / Restroom E - SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Beige, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-64	917091613-66.1	***No***	NAD
Location: Ceramic Floor Tile (Tan Pattern) & Mortar (Brown) & Base (Grey) / Restroom E - NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-64	917091613-66.2	***No***	NAD
Location: Ceramic Floor Tile (Tan Pattern) & Mortar (Brown) & Base (Grey) / Restroom E - NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-64	917091613-66.3	***No***	NAD
Location: Ceramic Floor Tile (Tan Pattern) & Mortar (Brown) & Base (Grey) / Restroom E - NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-65	917091613-67	***No***	NAD
Location: Tar (Black) / Restroom F - Exterior Foundation - SW Corner At Pilling At Entry			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-66	917091613-68	***No***	NAD
Location: Vent Penetration Mastic (Black) / Restroom F - Roof - West At Center			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White/Grey, Heterogeneous, Non-Fibrous, Penetration Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-67	917091613-69.1	***Yes***	3 %
Location: Caulking (Black) / / Restroom F - Roofing Block - SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types: Chrysotile 3.0 %			
Other Material: Non-fibrous 97 %			
11119148-67	917091613-69.2	***No***	NAD
Location: Caulking (Black) / / Restroom F - Roofing Block - SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Foam			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-68	917091613-70	***No***	NAD
Location: Tar Paper / Weather Barrier (Black) / Restroom F - SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Tar Paper			
Asbestos Types:			
Other Material: Cellulose 15 %, Non-fibrous 85 %			
11119148-69	917091613-71	***No***	NAD
Location: Tar Paper Weather Barrier (Black) / Restroom F - South Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Tar Paper			
Asbestos Types:			
Other Material: Cellulose 15 %, Non-fibrous 85 %			
11119148-70	917091613-72	***No***	NAD
Location: Drywall (White) & JC (White) (On Wood) / Restroom F - West Wall At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Joint Compound			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: DW not submitted			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-71	917091613-73	***No***	NAD
Location: Drywall (White) & JC (White) (On Wood) / Restroom F - SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Blue, Homogeneous, Non-Fibrous, Paint Coating			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: DW/JC not submitted			
11119148-72	917091613-74	***No***	NAD
Location: Drywall (White) & JC (White) (On Wood) / Restroom F - East Bathroom (W) At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Blue, Homogeneous, Non-Fibrous, Paint Coating			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
Comment: DW/JC not submitted			
11119148-73	917091613-75	***No***	NAD
Location: Caulking (White) / Restroom F - East Bathroom (W) At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-74	917091613-76	***No***	NAD
Location: Window Caulking (White) / Restroom F - NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: White, Homogeneous, Non-Fibrous, Caulking			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-75	917091613-77	***No***	NAD
Location: Weather Coating On Gate (Grey) / Restroom F - At Entrance			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Coating			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-76	917091613-78	***Yes***	Trace (<1 %) (by CVES) by Arturo A. Aldana on 10/03/17
Location: Wall Texture (Blue & White) & JC (White) / Restroom F - North Wall At NE Corner			
Analyst Description: Blue/White, Homogeneous, Non-Fibrous, Texture **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 % **Comment:** JC not submitted			
11119148-77	917091613-79	***Yes***	Trace (<1 %) (by CVES) by Arturo A. Aldana on 10/03/17
Location: Wall Texture (Blue & White) & JC (White) / Restroom F - East Wall At SW Corner			
Analyst Description: Blue/White, Homogeneous, Non-Fibrous, Texture **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 %			
11119148-78	917091613-80.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: Vinyl Membrane Roofing System (White) / Restroom F - Roof - Center At South Entrance			
Analyst Description: White, Homogeneous, Fibrous, Covering **Asbestos Types:** **Other Material:** Synthetic fibers 10 %, Non-fibrous 90 %			
11119148-78	917091613-80.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: Vinyl Membrane Roofing System (White) / Restroom F - Roof - Center At South Entrance			
Analyst Description: White, Homogeneous, Fibrous, Insulation-like Material **Asbestos Types:** **Other Material:** Fibrous glass 25 %, Non-fibrous 75 %			
11119148-79	917091613-81	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: Vinyl Membrane Roofing System (White) / Restroom F - Roof - Center East At South Edge			
Analyst Description: White, Homogeneous, Fibrous, Covering **Asbestos Types:** **Other Material:** Synthetic fibers 10 %, Non-fibrous 90 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-80	917091613-82.1	***No***	NAD
Location: Ceramic Floor Tile (Brown / Tan Pattern) & Grout (Brown) & Mortar (Grey) / Restroom F - Men's At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-80	917091613-82.2	***No***	NAD
Location: Ceramic Floor Tile (Brown / Tan Pattern) & Grout (Brown) & Mortar (Grey) / Restroom F - Men's At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-80	917091613-82.3	***No***	NAD
Location: Ceramic Floor Tile (Brown / Tan Pattern) & Grout (Brown) & Mortar (Grey) / Restroom F - Men's At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-81	917091613-83.1	***No***	NAD
Location: Ceramic Floor Tile (Brown / Tan Pattern) & Grout (Brown) & Mortar (Grey) / Restroom F - Women's At South Wall Center Under Sink			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Tan, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-81	917091613-83.2	***No***	NAD
Location: Ceramic Floor Tile (Brown / Tan Pattern) & Grout (Brown) & Mortar (Grey) / Restroom F - Women's At South Wall Center Under Sink			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Cementitious, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-81	917091613-83.3	***No***	NAD
Location: Ceramic Floor Tile (Brown / Tan Pattern) & Grout (Brown) & Mortar (Grey) / Restroom F - Women's At South Wall Center Under Sink			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Mortar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-82	917091613-84.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Men's At SW Corner			
Analyst Description: Brown, Homogeneous, Non-Fibrous, Ceramic Tile **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-82	917091613-84.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Men's At SW Corner			
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Mortar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-82	917091613-84.3	***Yes***	Trace (<1 %) (by CVES) by Arturo A. Aldana on 10/03/17
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Men's At SW Corner			
Analyst Description: Tan, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 %			
11119148-83	917091613-85.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Women's At South Wall Center Under Sink			
Analyst Description: Brown, Homogeneous, Non-Fibrous, Ceramic Tile **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-83	917091613-85.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Women's At South Wall Center Under Sink			
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-83	917091613-85.3	***Yes***	Trace (<1 %) (by CVES) by Arturo A. Aldana on 10/03/17
Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Women's At South Wall Center Under Sink			
Analyst Description: Tan, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-84	917091613-86.1	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Red, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-84	917091613-86.2	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-84	917091613-86.3	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-85	917091613-87.1	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - Women's At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Red, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-85	917091613-87.2	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - Women's At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-85	917091613-87.3	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - Women's At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-86	917091613-88.1	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - Women's At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Red, Homogeneous, Non-Fibrous, Ceramic Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-86	917091613-88.2	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - Women's At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Grout			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-86	917091613-88.3	***No***	NAD
Location: Ceramic Floor Tile (Red) & Grout (Brown) & Mastic (Cream) / Restroom F - Women's At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-87	917091613-89.1	***Yes***	3 %
Location: 12"x12" VFT (Grey Streaked) & Mastic (Black) / Harbor Master's Office (HMO) - Main Office At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Floor Tile			
Asbestos Types: Chrysotile 3.0 %			
Other Material: Non-fibrous 97 %			
11119148-87	917091613-89.2	***No***	NAD
Location: 12"x12" VFT (Grey Streaked) & Mastic (Black) / Harbor Master's Office (HMO) - Main Office At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-88	917091613-90.1	***Yes***	3 %
Location: 12"x12" VFT (Grey Streaked) & Mastic (Black) / HMO - Foyer At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Floor Tile			
Asbestos Types: Chrysotile 3.0 %			
Other Material: Non-fibrous 97 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-88	917091613-90.2	***No***	NAD
Location: 12"x12" VFT (Grey Streaked) & Mastic (Black) / HMO - Foyer At SW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-89	917091613-91.1	***Yes***	3 %
Location: 12"x12" VFT (Grey Streaked) & Mastic (Black) / HMO - Main Office At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Floor Tile			
Asbestos Types: Chrysotile 3.0 %			
Other Material: Non-fibrous 97 %			
11119148-89	917091613-91.2	***No***	NAD
Location: 12"x12" VFT (Grey Streaked) & Mastic (Black) / HMO - Main Office At SE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-90	917091613-92.1	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing/Gravel			
Asbestos Types:			
Other Material: Fibrous glass 15 %, Non-fibrous 85 %			
11119148-90	917091613-92.2	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-90	917091613-92.3	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NE Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Tar Paper			
Asbestos Types:			
Other Material: Cellulose 10 %, Non-fibrous 90 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-91	917091613-93.1	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing/Gravel			
Asbestos Types:			
Other Material: Fibrous glass 20 %, Non-fibrous 80 %			
11119148-91	917091613-93.2	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-91	917091613-93.3	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Fibrous, Roofing			
Asbestos Types:			
Other Material: Fibrous glass 10 %, Non-fibrous 90 %			
11119148-91	917091613-93.4	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At NW Corner			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Brown, Homogeneous, Fibrous, Paper			
Asbestos Types:			
Other Material: Cellulose 20 %, Non-fibrous 80 %			
11119148-92	917091613-94.1	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At East Side			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Heterogeneous, Fibrous, Roofing/Gravel			
Asbestos Types:			
Other Material: Fibrous glass 20 %, Non-fibrous 80 %			
11119148-92	917091613-94.2	***No***	NAD
Location: Tar And Gravel Roofing System (Black) / HMO - Roof At East Side			(by CVES) by Arturo A. Aldana on 10/03/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-92	917091613-94.3	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17

Location: Tar And Gravel Roofing System (Black) / HMO - Roof At East Side

Analyst Description: Black, Homogeneous, Fibrous, Tar Paper
Asbestos Types:
Other Material: Cellulose 10 %, Non-fibrous 90 %

11119148-93	917091613-95	***No***	NAD (by CVES) by Arturo A. Aldana on 10/03/17

Location: Roof Coating With Gravel (Grey & Pink) / HMO - Roof At SE Corner

Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Gravel/Roofing Surface
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-94	917091613-96.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Hose (Black) / HMO - Under Building At SW Corner

Analyst Description: Black, Homogeneous, Non-Fibrous, Rubbery Material
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-94	917091613-96.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Hose (Black) / HMO - Under Building At SW Corner

Analyst Description: Grey, Homogeneous, Fibrous, Insulation
Asbestos Types:
Other Material: Synthetic fibers 60 %, Non-fibrous 40 %

11119148-95	917091613-97	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Traction Coat (Black) & Concrete (Grey) / HMO - Ramp At Stair Entrance

Analyst Description: Black, Homogeneous, Non-Fibrous, Coating
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Concrete not submitted

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-96	917091613-98	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Vapor Barrier (Black) / HMO - Exterior At NW Corner			
Analyst Description: Brown/Black, Heterogeneous, Fibrous, Vapor Barrier **Asbestos Types:** **Other Material:** Cellulose 20 %, Non-fibrous 80 %			
11119148-97	917091613-99	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Vapor Barrier (Black) / HMO - Storage Room At NE Corner			
Analyst Description: Black, Homogeneous, Fibrous, Vapor Barrier **Asbestos Types:** **Other Material:** Cellulose 20 %, Non-fibrous 80 %			
11119148-98	917091613-100.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: 12"x12" ACT (Tan) & Mastic (Brown) / HMO - Foyer At NW Corner Ceiling			
Analyst Description: Brown, Homogeneous, Fibrous, Ceiling Tile **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			
11119148-98	917091613-100.2	***Yes***	Trace (<1 %) (by CVES) by Arturo A. Aldana on 10/02/17
Location: 12"x12" ACT (Tan) & Mastic (Brown) / HMO - Foyer At NW Corner Ceiling			
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** Tremolite <1. % **Other Material:** Non-fibrous 100 %			
11119148-99	917091613-101	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Wood Panel Mastic (Brown) / HMO - SW Office Behind Wood Panel			
Analyst Description: Light Brown, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-100	917091613-102	***Yes***	Trace (<1 %) (by CVES) by Arturo A. Aldana on 10/02/17
Location: Terrazzo Shower Pan (Marbled White) / HMO - Bathroom At Shower At NE Corner			
Analyst Description: White/Grey, Homogeneous, Non-Fibrous, Cementitious, Terrazzo **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-101	917091613-103	*No*	NAD
Location: Foam (Pink) / HMO - Dock At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Pink/Grey, Homogeneous, Non-Fibrous, Foam			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-102	917091613-104	*No*	NAD
Location: HVAC Ducting Wrap (Yellow) / HMO - Kitchen Hall			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Yellow, Homogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Fibrous glass 70 %, Non-fibrous 30 %			
11119148-103	917091613-105.1	*No*	NAD
Location: Insulation Batt (Pink) & Paper & Backing (Silver) / HMO - Kitchne Hall			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Pink, Homogeneous, Fibrous, Insulation			
Asbestos Types:			
Other Material: Fibrous glass 70 %, Non-fibrous 30 %			
11119148-103	917091613-105.2	*No*	NAD
Location: Insulation Batt (Pink) & Paper & Backing (Silver) / HMO - Kitchne Hall			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Brown, Homogeneous, Fibrous, Paper			
Asbestos Types:			
Other Material: Cellulose 30 %, Non-fibrous 70 %			
11119148-103	917091613-105.3	*No*	NAD
Location: Insulation Batt (Pink) & Paper & Backing (Silver) / HMO - Kitchne Hall			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Silver, Homogeneous, Non-Fibrous, Backing			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-104	917091613-106	*No*	NAD
Location: Conduit Penetration Sealant (Dark Grey) / HMO - Roof At Center - S At HVAC			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Grey, Homogeneous, Non-Fibrous, Sealant			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-105	917091613-107	***No***	NAD
Location: Conduit Penetration Sealant (Dark Grey) / HMO - Roof At Center - S At HVAC			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Light Grey, Homogeneous, Non-Fibrous, Sealant			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-106	917091613-108	***Yes***	5 %
Location: Flashing Sealant (Dark Grey) At Penetration / HMO - Roof At Center - S At HVAC			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Black/Grey, Homogeneous, Non-Fibrous, Sealant			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			
11119148-107	917091613-109	***Yes***	5 %
Location: Vent Penetration Mastic (Black) / HMO - Roof - Center At Penetration			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Black/Grey, Homogeneous, Non-Fibrous, Penetration Mastic			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			
11119148-108	917091613-110	***Yes***	5 %
Location: Vent Penetration Mastic (Black) / HMO - Roof - Center North At RR Vent			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Penetration Mastic			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			
11119148-109	917091613-111.1	***Yes***	2 %
Location: Drywall (White) & JC (White) / HMO - Foyer At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White, Homogeneous, Non-Fibrous, Joint Compound			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
11119148-109	917091613-111.2	***No***	NAD
Location: Drywall (White) & JC (White) / HMO - Foyer At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Drywall			
Asbestos Types:			
Other Material: Cellulose 3 %, Non-fibrous 97 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-110	917091613-112.1	***Yes***	2 % [2]
Location: Drywall (White) & JC (White) / HMO - Storage - West Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White, Homogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** Chrysotile 2.0 % **Other Material:** Non-fibrous 98 %			
11119148-110	917091613-112.2	***No***	NAD
Location: Drywall (White) & JC (White) / HMO - Storage - West Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 5 %, Non-fibrous 95 %			
11119148-111	917091613-113.1	***Yes***	2 %
Location: Ceiling Drywall (White) & JC (White) / HMO - Bathroom At SW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White, Homogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** Chrysotile 2.0 % **Other Material:** Non-fibrous 98 %			
11119148-111	917091613-113.2	***No***	NAD
Location: Ceiling Drywall (White) & JC (White) / HMO - Bathroom At SW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 7 %, Non-fibrous 93 %			
11119148-112	917091613-114.1	***No***	NAD
Location: 12x12 ACT Pin And Fissure (White) / HMO - Foyer At NW Corner Ceiling			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: White/Brown, Homogeneous, Fibrous, Ceiling Tile **Asbestos Types:** **Other Material:** Cellulose 60 %, Non-fibrous 40 %			
11119148-112	917091613-114.2	***Yes***	Trace (<1 %)
Location: 12x12 ACT Pin And Fissure (White) / HMO - Foyer At NW Corner Ceiling			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** Tremolite <1. % **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-113	917091613-115	***No***	NAD
Location: Weather Barrier (Black) / HMO - Water Heater Closet Floor - Under Floorboard At NW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Black, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-114	917091613-116	***No***	NAD
Location: Weather Barrier (Black) / HMO - Water Heater Closet Floor - Under Floorboard At NW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Black, Homogeneous, Fibrous, Barrier Paper			
Asbestos Types:			
Other Material: Cellulose 30 %, Non-fibrous 70 %			
11119148-115	917091613-117	***Yes***	10 %
Location: RSF (Tan And Gold) & Mastic (Yellow) / HMO - Storage At NE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Beige, Homogeneous, Fibrous, Sheet Flooring			
Asbestos Types: Chrysotile 10.0 %			
Other Material: Non-fibrous 90 %			
Comment: Unable to seperate mastic from positive floor backing-Not analyzed			
11119148-116	917091613-118	***Yes***	15 %
Location: RSF (Tan And Gold) & Mastic (Yellow) / HMO - Water Heater Closet At NW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Beige, Homogeneous, Fibrous, Sheet Flooring			
Asbestos Types: Chrysotile 15.0 %			
Other Material: Non-fibrous 85 %			
Comment: Unable to seperate mastic from positive floor backing-Not analyzed			
11119148-117	917091613-119	***Yes***	15 %
Location: RSF (Tan And Gold) & Mastic (Yellow) / HMO - Kitchen At SW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Beige, Homogeneous, Fibrous, Sheet Flooring			
Asbestos Types: Chrysotile 15.0 %			
Other Material: Non-fibrous 85 %			
Comment: Unable to seperate mastic from positive floor backing-Not analyzed			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-118	917091613-120.1	***No***	NAD
Location: 4" Base Cove (Brown) & Mastic (Beige) / HMO - West Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Basecove			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-118	917091613-120.2	***No***	NAD
Location: 4" Base Cove (Brown) & Mastic (Beige) / HMO - West Wall At SE Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-119	917091613-121.1	***No***	NAD
Location: 4" Base Cove (Brown) & Mastic (Beige) / HMO - Bathroom - West Wall At SW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Basecove			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-119	917091613-121.2	***No***	NAD
Location: 4" Base Cove (Brown) & Mastic (Beige) / HMO - Bathroom - West Wall At SW Corner			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Brown, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-120	917091613-122	***Yes***	2 % [2]
Location: Wall Texture (White) & JC (White) / HMO - Entry At North Wall			(by CVES) by Arturo A. Aldana on 10/02/17
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Texture			
Asbestos Types: Chrysotile 2.0 %			
Other Material: Non-fibrous 98 %			
Comment: JC not submitted			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-121	917091613-123	***Yes***	Trace (<1 %)[2] (by CVES) by Arturo A. Aldana on 10/02/17
Location: Wall Texture (White) & JC (White) / HMO - West Wall NW Corner			
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Texture **Asbestos Types:** Chrysotile <1. % **Other Material:** Non-fibrous 100 % **Comment:** JC not submitted			
11119148-122	917091613-124	***Yes***	2 % (by CVES) by Arturo A. Aldana on 10/02/17
Location: Wall Texture (White) & JC (White) / HMO - Storage At E Wall At Center			
Analyst Description: White, Homogeneous, Non-Fibrous, Texture **Asbestos Types:** Chrysotile 2.0 % **Other Material:** Non-fibrous 98 % **Comment:** JC not submitted			
11119148-123	917091613-125	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Tar Paper Coating (Grey / Black) / Building Pad / Disused Concrete Dock (Building Pad) Corrigated Metal Pipe Under Dock At SW Corner			
Analyst Description: Black/Grey, Homogeneous, Non-Fibrous, Coating **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-124	917091613-126	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete Pad (Grey) / Building Pad - Top At NW Corner			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Concrete **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-125	917091613-127	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Flashing Caulk (Grey) / Building Pad - Top At NW Corner			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Caulking **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-126	917091613-128	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Pebbled Concrete Stairs (Grey) / Building Pad - Stairs North At Center			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Concrete **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-127	917091613-129	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Tar (Black) / Building Pad - Top Pad At SW Side			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-128	917091613-130	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete Surface (Grey) / Building Pad - Center (North)			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-129	917091613-131	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete Surface (Grey) / Building Pad - Top At NE Corner			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-130	917091613-132	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Caulking (Grey) / Building Pad - Top At NE Corner			
Analyst Description: Light Grey, Homogeneous, Non-Fibrous, Caulking **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-131	917091613-133	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete Deck (Grey & Marbled) / Building Pad - North At Center			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Concrete **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-132	917091613-134	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Surface Coating (Grey) / Building Pad - Top At NW Corner			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Coating			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-133	917091613-135	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete Post (Grey) / K Dock - Slip 17 At East Side			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Concrete			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-134	917091613-136	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Tar (Black) / K Dock - Slip 19 At East Side			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-135	917091613-137	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Tar (Black) / K Dock - Slip 17 - East Post Across From Slip 17			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-136	917091613-138	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Tar (Black) / K Dock - Slip 21 At East Side Of Post			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
11119148-137	917091613-139.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Protective Rubber Sheeting (Black) & Tar (Black) / K Dock - Slip 19 At East Side			
Analyst Description: Black, Homogeneous, Non-Fibrous, Rubbery Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-137	917091613-139.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Protective Rubber Sheeting (Black) & Tar (Black) / K Dock - Slip 19 At East Side

Analyst Description: Black, Homogeneous, Non-Fibrous, Tar
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-138	917091613-140	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Protective Rubber Sheeting (Black) & Tar (Black) / K Dock - Slip 7 At East Side

Analyst Description: Black/Grey, Homogeneous, Non-Fibrous, Rubbery Material
Asbestos Types:
Other Material: Non-fibrous 100 %
Comment: Tar not submitted

11119148-139	917091613-141	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Tar (Black) / K Dock - Slip 9 At NE Side Of Pier

Analyst Description: Black, Homogeneous, Non-Fibrous, Tar
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-140	917091613-142	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Foam (Grey) / K Dock - Slip 19 At Center

Analyst Description: Light Grey, Homogeneous, Non-Fibrous, Foam
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-141	917091613-143	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Float Foam (Pink) / K Dock - Slip 29 At SW Corner

Analyst Description: Pink, Homogeneous, Non-Fibrous, Foam
Asbestos Types:
Other Material: Non-fibrous 100 %

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-142	917091613-144	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Caulking (Brown) / K Dock - Slip 7			
Analyst Description: Brown, Homogeneous, Non-Fibrous, Caulking **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-143	917091613-145	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete (Grey) / K Dock - Slip 9 - West Entrance At Pier Center			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Concrete **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-144	917091613-146	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Composite Plastic Rail (Grey) / K Dock - Slip 9 At NE Side Of Pier			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-145	917091613-147	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Caulking (Grey) / K Dock - Slip 11 Roof At NE Corner			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Caulking **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-146	917091613-148	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Vinyl Bumper / K Dock - Slip 21 - West At Center			
Analyst Description: Off-White, Homogeneous, Non-Fibrous, Vinyl Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-147	917091613-149	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Float Foam (Blue) / L-M Dock - Pier 13			
Analyst Description: Light Blue, Homogeneous, Non-Fibrous, Foam **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-148	917091613-150	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Traction Material (Grey) / L-M Dock - Slip 48 At SW Corner			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-149	917091613-151.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Flashing (Metal) & Caulking (White) / L-M Dock - Slip 10 At Ceiling			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Metal **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-149	917091613-151.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Flashing (Metal) & Caulking (White) / L-M Dock - Slip 10 At Ceiling			
Analyst Description: White, Homogeneous, Non-Fibrous, Caulking **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-150	917091613-152	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Vinyl Bumper (Tan) / L-M Dock - Slip 46 At NW Corner			
Analyst Description: Grey, Homogeneous, Non-Fibrous, Vinyl Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-151	917091613-153	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Vinyl Bumper (White) / S Dock - Edge At NE Corner			
Analyst Description: White, Homogeneous, Non-Fibrous, Vinyl Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-152	917091613-154	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Tar (Black) / O-N Dock - Pier At SW Corner			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-153	917091613-155	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Foam (Orange) / O-N Dock - Pier 11 At SE Corner			
Analyst Description: Orange, Homogeneous, Non-Fibrous, Foam **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
11119148-154	917091613-156	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Gasket (Black) & Mastic (Grey) / D Dock - Railing At E. Side			
Analyst Description: Black, Homogeneous, Non-Fibrous, Gasket **Asbestos Types:** **Other Material:** Non-fibrous 100 % **Comment:** Mastic not submitted			
11119148-155	917091613-157	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Traction Coat (White And Clear) / D Dock - Slip 4 At NW Corner At End			
Analyst Description: Brown, Homogeneous, Non-Fibrous, Coating **Asbestos Types:** **Other Material:** Cellulose 12 %, Non-fibrous 88 %			
11119148-156	917091613-158	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Traction Coat (White) Over Wood / D Dock - Slip 2 At NW Corner			
Analyst Description: White/Brown, Homogeneous, Non-Fibrous, Coating **Asbestos Types:** **Other Material:** Cellulose 12 %, Non-fibrous 88 %			
11119148-157	917091613-159	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17
Location: Concrete Pad (Grey) / D Dock - Slip 1 At Center			
Analyst Description: Grey, Heterogeneous, Non-Fibrous, Cementitious, Concrete **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-158	917091613-160	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Vinyl Bumper (Grey / Tan) / D Dock - Slip 23 At North End At Center

Analyst Description: Brown/Grey, Heterogeneous, Non-Fibrous, Vinyl Material
Asbestos Types:
Other Material: Non-fibrous 100 %

11119148-159	917091613-161.1	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Vinyl Membrane Roofing System (White) & Drywall (White) / Restroom F - Roof At Center

Analyst Description: White, Homogeneous, Fibrous, Fibrous Strips
Asbestos Types:
Other Material: Synthetic fibers 15 %, Non-fibrous 85 %

11119148-159	917091613-161.2	***No***	NAD (by CVES) by Arturo A. Aldana on 10/02/17

Location: Vinyl Membrane Roofing System (White) & Drywall (White) / Restroom F - Roof At Center

Analyst Description: White, Heterogeneous, Fibrous, DW-like Material
Asbestos Types:
Other Material: Fibrous glass 15 %, Non-fibrous 85 %

Reporting Notes:

(1) Physically inseparable layers in sample - sample composited for analysis

(2) Insufficient material submitted for accurate quantitation during PLM analysis (no QC possible).

Analyzed By: Lateef MacIntosh _____; Date Analyzed: 10/2/2017 10/3/17

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0, CA ELAP lab #2322); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: _____

Please Reply To:

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

FACSIMILE TELECOPY TRANSMISSION

To: Scott Harris
GHD
Fax #:
Email: scott.harris@ghd.com,matt.tolley@ghd.com

From: Paola Ducoing
AmeriSci Job #: 917101071
Subject: PLM 400 point count 5 day Results
Client Project: 11119148.04; City Of San Leandro; San Leandro Marina

Date: Tuesday, October 10, 2017
Time: 10:40:28
Comments:

Number of Pages: 10 (including cover sheet)

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

GHD
Attn: Scott Harris
718 3rd Street

Eureka, CA 95501

Date Received 10/04/17 **AmeriSci Job #** 917101071
Date Examined 10/10/17 **P.O. #**

RE: 11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-33	917101071-01	*No*	NAD [1]

Location: Concrete Stem Wall (Grey) / Restroom C - SW Corner

(by 400 pt ct)
by Paola Ducoing
on 10/10/17

Analyst Description: Grey, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos/Inert 53.5 %
Comment: Heat Sensitive (organic): 3.0%; Acid Soluble (inorganic): 43.5%; Inert (Non-asbestos): 53.5%

11119148-62	917101071-02	*Yes*	1.3 % pc [1]

Location: 6" Ceramic Base Tile (Brown) & Grout (Brown) & Mastic (Yellow) / Restroom E - SW Corner

(by 400 pt ct)
by Paola Ducoing
on 10/10/17

Analyst Description: Brown, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile 1.3 %
Other Material: Non-Asbestos/Inert 39.8 %
Comment: Heat Sensitive (organic): 40.9%; Acid Soluble (inorganic): 18.0%; Inert (Non-asbestos): 39.8%

11119148-82	917101071-03	*Yes*	1 % pc [1]

Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Men's At SW Corner

(by 400 pt ct)
by Paola Ducoing
on 10/10/17

Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile 1.0 %
Other Material: Non-Asbestos/Inert 19.5 %
Comment: Heat Sensitive (organic): 39.5%; Acid Soluble (inorganic): 40.0%; Inert (Non-asbestos): 19.5%

11119148-83	917101071-04	*Yes*	1.1 % pc [1]

Location: 6" Ceramic Base Tile (Tan) & Mortar (Brown) & Mastic (Light Brown) / Restroom F - Women's At South Wall Center Under Sink

(by 400 pt ct)
by Paola Ducoing
on 10/10/17

Analyst Description: Tan, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile 1.1 %
Other Material: Non-Asbestos/Inert 20.8 %
Comment: Heat Sensitive (organic): 36.9%; Acid Soluble (inorganic): 41.2%; Inert (Non-asbestos): 20.8%

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-100	917101071-05	***Yes***	0.3 % pc [1]

Location: Terrazzo Shower Pan (Marbled White) / HMO - Bathroom At Shower At NE Corner

(by 400 pt ct) by Paola Ducoing on 10/10/17

Analyst Description: White/Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material
Asbestos Types: Chrysotile 0.3 %
Other Material: Non-Asbestos/Inert 52.3 %
Comment: Heat Sensitive (organic): 7.2%; Acid Soluble (inorganic): 40.2%; Inert (Non-asbestos): 52.3%

11119148-109	917101071-06	***Yes***	Trace (<0.25 % pc) [1]

Location: Drywall (White) & JC (White) / HMO - Foyer At SE Corner

(by 400 pt ct) by Paola Ducoing on 10/10/17

Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile <0.25 % pc
Other Material: Non-Asbestos/Inert 30.1 %
Comment: Heat Sensitive (organic): 39.2%; Acid Soluble (inorganic): 30.7%; Inert (Non-asbestos): 30.1%

11119148-110	917101071-07	***No***	NAD [1]

Location: Drywall (White) & JC (White) / HMO - Storage - West Wall At SE Corner

(by 400 pt ct) by Paola Ducoing on 10/10/17

Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos/Inert 1.7 %
Comment: Heat Sensitive (organic): 39.2%; Acid Soluble (inorganic): 59.1%; Inert (Non-asbestos): 1.7%

11119148-111	917101071-08	***Yes***	Trace (<0.25 % pc) [1]

Location: Ceiling Drywall (White) & JC (White) / HMO - Bathroom At SW Corner

(by 400 pt ct) by Paola Ducoing on 10/10/17

Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile <0.25 % pc
Other Material: Non-Asbestos/Inert 13.4 %
Comment: Heat Sensitive (organic): 31.1%; Acid Soluble (inorganic): 55.4%; Inert (Non-asbestos): 13.4%

11119148-112	917101071-09	***Yes***	Trace (<0.25 % pc) [1]

Location: 12x12 ACT Pin And Fissure (White) / HMO - Foyer At NW Corner Ceiling

(by 400 pt ct) by Paola Ducoing on 10/10/17

Analyst Description: White/Brown, Homogeneous, Fibrous, Bulk Material
Asbestos Types: Tremolite <0.25 % pc
Other Material: Non-Asbestos/Inert 38.1 %
Comment: Heat Sensitive (organic): 52.4%; Acid Soluble (inorganic): 9.4%; Inert (Non-asbestos): 38.1%

See Reporting notes on last page

PLM Bulk Asbestos Report

11119148.04; City Of San Leandro; San Leandro Marina

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
11119148-121	917101071-10	***No***	NAD [1]

Location: Wall Texture (White) & JC (White) / HMO - West Wall NW Corner

(by 400 pt ct)
by Paola Ducoing
on 10/10/17

Analyst Description: Off-White, Homogeneous, Non-Fibrous, Bulk Material

Asbestos Types:

Other Material: Non-Asbestos/Inert 24.2 %

Comment: Heat Sensitive (organic): 54.6%; Acid Soluble (inorganic): 21.3%; Inert (Non-asbestos): 24.2%

Reporting Notes:

(1) EPA 400 Point Count Analysis performed on Inert Residue remaining after 480C heat and HCl acid treatments

Analyzed By: Paola Ducoing Paola ; Date Analyzed: 10/10/2017 10/10/17

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/R-93/116, including requirements for EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0, CA ELAP lab #2322); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: Paola

718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330	**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
	Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170916 13

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-29	Tar & gravel roof system (black)	Restroom C - Center - South	MM	NF
11119148-30	Vent Penetration Mastic (black)	Restroom C - Center - South	MM	NF
11119148-31	Vapor Barrier (black)	Restroom C - South wall at SE corner	MM	NF
11119148-32	Ceramic wall tile (grey) + mortar (light grey) + grout (dark grey)	Restroom C - SE corner	MM/SM	NF
11119148-32A	Ceramic floor tile (grey) + mortar (light grey) + grout (dark grey) + weather barrier (black)	Restroom C - NW corner	MM/SM	NF
11119148-33	Concrete stem wall (grey)	Restroom C - SW corner	MM	NF
11119148-34	Concrete stem wall (grey)	Restroom D - SE corner	MM	NF
11119148-35	Tar and gravel Rolled roofing (black)	Restroom D - North roof at vent	MM	NF
11119148-36	Tar and gravel Rolled roofing (black)	Restroom D - Roof - Center South at peak	MM	NF
11119148-37	Roof penetration mastic (black)	Restroom D - Roof - Center at vent	MM	NF
11119148-38	Vent Penetration Mastic (black)	Restroom D - Roof - NE corner at skylight	MM	NF
11119148-39	Ceramic wall tile (grey) + mortar (light grey) + grout (dark grey)	Restroom D - East wall at SE corner	MM	NF
11119148-40	Ceramic floor tile (grey) + mortar (light grey) + grout (dark grey)	Restroom D - North shower wall at NE corner	MM	NF
11119148-41	Ceramic floor tile (grey) + mortar (light grey) + grout (dark grey)	Restroom D - Bathroom wall at NE corner	MM	NF

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		Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-55	Wall texture (yellow + green) + JC (white)	Restroom E - Men's - South wall at SE corner	SM	F
11119148-56	Wall texture (yellow + green) + JC (white)	Restroom E - Women's - South wall at center	SM	F
11119148-57	Wall texture (yellow + green) + JC (white)	Restroom E - Women's - NE corner	SM	F
11119148-58	Drywall (white) + JC (white) + wood	Restroom E - Men's - SE corner	MM	F
11119148-59	6" ceramic base tile (tan) + mortar (brown) + mastic (cream)	Restroom E - Men's - East wall at sE corner	MM	NF
11119148-60	6" ceramic base tile (tan) + mortar (brown) + mastic (cream)	Restroom E - Men's - East wall at center	MM	NF
11119148-61	6" ceramic base tile (tan) + mortar (brown) + mastic (cream)	Restroom E - Women's - West wall at SW corner	MM	NF
11119148-62	6" ceramic base tile (brown) + grout (brown) + mastic (yellow)	Restroom E - SW corner	MM	NF
11119148-63	Ceramic wall tile (grey) + mortar (light grey) + grout (dark grey)	Restroom E - SE corner	MM	NF
11119148-64	Ceramic floor tile (tan pattern) + mortar (brown) + base (grey)	Restroom E - NW corner	MM	NF
11119148-65	Tar (black)	Restroom F - Exterior Foundation - SW corner at piling at entry	MM	NF
11119148-66	Vent Penetration Mastic (black)	Restroom F - Roof - West at center	MM	NF
11119148-67	Caulking (black)	Restroom F - Roofing block - SE corner	MM	NF
11119148-68	Tar paper/weather barrier (black)	Restroom F - SW corner	MM	NF

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718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330	**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
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	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-83	6" ceramic base tile (tan) + mortar (brown) + mastic (light brown)	Restroom F - Women's at South wall center under sink	MM	NF
11119148-84	Ceramic floor tile (red) + grout (brown) + mastic (cream)	Restroom F - NE corner	MM	NF
11119148-85	Ceramic floor tile (red) + grout (brown) + mastic (cream)	Restroom F - Women's at NW corner	MM	NF
11119148-86	Ceramic floor tile (red) + grout (brown) + mastic (cream)	Restroom F - Women's at NE corner	MM	NF
11119148-87	12"x12" VFT (grey streaked) + mastic (black)	Harbor Master's Office (HMO) - Main office at NE corner	MM	NF
11119148-88	12"x12" VFT (grey streaked) + mastic (black)	HMO - Foyer at SW corner	MM	NF
11119148-89	12"x12" VFT (grey streaked) + mastic (black)	HMO - Main office at SE corner	MM	NF
11119148-90	Tar and gravel roofing system (black)	HMO - Roof at NE corner	MM	NF
11119148-91	Tar and gravel roofing system (black)	HMO - Roof at NW corner	MM	NF
11119148-92	Tar and gravel roofing system (black)	HMO - Roof at East side	MM	NF
11119148-93	Roof coating with gravel (grey + pink)	HMO - Roof at SE corner	MM	NF
11119148-94	Hose (black)	HMO - under building at SW corner	MM	NF
11119148-95	Traction coat (black) + concrete (grey)	HMO - ramp at stair entrance	MM	NF
11119148-96	Vapor Barrier (black)	HMO - Exterior at NW corner	MM	NF

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718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330	**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
	Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-97	Vapor Barrier (black)	HMO - Storage room at NE corner	MM	NF
11119148-98	12"x12" ACT (tan) + mastic (brown)	HMO - Foyer at NW corner ceiling	MM	NF
11119148-99	Wood panel mastic (brown)	HMO - SW office behind wood panel	MM	NF
11119148-100	Terrazzo Shower Pan (marbled white)	HMO - Bathroom at shower at NE corner	MM	NF
11119148-101	Foam (pink)	HMO - Dock at SE corner	MM	F
11119148-102	HVAC ducting wrap (yellow)	HMO - Kitchen hall	TSI	F
11119148-103	Insulation batt (pink) + paper + backing (silver)	HMO - Kitchen hall	TSI	F
11119148-104	Conduit penetration sealant (dark grey)	HMO - Roof at Center-S at HVAC	MM	NF
11119148-105	Conduit penetration sealant (dark grey)	HMO - Roof at Center-S at HVAC	MM	NF
11146431-106	Flashing sealant (dark grey) at penetration	HMO - Roof at Center-S at HVAC	MM	NF
11146431-107	Vent Penetration Mastic (black)	HMO - Roof - Center at penetration	MM	NF
11146431-108	Vent Penetration Mastic (black)	HMO - Roof - Center North at RR vent	MM	NF
11146431-109	Drywall (white) + JC (white)	HMO - Foyer at SE corner	MM	F
11146431-110	Drywall (white) + JC (white)	HMO - Storage - West wall at SE corner	MM	F

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718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330	**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
	Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 1170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11146431-111	Ceiling Drywall (white) + JC (white)	HMO - Bathroom at SW corner	MM	F
11146431-112	12x12 ACT pin and fissure (white)	HMO - Foyer at NW corner ceiling	MM	F
11146431-113	Weather barrier (black)	HMO - Water heater closet floor - under floorboard. at NW corner	MM	NF
11146431-114	Weather barrier (black)	HMO - Water heater closet floor - under floorboard at NW corner	MM	NF
11146431-115	RSF (tan and gold) + mastic (yellow)	HMO - Storage at NE corner	MM	F
11146431-116	RSF (tan and gold) + mastic (yellow)	HMO - Water heater closet at NW corner	MM	F
11146431-117	RSF (tan and gold) + mastic (yellow)	HMO - Kitchen at SW corner	MM	F
11146431-118	4" Base Cove (brown) + mastic (beige)	HMO - West wall at SE corner	MM	NF
11146431-119	4" Base Cove (brown) + mastic (beige)	HMO - Bathroom - West wall at SW corner	MM	NF
11146431-120	Wall texture (white) + JC (white)	HMO - Entry at North Wall	SM	F
11146431-121	Wall texture (white) + JC (white)	HMO - West wall at NW corner	SM	F
11146431-122	Wall texture (white) + JC (white)	HMO - Storage at E wall at center	SM	F
11146431-123	Tar pipe coating (grey/black)	Building Pad/Disused Concrete Dock (Building Pad) - Corrigated metal pipe under dock at SW corner	MM	NF
11146431-124	Concrete pad (grey)	Building Pad - Top at NW corner	MM	NF

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GHD 718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330		**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
		Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
		Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
		Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 917091613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-1	Tar & gravel roof system (black)	Restroom A - Roof - Center E at peak	MM	NF
11119148-2	Tar & gravel roof system (black)	Restroom A - Roof at NW corner	MM	NF
11119148-3	Tar & gravel roof system (black)	Restroom A - Roof at SW corner	MM	NF
11119148-4	Electrical Conduit Tape (grey) + insulation (black)	Restroom A - North Wall at slab	MM	NF
11119148-5	Weather barrier (black)	Restroom A - Roof - Flashing at SE corner	MM	NF
11119148-6	Weather barrier (black)	Restroom A - Roof - Flashing at SW corner	MM	NF
11119148-7	Roof Vent Penetration Mastic (black)	Restroom A - ceiling at SW corner	MM	NF
11119148-8	Ceiling texture (white)	Restroom A - Roof - Vent at center	SM	F
11119148-9	Exterior paint (red/grey)	Restroom A - North wall - Electrical box at center	SM	NF
11119148-10	Floor tile (grey marbled) + grout (brown) + mortar (grey)	Restroom A - Interior at SE corner	MM	NF
11119148-11	Floor tile (grey marbled) + grout (brown) + mortar (grey)	Restroom A - Interior at NE corner	MM	NF
11119148-12	Wall tile (grey marbled) + grout (brown) + mortar (grey) + patch (dark grey)	Restroom A - Interior - West wall at SW corner	MM	NF
11119148-13	Wall tile (grey marbled) + grout (brown) + mortar (grey) + patch (dark grey)	Restroom A - Interior - East wall at center	MM	NF
11119148-14	Concrete stem wall (grey)	Restroom A - Exterior at SW corner	MM	NF

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GHD	718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330	**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
		Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
		Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
		Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170916 13

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-15	Tar & gravel roof system (black)	Restroom B - Roof - Center - South at peak	MM	NF
11119148-16	Tar & gravel roof system (black)	Restroom B - Roof at NW skylight	MM	NF
11119148-17	Tar & gravel roof system (black)	Restroom B - Roof at NE corner	MM	NF
11119148-18	Vent Penetration Mastic (black)	Restroom B - Roof at vent	MM	NF
11119148-19	Exterior paint (white) over wood	Restroom B - Exterior - Trim at NE corner	MM	NF
11119148-20	Concrete stem wall (grey)	Restroom B - Exterior - North wall at NE corner	MM	NF
11119148-21	Concrete stem wall (grey)	Restroom B - Exterior at SW corner	MM	NF
11119148-22	Seam caulk (pink)	Restroom B - Interior Men's shower at North wall at base	MM	NF
11119148-23	Wall texture (white) + plaster (white) + wood	Restroom B - Interior Men's at SE corner	SM	F
11119148-24	Wall texture (white) + plaster (white) + wood	Restroom B - Interior ceiling at NW corner	SM	F
11119148-25	Wall texture (white) + plaster (white) + wood	Restroom B - Interior Women's - West wall at SW corner	SM	F
11119148-26	Floor tile (grey marbled) + grout (brown) + mortar (grey)	Restroom B - Interior Women's South wall at SW corner	MM	NF
11119148-27	Wall tile (grey marbled) + grout (brown) + mortar (grey) + patch (dark grey)	Restroom B - Interior Men's North wall at NW corner	MM	NF
11119148-28	Tar & gravel roof system (black)	Restroom C - Roof at NE corner	MM	NF

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718 3rd Street Eureka, California Ph: (707) 443-8326 Fax: (707) 444-8330	**Contact Name:**	Scott Harris and/or Matt Tolley	**Sample Date:**	9/20-9/21 2017
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	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-29	Tar & gravel roof system (black)	Restroom C - Center - South	MM	NF
11119148-30	Vent Penetration Mastic (black)	Restroom C - Center - South	MM	NF
11119148-31	Vapor Barrier (black)	Restroom C - South wall at SE corner	MM	NF
11119148-32	Ceramic wall tile (grey) + mortar (light grey) + grout (dark grey)	Restroom C - SE corner	MM/SM	NF
11119148-32A	Ceramic floor tile (grey) + mortar (light grey) + grout (dark grey) + weather barrier (black)	Restroom C - NW corner	MM/SM	NF
11119148-33	Concrete stem wall (grey)	Restroom C - SW corner	MM	NF
11119148-34	Concrete stem wall (grey)	Restroom D - SE corner	MM	NF
11119148-35	Tar and gravel Rolled roofing (black)	Restroom D - North roof at vent	MM	NF
11119148-36	Tar and gravel Rolled roofing (black)	Restroom D - Roof - Center South at peak	MM	NF
11119148-37	Roof penetration mastic (black)	Restroom D - Roof - Center at vent	MM	NF
11119148-38	Vent Penetration Mastic (black)	Restroom D - Roof - NE corner at skylight	MM	NF
11119148-39	Ceramic wall tile (grey) + mortar (light grey) + grout (dark grey)	Restroom D - East wall at SE corner	MM	NF
11119148-40	Ceramic floor tile (grey) + mortar (light grey) + grout (dark grey)	Restroom D - North shower wall at NE corner	MM	NF
11119148-41	Ceramic floor tile (grey) + mortar (light grey) + grout (dark grey)	Restroom D - Bathroom wall at NE corner	MM	NF

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	Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 917091613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-42	Wall texture (white) + plaster (white) + wood	Restroom D - (W) Bathroom - West wall at SW corner	SM	NF
11119148-43	Traction coat (tan) + concrete (grey)	Restroom D - (M) Bathroom wall at SW corner	MM	NF
11119148-44	Weather barrier (black)	Restroom D - At SE corner	MM	NF
11119148-45	Roof caulking (white) + flashing (grey)	Restroom D - At NE corner	MM	NF
11119148-46	Window caulking (cream)	Restroom D - West wall at center window	MM	NF
11119148-47	Caulking (white)	Restroom D - East wall above wall tile.	MM	NF
11119148-48	Flat roof panel (cream)	Restroom E - Flat roof at sloped transition	MM	NF
11119148-49	Roof Fastener caulk (grey)	Restroom E - Flat roof at sloped transition btwn upper/lower	MM	NF
11119148-50	Exterior paint (grey) (over wood)	Restroom E - Exterior - South wall at SE corner	MM	NF
11119148-51	Mastic (cream) + caulking (cream)	Restroom E - NE corner	MM	NF
11119148-52	Weather barrier (black)	Restroom E - Center Closet -SW corner	MM	NF
11119148-52A	Weather barrier (black)	Restroom E - SW corner	MM	NF
11119148-53	Wall texture (yellow + green) + JC (white)	Restroom E - Men's - NW corner	SM	F
11119148-54	Wall texture (yellow + green) + JC (white)	Restroom E - Men's - NE corner	SM	F

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		Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
		Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-55	Wall texture (yellow + green) + JC (white)	Restroom E - Men's - South wall at SE corner	SM	F
11119148-56	Wall texture (yellow + green) + JC (white)	Restroom E - Women's - South wall at center	SM	F
11119148-57	Wall texture (yellow + green) + JC (white)	Restroom E - Women's - NE corner	SM	F
11119148-58	Drywall (white) + JC (white) + wood	Restroom E - Men's - SE corner	MM	F
11119148-59	6" ceramic base tile (tan) + mortar (brown) + mastic (cream)	Restroom E - Men's - East wall at sE corner	MM	NF
11119148-60	6" ceramic base tile (tan) + mortar (brown) + mastic (cream)	Restroom E - Men's - East wall at center	MM	NF
11119148-61	6" ceramic base tile (tan) + mortar (brown) + mastic (cream)	Restroom E - Women's - West wall at SW corner	MM	NF
11119148-62	6" ceramic base tile (brown) + grout (brown) + mastic (yellow)	Restroom E - SW corner	MM	NF
11119148-63	Ceramic wall tile (grey) + mortar (light grey) + grout (dark grey)	Restroom E - SE corner	MM	NF
11119148-64	Ceramic floor tile (tan pattern) + mortar (brown) + base (grey)	Restroom E - NW corner	MM	NF
11119148-65	Tar (black)	Restroom F - Exterior Foundation - SW corner at piling at entry	MM	NF
11119148-66	Vent Penetration Mastic (black)	Restroom F - Roof - West at center	MM	NF
11119148-67	Caulking (black)	Restroom F - Roofing block - SE corner	MM	NF
11119148-68	Tar paper/weather barrier (black)	Restroom F - SW corner	MM	NF

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	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-69	Tar paper/weather barrier (black)	Restroom F - South wall at SE corner	MM	NF
11119148-70	Drywall (white) + JC (white) (on wood)	Restroom F - West wall at NE corner	MM	F
11119148-71	Drywall (white) + JC (white) (on wood)	Restroom F - SW corner	MM	F
11119148-72	Drywall (white) + JC (white) (on wood)	Restroom F - East bathroom (W) at SW corner	MM	F
11119148-73	Caulking (white)	Restroom F - East bathroom (W) at SE corner	MM	NF
11119148-74	Window Caulking (white)	Restroom F - NW corner	MM	NF
11119148-75	Weather coating on gate (grey)	Restroom F - at entrance	MM	NF
11119148-76	Wall texture (blue + white) + JC (white)	Restroom F - North wall at NE corner	SM	F
11119148-77	Wall texture (blue + white) + JC (white)	Restroom F - East wall at SW corner	SM	F
11119148-78	Vinyl membrane roofing system (white)	Restroom F - Roof - Center at South entrance	MM	NF
11119148-79	Vinyl membrane roofing system (white)	Restroom F - Roof - Center East at South edge	MM	NF
11119148-80	Ceramic floor tile (brown/tan pattern) + grout (brown) + mortar (grey)	Restroom F Men's at SW corner	MM	NF
11119148-81	Ceramic floor tile (brown/tan pattern) + grout (brown) + mortar (grey)	Restroom F - Women's at South wall center under sink	MM	NF
11119148-82	6" ceramic base tile (tan) + mortar (brown) + mastic (light brown)	Restroom F Men's at SW corner	MM	NF

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	Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
	Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-83	6" ceramic base tile (tan) + mortar (brown) + mastic (light brown)	Restroom F - Women's at South wall center under sink	MM	NF
11119148-84	Ceramic floor tile (red) + grout (brown) + mastic (cream)	Restroom F - NE corner	MM	NF
11119148-85	Ceramic floor tile (red) + grout (brown) + mastic (cream)	Restroom F - Women's at NW corner	MM	NF
11119148-86	Ceramic floor tile (red) + grout (brown) + mastic (cream)	Restroom F - Women's at NE corner	MM	NF
11119148-87	12"x12" VFT (grey streaked) + mastic (black)	Harbor Master's Office (HMO) - Main office at NE corner	MM	NF
11119148-88	12"x12" VFT (grey streaked) + mastic (black)	HMO - Foyer at SW corner	MM	NF
11119148-89	12"x12" VFT (grey streaked) + mastic (black)	HMO - Main office at SE corner	MM	NF
11119148-90	Tar and gravel roofing system (black)	HMO - Roof at NE corner	MM	NF
11119148-91	Tar and gravel roofing system (black)	HMO - Roof at NW corner	MM	NF
11119148-92	Tar and gravel roofing system (black)	HMO - Roof at East side	MM	NF
11119148-93	Roof coating with gravel (grey + pink)	HMO - Roof at SE corner	MM	NF
11119148-94	Hose (black)	HMO - under building at SW corner	MM	NF
11119148-95	Traction coat (black) + concrete (grey)	HMO - ramp at stair entrance	MM	NF
11119148-96	Vapor Barrier (black)	HMO - Exterior at NW corner	MM	NF

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		Contact Email:	scott.harris@ghd.com, matt.tolley@ghd.com	**Client:**	City of San Leandro
		Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
		Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170911613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11119148-97	Vapor Barrier (black)	HMO - Storage room at NE corner	MM	NF
11119148-98	12"x12" ACT (tan) + mastic (brown)	HMO - Foyer at NW corner ceiling	MM	NF
11119148-99	Wood panel mastic (brown)	HMO - SW office behind wood panel	MM	NF
11119148-100	Terrazzo Shower Pan (marbled white)	HMO - Bathroom at shower at NE corner	MM	NF
11119148-101	Foam (pink)	HMO - Dock at SE corner	MM	F
11119148-102	HVAC ducting wrap (yellow)	HMO - Kitchen hall	TSI	F
11119148-103	Insulation batt (pink) + paper + backing (silver)	HMO - Kitchen hall	TSI	F
11119148-104	Conduit penetration sealant (dark grey)	HMO - Roof at Center-S at HVAC	MM	NF
11119148-105	Conduit penetration sealant (dark grey)	HMO - Roof at Center-S at HVAC	MM	NF
11146431-106	Flashing sealant (dark grey) at penetration	HMO - Roof at Center-S at HVAC	MM	NF
11146431-107	Vent Penetration Mastic (black)	HMO - Roof - Center at penetration	MM	NF
11146431-108	Vent Penetration Mastic (black)	HMO - Roof - Center North at RR vent	MM	NF
11146431-109	Drywall (white) + JC (white)	HMO - Foyer at SE corner	MM	F
11146431-110	Drywall (white) + JC (white)	HMO - Storage - West wall at SE corner	MM	F

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		Analysis Method:	PLM (Asbestos) - please provide result for each layer where multiple materials exist	**Site:**	**San Leandro Marina**
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BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170916613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11146431-111	Ceiling Drywall (white) + JC (white)	HMO - Bathroom at SW corner	MM	F
11146431-112	12x12 ACT pin and fissure (white)	HMO - Foyer at NW corner ceiling	MM	F
11146431-113	Weather barrier (black)	HMO - Water heater closet floor - under floorboard. at NW corner	MM	NF
11146431-114	Weather barrier (black)	HMO - Water heater closet floor - under floorboard at NW corner	MM	NF
11146431-115	RSF (tan and gold) + mastic (yellow)	HMO - Storage at NE corner	MM	F
11146431-116	RSF (tan and gold) + mastic (yellow)	HMO - Water heater closet at NW corner	MM	F
11146431-117	RSF (tan and gold) + mastic (yellow)	HMO - Kitchen at SW corner	MM	F
11146431-118	4" Base Cove (brown) + mastic (beige)	HMO - West wall at SE corner	MM	NF
11146431-119	4" Base Cove (brown) + mastic (beige)	HMO - Bathroom - West wall at SW corner	MM	NF
11146431-120	Wall texture (white) + JC (white)	HMO - Entry at North Wall	SM	F
11146431-121	Wall texture (white) + JC (white)	HMO - West wall at NW corner	SM	F
11146431-122	Wall texture (white) + JC (white)	HMO - Storage at E wall at center	SM	F
11146431-123	Tar pipe coating (grey/black)	Building Pad/Disused Concrete Dock (Building Pad) - Corrigated metal pipe under dock at SW corner	MM	NF
11146431-124	Concrete pad (grey)	Building Pad - Top at NW corner	MM	NF

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BULK SAMPLE COLLECTION CHAIN OF CUSTODY 1709163

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11146431-125	Flashing caulk (grey)	Building Pad - Top at NW corner	MM	NF
11146431-126	Pebbled concrete stairs (grey)	Building Pad - Stairs North at center	MM	NF
11146431-127	Tar (black)	Building Pad - Top Pad at SW side	MM	NF
11146431-128	Concrete surface (grey)	Building Pad - Center (North)	MM	NF
11146431-129	Concrete surface (grey)	Building Pad - Top at NE corner	MM	NF
11146431-130	Caulking (grey)	Building Pad - Top at NE corner	MM	NF
11146431-131	Concrete deck (grey & marbled)	Building Pad - North at center	MM	NF
11146431-132	Surface coating (grey)	Building Pad - Top at NW corner	MM	NF
11146431-133	Concrete post (grey)	K Dock - Slip 17 at east side	MM	NF
11146431-134	Tar (black)	K Dock - Slip 19 at east side	MM	NF
11146431-135	Tar (black)	K Dock - Slip 17 - East post across from slip 17	MM	NF
11146431-136	Tar (black)	K Dock - Slip 21 at East side of post	MM	NF
11146431-137	Protective rubber sheeting (black) + tar (black)	K Dock - Slip 19 at east side	MM	NF
11146431-138	Protective rubber sheeting (black) + tar (black)	K Dock - Slip 7 at east side	MM	NF

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BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170916613

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11146431-139	Tar (black)	K Dock - Slip 9 at NE side of pier	MM	NF
11146431-140	Foam (grey)	K Dock - Slip 19 at center	MM	F
11146431-141	Float foam (pink)	K Dock - Slip 29 at SW corner	MM	F
11146431-142	Caulking (brown)	K Dock - Slip 7	MM	NF
11146431-143	Concrete (grey)	K Dock - Slip 9 - West entrance at pier center	MM	NF
11146431-144	Composite plastic rail (grey)	K Dock - Slip 9 at NE side of pier	MM	NF
11146431-145	Caulking (grey)	K Dock - Sip 11 Roof at NE corner	MM	NF
11146431-146	Vinyl bumper	K Dock - Slip 21 - West at center	MM	NF
11146431-147	Float foam (blue)	L-M Dock - Pier 13	MM	F
11146431-148	Traction material (grey)`	L-M Dock - Slip 48 at SW corner	MM	NF
11146431-149	Flashing (metal) + caulking (white)	L-M Dock - Slip 10 at ceiling	MM	NF
11146431-150	Vinyl bumper (tan)	L-M Dock - Slip 46 at NW corner	MM	NF
11146431-151	Vinyl bumper (white)	S Dock - Edge at NE corner	MM	NF
11146431-152	Tar (black)	O-N Dock - Pier at SW corner	MM	NF

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BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170916013

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11146431-153	Foam (orange)	O-N Dock - Pier 11 at SE corner	MM	F

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	Turnaround Time:	**STANDARD**	**Project #:**	11119148.04

BULK SAMPLE COLLECTION CHAIN OF CUSTODY 9170916013

Sample Number	Sample Description	Location	USEPA Material Type	Friability
11146431-154	Gasket (black) + mastic (grey)	D Dock - railing at E side.	MM	NF
11146431-155	Traction coat (white and clear)	D Dock - Slip 4 at NW corner at end	MM	NF
11146431-156	Traction coat (white) over wood	D Dock - Slip 2 at NW corner	MM	NF
11146431-157	Concrete pad (grey)	D Dock - Slip 1 at center	MM	NF
11146431-158	Vinyl bumper (grey/tan)	D Dock - Slip 23 at North end at center	MM	NF
11146431-159	Vinyl membrane roofing system (white) + drywall (white)	Restroom F - Roof at center	MM	NF
No Sample	FRP Panel Mastic	HMO - Restroom - Interior walls, including shower surround and ceiling	MM	NF

Notes:

F = Friable

MM = Miscellaneous Material

NF = Nonfriable

RSF = Resilient Sheet Flooring

SM = Surfacing Material

VFT = Vinyl Floor Tile

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Appendix D Regulatory Overview for Asbestos

This appendix section provides a summary of governmental regulations applicable to asbestos and is applicable to the impaction of the asbestos building materials present at the project site.

E1.1 Asbestos Regulations

E1.1.1 Code of Federal Regulations

The following is a summary list of United States governmental regulations concerning asbestos:

1. 29 Code of Federal Regulations (CFR) 1926.1101, Asbestos (including all mandatory appendices)
2. 40 CFR 61, Subpart A and Subpart M USEPA NESHAP
3. 40 CFR Parts 261, 265, and 268, Hazardous Waste Management
4. 40 CFR Part 763, Asbestos Emergency Hazard Emergency Response Act (AHERA)
5. 49 CFR Parts 172, 173, 178, 179, Hazardous Material Transportation

E1.1.2 California Code of Regulations

The following is a summary list of State of California governmental regulations concerning asbestos:

1. 8 CCR Division 1, Chapter 4, Construction Safety Orders
2. 8 CCR Article 2.5, Registration of Asbestos Work, Sections 341.6–341.14
3. 8 CCR Section 1529, Asbestos
4. 8 CCR Section 5144, Respiratory Protection
5. 22 CCR Division 4.5, Environmental Health Standards for Management of Hazardous Waste
6. California Environmental Protection Agency (Cal/EPA), California Air Resource Board (CARB), Final Regulation Order, Section 93105, Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations

E1.1.3 Definitions

For the purpose of this report, the following definitions will apply to the discussion of hazardous materials contained herein.

1. Abatement – Hazardous materials related construction undertaken for the purpose of eliminating or reducing existing recognized hazardous materials related hazards as adapted from 29 Code of Federal Regulations (CFR), Part 1903 Inspections, Citation and Proposed Penalties, Standard 1903.19 Abatement Verification (29 CFR 1903.19), Subsection (b)(1).
2. Asbestos Containing Material (ACM) – A material determined to contain greater than one percent (1%) asbestos by weight as defined by the Title 8 California Code of Regulations (CCR), Subchapter 4, Construction Safety Orders, Article 4. Dusts, Fumes, Mists, Vapors, and Gases, Section 1529 (8 CCR 1529), Subsection (b).

3. Asbestos Containing Construction Material (ACCM) – A construction material determined to contain detectable levels of asbestos fibers in concentrations of greater than 0.1 percent asbestos by weight as defined by Chapter 3.2 of the California Occupational Safety and Health Regulations, Subchapter 2, Regulations of the Division of Occupational Safety and Health, Article 2.5. Registration--Asbestos- Related Work, Section 341.6(c).
4. Containment – Protective physical barriers and associated means and methods used to contain airborne contaminant dust within the abatement work area and prevent contamination of surfaces and grounds below and adjacent to areas where a hazardous material is being disturbed.
5. Hazardous Material – Substance with properties that can cause injury or illness to humans or adversely impact living organisms in the environment under certain conditions. Hazardous materials include both organic and inorganic chemicals and chemical compounds. Includes any substance on the list of hazardous substances prepared by the Director, California Department of Industrial Relations, pursuant to Labor Code Section 6382 and also known as the Director's List. For the project, hazardous materials include, but are not limited to: asbestos, lead and universal waste.
6. Hazardous Waste – Waste material that is listed or meets the criteria for hazardous waste as set forth in CCR, Title 22, Division 4.5 and Article 9. at minimum, with regard to asbestos, the following shall be considered to be hazardous wastes with respect to this section:
    a. Nonfriable Asbestos Containing Material (Category I and II) rendered friable during renovation or renovation
    b. Regulated Asbestos Containing Material

E1.4 Nonfriable Asbestos Containing Material

Friability is a qualitative measure of a material's affinity for producing airborne asbestos fibers (dust). A material that, when dry, can be crumbled, pulverized or reduced to powder using hand pressure is classified as friable according to USEPA regulations. Nonfriable materials are those that do not meet the above-definition of friable.

Nonfriable materials are classified by the USEPA into the following categories:

1. Category I Nonfriable – Any asbestos containing gasket, packing, resilient floor covering, or asphalt roofing product that contains greater than 1% asbestos as determined by PLM, that, when dry cannot be crumbled, pulverized, or reduced to a powder using hand pressure.
2. Category II Nonfriable – Any material, excluding Category I nonfriable ACM, that contains greater than 1% asbestos as determined by PLM, that, when dry cannot be crumbled, pulverized, or reduced to a powder using hand pressure.

Category I Nonfriable ACM may be left in place during renovation work. Certain Category II Nonfriable ACM may be left in place during renovation or renovation; however, Category II ACM that may become friable (e.g., damaged, brittle and/or cementitious materials) must be removed prior to renovation or renovation. Category I ACM and some Category II ACM may be left in situ

during renovation; however Cal/OSHA will regulate such renovation activities as Class II work, as defined herein.

Note: Cal/OSHA employee protection protocols, including those summarized herein, apply to any disturbance of asbestos material, regardless of the USEPA material category (Category I, Category II, RACM), concentration of asbestos, or quantity of material. As such worker protection protocols per 8 CCR 1529 apply to work disturbing any asbestos.

If a nonfriable material is impacted with mechanical means (power tools, abrasive mechanical means, etc.) such material shall no longer be classified as nonfriable and shall instead be classified as RACM. A nonfriable material that has been significantly damaged may also be classified as friable, if the damaged material can be reduced to powder or crumbled using hand pressure.

E1.5 Regulated Asbestos Containing Material

A material is regulated by the USEPA as RACM if it conforms to one or more of the following:

1. It is a friable ACM
2. It is a Category I or II ACM that has become friable
3. It is a Category I ACM that will be subject to mechanical impaction
4. It is a Category II ACM that has a high probability of becoming friable during the course of renovation or renovation activities that are expected to impact the material

While the USEPA does not regulate material determined by PLM laboratory analysis using point count 400 methodology to contain less than 1% asbestos, some Cal/OSHA regulations apply to material determined to contain any detectable amount of asbestos.

Pursuant to NESHAP regulations, nonfriable materials are not classified as RACM if removed essentially intact using hand methods and not made “friable” during removal. The use of mechanical means to remove or impact nonfriable ACM will render that material friable, thus mechanically-impacted materials shall be considered RACM and subject to handling and disposal requirements governing RACM.

Asbestos containing material that meets the USEPA definition of RACM, if present in quantities greater than the Yolo Solano Air Quality Management District (BAAQMD) quantity thresholds noted in Section 6, must be removed from the project site prior to renovation. Additionally, Category I and Category II ACM that is associated with a fire-damaged structure must be classified as RACM, per USEPA regulation. Materials identified in this report as USEPA RACM will require disposal as a non-Resource Conservation and Recovery Act (RCRA) California hazardous asbestos waste, if disposed of in California.

Abatement of RACM that is Thermal System Insulation (TSI) or surfacing material requires Class I abatement methods as defined by the Occupational Safety and Health Administration (OSHA) and Cal/OSHA. RACM that is not TSI or surfacing material requires Class II abatement methods as defined by OSHA and Cal/OSHA. Class I and Class II abatement methods are described below.

E1.6 Cal/OSHA Work Classes

Cal/OSHA regulates material containing asbestos at any detectable level, thus worker protection, material handling, material labelling, and material disposal protocols per California Code of Regulations (CCR), Title 8, Section 1529 (8 CCR 1529) apply to impaction of any material determined to contain asbestos above the laboratory detection limit. Impaction of material determined to contain asbestos in concentrations of less than 1% by weight (ACCM and <0.1%) is categorized by Cal/OSHA as unclassified work.

Cal/OSHA regulates worker exposure to airborne asbestos by instituting work practice, notification, training, and personal protective equipment requirements for employers and employees. In an effort to mitigate worker exposure to airborne asbestos fibers, Cal/OSHA mandates specific material containerization and work practices when workers impact materials containing asbestos at any detectable level. Cal/OSHA categorizes asbestos related work into four work classes as described below and defined in 8 CCR 1529.

E1.6.1 Class I Work

Class I asbestos work consists of activities involving the removal of asbestos-containing TSI, asbestos-containing surfacing material, or PACM. TSI includes pipe, pipe fitting, duct, boiler, and flue asbestos-containing insulation. Surfacing material includes sprayed-on or troweled-on asbestos-containing fire proofing, acoustical plaster or decorative plaster. PACM is TSI or surfacing material installed prior to 1981. PACM is presumed to contain asbestos and must be handled according to Class I work protocols unless sampled and determined by PLM analysis to contain no detectable asbestos fibers. Class I abatement work is subject to OSHA and Cal/OSHA regulations. Class I work must be conducted within a regulated negative-pressure containment equipped with a three-stage decontamination chamber that includes an operable shower. Class I work must be performed by properly trained and protected workers using appropriate means and methods as described by 8 CCR 1529.

E1.6.2 Class II Work

Class II asbestos work means activities involving the impaction and removal of ACM, which is not TSI or surfacing material, and results in more than one bag of waste materials. This includes but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics. Class II work must be conducted within a regulated area containment and must be performed by properly trained and protected workers using appropriate means and methods as described by 8 CCR 1529.

E1.6.3 Class III Work

Class III asbestos work means activities involving the repair and maintenance operations, where ACM, including TSI, surfacing ACM and/or PACM, is likely to be disturbed. Class III asbestos removal operations are limited to work that generates no more waste than that which can fit into one 60 inch by 60-inch (60” x 60”) waste bag. Class III work must be conducted within a regulated area containment by properly trained and protected workers using appropriate means and methods described by 8 CCR 1529.

E1.6.4 Class IV Work

Class IV asbestos work means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste and debris resulting from Class I, II, and III activities. Class IV work must be conducted by properly trained and protected workers using appropriate means and methods described by 8 CCR 1529.

E1.7 Asbestos Containing Construction Material

Materials reported by laboratory analysis to contain detectable concentrations of asbestos fibers of less than 1% by weight are not regulated by the USEPA as ACM or RACM and are not governed by NESHAP regulations. While not regulated by the USEPA, materials containing less than 1% asbestos by weight are regulated by Cal/OSHA as ACCM and are subject to Cal/OSHA employee protection, waste labeling, and handling protocols. Employees impacting materials containing detectable levels of asbestos fibers, but in concentrations less than 1% asbestos by weight, must adhere to work practices and methods of compliance as mandated by Cal/OSHA and described in 8 CCR 1529.

E1.8 Exposure Limits for Asbestos

Employers must monitor the air their workers are breathing to determine the airborne concentration of asbestos fibers present in the work environment during the various shifts and while performing various tasks. Phase contract microscopy (PCM) sampling cassettes and low-volume air pumps are worn by employees during their work shift, typically for a period of eight hours. The PCM cassettes are analyzed by a laboratory and an exposure is determined, measured in asbestos fibers per cubic centimeter of air (fibers/cc), extrapolated across the eight-hour work shift. The eight-hour exposure is known as a time-weighted average (TWA).

The exposure limits noted in Table E1.8 Cal/OSHA Airborne Exposure Limits for Asbestos (Table E1.8) must be adhered to for employee protection to establish appropriate protective measures and controls when impacting material containing asbestos.

Table E1.8 Cal/OSHA Airborne Exposure Limits for Asbestos

Air Contaminant	Excursion Limit (Short Term Exposure Limit)	Permissible Exposure Limit (PEL) (8 hr TWA)
Asbestos	1.0 fibers/cc over 30 minutes	0.1 fibers/cc over an 8 hour TWA

Notes:

- Permissible Exposure Limit (PEL): Employer must ensure no employee is exposed above this level based on an 8 hour TWA. When employee expose levels meet or exceed the PEL, administrative, engineering and work practice controls must be implemented. Respiratory protection and other protective measures are required pending feasible engineering controls. Other training, monitoring, and medical surveillance requirements apply for exposure levels exceeding PEL.
- Short Term Exposure Limit (STEL): Short term exposure is measured over 30 minutes during periods of maximum expected exposure operations and is also known as the Excursion Limit

The Contractor should conduct representative breathing zone personal air monitoring of its employees, including a minimum of 25 percent of the crew, once each shift and repeated daily or until a negative exposure assessment (NEA), as derived in accordance with 8 CCR 1529 (f)(2)(C), can be established. A NEA is documented proof that a given activity will not expose employees to asbestos in concentrations above the PELs noted in Table E1.8. A NEA may be established by maintaining initial air monitoring from the beginning of a project that is representative of work employees will be performing during the entire project showing exposure below the PEL or Short Term Exposure Limit (STEL).

Workers should wear personal air sampling devices for the full duration of their shift (eight hours). At least one sample should be collected representing each position/job classification in each work area of the project site. If exposures are determined to be above the PEL or STEL, appropriate worker protections should be instituted per 8 CCR 1529. Exposure monitoring should document the source of asbestos emissions.

Until an employee exposure assessment is completed and it has been determined and documented that the employee is not exposed above the PEL, the Contractor should treat the employee as if the employee were exposed above the PEL and should implement employee protective measures per 8 CCR 1529. Monitoring should be conducted by an individual experienced and knowledgeable about the methods of air monitoring in compliance with applicable regulatory standards.

E2.1 Requirements for Asbestos Impaction

E2.1.1 Asbestos Administrative Controls

Employers must establish a written hazard communication (HAZCOM) training program and train their employees to the hazards to which they are exposed. A HAZCOM program should be implemented for employees who will impact asbestos. If exposure monitoring shows worker airborne exposure to asbestos above the PEL, or above the excursion limit, then additional training and worker certification is necessary.

Supervisors who oversee asbestos work shall have completed 40 hours of USEPA Asbestos Hazard Emergency Response Act (AHERA)-accredited supervisor training. Employees interacting with asbestos must have a level of training appropriate for the class of asbestos work, ranging from two hours (HAZCOM) to 32 hours (AHERA-accredited Worker). At no time should suspected or known asbestos material be drilled, cut, sanded, scraped, or otherwise disturbed by untrained personnel.

Asbestos disturbance and/or removal operations must be conducted by a Cal/OSHA-registered and State-licensed asbestos removal contractor. Contractor registration with Cal/OSHA is required if greater than 100 square feet of ACM, RACM, or ACCM are disturbed by a contractor within a one-year period of time. Employers whose employees disturb asbestos must file a written Report of Use of Regulated Carcinogens (Report of Use) form with Cal/OSHA. A Report of Use form must be filed with Cal/OSHA by employers whose workers disturb material containing greater than 0.1 percent asbestos. Disturbance of asbestos and/or abatement operations should be supervised by a Competent Person, as defined by 8 CCR 1529, who is trained, knowledgeable and qualified in the techniques of asbestos abatement.

One or more of the following specialty certifications for asbestos is/are required by the California Contractors' State License Board (CSLB) for contractors who disturb greater than 100 square feet of asbestos in a year (some exceptions for specific materials apply):

1. C-22 – Asbestos abatement
2. ASB – Asbestos Certification

E2.1.2 Work Practice Controls

Asbestos abatement should be performed by persons trained, qualified, licensed, and equipped to perform asbestos abatement. Employees must never be exposed to airborne asbestos above the PEL, thus specific administrative controls, work practice controls and personal protective equipment (PPE) protocols must be implemented by the employer. Whole-body coverings (including hood and foot-coverings), gloves, and HEPA cartridge-equipped respirators are the standard PPE utilized for asbestos work in most circumstances. The remainder of this section consists of a brief summary of selected work practices required when impacting materials containing asbestos.

A regulated area is required to be established using signage and/or barrier tape around a work area where asbestos is to be impacted if there is a "reasonable possibility" that airborne concentrations of asbestos will exceed the PEL (8 CCR 1529). A regulated area is also required for all Class I, II and III work. Regulated areas shall be demarcated "in a manner that minimized the number of persons within the area and protects persons outside the area from exposure to airborne asbestos" (8 CCR 1529). Access to regulated areas shall be limited to properly trained and protected workers.

The use of wet methods (water) to mitigate emissions of airborne dust is required whenever material containing asbestos is disturbed. The goal of using wet methods is to achieve no visible emissions of asbestos-related dust.

Vacuum cleaners equipped with High Efficiency Particulate Filters (HEPA) must be used by employees impacting material containing asbestos in detectable quantities and must also be used to address associated dust and debris. Material containing asbestos in detectable quantities may not be impacted by non-HEPA-equipped sanders, grinders, saws, or other abrasive power tools. Material containing asbestos (including associated dust and debris) may not be addressed using compressed air, dry sweeping, or dry shoveling.

Material containing asbestos in detectable quantities must be "promptly" containerized in leak tight containers. Prompt clean-up generally is understood to mean that material should not be left un-containerized (unpackaged or outside of a sealable disposal container or waste bin) after any work stoppage such as scheduled breaks and the end of any work shift. Waste containers containing ACM or RACM must be labeled in accordance with Cal/OSHA labeling requirements. Waste containers of RACM must be additionally labeled in accordance with USEPA labeling requirements.

E2.2 Asbestos Work Notifications

Notifications are required by regulatory agencies prior to conducting certain types of work which may impact hazardous materials. Pre-work notifications are required for the project by the BAAQMD and Cal/OSHA with jurisdictional authority over the project site as noted in Table 6.1 located in Section 6.

E2.2.1 Cal/OSHA Temporary Worksite Notification

For project activities which will involve asbestos-related work in excess of 100 square or linear feet, written notification must be made to Cal/OSHA. Such written notification to Cal/OSHA must be submitted to the nearest Cal/OSHA office exercising regulatory authority over the project at least 24 hours prior to the start of asbestos-related work. In addition, certain unexpected events related to asbestos work, such as employees exposed over the PEL without a respirator, must be reported to Cal/OSHA within 15 days of the incident.

E2.2.1 NESHAP Renovation or Renovation Notification

The USEPA NESHAP regulations are authorized by Section 112 of the Clean Air Act (published in 40 Code of Federal Regulations Parts 61 and 63) and specify work practices for asbestos to be followed during renovations and renovations of all structures meeting the NESHAP definition of a facility. The NESHAP regulations require the owner of the facility, or the facility operator, to notify a USEPA delegated authority at least 10 business days prior to the planned commencement of abatement, renovation, and/or renovation work triggering notification. The USEPA authority administering the NESHAP regulations for the project site is the BAAQMD.

A Renovation Notification must be supplied to the BAAQMD 10 business days before any work meeting one or more of the following criteria:

1. Impaction or removal of RACM in quantities greater than the notification thresholds noted in Section 6
2. Facility renovation, including unweighting or removal of any load-bearing structure
3. Intentional burning for fire training purposes

E2.3 Asbestos Disposal Requirements

Category I and Category II nonfriable ACM should be disposed of as asbestos-containing waste in California. Friable ACM (RACM), including nonfriable material that has become or will be rendered friable, should be disposed of in California as non-Resource Conservation and Recovery Act (non-RCRA) hazardous waste. Impacting nonfriable ACM with mechanical means will render such material friable and reclassify the material as RACM.

If point count laboratory analysis (Point Count 400) shows that a given material contains less than 1% asbestos, then such material is not considered a hazardous waste by USEPA, or the California Department of Toxic Substances Control (DTSC). Asbestos material containing less than 1% asbestos is not subject to Cal/OSHA asbestos waste labeling requirements. Waste materials containing less than 1% asbestos may generally be disposed of as construction debris in many California landfills and at many municipal transfer stations; however, the acceptance criteria of each facility may differ. The waste acceptor should be contacted, and their individual acceptance-criteria abided by, prior to waste transport and disposal.

Appendix E – Laboratory Certifications

Accreditations and Certifications for Laboratories Providing Analytical Data for the Project

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200346-0

AmeriSci Los Angeles
Carson, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-01-01 through 2017-12-31
Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Los Angeles
DBA: AmeriSci Los Angeles
24416 South Main Street, Suite 308
Carson, CA 90745
Mr. Glenn F. Massey
Phone: 310-834-4868 Fax: 310-834-4772
Email: gmassey@amerisci.com
http://www.amerisci.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200346-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

AmeriSci Los Angeles

24416 South Main Street

Carson, CA 90745

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2322**

Expiration Date: **9/30/2018**

Effective Date: **10/1/2016**

Sacramento, California
subject to forfeiture or revocation

for

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

October 31, 2017

Glenn Massey
AmeriSci Los Angeles
24416 South Main Street Suite 308
Carson, CA 90745

Dear Glenn Massey: Certificate No. 2322

This notice advises that the laboratory named above has been certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, *et seq.*

The Fields of Testing for which this laboratory has been certified are indicated on the enclosed "Fields of Testing" list. The certificate shall remain in effect until **September 30, 2018** unless it is revoked. This certificate is subject to an annual fee as determined by HSC 100860.1(a).

The application for renewal of this certificate must be received 90 days prior to the expiration date to remain in force according to HSC 100845(a). You must submit annual Proficiency Testing results before the due date of your annual fee to remain in compliance.

Any change in laboratory location or alteration to laboratory structure that could adversely affect quality of analysis in certified methods require notification prior to the change. Notification is also required for a transfer in ownership or appointment of new laboratory director within 30 days of the change (HSC, Section 100845(b) and (d)).

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories certified by the State of California.

Please contact our office at (916) 323-3431 or elapca@waterboards.ca.gov with questions.

Sincerely,

for

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

Enclosure

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

AmeriSci Los Angeles

24416 South Main Street
Carson, CA 90745
Phone: (310) 834-4868

Certificate No. 2322
Expiration Date 9/30/2018

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.150	009	Lead	EPA 200.9
103.160	001	Mercury	EPA 245.1
103.300	001	Asbestos	EPA 100.1
103.301	001	Asbestos	EPA 100.2

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.020	001	Conductivity	EPA 120.1
108.110	001	Turbidity	EPA 180.1
108.112	001	Boron	EPA 200.7
108.490	001	Hydrogen Ion (pH)	SM4500-H+ B-2000

Field of Testing: 109 - Toxic Chemical Elements of Wastewater

109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7
109.010	004	Barium	EPA 200.7
109.010	005	Beryllium	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	026	Vanadium	EPA 200.7

As of 10/31/2017, this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

109.010	027	Zinc	EPA 200.7
109.190	001	Mercury	EPA 245.1
Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste			
114.010	001	Antimony	EPA 6010B
114.010	002	Arsenic	EPA 6010B
114.010	003	Barium	EPA 6010B
114.010	004	Beryllium	EPA 6010B
114.010	005	Cadmium	EPA 6010B
114.010	006	Chromium	EPA 6010B
114.010	007	Cobalt	EPA 6010B
114.010	008	Copper	EPA 6010B
114.010	009	Lead	EPA 6010B
114.010	010	Molybdenum	EPA 6010B
114.010	011	Nickel	EPA 6010B
114.010	012	Selenium	EPA 6010B
114.010	013	Silver	EPA 6010B
114.010	014	Thallium	EPA 6010B
114.010	015	Vanadium	EPA 6010B
114.010	016	Zinc	EPA 6010B
114.103	001	Chromium (VI)	EPA 7196A
114.140	001	Mercury	EPA 7470A
114.241	001	Corrosivity - pH Determination	EPA 9045C
Field of Testing: 115 - Extraction Test of Hazardous Waste			
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312
Field of Testing: 121 - Bulk Asbestos Analysis of Hazardous Waste			
121.010	001	Bulk Asbestos	EPA 600/M4-82-020

GHD Inc.

5900 Hollis Street

Emeryville, CA 94608

T: (510) 420-0700 E: emeryville@ghd.com

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Document Status

Revision	Author	Reviewer	Reviewer Signature	Approved	Approver Signature	Date
Draft	Matt Tolley	Misha Schwarz		Scott Harris		11/22/2017

www.ghd.com

Appendix G
Site Photo Logs

Photo 1 - Plastic lumber refueling dock with steel guide pile

Photo 2 - Pier A -- Typical Concrete Float Condition

Photo 3 - Typical Condition of Timber Finger

Photo 4 - Typical timber dolphin and floating dock. Note fiberglass jacket and concrete cap on the piles.

Photo 5 - Concrete Access Pier and Aluminum Gangway

Photo 6 - Timber Access Pier and Aluminum Gangway

Photo 7 - Harbor Master's Office and timber access ramp

Photo 8 - Overwater Restroom

Photo 9 - Blue Dolphin Restaurant Foundation

Photo 10 - Closed Observation Deck

Photo 11 - Sewage Pump on Refueling Dock (typical of 2)

Photo 12 - Typical Service Cabinet – containing electrical, telecomm, and water service

Photo 13 - Butane Tank Cabinet

Photo 14 - Plywood Shed and Pile-Supported Closed Observation Deck

Photo 15 - Weather Station and Noise Monitor

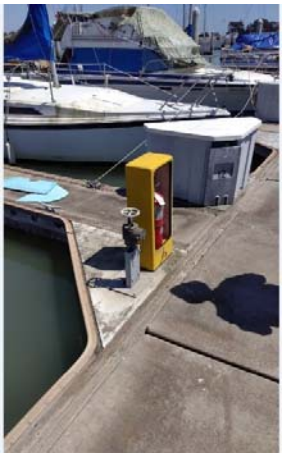

Photo 16 - Typical Fire Extinguisher and Hydrant

Photo 17 - Typical Fire Hose Cabinet