LIMITED ASBESTOS AND LEAD BASED PAINT SURVEY
U.S. 101/PALO COMADO CANYON ROAD INTERCHANGE PROJECT
CITY OF AGOURA HILLS, CALIFORNIA
GDC PROJECT NUMBER LA1143

Prepared for

PARSONS
Road & Highway Division
2201 Dupont Drive | Suite 200
Irvine, California 92612

Prepared by

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January 14, 2014

GROUP DELTA CONSULTANTS

Geotechnical Engineering

Geology

Hydrogeology

Earthquake Engineering

Materials Testing & Inspection

Forensic Services

January 14, 2014

Parsons
Road & Highway Division
2201 Dupont Drive, Suite 200
Irvine, California 92612

Attention: Mr. Thomas Sardo

Subject: Limited Asbestos and Lead Based Paint Survey
U.S. 101/Palo Comado Canyon Road Interchange Project
City of Agoura Hills, California,
Group Delta Project No. LA1143

Dear Mr. Sardo,

Group Delta Consultants, Inc. (Group Delta) is pleased to submit this report to Parsons (hereafter "Client") on the results of a limited asbestos-containing material (ACM) and lead-based paint (LBP) survey for the U.S. 101/Palo Comado Canyon Road Interchange Project in Agoura Hills, California (Site) (Figure 1).

This project includes the widening of the Palo Comado Overcrossing with a median turn lane, sidewalks, and modification of the ramps. The ACM survey is required on the existing overcrossing to determine the condition and location of accessible, suspect friable and non-friable ACM. A lead survey is required on the overcrossing and road striping to assess the presence and location of LBP and lead in striping on the project. Provided herein are the results of the limited ACM and lead survey.

Should you have any questions regarding this report, please feel free to call us at 949-450-2100.

Yours Sincerely,
GROUP DELTA CONSULTANTS, INC.

REGISTERED PROFESSIONAL ENGINEER
GLENN A. BURKS
5975
EXP. 6/30/14
CHEMICAL
STATE OF CALIFORNIA

Glenn Burks, Ph. D., P.E.
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List of Acronyms

AAS	Atomic Absorptions Spectrometry
ACM	Asbestos containing material
AL	Action Level
CAC	Certified Asbestos Consultant
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDPH	California Department of Public Health
CFR	Code of Federal Regulations
CPSC	Consumer Product Safety Commission
EPA	Environmental Protection Agency
CDPH	California Department of Public Health
DOSH	California Division of Occupational Safety and Health
ft	feet
HUD	U.S. Department of Housing and Urban Development
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectrometry
ISA	Initial Site Assessment
kg	kilogram
L	liter
LBP	lead-based paint
LCP	lead-containing paint
mg	milligram
OC	overcrossing
OSHA	Occupational Safety and Health Administration
PLM	Polarized light microscopy
PEL	Permissible Exposure Level
QA/QC	Quality Assurance/Quality Control
REC	Recognized Environmental Condition
ROW	right-of-way
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leaching Procedure
TTLC	Total Threshold Limit Concentration
TWA	Time Weighted Average
UC	undercrossing
XRF	X-Ray Fluorescence

1.0 PROJECT BACKROUND AND OBJECTIVE

The project understanding is based on the Request for Proposal (RFP) sent by Parsons. Based on the RFP, we understand that this project includes the widening of the Palo Comado Canyon Road overcrossing with a median turn lane, sidewalks, and modification of the ramps in order to improve traffic circulation, safety, and bicycle/pedestrian access (Figure 1).

The U.S. 101/Palo Comado Canyon Road overcrossing structure was built in 1963. It provides one 12-foot lane and a 4-foot shoulder in each direction. A 5-foot sidewalk is provided on the west side of the overcrossing. The interchange is configured with tight diamond ramps on the northbound side and hook ramps on the southbound side located on the southwest quadrant of the interchange.

The LBP survey was conducted on the bridge structure to test for the presence of LBP on the bridge railing. A survey of the road/highway striping was also conducted to test for the presence of lead in the materials. An ACM survey was required on building materials used on the overcrossing to determine the condition and location of accessible, suspect friable and non-friable ACM.

2.0 SCOPE OF WORK

On March 11, 2013, Group Delta submitted to Parsons a Proposal for Geotechnical Investigation and Hazardous Materials Survey and Limited Phase II Site Investigation. The results of the Geotechnical Investigation and Limited Phase II Site Investigation will be submitted as separate reports.

A limited survey for ACM was conducted on August 28 and September 1, 2013, by Panacea, Inc. of Paramount, California (Panacea). Steve Modtland, a Certified Asbestos Consultant (CAC# 08-4373), collected nine bulk samples of accessible suspect materials which were submitted under proper chain-of-custody (COC) to Forensic Analytical Laboratory (Hayward, California) for asbestos content analysis. Samples collected included:

- Three samples of gray concrete,
- Three samples of expansion joint material, and
- Three samples from black or gray gaskets.

The limited LBP survey was conducted on August 28 and September 12, 2013 by Hsin Chou, California Department of Public Health (CDPH) lead inspector ID#17 and Steve Modtland, CDPH lead sampling technician ID # 25285. Twelve chip samples of paint were collected and submitted under proper COC protocol to Forensic Analytical Laboratory (Hayward, California) for analysis. Eleven of the paint samples were collected from yellow street or highway striping, including:

- One sample from the freeway off-ramp;
- One sample from the freeway on-ramp;
- Two samples from Palo Comado Canyon Road south of the overcrossing;
- Two samples from Palo Comado Canyon Road north of the overcrossing;
- Four samples from the northbound U.S. 101; and
- One sample from the southbound U.S. 101.

In addition, one paint sample was collected from the railing on the west side of the overcrossing.

The ACM and paint chip sampling locations are provided on Figures 2 and 3, respectively.

Lastly, a report was prepared summarizing the findings of the limited ACM and LBP surveys.

3.0 LIMITED ASBESTOS AND LEAD SURVEY

Panacea performed the limited ACM and LBP survey for the the Site on August 28, September 1, and September 12, 2013. Reports documenting the methodology for sample collection and the results of the limited ACM and LBP surveys were completed by Panacea and are provided in Appendices A, B, and C. A brief summary of the results of the limited ACM and LBP survey is presented below.

3.1 ACM Survey Results

The nine bulk samples of suspect friable and non-friable ACM were submitted, under proper COC protocol, to Forensic Analytical Laboratory for analysis of asbestos content by Polarized Light Microscopy (PLM) (EPA Method-600/R-93-116). The United States Environmental Protection Agency (USEPA) defines ACMs as found to contain 1% or greater of Asbestos. For a building material to be considered a non-ACM in the State of California, no asbestos can be detected in any of the samples collected. Table 1 provides the results of the limited ACM survey.

TABLE 1
Limited ACM Survey Results

Sample ID	*Material Sampled*	*Number of Samples Analyzed*	*Percent Asbestos in Sample*
B-001	Gasket, black	1	No Asbestos Detected
B-002	Concrete, gray	1	No Asbestos Detected
B-003	Concrete, gray	1	No Asbestos Detected
B-004	Expansion joint material	1	No Asbestos Detected
B-005	Gasket, black	1	No Asbestos Detected
B-006	Expansion joint material	1	No Asbestos Detected
B-007	Expansion joint material	1	No Asbestos Detected
B-008	Concrete, gray	1	No Asbestos Detected
B-009	Gasket, gray	1	80% Chrysotile

One grey gasket was determined to contain 80% chrysotile asbestos. Based upon site observations, accessibility of materials, laboratory analytical results, current regulatory guidelines and laws, and the professional judgment of the CAC, ACMs are present on the bridge in up to nine gaskets located between the railing supports and the concrete walls on the east and west sides of the overcrossing. The material in these gaskets were considered to be homogeneous and represented by Sample B-009.

No utility conduits or drain lines were identified on or in the overcrossing structure that can be considered a suspect ACM. The only visible conduits on the overcrossing

were metal and appeared to supply electricity to the signs attached to the overcrossing.

3.2 Lead Survey Results

The twelve paint chip samples were submitted to AmeriSci Los Angeles (AmeriSci, Carson, California) for analysis of lead content by atomic absorption (AA) in accordance with EPA Method 7420/3050B. Table 2 provides the results of the limited LBP survey.

TABLE 2
Limited LBP Survey Results

Sample ID	*Sample Location*	*Color, Component, and Substrate*	*Lead Concentration (% by weight)*
L-1	Railing on overcrossing (western portion)	Tan paint on metal railing	1.4
L-2	Northbound 101 freeway on-ramp	Yellow stripe on asphalt	0.11
L-3	Northbound 101 freeway off-ramp	Yellow stripe on concrete	2.5
L-4	South of overcrossing	Yellow stripe on concrete	<0.007
L-5	South of overcrossing	Gold stripe on concrete	0.067
L-6	North of overcrossing	Yellow stripe on concrete	1.3
L-7	North of overcrossing	Gold stripe on concrete	0.95
L-8	Northbound 101, west of overcrossing	Yellow stripe on concrete	<0.006
L-9	Northbound 101, east of overcrossing	Yellow stripe on concrete	0.026
L-10	Northbound 101, east of overcrossing	Yellow stripe on asphalt	<0.007
L-11	Northbound 101, west of overcrossing	Yellow stripe on asphalt	<0.007
L-12	Southbound 101, under overcrossing	Yellow stripe on asphalt	<0.006

The results above indicate that the paint collected as samples L-1, L-3, L-6, and L-7 are considered LBP by Department of Housing and Urban Development (HUD) and the CDPH standards because the paint contains greater than or equal to 0.5% lead by weight. The paint represented by samples L-2 and L-5 is considered lead containing paint (LCP) by HUD/CDPH standards because the paint is between 0.06% and 0.5%

lead by weight. The paint represented by samples L-4 and L-8 through L-12 are considered non-LBP since the paint contains less than 0.06% lead by weight.

Based on California Code of Regulations (CCR)-22, waste materials with concentrations equal or greater than 1,000 mg/kg or 0.1% by weight are considered hazardous waste. The striping paint collected from the northbound freeway on-ramp, northbound freeway off-ramp, and north of the overcrossing contain greater than 0.1% lead and if removed would be considered hazardous. The yellow striping south of the overcrossing contains less than 0.1% lead, but would still require additional analyses for hazardous lead content following removal.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Provided below are the conclusions and recommendations based on the results of the limited ACM and LBP survey.

4.1 ACM

Asbestos (80% chrysotile) was found in the gray gasket that was sampled. It is the CACs professional opinion that the sampled material is homogeneous and represents the material that composes at least nine other gaskets on the structure. These gaskets are located between the concrete walls and the bridge railing supports on either side of the overcrossing. ACM was not detected in the overcrossing concrete, expansion joint material, and black gaskets located under washers on the railing supports.

The ACM materials were observed to be non-friable and in good condition. If ACM remains in good condition and is not disturbed, exposures to asbestos are expected to be negligible. However, when ACM deteriorates, is disturbed or damaged, such as during removal or demolition operations, asbestos fibers may be released creating a potential health hazard for the public and construction personnel.

If bridge railing including the gray ACM gaskets must be removed during construction, a State-certified asbestos abatement contractor should remove the ACM gaskets. GDC recommends that the following steps be taken:

- Prepare bid documents and specifications for the project to control the project and ensure lawful removal techniques are used.
- Remove and dispose of ACM, in accordance with federal, state, and local regulations and ordinances. DOSH Class I, II, III, or IV asbestos work procedures should be followed for all asbestos abatement.
- All contractors and visitors working on or around the overcrossing should be notified and trained regarding the presence, locations, and quantities of ACMs.
- An independent third party State of California Certified Asbestos Consultant (CAC) or Site Surveillance Technician (CSST), under direction of the CAC, should provide oversight to ensure that the contractor complies with the specifications, proper protective equipment is used, and proper disposal procedures are followed.
- Follow State and local regulations for proper regulatory notifications and disposal of ACM.

4.2 Lead

4.2.1 Overcrossing LBP

An elevated concentration of lead was found on the tan metal railing paint collected from the west side of the overcrossing. The paint was observed to be in fair condition. The lead concentration detected was 1.4% by weight. Based upon this elevated concentration, the paint would be considered a California hazardous waste if removed. Subcontractors should be aware of LBP locations, the hazards of LBP, and proper handling/abatement techniques. If the LBP remains in good condition and is not disturbed, exposures to lead are expected to be negligible. However, when LBP deteriorates, is disturbed or damaged, such as during construction operations, lead dust may be released, creating potential health hazards for the public and construction personnel.

GDC recommends the following:

- If the tan LBP is removed or abated during construction then additional testing of the lead debris should be performed prior to disposal to determine if the paint debris is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste.
- The LBP on the railing that is in good condition does not need to be abated prior to construction. However, any LBP that must be disturbed during construction, including flaking or peeling LBP, should be properly removed by a licensed lead abatement contractor and properly disposed following federal, State, and local regulations prior to construction activities that may disturb the LBP.
- LBP coated metal may be disposed or recycled as construction debris as long as it remains on the substrate in accordance with federal, state, and local regulations for the proper disposal of LBP;
- The demolition contractor should implement precautions to comply with OSHA 29 CFR 1926.62, Lead in Construction.
- Because DOSH regulations are based upon exposure levels in air and blood, a negative exposure assessment (worker protection evaluation) should be conducted when working in areas with LBP and LCP when specified “trigger tasks” as performed.
- Follow federal, State, and local regulations for proper disposal of LBP.

4.2.2 Road/Highway Striping

Lead was present in yellow striping samples collected from the northbound freeway on-ramp, northbound freeway off-ramp, and from Palo Comado Canyon Road north of the overcrossing. The paint striping was observed to be in fair to intact condition. Based upon the elevated concentrations, the paint would be considered a California hazardous waste if removed as waste. Subcontractors should be aware of LBP locations, the hazards of LBP, and proper handling/abatement techniques. If the LBP remains in good condition and is not disturbed, exposures to lead are expected to be negligible. Striping may be left in place and not disturbed during construction, removed in advance of construction activities, or removed with the underlying bulk surface materials.

GDC recommends the following:

- Based upon the detected concentrations of lead, LBP with hazardous concentrations of lead is present on the Site as yellow striping. Because of this, it is recommended all yellow striping encountered on the Project be managed as such.
- If the LBP striping is removed or abated in advance of construction then additional testing of the lead debris should be performed prior to disposal to determine if the paint debris is a Federal Resource Conservation and Recovery Act (RCRA) hazardous waste.
- The demolition contractor should implement precautions to comply with OSHA 29 CFR 1926.62, Lead in Construction.
- A Certified Industrial Hygienist must prepare a Lead Compliance Plan per Caltrans requirements outlining safe work practices for the LBP striping and management of striping debris.
- If grinding is proposed, the mass ratio of thermoplastic to asphalt grindings can be calculated and applied to the 90% upper confidence limit for lead to calculate predicted concentrations of total lead in the grindings. This may allow for removal of the striping with road grindings as construction debris in accordance with Caltrans requirements.
- Because DOSH regulations are based upon exposure levels in air and blood, a negative exposure assessment (worker protection evaluation) should be conducted when working in areas with LBP and Lead-Containing Paint (LCP) when specified “trigger tasks” as performed.

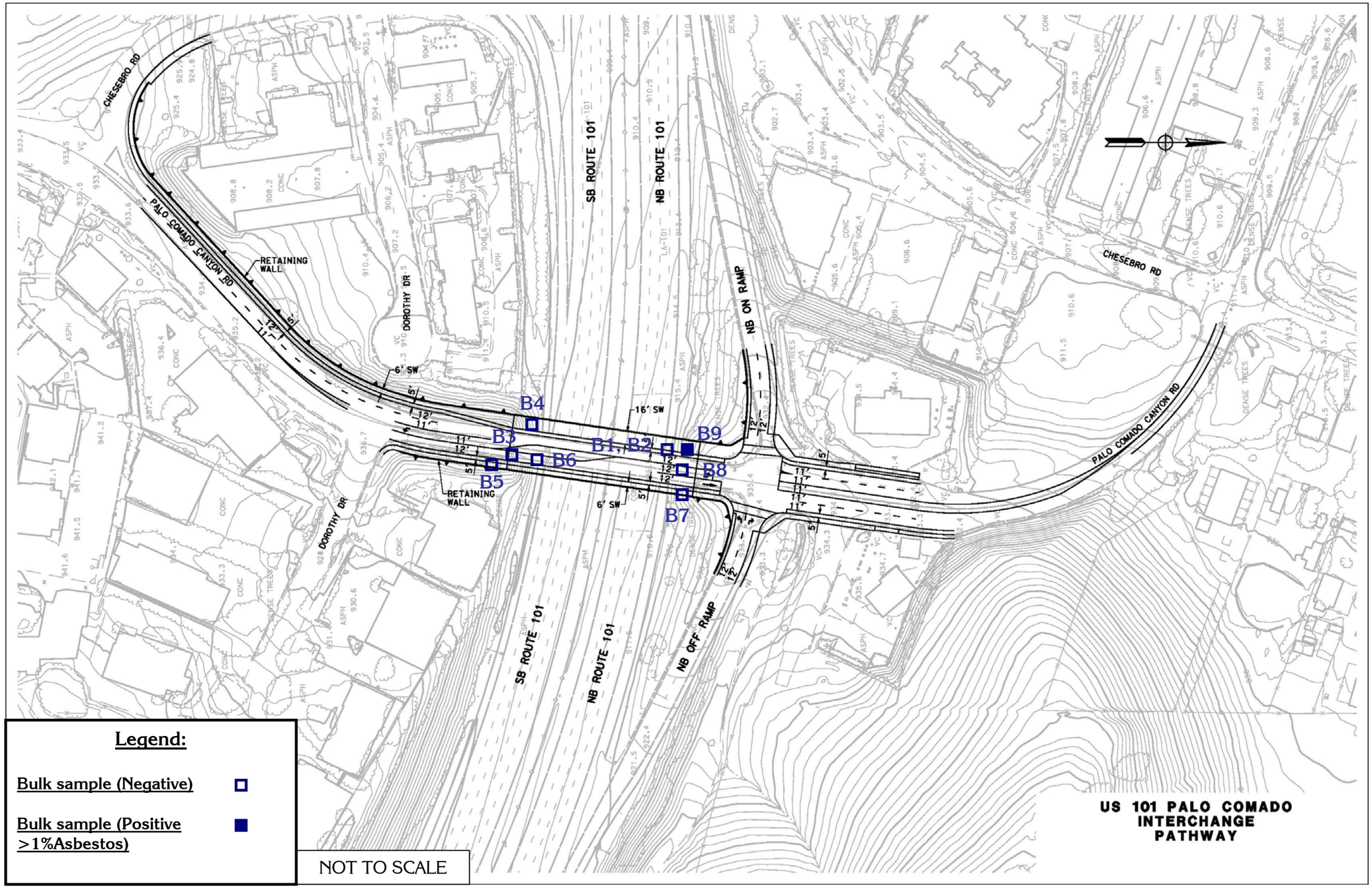
5.0 LIMITATIONS

This investigation was performed in accordance with generally accepted engineering principles and practice. The professional engineering work and judgments presented in this report meet the standard of care of our profession at this time. No other warranty, expressed or implied, is made.

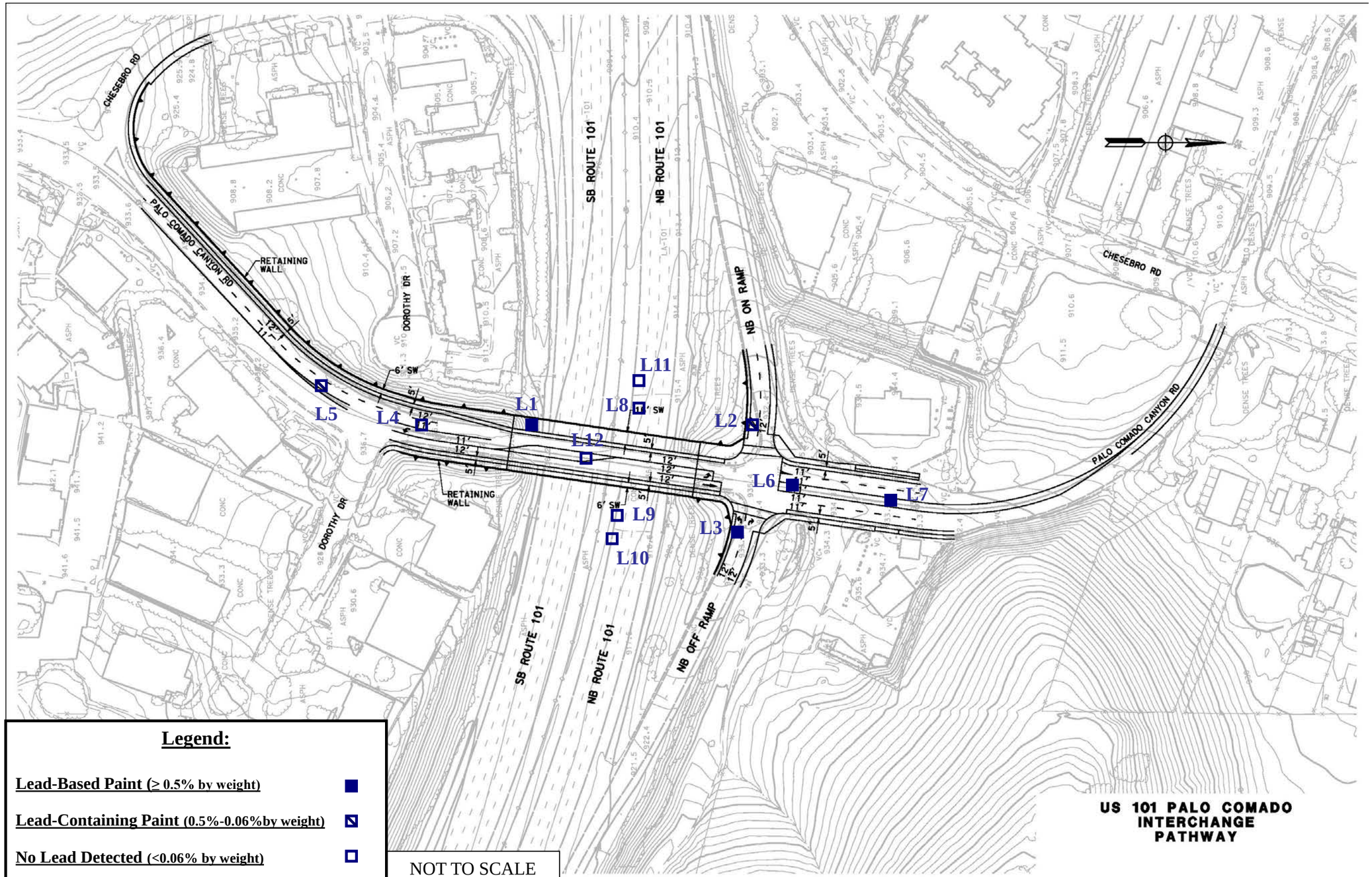
Only the overcrossing and road surface construction materials could be tested, and a limited number of ACM and LBP samples were collected. No guarantees can be made regarding the absence of the ACM and LBP from the portions of the bridges that were not tested and/or could not be accessed. Additional testing and sampling may be required during construction in order to provide a higher level of confidence regarding the absence of potential ACM and LBP in the bridge.

FIGURES

GROUP DELTA CONSULTANTS	GROUP DELTA CONSULTANTS, INC. ENGINEERS AND GEOLOGISTS	FIGURE NUMBER. 1
	PROJECT NAME:. US101/Palo Comada Canyon Rd Interchange Project	PROPOSE NUMBER LA13-132
	PROJECT LOCATION MAP	



GROUP DELTA CONSULTANTS	**Limited Asbestos and Lead Survey**	U.S. 101/Palo Comado Canyon Road Interchange Project **Bulk Sample Locations for Asbestos**	**GDC Project No. LA-1143**	**FIGURE 2**



Legend:

Lead-Based Paint (≥ 0.5% by weight) ■

Lead-Containing Paint (0.5%-0.06%by weight) ▨

No Lead Detected (<0.06% by weight) □

NOT TO SCALE

Limited Asbestos and Lead Survey	U.S. 101/Palo Comado Canyon Road Interchange Project **Paint Chip Sample Locations**	**GDC Project No. LA-1143**	**FIGURE 3**

APPENDIX A
Asbestos Survey for Palo Comado Overcrossing, Agoura Hills, California

PANACEA, INC.
Environmental Services
14905 Paramount Blvd., Suite H • Paramount, CA 90723 • Tel. 562.860.2869 • Fax 562.633.3180

Final

September 15, 2013

Mr. Jack Packwood
Group Delta Consultants, Inc.
4201 Santa Ana Street, Suite F
Ontario, California 91761

via Email
jackp@groupdelta.com

SUBJECT: Asbestos Survey for Palo Comado Over-Crossing Bridge, Agoura Hills, California

In response to your request, Panacea, Inc. (Panacea) conducted an asbestos survey at the above-referenced site as part of future renovation of the over-crossing bridge.

The following documents are attached to this letter report:

- Asbestos survey summary table, which presents analytical results, descriptions of materials sampled, sample locations, estimated area covered, homogeneous areas, and comments;
- A figure depicting the approximate locations where samples were collected; and
- Copies of laboratory analytical report and chain-of-custody record.

1.0 OBJECTIVE

The objective of the work was to assess the likelihood that asbestos is present in suspect and readily accessible construction materials in concentrations greater than 1 percent.

2.0 ASBESTOS SURVEY RESULTS

The survey was conducted on August 28 and September 1, 2013, by a Certified Asbestos Consultant (CAC) from Panacea. Nine bulk samples of accessible suspect materials were collected and submitted to Forensic Analytical Laboratory in Hayward, California, for analysis using polarized light microscopy (PLM). Copies of the laboratory analytical report and chain-of-custody records are attached.

Based on the scope of work, site observations, accessibility of the materials, laboratory analytical results, current regulatory guidelines and laws, state-of-the-industry practices, and the professional judgment of Panacea personnel, the presence, location, and estimated quantity of identified ACM is noted below.

PRESENCE, LOCATIONS, AND QUANTITIES OF ACM

PRESENCE	LOCATION (HOMOGENEOUS AREA)	ESTIMATED QUANTITY
ACM (>1% Asbestos)		
Gasket, gray	Included ~9 gaskets between various railing supports and concrete wall on the east and west sides of over-crossing.	~9 gaskets

Note:

"~" = approximately

The accompanying asbestos survey summary table presents detailed descriptions of materials sampled, sample locations, and laboratory analytical results. Figure 1 depicts the approximate locations where samples were collected.

3.0 CONCLUSIONS AND/OR RECOMMENDATIONS

The following conclusions/recommendations are based on the information obtained during this survey, laboratory analytical results, current regulatory guidelines and laws, state-of-the-industry practices, and the judgment of Panacea's personnel:

- There is a high likelihood that asbestos is present in concentrations greater than 1 percent on the over-crossing.

- The attached asbestos survey summary table presents analytical results, descriptions of materials sampled, sample locations, estimated area covered, homogeneous areas, and comments. Figures 1 depicts the approximate sample locations.

- ACMs should be removed by an asbestos-licensed contractor prior to the renovation or demolition of the over-crossing. DOSH Class I, II, III, or IV asbestos work procedures should be followed for all asbestos abatement.

- All contractors and visitors working on or around the over-crossing should be notified regarding the presence, locations, and quantities of the ACMs. Applicable notification laws should be followed and training provided.

- The owner should obtain an "asbestos-free certification" from any contractor installing or removing over-crossing materials and should notify the maintenance staff to use only "asbestos-free" products for any repair and maintenance work.

- No judgment was made for inaccessible construction materials or materials that had not been sampled and analyzed.

The likelihood statements stated above are defined in the attachment. The above recommendations are intended to provide guidance for implementing procedures that, in our experience, are appropriate within the regulatory environment in California. These recommendations are not intended to constitute legal advice; it is possible that legal counsel familiar with asbestos law might provide recommendations that would differ from those cited above and/or would advise compliance with regulations, guidelines, and laws not cited herein.

4.0 LIMITATIONS

The judgments and conclusions described in this report pertain to conditions judged to be present or applicable at the time the work was performed and within the scope of work. Future conditions may differ from those described herein, and this report is not intended for use in future evaluations of the site unless an update is conducted by a CAC.

Certain materials not sampled may contain asbestos in concentrations greater than 1 percent. These materials include electrical wrapping, materials inside electrical fixtures, brake shoes, and other materials that may be hidden. However, these materials are judged to have a very low likelihood of containing greater than 1 percent asbestos.

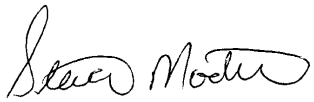
Although personnel who conducted the survey are certified under the Asbestos Hazard Emergency Response Act (AHERA) and an accredited laboratory performed the analysis, the asbestos survey described herein may not identify all ACM onsite. Possible reasons for this include inaccessible features, unavailability of as-built drawings (specifying all materials used in the structure), practical limitations as to the number of samples that can be collected, and analytical method used (PLM). Furthermore, although a sample was collected from each material that appeared to be different (based on color and texture), homogeneity of content of similar materials cannot be guaranteed because similarity of color and texture does not assure that the same ingredients were used in their manufacturing. It is possible that of two apparently similar materials, one may contain asbestos and one may not. Therefore, additional sampling and testing may be necessary to provide a higher confidence level regarding the presence of ACM.

Services performed by Panacea were conducted in a manner consistent with state-of-the-industry practices, recognizing that even the most comprehensive survey may not detect all ACM at the site. Therefore, Panacea cannot act as an insurer or certify that the site is free of asbestos.

Panacea relied on the information collected during our site visit and/or provided by the client or others to arrive at our conclusions. Panacea assumes that information provided by others is accurate, and Panacea did not make any attempt to verify or duplicate the information.

If you have any questions regarding this letter report, please feel free to contact me at your convenience.

Very truly yours,
PANACEA, INC.



Steven Modtland, CAC
Certification No. 08-4373

ATTACHMENTS:

- Asbestos Survey Summary Table
- Figure1
- Photographs
- Laboratory Analytical Reports and Chain-of-Custody Record
- Building Inspector's Certification
- Laboratory Accreditation
- Likelihood Statements

ATTACHMENTS

ASBESTOS SURVEY SUMMARY TABLE

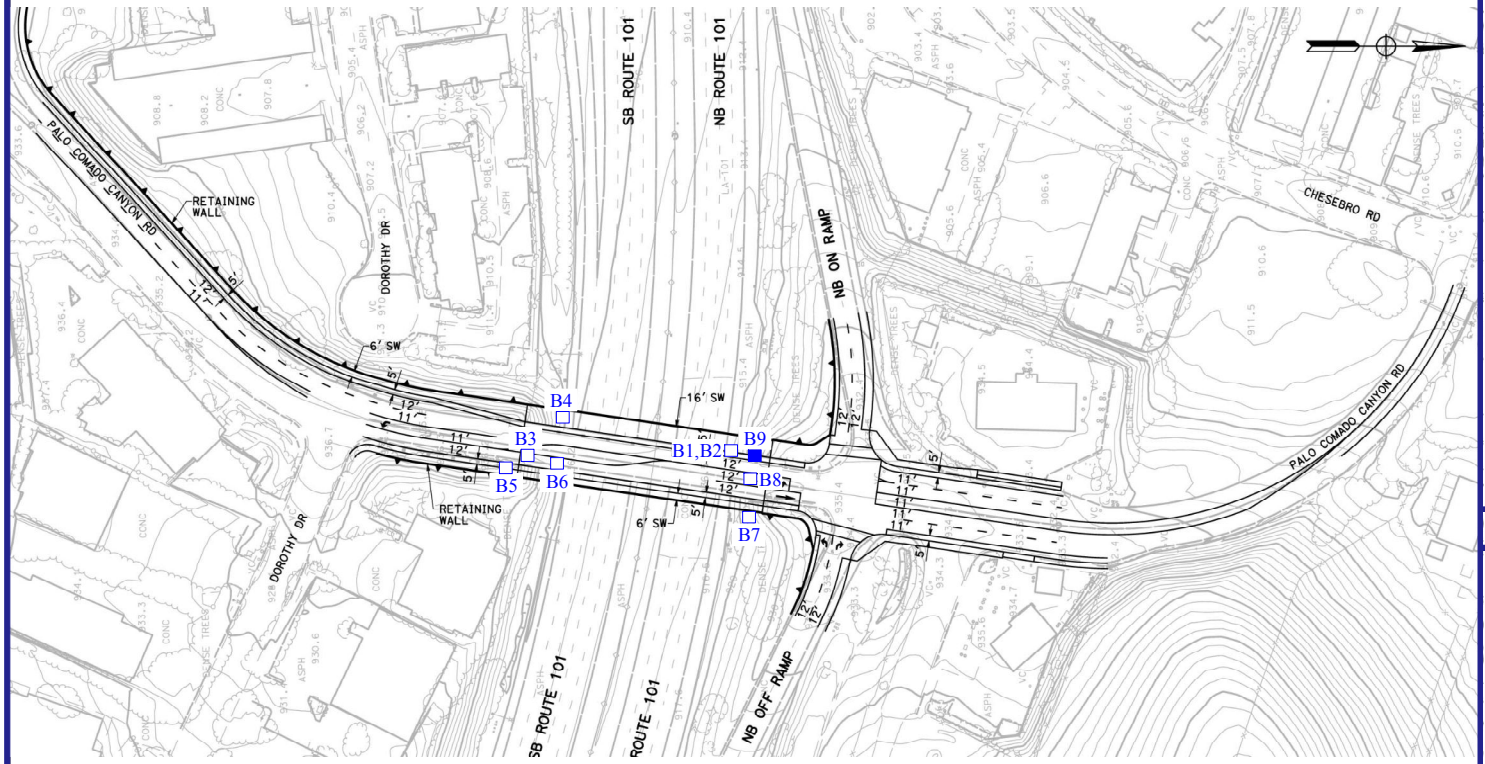
Building No. SM130828

Sample No.	Analytical Results	Description of Material	Sample Location	Est. Area Covered	Homogeneous Area	Additional Comments
SM130828-B-001 **Priority No.**	ND	Gasket, black	Over-crossing, northern portion, under washer on railing support			
SM130828-B-002 **Priority No.**	ND	Concrete, gray	Over-crossing, northern portion, concrete wall supporting railing			
SM130828-B-003 **Priority No.**	ND	Concrete, gray	Over-crossing, southern portion, on road			
SM130828-B-004 **Priority No.**	ND	Expansion joint material, black, rubbery	Over-crossing, southern portion, between concrete on sidewalk			
SM130828-B-005 **Priority No.**	ND	Gasket, black	Over-crossing, southern portion, under washer on railing support			
SM130828-B-006 **Priority No.**	ND	Expansion joint material, gray, rubbery	Over-crossing, southern portion, between concrete on road			
SM130828-B-007 **Priority No.**	ND	Expansion joint material, brown, cardboard-like	Over-crossing, northern portion, between concrete on wall			
SM130828-B-008 **Priority No.**	ND	Concrete, gray	Over-crossing, northern portion, on column under over-crossing			
SM130828-B-009 **Priority No.**	80% CH	Gasket, gray	Over-crossing, northern portion, between railing support and concrete wall	~9 gaskets	Included ~9 gaskets between various railing supports and concrete wall on the east and west sides of over-crossing.	Nonfriable and in good condition.

ASBESTOS SURVEY SUMMARY TABLE

NOTES (where applicable):

1. This summary table is intended to be used with the figure(s) prepared by Panacea, Inc. Please refer to the figure(s) for the room or area designations.
2. Estimated area covered is intended for discussion and management purposes only. Actual square footage may vary. Other asbestos-containing materials (ACMs) may be present in inaccessible areas.
3. CH = chrysotile; AM = amosite; CR = crocidolite; AN = anthophyllite; TR = tremolite; AC = actinolite; ND = none detected; <1% = trace amount of asbestos.
4. HVAC = heating, ventilation, and air conditioning unit; FP = floor plan; OD = outside diameter; LF = linear feet; SF = square feet; "~" = approximately; "<" = less than; ">" = greater than; OH = overhang; PLM = polarized light microscopy; TEM = transmission electron microscopy; "+" = positive, "x" = times.
5. FM = flooring material; FT = floor tile; MAS = mastic; LN = linoleum; CB = cove base; CBM = cove base and mastic; SP = silver paint sealant; DS = duct sealant; RM = roofing material; PRC = plastic roof cement; FLC = floor leveling compound; CT = ceiling tile; HDW = HVAC duct wrapping material; DI = duct insulation; SFP = silver foil paper; PI = pipe insulation.
6. JC = asbestos concentration for joint compound; COMP = assumed asbestos concentrations for the composited system (walls and/or ceiling) consisting of wallboard (drywall) and joint compound. Estimated area covered for joint compound and other wall material is based on the floor area. Actual square footage of the composite wall and/or ceiling system can vary from 2 to 5 times the floor area.
7. ACM = asbestos-containing material; ACCM = asbestos-containing construction material.
8. EPA = U.S. Environmental Protection Agency; DOSH = Division of Occupational Safety and Health.



LEGEND

- Bulk Sample Location (Negative)
- Bulk Sample Location (Positive, >1% Asbestos)

GENERAL NOTES

1. All locations are approximate. No scale or dimension is implied.
2. Base map obtained from client.
3. Room numbers or area designations are arbitrarily assigned for discussion purposes only.
4. Sample numbers are shortened for graphic presentation purposes (e.g., sample number [BLDG NO.]-B-001 is shortened to B1).

PANACEA, INC.
Environmental Services

BULK SAMPLE LOCATIONS
PALO COMADO OVER-CROSSING
AGOURA HILLS, CALIFORNIA

PROJECT NO. C13-801	FIGURE 1

LOCATION OF ASBESTOS-CONTAINING GASKET

LOCATION OF ASBESTOS-CONTAINING GASKET

Forensic Analytical Laboratories

Final Report

Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Panacea Inc.
Accounts Payable
14905 Paramount Blvd.
Suite - H
Paramount, CA 90723

Client ID: 5572
Report Number: B181382
Date Received: 08/30/13
Date Analyzed: 09/03/13
Date Printed: 09/04/13
First Reported: 09/04/13

Job ID/Site: C13-801 - Palo Comando Bridge

Date(s) Collected: 08/28/2013

FALI Job ID: 5572
Total Samples Submitted: 8
Total Samples Analyzed: 8

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
SM130828-B-1	11420766						
Layer: Black Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
SM130828-B-2	11420767						
Layer: Grey Cementitious Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
SM130828-B-3	11420768						
Layer: Tan Cementitious Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
SM130828-B-4	11420769						
Layer: Black Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
SM130828-B-5	11420770						
Layer: Black Non-Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (Trace)		**Asbestos (ND)**					
SM130828-B-6	11420771						
Layer: Yellow Foam			**ND**				
Layer: Paint			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					
SM130828-B-7	11420772						
Layer: Brown Fibrous Material			**ND**				
Total Composite Values of Fibrous Components: Cellulose (90 %)		**Asbestos (ND)**					
SM130828-B-8	11420773						
Layer: Grey Cementitious Material			**ND**				
Total Composite Values of Fibrous Components:		**Asbestos (ND)**					

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Report Number: B181382

Client Name: Panacea Inc. **Date Printed:** 09/04/13

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Panacea Inc.
Steven Modtland
14905 Paramount Blvd.
Suite - H
Paramount, CA 90723

Client ID: 5572
Report Number: B181471
Date Received: 09/04/13
Date Analyzed: 09/06/13
Date Printed: 09/06/13
First Reported: 09/06/13

Job ID/Site: C13-801; Palo Comado Bridge

Date(s) Collected: 09/01/2013

FALI Job ID: 5572
Total Samples Submitted: 1
Total Samples Analyzed: 1

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
SM130828-B-9	50817173						
Layer: Black Gasket		Chrysotile	**80 %**				
Total Composite Values of Fibrous Components:		**Asbestos (80%)**					
Cellulose (Trace)							

Steven Takahashi, Laboratory Supervisor, Rancho Dominguez Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

2959 Pacific Commerce Drive, Rancho Dominguez, CA 90221 / Telephone: (310) 763-2374 (888) 813-9417 / Fax: (310) 763-8684

PANACEA, INC.

Environmental Services

14905 Paramount Blvd., Suite H • Paramount, CA 90723 • Tel. 562.860.2869 • Fax 562.633.3180

CHAIN OF CUSTODY RECORD

Date: 8/29/13 PM: Hsin Chou Page: 1 of 1

Project Name: Palo Comando Bridge - Asb, LS Sampled By: Steven Modtland

Project No.: C13-801 Shipped To: Forensic by: FedEx

SAMPLE NUMBER	SAMPLING DATE / TIME	PRESERVATION METHOD	CONTAINER TYPE/SIZE	SAMPLE MATRIX	ANALYSES REQUIRED PLM	
SM130828-B-1	8/20/13	None	Sealed	Bulk	2 day TAT	
2						
3						
4						
5						
6						
7						
8						

TOTAL NUMBER OF SAMPLES 8 2 day TAT

COMMENTS: Return signed chain-of-custody forms with final report(s). Email the report to Lorraina at lvalencia@panenv.com

FTM = floor tile and mastic; LNM = linoleum and mastic; CBM = cove base and mastic;
CTM = ceiling tile and mastic; DWJ = wallboard and joint compound; ML = other multiple-layered materials.

Relinquished By:	[signature]	Company: Panacea, Inc.	Date: 8/29/13	Time: 300 pm
Received By:	L. Valencia	Company: Panacea, Inc.	Date: 8/29/13	Time: 301 pm
Relinquished By:	L. Valencia	Company: Panacea, Inc.	Date: 8/29/13	Time: 3:01 pm
Received By:	[signature]	Company: Cali	Date: 8-30-13	Time: 10:30 am
Relinquished By:		Company:	Date:	Time:
Received By:		Company:	Date:	Time:

Revision : 07-09-28

PANACEA, INC.

Environmental Services

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CHAIN OF CUSTODY RECORD

Date: 9/3/13 PM: Steven Medtland

Project Name: Palo Comado Bridge

Project No.: C13-801

Page: 1 of 1

Sampled By: Steven

Shipped To: Forn. Anq. by: Dropped off

SAMPLE NUMBER	SAMPLING DATE / TIME	PRESERVATION METHOD	CONTAINER TYPE/SIZE	SAMPLE MATRIX	ANALYSES REQUIRED	
					PLM	
SM130828-B-9	9/1/13	None	Plastic Bag	Bulk	✓	

TOTAL NUMBER OF SAMPLES 1

COMMENTS: 2 DAY TAT

Return signed chain-of-custody forms with final report(s). Email the report to Lorraina at lvalencia@panenv.com

FTM = floor tile and mastic; LNM = linoleum and mastic; CBM = cove base and mastic;
CTM = ceiling tile and mastic; DWJ = wallboard and joint compound; ML = other multiple-layered materials.

Relinquished By:		Company: Panacea, Inc.	Date: 9/3/13	Time: —
Received By:		Company: FAU D/O	Date: 9/4/13	Time: 830 am
Relinquished By:		Company:	Date:	Time:
Received By:		Company:	Date:	Time:
Relinquished By:		Company:	Date:	Time:
Received By:		Company:	Date:	Time:

Revision : 07-09-28

State of California
Division of Occupational Safety and Health

Certified Asbestos Consultant

Steven L Modtland
Name

Certification No. **08-4373**

Expires on **05/15/14**

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

NVLAP® **National Voluntary Laboratory Accreditation Program**

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Forensic Analytical Laboratories, Inc.
3777 Depot Road, Suite 409
Hayward, CA 94545-2761
Mr. David Sandusky
Phone: 510-887-8828 Fax: 510-887-4218
E-Mail: Daves@forensica.com
URL: http://www.forensica.com

BULK ASBESTOS FIBER ANALYSIS (PLM) **NVLAP LAB CODE 101459-0**

NVLAP Code	*Designation / Description*
18/A01	EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2012-07-01 through 2013-06-30
Effective dates

For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101459-0

Forensic Analytical Laboratories, Inc.

Hayward, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK 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).

2012-07-01 through 2013-06-30

Effective dates

DEPARTMENT OF COMMERCE ★ UNITED STATES OF AMERICA ★

For the National Institute of Standards and Technology

NVLAP-01C (REV. 2009-01-28)

Likelihood Statements

Many statements have been made in this report regarding the likelihood of the occurrence of certain adverse events. The term "likelihood," as used here, pertains to chances of a match between the prediction for the event and its actual occurrence. Likelihood statements are based on the professional judgments of Panacea Inc. A prediction made for the occurrence of an event will either match the actual occurrence or not. Uncertainty about the natural processes, lack of adequate scientific understanding of the physical and chemical interactions at the site, and insufficient data and information about the specific site conditions usually preclude a perfect or 100-percent likelihood of match between predictions and actual occurrences. Therefore, where a perfect match is not possible, the likelihood statement assigns a measure for a "degree of belief" or a "betting score" for the match between the prediction for the event and the actual event outcome.

The likelihood statements can be made either qualitatively, expressed verbally, or quantitatively, expressed in percent ranges. The qualitative terms expressed verbally, however, can be approximately related to percent ranges. Panacea, Inc. has used the following approximate percent ranges for the qualitative terms used in likelihood statements:

QUALITATIVE TERM	APPROXIMATE PERCENT RANGE
Very Low	Less than 10
Low	10 to 20
Low to Moderate	20 to 40
Moderate	40 to 60
Moderate to High	60 to 80
High	80 to 90
Very High	More than 90

The following is a typical likelihood statement and its interpretation:

- Statement: Based on site conditions, data collected, and current regulatory guidelines delineating a hazardous waste, it is the judgment of Panacea, Inc. that there is a low likelihood that hazardous waste from the landfill has migrated to the site.

- Interpretation of Statement: The statement reflects an extrapolation of a discrete data set to the entire site. This statement is made within the context of regulatory guidelines delineating hazardous wastes in effect at the time the statement is made. It is important to note that these guidelines periodically change; consequently, the judgment made corresponds to the guidelines cited in the report.

An extrapolation made from a discrete data set precludes making a statement with certainty that the event has occurred (i.e., one cannot really say with 100-percent certainty that hazardous waste from the landfill has not migrated to the site). Therefore, a professional judgment is made for the event that is expressed in terms of the likelihood (less than 100 percent) that the event either has or has not occurred.

The statement given above renders a professional judgment that there is a low likelihood that the event has occurred. The above statement could also have been expressed as "there is a high likelihood that hazardous waste from the landfill has not migrated to the site."

APPENDIX B
Paint Chip Sampling for Palo Comado Overcrossing, Agoura Hills, California

PANACEA, INC.
Environmental Services
14905 Paramount Blvd., Suite H • Paramount, CA 90723 • Tel. 562.860.2869 • Fax 562.633.3180

Final

September 15, 2013

Mr. Jack Packwood
Group Delta Consultants, Inc.
4201 Santa Ana Street, Suite F
Ontario, California 91761

via Email
jackp@groupdelta.com

SUBJECT: Paint Chip Sampling for Palo Comado Over-Crossing Bridge, Agoura Hills, California

In response to your request, Panacea, Inc. (Panacea) conducted paint chip (bulk) testing for lead concentrations at the above-referenced site as part of future renovation of the over-crossing bridge.

A figure depicting the approximate locations where samples were collected and copies of laboratory analytical report and chain-of-custody record are attached to this letter report:

It is our understanding that the over-crossing is not zoned for residential and/or commercial building usage; therefore, Panacea is not required to submit Form 8552 "Lead Hazard Evaluation Form" to the California Department of Public Health (DPH) upon completion of this report. If our understanding is different than Caltrans' policy, then please let us know.

The estimated quantity presented in this report is intended for discussion and management purposes only. The actual quantity of lead material should be verified by qualified contractor prior to bidding and/or abatement.

1.0 GUIDELINES AND TERMINOLOGY FOR LEAD

1.1 LEAD-BASED PAINT AND LEAD-CONTAINING PAINT DEFINITIONS

In 1978, the Consumer Product Safety Commission (CPSC) established a maximum lead content in paint of less than 0.06 percent by weight in a dry film of newly applied paint (U.S. Department of Housing and Urban Development [HUD], 1995). HUD specifies that lead-based paint (LBP) exists when paint contains lead equal to or greater than 1.0 milligram per square centimeter (mg/cm^2) by area or 0.5 percent by weight (HUD, 1995). DPH adopted HUD's LBP definitions in Title 17, California Code of Regulations (CCR), Section 35033.

Typically, the area concentrations are based on field x-ray fluorescence (XRF) analysis, while the weight concentrations are based on one of several laboratory analytical methods such as atomic absorption spectrometry (AAS) and inductively coupled plasma-atomic emission spectrometry (ICP-AES).

The definitions used in this report are as follows:

- LBP (greater than or equal to 0.5 percent by weight) – The HUD and DPH definitions are the generally accepted industry standards for determining the presence or absence of LBP. Therefore, HUD and DPH definitions are used as the evaluation criteria for LBP in this report.

- Lead-Containing Paint (LCP) – This definition is used for coatings containing detectable lead concentrations below 0.5 percent by weight but greater than or equal to 0.06 percent.

- Non-LBP – This definition is used for coatings containing lead concentrations below CPSC's maximum lead content of 0.06 percent by weight.

1.2 LEAD-CONTAINING HAZARDOUS WASTE

Regulation 22 CCR 66261.24 states that when representative samples of a waste exhibit certain toxic characteristics then the waste is considered hazardous. Lead-containing waste (LCW) is regulated as a hazardous waste if it exhibits one of the three threshold concentrations: total threshold limit concentration (TTLC), soluble threshold limit concentration (STLC), and/or Toxic Characteristic Leaching Procedures (TCLP). Interpretations of the waste concentrations are presented below.

- TTLC equal to or greater than 1,000 milligrams per kilogram (mg/kg) (or 0.1 percent)

    - The TTLC for lead is 1,000 mg/kg. If the sample concentration is at or above 1,000 mg/kg, then the represented material/waste when demolished will be considered as a California hazardous waste.

    - Additional TCLP analysis is required to determine whether the California-regulated waste is a Resource Conservation and Recovery Act (RCRA) hazardous waste. If the TCLP result is at or above 5 milligrams per liter (mg/L) of solution, then the waste is a California-regulated and RCRA hazardous waste. If the TCLP is below 5 mg/L, then the waste is considered to be a California-regulated waste but a non-RCRA hazardous waste.

- TTLC between 50 and 1,000 mg/kg (or 0.005 to 0.1 percent)

    - If the sample concentration is between 50 and 1,000 mg/kg, then additional testing using the California-mandated waste extraction test (WET) can be conducted to further characterize the STLC of the waste. The STLC for lead is 5 mg/L. At or above 5 mg/L of lead, the material would need to be disposed of as a California hazardous waste. Below 5 mg/L of lead, the waste is considered as construction debris or nonhazardous waste.

- If the sample concentration is between 100 to 1,000 mg/kg, then additional testing using the TCLP can be conducted to further characterize the TCLP of the waste. The TCLP for lead is 5 mg/L. At or above 5 mg/L of lead, the material is classified as RCRA hazardous waste. Below 5 mg/L of lead, the waste is considered as non-RCRA hazardous waste; however, the STLC analysis is still required to determine if the waste is a California-regulated waste.

- TTLC less than 50 mg/kg (or 0.005 percent)

  - If the sample concentrations are less than 50 mg/kg, then the waste is considered as construction debris or nonhazardous waste.

1.3 WORKER EXPOSURE STANDARDS

Due to the growing concerns related to workplace lead exposure, the Federal Occupational Safety and Health Administration (OSHA) promulgated a lead standard for the construction industry in Title 29, Code of Federal Regulations (CFR), Part 1926.62 (29 CFR 1926.62), on May 4, 1993 (OSHA, 1993). The California Division of Occupational Safety and Health (DOSH) adopted and revised the OSHA standard under CCR, Title 8, Section 1532.1 (8 CCR 1532.1) (DOSH, 1997). Under 29 CFR 1926.62 and 8 CCR 1532.1, lead is defined as metallic lead, all inorganic lead compounds, and organic lead soaps. Lead paint is included in this regulation; however, it is not defined with any given concentration.

DOSH established exposure levels for lead in the construction industry at an action level (AL) of 30 micrograms of lead per cubic meter (µg/m^3) of air and a permissible exposure level (PEL) of 50 µg/m^3 calculated as an 8-hour time-weighted average (TWA) (DOSH, 1997). For certain construction activities involving lead paint, OSHA requires that an employer treat employees as if they were exposed to lead at a certain level and implement employee protective measures until exposure assessment using air sampling indicates otherwise. These activities and assumed levels of exposure are summarized in the table below.

ACTIVITIES	ASSUMED LEVELS OF EXPOSURE (ug/m^3)
– Manual demolition of structure – Manual scraping – Manual sanding – Heat gun applications – Power tool cleaning with dust collection systems – Lead-based paint spraying	50 < Exposure < 500
– Use of lead containing mortar, lead burning – Rivet busting	Exposure > 500

ACTIVITIES	ASSUMED LEVELS OF EXPOSURE (ug/m^3)
– Power tool cleaning without dust collection system – Cleanup activities where dry expendable abrasives are used – Abrasive blasting, enclosure movement and removal	
– Abrasive blasting – Welding – Cutting – Torch burning	Exposure > 2,500

The detection limit of the XRF analyzer is generally considered to be accurate when concentrations of lead in paint are greater than 1.0 mg/cm^2. The accuracy of the laboratory analytical methods is typically expressed in parts per million (or below the CPSC's 0.06 percent by weight). It has been our experience that when an XRF analyzer does not detect lead in paint, a high likelihood exists that the same paint will be reported to contain lead above the detection limits of laboratory analytical methods such as AAS and ICP-AES. OSHA and DOSH regulations are not based on the concentrations in paint but rather on the exposure levels in air and/or blood.

2.0 PAINT CHIP SAMPLING RESULTS AND INTERPRETATIONS

The sampling was conducted on August 28, 2013. Seven bulk samples of paint were collected by Panacea and submitted to Forensic Analytical Laboratory in Hayward, California for analysis using AAS.

The following table presents the sample locations, components, substrates, colors, laboratory results, estimated quantity, homogeneous area, conditions, and interpretation of the results.

Figure 1 depicts the approximate locations where samples were collected and area designations.

SAMPLE NO.	SAMPLE LOCATION	COMPONENT	SUBSTRATE	COLOR	RESULTS (% BY WEIGHT)	ESTIMATED QUANTITY	HOMOGENEOUS AREA OBSERVED	CONDITION	INTEPRETATION
SM130828-L-1	Over-crossing, western portion	Fence	Metal	Tan	1.4	~270 LF	Included fence on the west side of over-crossing.	Fair	LBP
SM130828-L-2	Northbound 101 freeway on-ramp	Stripe on Road	Asphalt	Yellow	0.11	~480 LF	Included yellow stripe on Northbound 101 freeway on-ramp.	Intact	LCP
SM130828-L-3	Northbound 101 freeway off-ramp	Stripe on Road	Concrete	Yellow	2.5	~350 LF	Included yellow stripe on Northbound 101 freeway off-ramp.	Fair	LBP
SM130828-L-4	South of over-crossing	Stripe on Road	Concrete	Yellow	<0.007	--	--	--	Non-LBP
SM130828-L-5	South of over-crossing	Stripe on Road	Concrete	Gold	0.067	~900 LF	Included yellow stripes south of Dorothy Drive.	Intact	LCP
SM130828-L-6	North of over-crossing	Stripe on Road	Concrete	Yellow	1.3	~1,100 LF	Included yellow stripes north of over-crossing.	Intact	LBP
SM130828-L-7	North of over-crossing	Stripe on Road	Concrete	Gold	0.95	0	Included in SM130828-L-6.	Intact	LBP

Notes:

"<" = less than and below the reporting limit of the analytical method; "~" = approximately; LF = linear feet; "--" = not provided because no lead was detected in the sample; LBP = lead-based paint; LCP = lead-containing paint

3.0 CONCLUSIONS AND/OR RECOMMENDATIONS

Based on the information obtained during this sampling, laboratory analytical results, current regulatory guidelines and laws, state-of-the-industry practices, and the professional judgment of Panacea's personnel, the following conclusions have been made:

- Presence of LBP (detectable lead concentrations ≥0.5% by weight)
    - SM130828-L-1, SM130828-L-3, SM130828-L-6, and SM130828-L-7 were judged to be LBP. The paint was observed in fair to intact condition. See the table in Section 2.0 for sample locations and detailed descriptions.
- Presence of LCP (detectable lead concentrations <0.5% and ≥0.06% by weight)
    - SM130828-L-2 and SM130828-L-5 were judged to be LCP. The paint was observed in intact condition. See the table in Section 2.0 for sample locations and detailed descriptions.
- Non-LBP (≤0.06% by weight)
    - These materials/components are not subject to DPH and HUD regulations.
- Lead-Containing Hazardous Waste
    - Because hazardous waste is determined based on representative TTLC, STLC, and TCLP concentrations in samples, a proper waste characterization should be conducted for areas with detectable lead concentrations greater than or equal to 0.005 percent by weight during the renovation/demolition activities.
    - For painted surfaces in poor condition (i.e., chalky, peeling, cracked, etc.), it is recommended that paint stabilization be performed (i.e., encasement/encapsulation, scrapping, chemical stripping, removal, etc.) before demolition as part of the standard industry practices. Typically, a relatively small amount of poor-condition paint is generated as part of stabilization for demolition/renovation (i.e., a few 55-gallon barrels).
    - Intact paint on components or paint on stabilized components can be disposed of as regular construction debris.
- Worker Protection
    - Regardless of the conditions of paint containing lead, because DOSH regulations are not based on the concentrations in paint but rather on the exposure levels in air and/or blood, a negative exposure assessment (worker

protection evaluation) should be conducted when working in areas with LBP and LCP during the renovation/demolition activities.

However, for non-LBP at concentrations below 0.06 percent by weight, it is expected that the total dust (nuisance dust) standard would be exceeded before lead standard AL and PEL. Therefore, typical dust controls used in construction activities should be able to reduce airborne lead exposure below AL and PEL.

- The trigger for the worker protection is based on the "task" performed. Once a task is triggered, then the contractor is required to do a negative exposure assessment (NEA) along with any engineering control method(s) used (i.e., wetting, localized ventilation, spray foam, etc.). The NEA should be conducted by a qualified individual or company either through an objective evaluation of historical data and/or onsite air monitoring of the task performed.

- Alternatively, the contractor may elect to have LBP and/or LCP removed by in-house lead-trained workers under proper personal protection or subcontract the work to a lead-abatement subcontractor.

- For the lead dust or debris generated through the "task," the contractor should contain and separate it from the intact painted components and do a hazardous waste characterization or assume it is hazardous and dispose of it accordingly. Usually the lead containing dust and debris are assumed hazardous materials, and a relatively small amount is present (i.e., a few 55-gallon barrels).

4.0 REFERENCES

California Division of Occupational Safety and Health (DOSH), 1997. *Title 8, California Code of Regulations*, Section 1532.1. Revised 1997.

Occupational Safety and Health Administration (OSHA), 1993. *Occupational Safety and Health Standards.* Title 29, Code of Federal Regulations, Part 1926.62.

U.S. Department of Housing and Urban Development (HUD), 1995. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.* June 1995.

If you have any questions, please feel free to contact me at (562) 860-2869.

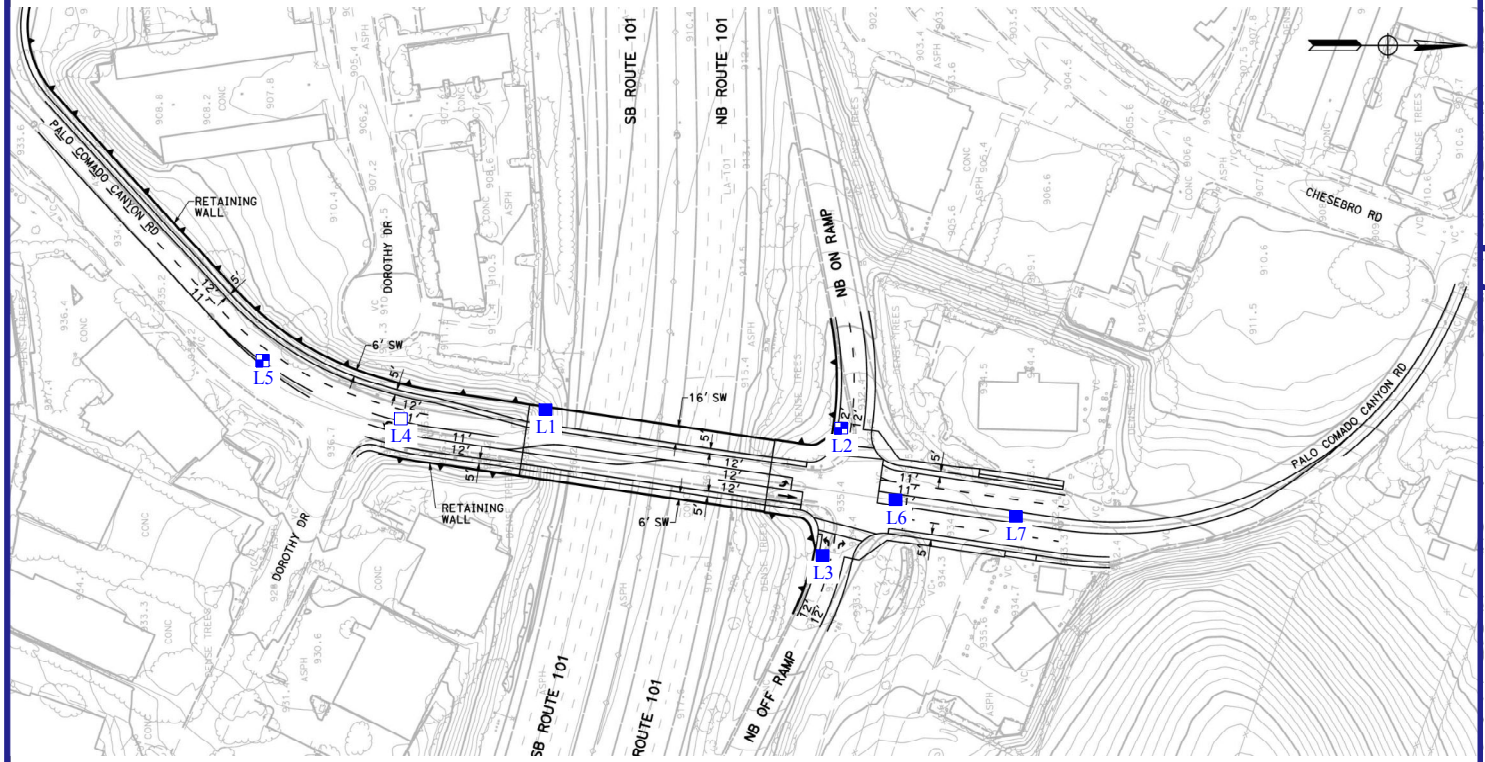
Very truly yours,
PANACEA, INC.

Hsin H. Chou, CIH, REA II, CAC
DPH Certification No. 17

Attachments:

- Figure 1
- Laboratory Analytical Reports and Chain-of-Custody Records
- Building Inspector's Certification
- Laboratory Accreditation
- Likelihood Statements

ATTACHMENTS



LEGEND

- ■ Lead-Based Paint (>=0.5% By Weight)
- ▪ Lead-Containing Paint (<0.5% By Weight)
- □ No Lead Detected (<0.06% By Weight)

GENERAL NOTES

1) All locations are approximate. No scale or dimension is implied.
2) Base map obtained from client.
3) Room numbers or designations are arbitrarily assigned for discussion purposes only.
4) Sample numbers are shortened for graphic presentation purposes (e.g., sample number [BLDG NO.]-L-001 is shortened to L1).
5) This survey gives general indications and locations of lead-based paint (LBP) and lead-containing paint (LCP). Absence of positive samples does not guarantee that an area is lead-free.
6) Non-LBP is defined as paint or coating containing lead in concentrations <0.06% by weight.
7) LCP is defined as paint or coating containing lead in concentrations ranging from <0.5% and >=0.06% by weight.
8) LBP is defined as paint or coating containing lead in concentrations >=0.5% by weight.

PANACEA, INC.
Environmental Services

PAINT CHIP SAMPLE LOCATIONS
PALO COMADO OVER-CROSSING
AGOURA HILLS, CALIFORNIA

PROJECT NO. C13-801	FIGURE 1

Forensic Analytical Laboratories

Metals Analysis of Paints

Panacea Inc.
Accounts Payable
14905 Paramount Blvd.
Suite - H
Paramount, CA 90723

Client ID: 5572
Report Number: M142349
Date Received: 08/30/13
Date Analyzed: 09/04/13
Date Printed: 09/04/13
First Reported: 09/04/13

Job ID / Site: C13-801 - Palo Comando Bridge-Asbt & LBP
Date(s) Collected: 08/28/13

FALI Job ID: 5572
Total Samples Submitted: 7
Total Samples Analyzed: 7

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
SM130828-L-1	30474976	Pb	1.4	wt%	0.2	EPA 3050B/7420
Comment:	Insufficient sample size for repeatable analysis.					
SM130828-L-2	30474977	Pb	0.11	wt%	0.007	EPA 3050B/7420
SM130828-L-3	30474978	Pb	2.5	wt%	0.2	EPA 3050B/7420
SM130828-L-4	30474979	Pb	< 0.007	wt%	0.007	EPA 3050B/7420
SM130828-L-5	30474980	Pb	0.067	wt%	0.006	EPA 3050B/7420
SM130828-L-6	30474981	Pb	1.3	wt%	0.07	EPA 3050B/7420
SM130828-L-7	30474982	Pb	0.95	wt%	0.06	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Daniele Siu

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

PANACEA, INC.

Environmental Services

14905 Paramount Blvd., Suite H • Paramount, CA 90723 • Tel. 562.860.2869 • Fax 562.633.3180

CHAIN OF CUSTODY RECORD

Date: 8/29/13 PM: Hsin Chou Page: 1 of 1

Project Name: Palo Comando Bridge - Asb+LDP Sampled By: Steve / Hsin

Project No.: C13-801 Shipped To: Forensic by: FedEx

SAMPLE NUMBER	SAMPLING DATE / TIME	PRESERVATION METHOD	CONTAINER TYPE/SIZE	SAMPLE MATRIX	ANALYSES REQUIRED
					AAS
SM130828-L-1	8/28/13	None	Sealed	Paint Chips	2 day TAT
2					
3					
4					
5					
6					
7					

TOTAL NUMBER OF SAMPLES 7

COMMENTS: Return signed chain-of-custody forms with final report(s). Email the report to Lorraina at lvalencia@panenv.com

2 day TAT

Relinquished By:		Company: Panacea, Inc.	Date: 8/29/13	Time: 3:00 pm	
Received By:		Company: Panacea, Inc.	Date: 8/29/13	Time: 3:01 pm	
Relinquished By:		Company: Panacea, Inc.	Date: 8/29/13	Time: 3:01 pm	
Received By:		Company: Gali	Date: 8-30-13	Time: 10:30 am	
Relinquished By:		Company:	Date:	Time:	
Received By:		Company:	Date:	Time:	

Revision : 07-09-28

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	01/16/2014
Supervisor	01/16/2014
Project Designer	01/16/2014
Project Monitor	01/16/2014

26226

Hsin H. Chou ID #: 17

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Sampling Technician	05/11/2014

27972

Steven L. Modtland ID #: 25285

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Forensic Analytical Laboratories, Inc.

3777 Depot Road, Suite 409, Hayward, CA 94545

Laboratory ID: 101762

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories in t*he following:

LABORATORY ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: 08/01/2014
✓	**ENVIRONMENTAL LEAD**	Accreditation Expires: 08/01/2014
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: 08/01/2014
☐	**FOOD**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

S. D. Allen Iske, PhD, CIH, CSP
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 12: 03/29/2012

Date Issued: 06/29/2012

AIHA
Laboratory Accreditation Programs, LLC

The laboratory participates in the following AIHA-LAP, LLC-approved proficiency testing programs:

- ❑ AIHA-PAT Programs, LLC IHPAT Metals
- ❑ AIHA-PAT Programs, LLC IHPAT Organic Solvents
- ❑ AIHA-PAT Programs, LLC IHPAT Silica
- ❑ AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (3M)
- ❑ AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (SKC)
- ❑ AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (AT)
- ✓ AIHA-PAT Programs, LLC IHPAT Asbestos
- ❑ AIHA-PAT Programs, LLC Bulk Asbestos (BAPAT)
- ✓ AIHA-PAT Programs, LLC Beryllium (BePAT)
- ❑ HSE Workplace Analytical Scheme for Proficiency (WASP) (Formaldehyde)
- ❑ HSE Workplace Analytical Scheme for Proficiency (WASP) (Thermal Desorption Tubes)
- ❑ Pharmaceutical Round Robin
- ❑ Compressed/Breathing Air Round Robin
- ❑ National Voluntary Laboratory Accreditation Program (NVLAP - determined at the time of site assessment)
- ❑ New York State Department of Health (NYS DOH – PCM and TEM)
- ❑ ERA Air and Emissions standards for indoor air quality
- ❑ Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA, formerly BGIA)
- ❑ Institut de Recherche Robert-Sauvé en Santé et en Sécurité du Travail (IRSST)

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

Forensic Analytical Laboratories, Inc.
3777 Depot Road, Suite 409, Hayward, CA 94545

Laboratory ID: **101762**
Issue Date: 06/29/2012

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 06/26/1995

Field of Testing (FoT)	Method	Method Description *(for internal methods only)*
Paint	16 CFR Part 1303 (CPSC-CH-E1003-09)	
	EPA SW-846 3050	
	EPA SW-846 7420	
Soil	EPA SW-846 3050	
	EPA SW-846 7420	
Settled Dust by Wipe	HUD App. 14.2	
	NIOSH 7082	
	NIOSH 9100	
	OSHA ID-105	
Airborne Dust	NIOSH 7082	
	NIOSH 7105	
	NIOSH 7303	

The laboratory participates in the following AIHA-LAP, LLC-approved proficiency testing programs**:**

- ✓ Paint
- ✓ Soil
- ✓ Settled Dust by Wipe
- ✓ Airborne Dust

Likelihood Statements

Many statements have been made in this report regarding the likelihood of the occurrence of certain adverse events. The term "likelihood," as used here, pertains to chances of a match between the prediction for the event and its actual occurrence. Likelihood statements are based on the professional judgments of Panacea Inc. A prediction made for the occurrence of an event will either match the actual occurrence or not. Uncertainty about the natural processes, lack of adequate scientific understanding of the physical and chemical interactions at the site, and insufficient data and information about the specific site conditions usually preclude a perfect or 100-percent likelihood of match between predictions and actual occurrences. Therefore, where a perfect match is not possible, the likelihood statement assigns a measure for a "degree of belief" or a "betting score" for the match between the prediction for the event and the actual event outcome.

The likelihood statements can be made either qualitatively, expressed verbally, or quantitatively, expressed in percent ranges. The qualitative terms expressed verbally, however, can be approximately related to percent ranges. Panacea, Inc. has used the following approximate percent ranges for the qualitative terms used in likelihood statements:

QUALITATIVE TERM	APPROXIMATE PERCENT RANGE
Very Low	Less than 10
Low	10 to 20
Low to Moderate	20 to 40
Moderate	40 to 60
Moderate to High	60 to 80
High	80 to 90
Very High	More than 90

The following is a typical likelihood statement and its interpretation:

- Statement: Based on site conditions, data collected, and current regulatory guidelines delineating a hazardous waste, it is the judgment of Panacea, Inc. that there is a low likelihood that hazardous waste from the landfill has migrated to the site.

- Interpretation of Statement: The statement reflects an extrapolation of a discrete data set to the entire site. This statement is made within the context of regulatory guidelines delineating hazardous wastes in effect at the time the statement is made. It is important to note that these guidelines periodically change; consequently, the judgment made corresponds to the guidelines cited in the report.

An extrapolation made from a discrete data set precludes making a statement with certainty that the event has occurred (i.e., one cannot really say with 100-percent certainty that hazardous waste from the landfill has not migrated to the site). Therefore, a professional judgment is made for the event that is expressed in terms of the likelihood (less than 100 percent) that the event either has or has not occurred.

The statement given above renders a professional judgment that there is a low likelihood that the event has occurred. The above statement could also have been expressed as "there is a high likelihood that hazardous waste from the landfill has not migrated to the site."

APPENDIX C
Paint Chip Testing of Yellow Striping on Interstate 101, Agoura Hills, California

PANACEA, INC.
Environmental Services
14905 Paramount Blvd., Suite H • Paramount, CA 90723 • Tel. 562.860.2869 • Fax 562.633.3180

Final

September 23, 2013

Mr. Jack Packwood
Group Delta Consultants, Inc.
4201 Santa Ana Street, Suite F
Ontario, California 91761

via Email
jackp@groupdelta.com

SUBJECT: Lead Paint Chip Testing of Yellow Striping on Interstate 101 near Palo Comado Overcrossing Bridge, Agoura Hills, California

In response to your request and authorization, Panacea, Inc. (Panacea) conducted lead paint chip (bulk) testing at the above-referenced site (Figure 1).

Figure 1 depicts the approximate locations where samples were collected and copies of laboratory analytical reports and chain-of-custody records are attached to this letter report.

It is our understanding that Interstate 101 is not zoned for residential and/or commercial building usage; therefore, Panacea is not required to submit Form 8552 "Lead Hazard Evaluation Form" to the California Department of Public Health (DPH) upon completion of this report. If our understanding is different than Caltrans' policy, then please let us know.

1.0 GUIDELINES AND TERMINOLOGY FOR LEAD

1.1 LEAD-BASED PAINT AND LEAD-CONTAINING PAINT DEFINITIONS

In 1978, the Consumer Product Safety Commission (CPSC) established a maximum lead content in paint of less than 0.06 percent by weight in a dry film of newly applied paint (U.S. Department of Housing and Urban Development [HUD], 1995). HUD specifies that lead-based paint (LBP) exists when paint contains lead equal to or greater than 1.0 milligram per square centimeter (mg/cm^2) by area or 0.5 percent by weight (HUD, 1995). DPH adopted HUD's LBP definitions in Title 17, California Code of Regulations (CCR), Section 35033.

Typically, the area concentrations are based on field x-ray fluorescence (XRF) analysis, while the weight concentrations are based on one of several laboratory analytical methods such as atomic absorption spectrometry (AAS) and inductively coupled plasma-atomic emission spectrometry (ICP-AES).

The definitions used in this report are as follows:

- LBP (greater than or equal to 0.5 percent by weight) – The HUD and DPH definitions are the generally accepted industry standards for determining the presence or absence of LBP. Therefore, HUD and DPH definitions are used as the evaluation criteria for LBP in this report.

- Lead-Containing Paint (LCP) – This definition is used for coatings containing detectable lead concentrations below 0.5 percent by weight but greater than or equal to 0.06 percent.

- Non-LBP – This definition is used for coatings containing lead concentrations below CPSC's maximum lead content of 0.06 percent by weight.

1.2 LEAD-CONTAINING HAZARDOUS WASTE

Regulation 22 CCR 66261.24 states that when representative samples of a waste exhibit certain toxic characteristics then the waste is considered hazardous. Lead-containing waste (LCW) is regulated as a hazardous waste if it exhibits one of the three threshold concentrations: total threshold limit concentration (TTLC), soluble threshold limit concentration (STLC), and/or Toxic Characteristic Leaching Procedures (TCLP). Interpretations of the waste concentrations are presented below.

- TTLC equal to or greater than 1,000 milligrams per kilogram (mg/kg) (or 0.1 percent)

    - The TTLC for lead is 1,000 mg/kg. If the sample concentration is at or above 1,000 mg/kg, then the represented material/waste when demolished will be considered as a California hazardous waste.

    - Additional TCLP analysis is required to determine whether the California-regulated waste is a Resource Conservation and Recovery Act (RCRA) hazardous waste. If the TCLP result is at or above 5 milligrams per liter (mg/L) of solution, then the waste is a California-regulated and RCRA hazardous waste. If the TCLP is below 5 mg/L, then the waste is considered to be a California-regulated waste but a non-RCRA hazardous waste.

- TTLC between 50 and 1,000 mg/kg (or 0.005 to 0.1 percent)

    - If the sample concentration is between 50 and 1,000 mg/kg, then additional testing using the California-mandated waste extraction test (WET) can be conducted to further characterize the STLC of the waste. The STLC for lead is 5 mg/L. At or above 5 mg/L of lead, the material would need to be disposed of as a California hazardous waste. Below 5 mg/L of lead, the waste is considered as construction debris or nonhazardous waste.

    - If the sample concentration is between 100 to 1,000 mg/kg, then additional testing using the TCLP can be conducted to further characterize the TCLP of the waste. The TCLP for lead is 5 mg/L. At or above 5 mg/L of lead, the material is classified as RCRA hazardous waste. Below 5 mg/L of lead, the waste is considered as non-RCRA hazardous waste; however, the STLC analysis is still required to determine if the waste is a California-regulated waste.

- TTLC less than 50 mg/kg (or 0.005 percent)
    - If the sample concentrations are less than 50 mg/kg, then the waste is considered as construction debris or nonhazardous waste.

1.3 WORKER EXPOSURE STANDARDS

Due to the growing concerns related to workplace lead exposure, the Federal Occupational Safety and Health Administration (OSHA) promulgated a lead standard for the construction industry in Title 29, Code of Federal Regulations (CFR), Part 1926.62 (29 CFR 1926.62), on May 4, 1993 (OSHA, 1993). The California Division of Occupational Safety and Health (DOSH) adopted and revised the OSHA standard under CCR, Title 8, Section 1532.1 (8 CCR 1532.1) (DOSH, 1997). Under 29 CFR 1926.62 and 8 CCR 1532.1, lead is defined as metallic lead, all inorganic lead compounds, and organic lead soaps. Lead paint is included in this regulation; however, it is not defined with any given concentration.

DOSH established exposure levels for lead in the construction industry at an action level (AL) of 30 micrograms of lead per cubic meter (µg/m^3) of air and a permissible exposure level (PEL) of 50 µg/m^3 calculated as an 8-hour time-weighted average (TWA) (DOSH, 1997). For certain construction activities involving lead paint, OSHA requires that an employer treat employees as if they were exposed to lead at a certain level and implement employee protective measures until exposure assessment using air sampling indicates otherwise. These activities and assumed levels of exposure are summarized in the table below.

ACTIVITIES	ASSUMED LEVELS OF EXPOSURE (ug/m^3)
– Manual demolition of structure – Manual scraping – Manual sanding – Heat gun applications – Power tool cleaning with dust collection systems – Lead-based paint spraying	50 < Exposure < 500
– Use of lead containing mortar, lead burning – Rivet busting – Power tool cleaning without dust collection system – Cleanup activities where dry expendable abrasives are used – Abrasive blasting, enclosure movement and removal	Exposure > 500

ACTIVITIES	ASSUMED LEVELS OF EXPOSURE (ug/m^3)
– Abrasive blasting – Welding – Cutting – Torch burning	Exposure > 2,500

The detection limit of the XRF analyzer is generally considered to be accurate when concentrations of lead in paint are greater than 1.0 mg/cm^2. The accuracy of the laboratory analytical methods is typically expressed in parts per million (or below the CPSC's 0.06 percent by weight). It has been our experience that when an XRF analyzer does not detect lead in paint, a high likelihood exists that the same paint will be reported to contain lead above the detection limits of laboratory analytical methods such as AAS and ICP-AES. OSHA and DOSH regulations are not based on the concentrations in paint but rather on the exposure levels in air and/or blood.

2.0 PAINT CHIP SAMPLING RESULTS AND INTERPRETATIONS

The sampling was conducted on September 12, 2013. Five bulk samples of paint were collected by Panacea and submitted to Forensic Analytical Laboratory in Hayward, California for analysis using AAS.

The following table presents the sample locations, components, substrates, colors, laboratory results, homogeneous area, conditions, and interpretation of the results.

Figure 1 depicts the approximate locations where samples were collected and area designations.

SAMPLE NO.	SAMPLE LOCATION	COMPONENT	SUBSTRATE	COLOR	RESULTS (% BY WEIGHT)	HOMOGENEOUS AREA OBSERVED	CONDITION	INTEPRETATION
L-8	Northbound 101, west of Palo Comado overcrossing	Stripe on Interstate	Concrete	Yellow	<0.006	--	--	Non-LBP
L-9	Northbound 101, east of Palo Comado overcrossing	Stripe on Interstate	Concrete	Yellow	0.026	--	--	Non-LBP
L-10	Northbound 101, east of Palo Comado overcrossing	Stripe on Interstate	Asphalt	Yellow	<0.007	--	--	Non-LBP
L-11	Northbound 101, west of Palo Comado overcrossing	Stripe on Interstate	Asphalt	Yellow	<0.007	--	--	Non-LBP
L-12	Southbound 101, under Palo Comado overcrossing	Stripe on Interstate	Asphalt	Yellow	<0.006	--	--	Non-LBP

Notes:

"<" = less than and below the reporting limit of the analytical method; "--" = not provided because no lead was detected in the sample; LBP = lead-based paint

3.0 CONCLUSIONS AND/OR RECOMMENDATIONS

Based on the information obtained during this sampling, laboratory analytical results, current regulatory guidelines and laws, state-of-the-industry practices, and the professional judgment of Panacea's personnel, the following conclusions have been made:

- Presence of LBP (detectable lead concentrations ≥0.5% by weight)
    - Not present in samples collected.
- Presence of LCP (detectable lead concentrations <0.5% and ≥0.06% by weight)
    - Not present in samples collected.
- Non-LBP (≤0.06% by weight)
    - These materials/components are not subject to DPH and HUD regulations.
- Lead-Containing Hazardous Waste
    - Because hazardous waste is determined based on representative TTLC, STLC, and TCLP concentrations in samples, a proper waste characterization should be conducted for areas with detectable lead concentrations greater than or equal to 0.005 percent by weight during the renovation/demolition activities.
    - For painted surfaces in poor condition (i.e., chalky, peeling, cracked, etc.), it is recommended that paint stabilization be performed (i.e., encasement/encapsulation, scrapping, chemical stripping, removal, etc.) before demolition as part of the standard industry practices. Typically, a relatively small amount of poor-condition paint is generated as part of stabilization for demolition/renovation (i.e., a few 55-gallon barrels).
    - Intact paint on components or paint on stabilized components can be disposed of as regular construction debris.
- Worker Protection
    - Regardless of the conditions of paint containing lead, because DOSH regulations are not based on the concentrations in paint but rather on the exposure levels in air and/or blood, a negative exposure assessment (worker protection evaluation) should be conducted when working in areas with LBP and LCP during the renovation/demolition activities.

However, for non-LBP at concentrations below 0.06 percent by weight, it is expected that the total dust (nuisance dust) standard would be exceeded before lead standard AL and PEL. Therefore, typical dust controls used in construction activities should be able to reduce airborne lead exposure below AL and PEL.

- The trigger for the worker protection is based on the "task" performed. Once a task is triggered, then the contractor is required to do a negative exposure assessment (NEA) along with any engineering control method(s) used (i.e., wetting, localized ventilation, spray foam, etc.). The NEA should be conducted by a qualified individual or company either through an objective evaluation of historical data and/or onsite air monitoring of the task performed.

- Alternatively, the contractor may elect to have LBP and/or LCP removed by in-house lead-trained workers under proper personal protection or subcontract the work to a lead-abatement subcontractor.

- For the lead dust or debris generated through the "task," the contractor should contain and separate it from the intact painted components and do a hazardous waste characterization or assume it is hazardous and dispose of it accordingly. Usually the lead containing dust and debris are assumed hazardous materials, and a relatively small amount is present (i.e., a few 55-gallon barrels).

4.0 REFERENCES

California Division of Occupational Safety and Health (DOSH), 1997. *Title 8, California Code of Regulations*, Section 1532.1. Revised 1997.

Occupational Safety and Health Administration (OSHA), 1993. *Occupational Safety and Health Standards.* Title 29, Code of Federal Regulations, Part 1926.62.

U.S. Department of Housing and Urban Development (HUD), 1995. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.* June 1995.

If you have any questions, please feel free to contact me at (562) 860-2869.

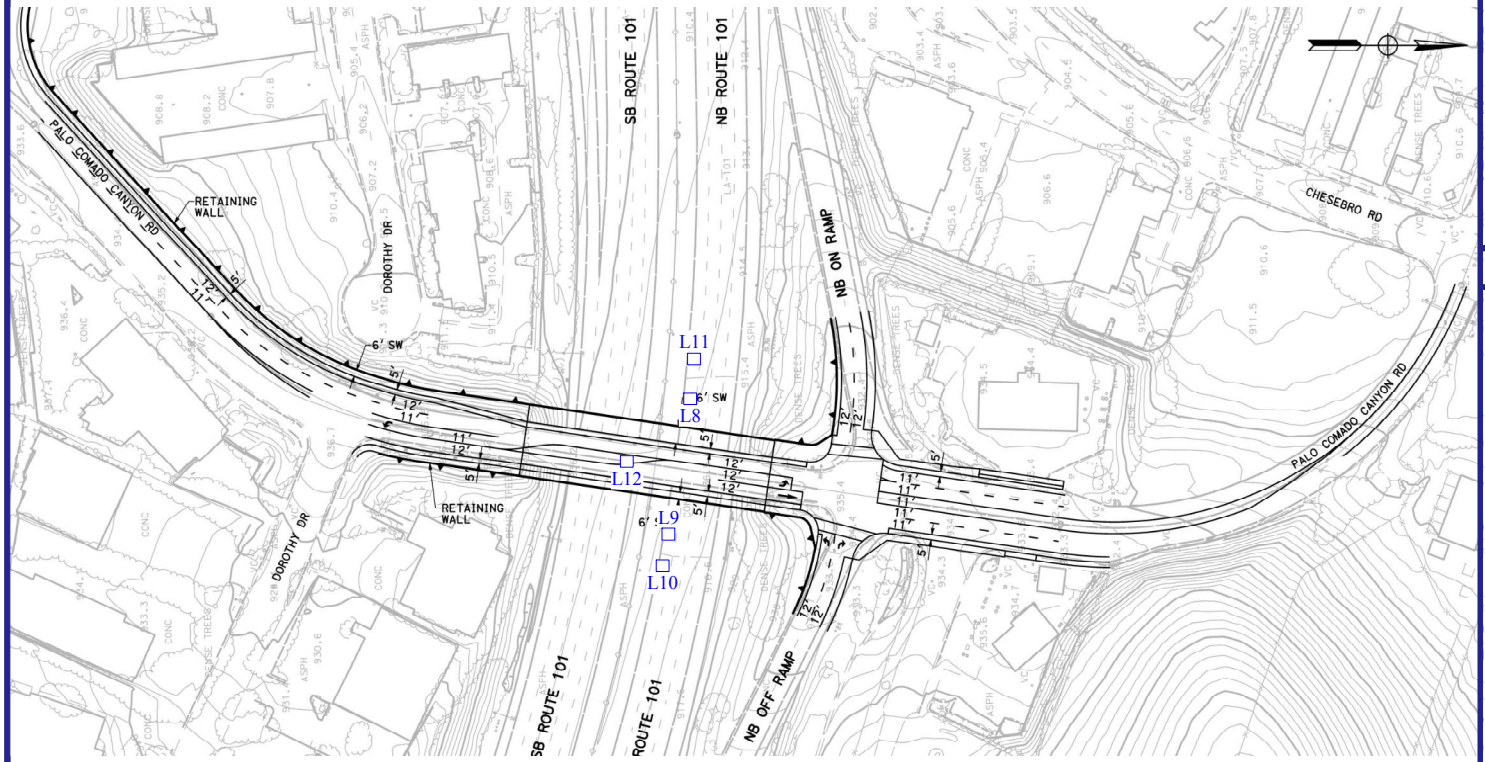
Very truly yours,
PANACEA, INC.

Hsin H. Chou, CIH, REA II, CAC
DPH Certification No. 17

Attachments:

- Figure 1
- Laboratory Analytical Reports and Chain-of-Custody Records
- Building Inspector's Certification
- Laboratory Accreditation
- Likelihood Statements

ATTACHMENTS



N

LEGEND

□ No Lead Detected (<0.06% By Weight)

GENERAL NOTES

1) All locations are approximate. No scale or dimension is implied.
2) Base map obtained from client.
3) Room numbers or designations are arbitrarily assigned for discussion purposes only.
4) Sample numbers are shortened for graphic presentation purposes (e.g., sample number [BLDG NO.]-L-001 is shortened to L1).
5) This survey gives general indications and locations of lead-based paint (LBP) and lead-containing paint (LCP). Absence of positive samples does not guarantee that an area is lead-free.
6) Non-LBP is defined as paint or coating containing lead in concentrations <0.06% by weight.
7) LCP is defined as paint or coating containing lead in concentrations ranging from <0.5% and >=0.06% by weight.
8) LBP is defined as paint or coating containing lead in concentrations >=0.5% by weight.

PANACEA, INC.
Environmental Services

PAINT CHIP SAMPLE LOCATIONS
INTERSTATE 101 NEAR
PALO COMADO OVERCROSSING
AGOURA HILLS, CALIFORNIA

PROJECT NO. C13-801	FIGURE 1

Forensic Analytical Laboratories

Metals Analysis of Paints

Panacea Inc.
Accounts Payable
14905 Paramount Blvd.
Suite - H
Paramount, CA 90723

Client ID: 5572
Report Number: M142834
Date Received: 09/16/13
Date Analyzed: 09/17/13
Date Printed: 09/17/13
First Reported: 09/17/13

Job ID / Site: C13-801, Palo Comado
Date(s) Collected: 9/12/13

FALI Job ID: 5572
Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
L-8	30476890	Pb	< 0.006	wt%	0.006	EPA 3050B/7420
L-9	30476891	Pb	0.026	wt%	0.007	EPA 3050B/7420
L-10	30476892	Pb	< 0.007	wt%	0.007	EPA 3050B/7420
L-11	30476893	Pb	< 0.007	wt%	0.007	EPA 3050B/7420
L-12	30476894	Pb	< 0.006	wt%	0.006	EPA 3050B/7420

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

Daniele Siu

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

3777 Depot Road, Suite 409, Hayward, CA 94545 / Telephone: (510) 887-8828 (800) 827-FASI / Fax: (510) 887-4218

Forensic Analytical Laboratories, Inc.

Analysis Request Form (COC)

Client Name & Address:

Panacea, Inc.

PO / Job#: C13-801 Date: 9/13/13

Turn Around Time: Same Day / 1Day / (2Day) / 3Day / 4Day / 5Day

☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Reticle#:

☐ PLM: ☐ Standard / ☐ Point Count 400 1000 / ☐ CARB 435

☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402

☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield

☐ TEM Water: ☐ Potable / ☐ Non Potable / ☐ Weigh. %

☐ TEM Microvac: ☐ Qual(4A) / ☐ D5755(sr/area) / ☐ D5756(str/mass)

Contact: Steven Modtland

Phone: 562-860-2869 Fax:

E-mail: lvalencia@panaev.com

☐ IAQ Particle Identification (PCM: LAB) ☐ PLM Opaques/Soil

☐ Particle Identification (TEM LAB) ☐ Special Project

Site: Palo Comado

Site Location

☒ Metals Analysis. Method: Lead AAS

Matrix:

Analytes:

Comments:

Report Via: ☐ Fax ☒ E-Mail ☐ Verbal

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY: Type	Time On/Off	Avg. LPM	Total Time	Sample Area / Air Volume
L-8	9/12/13		A P C				
L-9			A P C				
L-10			A P C				
L-11			A P C				
L-12			A P C				
			A P C				
			A P C				
			A P C				
			A P C				
			A P C				

Sampled By: Steven Modtland Date: 9/12/13 Time:

Shipped Via: ☐ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☒ Drop Off ☐ Other

Relinquished By: [signature] Date / Time: 9/13/13 1:31 PM

Received By: [signature] D/D Date / Time: 9-13-13 1:31 pm Condition Acceptable? ☒ Yes ☐ No

Relinquished By: [signature] FE Date / Time: 9-13-13 5 pm

Received By: [signature] AP Date / Time: 9/16/13 10:30am Condition Acceptable? ☒ Yes ☐ No

Relinquished By: Date / Time:

Received By: Date / Time: Condition Acceptable? ☐ Yes ☐ No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph. (510)887-8828 * (800)827-3274 / Fax (510)887-3019
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph. (310)763-2374 * (888)813-9417 / Fax (310)763-8165
Las Vegas Office: 5765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph. (702)784-0040 / Fax (702)784-0030

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Inspector/Assessor	01/16/2014
Supervisor	01/16/2014
Project Designer	01/16/2014
Project Monitor	01/16/2014

26226

Hsin H. Chou ID #: 17

State of California Department of Public Health

Lead-Related Construction Certificate

Certificate Type	Expiration Date
Sampling Technician	05/11/2014

27972

Steven L. Modtland ID #: 25285

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Forensic Analytical Laboratories, Inc.

3777 Depot Road, Suite 409, Hayward, CA 94545

Laboratory ID: 101762

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☐	**FOOD**	Accreditation Expires:

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S. D. Allen Iske, PhD, CIH, CSP
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 12: 03/29/2012

Date Issued: 06/29/2012

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Laboratory Accreditation Programs, LLC

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- ❑ AIHA-PAT Programs, LLC IHPAT Organic Solvents
- ❑ AIHA-PAT Programs, LLC IHPAT Silica
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- ❑ AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (SKC)
- ❑ AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (AT)
- ✓ AIHA-PAT Programs, LLC IHPAT Asbestos
- ❑ AIHA-PAT Programs, LLC Bulk Asbestos (BAPAT)
- ✓ AIHA-PAT Programs, LLC Beryllium (BePAT)
- ❑ HSE Workplace Analytical Scheme for Proficiency (WASP) (Formaldehyde)
- ❑ HSE Workplace Analytical Scheme for Proficiency (WASP) (Thermal Desorption Tubes)
- ❑ Pharmaceutical Round Robin
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- ❑ National Voluntary Laboratory Accreditation Program (NVLAP - determined at the time of site assessment)
- ❑ New York State Department of Health (NYS DOH – PCM and TEM)
- ❑ ERA Air and Emissions standards for indoor air quality
- ❑ Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA, formerly BGIA)
- ❑ Institut de Recherche Robert-Sauvé en Santé et en Sécurité du Travail (IRSST)

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

Forensic Analytical Laboratories, Inc.
3777 Depot Road, Suite 409, Hayward, CA 94545

Laboratory ID: **101762**
Issue Date: 06/29/2012

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 06/26/1995

Field of Testing (FoT)	Method	Method Description *(for internal methods only)*
Paint	16 CFR Part 1303 (CPSC-CH-E1003-09)	
	EPA SW-846 3050	
	EPA SW-846 7420	
Soil	EPA SW-846 3050	
	EPA SW-846 7420	
Settled Dust by Wipe	HUD App. 14.2	
	NIOSH 7082	
	NIOSH 9100	
	OSHA ID-105	
Airborne Dust	NIOSH 7082	
	NIOSH 7105	
	NIOSH 7303	

The laboratory participates in the following AIHA-LAP, LLC-approved proficiency testing programs**:**

- ✓ Paint
- ✓ Soil
- ✓ Settled Dust by Wipe
- ✓ Airborne Dust

Likelihood Statements

Many statements have been made in this report regarding the likelihood of the occurrence of certain adverse events. The term "likelihood," as used here, pertains to chances of a match between the prediction for the event and its actual occurrence. Likelihood statements are based on the professional judgments of Panacea Inc. A prediction made for the occurrence of an event will either match the actual occurrence or not. Uncertainty about the natural processes, lack of adequate scientific understanding of the physical and chemical interactions at the site, and insufficient data and information about the specific site conditions usually preclude a perfect or 100-percent likelihood of match between predictions and actual occurrences. Therefore, where a perfect match is not possible, the likelihood statement assigns a measure for a "degree of belief" or a "betting score" for the match between the prediction for the event and the actual event outcome.

The likelihood statements can be made either qualitatively, expressed verbally, or quantitatively, expressed in percent ranges. The qualitative terms expressed verbally, however, can be approximately related to percent ranges. Panacea, Inc. has used the following approximate percent ranges for the qualitative terms used in likelihood statements:

QUALITATIVE TERM	APPROXIMATE PERCENT RANGE
Very Low	Less than 10
Low	10 to 20
Low to Moderate	20 to 40
Moderate	40 to 60
Moderate to High	60 to 80
High	80 to 90
Very High	More than 90

The following is a typical likelihood statement and its interpretation:

- Statement: Based on site conditions, data collected, and current regulatory guidelines delineating a hazardous waste, it is the judgment of Panacea, Inc. that there is a low likelihood that hazardous waste from the landfill has migrated to the site.

- Interpretation of Statement: The statement reflects an extrapolation of a discrete data set to the entire site. This statement is made within the context of regulatory guidelines delineating hazardous wastes in effect at the time the statement is made. It is important to note that these guidelines periodically change; consequently, the judgment made corresponds to the guidelines cited in the report.

An extrapolation made from a discrete data set precludes making a statement with certainty that the event has occurred (i.e., one cannot really say with 100-percent certainty that hazardous waste from the landfill has not migrated to the site). Therefore, a professional judgment is made for the event that is expressed in terms of the likelihood (less than 100 percent) that the event either has or has not occurred.

The statement given above renders a professional judgment that there is a low likelihood that the event has occurred. The above statement could also have been expressed as "there is a high likelihood that hazardous waste from the landfill has not migrated to the site."