STATE OF HAWAII DEPARTMENT OF DEFENSE OFFICE OF THE ADJUTANT GENERAL 3949 DIAMOND HEAD ROAD HONOLULU, HAWAII 96816-4495

June 15, 2016

ADDENDUM NO. 1

Diamond Head Crater, M-Tunnel Repairs, State of Hawaii, Department of Defense, Job No. CA-1428-C

The items listed hereinafter are hereby made a part of the contract for the above mentioned project and shall govern the work taking precedence over previously issued contract documents governing the items mentioned. Receipt of this addendum is to be acknowledged on page OF-7 of the proposer's packet.

A. SUMMARY FOR VOLUNTARY PRE-BID CONFERENCE AND WALK-THROUGH

A voluntary pre-bid conference and walk-through was held at the M-Tunnels on June 1, 2016 at 9:00 a.m. A site visit and walk-through of the project area was also conducted following the meeting. A copy of the Sign-in Sheet of who attended the conference and walk-through is attached.

B. CHANGES TO SPECIFICATIONS

- Offer Form, page OF-6, LICENSE: Revise portion reading "B-General Building Contractor" to read "A-General Engineering Contractor or B-General Building Contractor".
- 2. Specification Section 01715, paragraph 3.01: Insert the following item:
 - "C. Final Letter Report, Asbestos and Lead Paint Survey, Repair Various Tunnels Shotcrete Finishes, Mule Tunnels 0.1, 1, 2, 3 and 5, Diamond Head Crater, Honolulu, Oahu, Hawaii, prepared by Element Environmental, Inc. dated June 2016."
- 3. Specification Section 01715: At the end of the section, insert the attached report (see title of report in item B.2. above 22 pages).

The questions below is from the pre-bid meeting/site visit that was held on June 1, 2016.

A. Question: Please advise us as to whether an addendum will be issued allowing an engineering contractor with a CLASS A license to bid on your tunnel repair project as a general contractor.

Response: Refer to item B.1. above.

Arthur J. Logan Major General Adjutant General

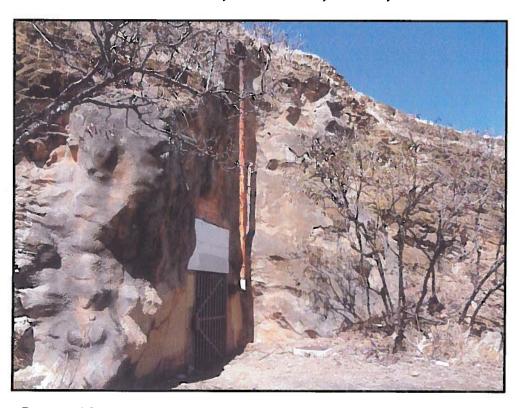
Posted: June 15, 2016

PRE-BID CONFERENCE ATTENDANCE LIST

DATE: June 1, 2016 at 9:00 A.M.	
PROJECT: Diamond Head Crater, M-Tunnel Repa	
State of Hawaii, Department of Defense	e, Job No. CA-1428-C
NAME: Llovd Maki	NAME
	NAME:
, and a second second	TITLE:
COMPANY: HIENG	COMPANY:
PHONE: 733-8441	PHONE:
FAX:	FAX:
CELL:	CELL:
EMAIL: <u>lloyd.k. maki@hawaii.gov</u>	EMAIL:
NAME: Marvin Krael	NAME:
TITLE: Project Manager	TITLE:
COMPANY: Global Specialty Contractors	COMPANY:
PHONE: 843-8881	PHONE:
FAX: 843.8883	FAX:
CELL: 387-0052	CELL:
EMAIL: MKVael @ global specialty . net	EMAIL:
NAME: David Lein	NAME:
TITLE: Project Manager	TITLE:
COMPANY: Abhersuoboda, Inc.	COMPANY:
PHONE: 682-4833	PHONE:
FAX: 682-0780	FAX:
CELL: (612-) 366-1884 EMAIL: David . Leinalymail. COM	CELL:
EMAIL: David Leing) amount com	EMAIL:
January Carp	Latvir VII.
NAME: Danny Guitis	NAME:
TITLE: Estimator	TITLE:
COMPANY: Ohana Environmental	COMPANY:
PHONE: 836 6955	PHONE:
FAX: 836 3833	FAX:
CELL: 348 1920	CELL:
EMAIL: danny-oecjehawau:w.com	EMAIL:
Ziviruz.	LIVIAIC.
NAME: Peter Grading	NAME:
NAME: Peter Gooding TITLE: Assistant Priet Manager COMPANY: Promothers Construction	TITLE:
COMPANY: Promethers Construction	COMPANY:
PHONE: 954-2615	
FAX:	PHONE:
CELL:	FAX:
	CELL:
EMAIL: peter (a) promethess construction.com	EMAIL:
the contract of the contract o	

Final Letter Report Asbestos and Lead Paint Survey

Repair Various Tunnel Shotcrete Finishes, Mule Tunnels 0.1, 1, 2, 3, and 5, Diamond Head Crater, Honolulu, Oahu, Hawaii



Prepared for:

State of Hawaii, Department of Defense Engineering Office 3949 Diamond Head Road Honolulu, Hawaii 96816

Prepared by:





June 14, 2016

Mr. Lloyd Maki, Assistant Chief Engineering Officer State of Hawaii, Department of Defense 3949 Diamond Head Road Honolulu, Hawaii 96816

Subject: State of Hawaii Purchase Order 16217334 (E2 Project 160031)

Asbestos and Lead Paint Survey

Repair Various Tunnel Shotcrete Finishes

Diamond Head Crater Mule Tunnels

Honolulu, Oahu, Hawaii

Dear Mr. Maki:

Element Environmental, LLC (E2) is pleased to submit this Asbestos and Lead Paint Survey report for the State of Hawaii Department of Defense (DoD) Repair Various Tunnel Shotcrete Finishes Project at the Diamond Head Crater Mule Tunnels (0.1, 1, 2, 3, and 5), Honolulu, Oahu, Hawaii. The Scope of Work (SOW) is based on E2's accepted fee proposal dated April 26, 2016.

The field work was performed on May 20, 2016. The DoD provided E2 with access to the fronts of the Tunnels. Digital color photographs were taken to document the field investigation, and select photographs are included in Appendix A.

Previous Assessment of Building Materials

E2 was provided an electronic copy of one previous sampling event (provided in Appendix B), which is summarized below:

- Assessment of Building Materials Prior to Renovations Process at Department of Defense Diamond Head Crater – Mule Tunnel #3 and Building #306, dated October 23, 2013, prepared by Ohana Environmental Construction, Inc. for the DoD-Hawaii Army National Guard. The limited assessment of suspect asbestos-containing material (ACM) and lead-containing paint (LCP) was limited to Mule Tunnel #3 (Entry-exterior only) and Building 306 located at 3949 Diamond Head Road (which is not pertinent to this current project).
 - ➤ Hard plaster in good to fair condition at the Exterior-Entry to Mule Tunnel #3 was sampled, analyzed for asbestos, and determined to be non-ACM. The laboratory identified the material as a grey/white plaster material with aggregate, brown powdery material and brown paint-like material.

One paint sample from the Mule Tunnel #3 Exterior-Entry metal door in fair condition was sampled, analyzed for total lead, and identified as lead-based paint (LBP, with a concentration of 48,000 milligrams per kilogram [mg/kg] lead).

Asbestos Survey

The current asbestos survey consisted of the collection of 25 samples from accessible components that may be affected by the project, i.e., five homogeneous sampling areas (HSAs) (one from each Tunnel front) consisting of the Tunnel entrance wall shotcrete (see Appendix A Photographs). Areas to be repaired were targeted for sampling if safely accessible. An HSA contains a material that appears uniform in color, texture, and function.

James Tsubone (#HIASB-4118) and Bernice Balete (#HIASB-0449), the asbestos inspectors who completed the sampling, are certified in accordance with the inspector training requirements of the Asbestos Hazard Emergency Response Act (AHERA) and the State of Hawaii Department of Health (HDOH) Asbestos Inspector Certification Program (Hawaii Administrative Rules [HAR] 11-503 and 11-504).

Forensic Analytical Laboratories, Inc. (Forensic) of Rancho Dominguez, California provided asbestos analytical services. Forensic is registered with the HDOH Indoor and Radiological Health Branch, Asbestos Section (L-06-002). Forensic is accredited by the California Environmental Laboratory Accreditation Program (ELAP) Branch, #1366; the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP) for asbestos/fiber microscopy core, #101629; and the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis, #101459-1. Samples were analyzed by polarized light microscopy (PLM) with dispersion staining (visual estimation), in accordance with United States Environmental Protection Agency (EPA) Interim Method of the Determination of Asbestos in Bulk Samples, Appendix E, Subpart E, 40 Code of Federal Regulations (CFR) 763, EPA Method 600/R-93-116, Visual Area Estimation.

Results were compared to standard presence/absence criteria for asbestos, i.e., materials containing over 1% asbestos are considered ACM. Asbestos was not found in any of the bulk samples collected from the project site. Table 1 provides suspect asbestos sample data results and locations; and Appendix B contains the complete suspect asbestos analytical laboratory report.

Lead Paint Survey

The current LBP survey consisted of the collection of 6 paint chip samples (one from each Tunnel front, and one additional from Tunnel M-0.1) from painted components that may be affected by the project, such as the shotcrete walls (see Appendix A Photographs).

Bernice Balete (#PB-0449), the paint inspector who completed the sampling, is certified by the HDOH Lead Activities Inspector Certification Program.

Forensic also provided the lead analytical services. Forensic is accredited by the AIHA under the Environmental Lead Laboratory Accreditation Program (ELLAP), #101629. Samples were analyzed by Atomic Absorption Spectrometry (AAS), in accordance with EPA Method 3050B/7420.

Results were compared to standard presence/absence criteria for lead, i.e., paint containing over 0.5% by weight or 5,000 mg/kg total lead were considered LBP. Paint with any detectable amount of lead is considered LCP. Both LBP and LCP are worker protection issues.

Table 2 provides paint sample results and locations; and Appendix C contains the complete paint chip sample analytical laboratory report. Four samples are considered LBP, with lead contents ranging from 0.9 to 10% by weight (9,000 to 100,000 mg/kg). Two samples are considered LCP with lead content of 0.15 to 0.19% by weight (1,500 to 1,900 mg/kg).

Conclusions

Asbestos was not found in the samples collected from the project site during this field effort. However, LBP and LCP were found in most of the samples collected from the project site during this field effort. These surfaces will be affected by the proposed construction work.

Future construction activities will need to address the presence of LCP and LBP. Appropriate worker protection measures for lead should be taken during the repair work. Representative Toxicity Characteristic Leaching Procedure (TCLP) samples of the waste stream may also need to be collected and analyzed prior to landfill acceptance. In addition, future construction documents should include appropriate plans and specifications to address abatement, handling, treatment, removal, recycling, storage, transportation, and/or disposal of any other suspect materials not sampled due to inaccessibility or hidden from view.

We appreciate the opportunity to have worked with you on this project. Should you have any questions or require additional information related to this project, please do not hesitate to call me at (808) 864-3952.

Sincerely,

Element Environmental, LLC

Ryan S. Yamauchi, P.E.

President

Attachments

Table 1: Suspect Asbestos Bulk Sample Results Table 2: Suspect Lead Paint Chip Sample Results

Appendix A: Site Photographs

Appendix B: Suspect Asbestos Analytical Laboratory Report Appendix C: Paint Chip Sample Analytical Laboratory Report

TABLE 1: SUSPECT ASBESTOS BULK SAMPLE RESULTS

Sample ID#	Material Location	Type of Suspect ACM	Friability	Physical Condition	Potential for Disturbance	Color	Asbestos Present?	Total % Asbestos	Other Materials
M-0.1-A1-1	Mule Tunnel 0.1 Entry	Shotcrete	non-friable	good to poor	low to high	gray	No	NAD	Celiulose (trace)
M-0.1-A1-2	11	"	11	11	40	"	"	**	*1
M-0.1-A1-3	n	n	**	"	b	"	"		"
M-0.1-A1-4	11	н	"	н	н	"	"	**	9
M-0.1-A1-5	N	**	"	"	и	"	"	**	
M-1-A2-1	Mule Tunnel 1 Entry	Shotcrete	non-friable	good to poor	low to high	gray	No	NAD	Cellulose (trace)
M-1-A2-2	"	44	"	"	**	"	11	66	
M-1-A2-3	"	u	H	"	11	"	11	14	н
M-1-A2-4	**	"	++	"	11	"	"	"	
M-1-A2-5		11	"	"	**	"	**	1)	"
M-2-A3-1	Mule Tunnel 2 Entry	Shotcrete	non-friable	good to poor	low to high	gray	No	NAD	Cellulose (trace)
M-2-A3-2	n	- 11	"	н	11	11	"	11	10
M-2-A3-3	0	**	.,	"	"		11	++	"
M-2-A3-4		**	"	"	"		11	++	"
M-2-A3-5	11	"	"	"	11	44	"		н
M-3-A4-1	Mule Tunnel 3 Entry	Shotcrete	non-friable	good to poor	low to high	gray	No	NAD	Celluiose (trace)
M-3-A4-2	**	"		"	"		44	"	n
M-3-A4-3	и	"	**	"	b)	"	"	"	11
M-3-A4-4	"	44	"	0	"	**	H	**	"
M-3-A4-5	н	11	**	0	и	"	"	"	a>
M-5-A5-1	Mule Tunnel 5 Entry	Shotcrete	non-friable	good to poor	low to high	gray	No	NAD	Cellulose (trace)
M-5-A5-2	11	н	11	"	n n	**	- 4	"	
M-5-A5-3	35	п	**	"	"	"	- "		**
M-5-A5-4	"	1)	"	0	0	"	19	н	n .
M-5-A5-5	n	"		"	n		"		n

Notes NAD = No Asbestos Detected Asbestos-containing material (ACM) = contains greater than 1% asbestos

Repair Various Tunnel Shotcrete Finishes Diamond Head Crater Mule Tunnels Honolulu, Oahu, Hawaii

Letter Report Asbestos and Lead Paint Survey June 2016

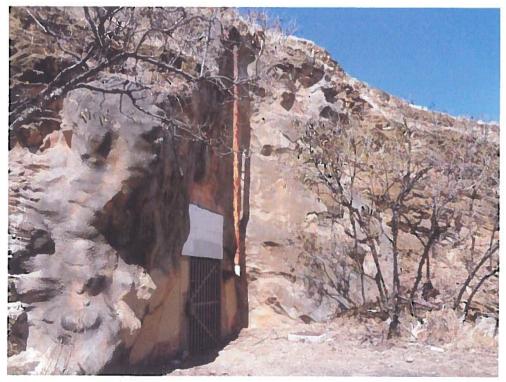
TABLE 2: SUSPECT LEAD PAINT CHIP SAMPLE RESULTS

Sample ID#	Material Location	Component	Substrate	Substrate Condition	Paint Color	Paint Condition	Lead Result (% by weight)	Lead Result (mg/kg)
M-0.1-L1	Tunnel 0.1	Wall	Shotcrete	good-poor	red-brown	intact	0.19	1,900
M-0.1-L6	Tunnel 0.1	Wall	Shotcrete	good-poor	white	intact	0.15	1,500
M-1-L2	Tunnel 1	Wall	Shotcrete	good-poor	red-brown	intact	1.6	16,000
M-2-L3	Tunnel 2	Wall	Shotcrete	good-poor	red-brown	intact	2.0	20,000
M-3-L4	Tunnel 3	Wall	Shotcrete	good-poor	red-brown	intact	10	100,000
M-5-L5	Tunnel 5	Wall	Shotcrete	good-poor	red-brown	intact	0.9	9,000

Notes:

Notes:
mg/kg = milligram per kilogram
%w/w = percent lead weight over sample weight
ND (< RL) = Lead was not detected above (the laboratory reporting limit [RL])
Lead-Containing Paint (LCP) = lead content greater than RL, but less than 0.5% by weight or 5,000 mg/kg
Lead-Based Paint (LBP) = lead content equal to or greater than 0.5% by weight or 5,000 mg/kg

APPENDIX A Site Photographs



Photograph 1 – Mule Tunnel 0.1 non-ACM shotcrete (HSA A1).



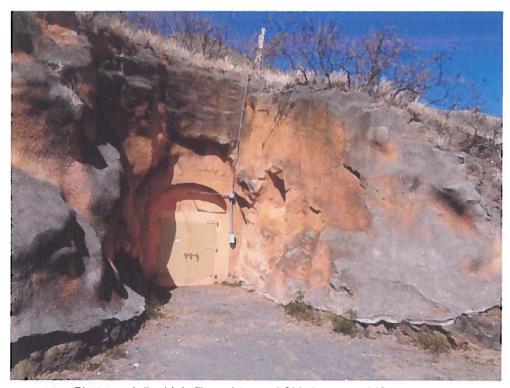
Photographs 2 and 3 – Close-up of Mule Tunnel 0.1 LCP samples L1 and L6, respectively.



Photographs 4 and 5 – Mule Tunnel 1 non-ACM shotcrete (HSA A2).



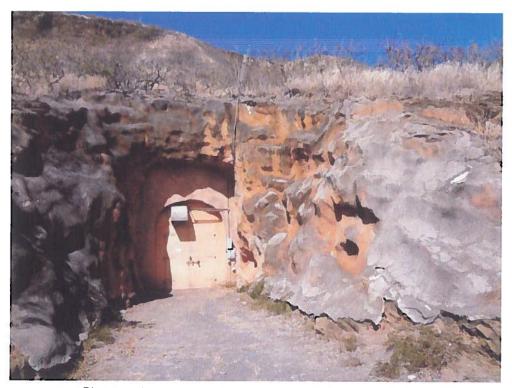
Photograph 6 – Close-up of Mule Tunnel 1 LBP sample L2.



Photograph 7 – Mule Tunnel 2 non-ACM shotcrete (HSA A3).



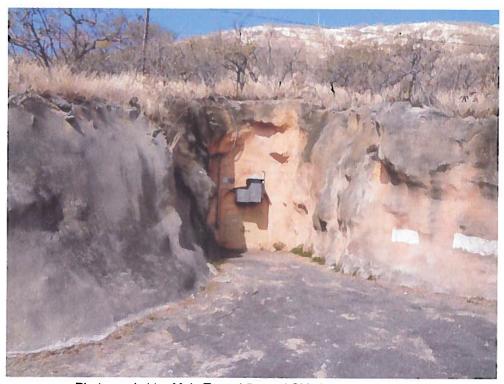
Photograph 8 – Close-up of Mule Tunnel 2 LBP sample L3.



Photograph 9 - Mule Tunnel 3 non-ACM shotcrete (HSA A4).



Photograph 10 – Close-up of Mule Tunnel 3 LBP sample L4.



Photograph 11 – Mule Tunnel 5 non-ACM shotcrete (HSA A5).



Photograph 12 – Close-up of Mule Tunnel 5 LBP sample L5.

APPENDIX B

Suspect Asbestos Analytical Laboratory Report



Bulk Asbestos Analysis

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

Element Environmental, LLC Bernice Balete 98-030 Hekaha Street

Unit 9

Aiea, HI 96701

Client ID: Report Number: L1617 B221785

Date Received: Date Analyzed:

05/23/16 05/31/16

Date Printed: First Reported: 05/31/16 05/31/16

Job ID/Site: 160031; Diamond Head Crater, Honolulu, Oahu, Hl

FALI Job ID:

L1617

Total Samples Analyzed:

Total Samples Submitted: 25

Date(s)	Collected:	05/20/2016

Lab Number Type Percent in Asbestos Type

Layer

ND

ND

ND

Percent in Layer

Asbestos Percent in Type Layer

M-0.1-A1-I

Sample ID

50992285

Layer: Grey Cementitious Material Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

M-0.1-A1-2

50992286

Layer: Grey Cementitious Material

Asbestos (ND)

Asbestos

Cellulose (Trace)

50992287 M-0.1-A1-3 Layer: Grey Cementitious Material

Total Composite Values of Fibrous Components:

Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

50992288

M-0.1-A1-4

Layer: Grey Cementitious Material

ND

ND

ND

Layer: Paint

Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

M-0.1-A1-5 50992289

Laver: Off-White Cementitious Material

Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

M-1-A2-1 50992290

Layer: Grey Cementitious Material

ND

Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

M-1-A2-2

M-1-A2-3

50992291

Layer: Grey Cementitious Material

ND

Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

50992292

Layer: Grey Cementitious Material

ND

Layer: Paint

ND

Total Composite Values of Fibrous Components:

Asbestos (ND)

Cellulose (Trace)

Report Number: B221785 **Date Printed:**

05/31/16

Client Name: Element Environmental, LLC

Sample IID	Lab Numbe	Asbestos er Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
M-1-A2-4 Layer: Grey Cementitious Material	50992293		ND	-			
Total Composite Values of Fibrous Con Cellulose (Trace)	mponents:	Asbestos (ND)					
M-1-A2-5 Layer: Brown Cementitious Material Layer: White Non-Fibrous Material	50992294		ND ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	mponents:	Asbestos (ND)					
M-2-A3-1 Layer: Grey Cementitious Material	50992295		ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	mponents:	Asbestos (ND)					
M-2-A3-2 Layer: Grey Cementitious Material	50992296		ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	mponents:	Asbestos (ND)					
M-2-A3-3 Layer: Brown Cementitious Material Layer: Grey Cementitious Material	50992297		ND ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	nponents:	Asbestos (ND)					
M-2-A3-4 Layer: Grey Cementitious Material	50992298		ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	mponents:	Asbestos (ND)					
M-2-A3-5 Layer: Brown Cementitious Material Layer: Grey Cementitious Material	50992299		ND ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	nponents:	Asbestos (ND)					
M-3-A4-1 Layer: Grey Cementitious Material	50992300		ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	nponents:	Asbestos (ND)					
M-3-A4-2 Layer: Grey Cementitious Material	50992301		ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	nponents:	Asbestos (ND)					
M-3-A4-3 Layer: Grey Cementitious Material	50992302		ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	nponents:	Asbestos (ND)					

Report Number: B221785

Client Name: Element Environmental, LLC **Date Printed:** 05/31/16

Sample ID	Lab Number	Asbestos r Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
M-3-A4-4 Layer: Brown Cementitious Material Layer: Grey Cementitious Material	50992303		ND ND				
Total Composite Values of Fibrous Co. Cellulose (Trace)	mponents:	Asbestos (ND)					
M-3-A4-5 Layer: White Cementitious Material Layer: Grey Cementitious Material	50992304		ND ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	mponents:	Asbestos (ND)					
M-5-A5-I Layer: Brown Cementitious Material Layer: Grey Cementitious Material	50992305		ND ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	mponents:	Asbestos (ND)					
M-5-A5-2 Layer: Grey Cementitious Material Layer: Orange Fibrous Material	50992306		ND ND				
Total Composite Values of Fibrous Con Cellulose (Trace)	nponents:	Asbestos (ND)					
M-5-A5-3 Layer: Grey Cementitious Material	50992307		ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	mponents:	Asbestos (ND)					
M-5-A5-4 Layer: Grey Cementitious Material	50992308		ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	nponents:	Asbestos (ND)					
M-5-A5-5 Layer: Grey Cementitious Material	50992309		ND				
Total Composite Values of Fibrous Cor Cellulose (Trace)	nponents:	Asbestos (ND)					

Tiffani Ludd, Laboratory Supervisor, Rancho Dominguez Laboratory

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

Analytical results and reports are generated by Forensic Analytical Laboratories Inc. (FALI) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by FALI to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by FALI. The client is solely responsible for the use and interpretation of test results and reports requested from FALI. Forensic Analytical Laboratories Inc. is not able to assess the degree of hazard resulting from materials analyzed. FALI reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



Forensic Analytical Laboratories, Inc.

Client Name & Address:		·	PO / Job#: 160031			Date: 5/20/2016		
Element Environmental, 98-030 Hekaha Street, U			Turn Around Tirr	ne: Same	Day / 1Day	/ 2Day	/ 3Day / 4	Day / 5 by
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			厦PLM: 口Stand	lard / 🎵	Point Count	100 100	00 / E CAR	B 435
Contact: Bernice Balete	Fax:		TEM Air: A TEM Bulk: T TEM Water: T	Quantita	tive / 💢 Qua	litative /	/ DiChatfiel	d
Phone: (808) 389-4792	(808) 488-1300	TEM Microvac					5756(str/mass)	
E-mail: bbalete@e2hi.com)		☐ IAQ Particle ld ☐ Particle Identit	fication (1	TEM LAB)		PLM Opa	
Site: Diamond Head Crate	er		Metals Analys	is: Metho	od: EPA Meth	nod 600/	R-93-116	
Site Location: Honolulu, Oa	ahu HI		Matrix: Bulk Analytes: As					
Comments: Page 1 of 3			7 Individual As	Destos	Report Via	:		
Comments. Page 1013						Fax	國 E-Mail	☐ Verbal
Sample ID Date / Sample Location / D			escription		FOR AIR SAM	AVg.	NLY	Sample Area / Air
Time Sample Escalish, 5			Туре	On/Off	LPM	Time	Volume	
M-0.1-A1-1	5/20/16	Tunnel 0.1 exterior shotcrete						
M-0.1-A1-2	5/20/18	Tunnel 0.1 exterior shotcrete						
M-0.1-A1-3	5/20/16	Tunnel 0.1 exterior shotcrete						
M-0.1-A1-4	5/20/16	Tunnel 0.1 exterior shotcrete						
M-0.1-A1-5	5/20/16	Tunnel 0.1 exterior shotcrete		A P				
M-1-A2-1	5/20/16	Tunnel 1 exterior shotcrete						
M-1-A2-2	5/20/16	Tunnel 1 exterior shotcrete		IA IP IC				
M-1-A2-3	5/20/16	Tunnel 1 exterior shotcrete		IA IP IC				
M-1-A2-4	5/20/16	Tunnel 1 exterior shotcrete		A IP C				
M-1-A2-5	5/20/16	Tunnel 1 exterior shotcrete		A [P] [C]				
Sampled By: Bernice Balete	, James	Tsubone Date:	5/20/2016		Time: 9 an	1 - 10 a	ım	
Shipped Via: 🗷 Fed Ex 💢	DHL 📮	UPS 🔲 US Mail 🔲 Cou	rier Drop (Off 📮	Other:			
Relinquished By: Bernice Bal			Relinquished	Ву:				
Date / Time: 5/20/2016 / 1130 am Date / Time:					Date / Time:			
Received By: aulle		Received By: Date / Time:			Received By: Date / Time:			. ;
Date / Time: 5/23/16 Condition Acceptable? Lyes	9:40	Condition Acceptable?	Yes 🗖 No	- 1	Condition Acc	:eptable?	Yes	II. No

San Francisco Office: 3777 Depot Road, Suite 409, Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Las Vegas Office: 6765 S. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030



Analysis Request Form (COC)

								
Client Name & Address:			PO / Job#: 160	031		D	Pate: 5/20/2	2016
Element Environmental, 98-030 Hekaha Street, t			Turn Around Tin	ne: Same	Day / IDay	/ 2Da	y / 3Day / 4	Day / 5 Day
Alea, Hawaii 96701	Jille 3		□ PCM: □ NIOSH 7400A / □ NIOSH 7400B □ Rotometer					
			優 PLM: 口 Standard / 豆 Point Count 400, 1000 / 口 CARB 435					
Contact: Bernice Balete			TEM Air:	HERA /	☐ Yamate2 /	/ DI NIC	OSH 7402	
Phone: (808) 389-4792	TEM Water: I	7 Potable	/ Non-Po	table /	Weight %			
E-mail: bbalete@e2hi.con	n		IAQ Particle k	fication (1	TEM LAB)		PLM Opa	
Site: Diamond Head Crate	er		Metals Analys	is: Metho	xd: EPA Meti	hod 600	VR-93-116	
Site Location: Honolulu, O	Matrix: Bulk							
	anu, mi		Analytes: As	bestos	D			
Comments: Page 2 of 3					Report Via	: [Fax	E-Mail	□ Verbal
Sample ID Date / Sample Location / D					FOR AIR SAM	MPLES C	ONLY	Sample Area /
Sample 10	Time	Sample Location / Do	•	Туре	Time On/Off	Avg. LPM	Total Time	Air Volume
M-2-A3-1	5/20/16	Tunnel 2 exterior shotcrete						
M-2-A3-2	5/20/16	Tunnel 2 exterior shotcrete		IP IP IA				
M-2-A3-3	5/20/16	Tunnel 2 exterior shotcrete		IA IP				
M-2-A3-4	5/20/16	Tunnel 2 exteriors hotcrete	l A					
M-2-A3-5	5/20/16	Tunnel 2 exterior shotcrete		IA' IP IC				
M-3-A4-1	5/20/16	Tunnel 3 exteriors hotcrete		A IP IC				
M-3-A4-2	5/20/16	Tunnel 3 exterior shotcrete		IA IP) IC				
M-3-A4-3	5/20/16	Tunnel 3 exterior shotcrete	19.77	IA IP IC				
M-3-A4-4	5/20/16	Tunnel 3 exterior shotcrete		IA IPI ICI				
M-3-A4-5	5/20/16	Tunnel 3 exterior shotcrete		IA IP [C]				
Sampled By: Bernice Balete	. James 1	Tsubone Date:	5/20/2016	rai	Time: 9 am	- 10 =	l am	
		UPS DUSMail Cou			Other:			
Relinquished By: Bernice Bal	()1	Relinquished By:	A11110		Relingüished E	Ву:		
Date / Time: 5/20/2016 / 113		ı	Date / Time:					
Received By	, 1	Received By:		-	Received By:			
Date Times 5/03/16	9:40			Ţ	Date / Time:			
Condition Acceptable? Yes	□ No	Condition Acceptable?	Yes 🛅 No	10	Condition Acc	entable	T Yes	T No





Forensic Analytical Laboratories, Inc.

Client Name & Address:			PO/Job#: 160031 Date				ate: 5/20/2	016
Element Environmental, 98-030 Hekaha Street, L			Turn Around Tim	ne: Same	Day / 1Day	/ 2Day	/ 3Day / 4	Day / 5 xy
Aiea, Hawaii 96701	int o,		PCM: I NIOSH 7400A / NIOSH 7400B Rotometer					
			限PLM: 口 Standard / 口 Point Count 400 1000 / 口 CARB 435					
Contact: Bernice Balete			☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield					
Phone: (808) 389-4792	Fax:	(808) 488-1300	☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D575S(str/area) / ☐ D5756(str/mass)					
E-mail: bbalete@e2hi.com	I IAQ Particle to Particle Identi	fication (1	TEM LAB)		PLM Opa			
Site: Diamond Head Crate	Metals Analys	is: Metho	od: EPA Meti	hod 600	/R-93-116			
Site Location: Honolulu, Oa	Matrix: Bulk Analytes: As	haataa						
Comments: Page 3 of 3	As As	Desios	Report Via	 I:				
			····			Fax	國 E-Mail	☐ Verbal
Sample ID Date / Sample Location / D			escription		FOR AIR SAM	1		Sample Area /
Time		Sample cocation, b	escription	Туре	Time On/Off	Avg. LPM	Total Time	Air Volume
M-5-A5-1	5/20/16	Tunnel 5 exterior shotcrete						
M-5-A5-2	5/20/16	Tunnel 5 exterior shotcrete		IA [P]				
M-5-A5-3	5/20/16	Tunnel 5 exterior shotcrete						
M-5-A5-4	5/20/16	Tunnel 5 exterior shotcrete		IA [P]				
M-5-A5-5	5/20/16	Tunnel 5 exterior shotcrete		IA IP IC				
				IA IP IC				
				IA IPL				
				IA IA				
				[P]				
		·						
				A				
Sampled By: Bernice Balete	lames '	Toubone Date	5/20/2016	[P]	Time: 9 am	10 -		
		UPS QUS Mail Q Cou			Other:	1-108	3111 	
Relinquished By: Bernice Bal	11 '	Relinquished By:		• .,	Relinquished I	Ву:		
Date / Time: 5/20/2016 / 113	4/40	Date / Time:			Date / Time:	-		
Received By	He	Received By:	****		Received By:			
Date Time: 5)3316	9:40	1		ľ	Date / Time:		_	
Condition Acceptable? TYes	No	Condition Acceptable?	Yes 🗇 No		Condition Acc	eptable	Yes !	No

APPENDIX C Paint Chip Sample Analytical Laboratory Report



Metals Analysis of Paints

Element Environmental, LLC Bernice Balete 98-030 Hekaha Street Unit 9

Aica, HI 96701

Client 1D:

L1617

Report Number: Date Received:

M172352 05/23/16

Date Analyzed:
Date Printed:

05/26/16

First Reported:

05/31/16 05/31/16

Job ID / Site: 160031; Diamond Head Crater, Honolulu, Oahu, HI

Date(s) Collected: 05/20/16

FALI Job ID:

L1617

Total Samples Submitted: 6
Total Samples Analyzed: 6

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference	
M-0.1-L1	LM124060	Pb	0.19	wt%	0.02	EPA 3050B/7420	11
M-1-L2	LM124061	Pb	1.6	wt%	0.2	EPA 3050B/7420	
M-2-L3	LM124062	Pb	2.0	wt%	0.2	EPA 3050B/7420	
M-3-L4	LM124063	Pb	10	wt%	0.6	EPA 3050B/7420	
M-5-L5	LM124064	Pb	0.9	wt%	0.2	EPA 3050B/7420	
M-0.1-L6	LM124065	Pb	0.15	wt%	0.006	EPA 3050B/7420	

Beatriz Hinojosa, Laboratory Supervisor, Rancho Dominguez Laboratory

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^{*} 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.

Client Name & Address:			PO/Job#: 160031			Date: 5/20/2016		
Element Environmental, 98-030 Hekaha Street, I			-		Day / 1Day			
Aiea, Hawali 96701	JIII 3		Turn Around Time: Same Day / 1Day / 2Day / 3Day / 4Day / 5 xy PCM: NIOSH 7400B Rotometer					
		*	□PLM: □Standard / □Point Count 400, 1000 / □CAR8 435					
Contact: Bernice Balete		•	TEM Air:					
Phone	Fax	· (808) 488-1300	☐ TEM Bulk: ☐ Quanitative / ☐ Qualitative / ☐ Chatfield ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight %					
(606) 369-4792	TEM Microva	c: 🎵 Qua	l(+/-) / □ D5	755(sr/	area) / D D5	756(str/mass)		
E-mail: bbalete@e2hi.com	☐ IAQ Particle id ☐ Particle Identi	fication (1	'EM LAB)		PLM Opa			
Site: Diamond Head Crate	er		Metals Analys		d: 3050B/74	20		
Site Location: Honolulu, O	ahu Hi		Marix: pain					
Comments: Page 1 of 1	Analytes: To	tal Lead	Report Via	•				
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				Fax	図 E-Mail	☐ Verbal		
Sample ID Date / Time Sample Location / D					FOR AIR SAA	APLES C	NLY	Sample Area /
			escription	Туре	Time On/Oif	Avg.	Total Time	Air
M-0,1-L1	5/20/16				011/01/	<u> </u>	Title	Volume
M-1-L2	6/20/18	Red-brown paint on shotcrete						
M-2-L3	Enous	Ond house print on shakers	· · · · ·	TCI LAI			 	
M-4-L3	6/20/16	Red-brown paint on shotcrele		A E				
M-3-L4	5/20/16	Red-brown/while powdery pain	Red-brown/white powdery paint on rock					
M-5-L5	5/20/16	Yellow rubbery paint an shotcre	te	IA IPI ICI				
M-5-L6-	5/20/16	While paint on cementitious sur	facing	A [P] [C]				
4-0.1-L6 4-931/16				[A]				
347 451/16				A P C				
: ·	<u></u>			1 10 1				
S		. 4		A P C	As			
Sampled By: Bernice Balele	, James	Tsubone Date:	5/20/2016		Time: 9 am	- 10 a	m	
Shipped Via: 原 Fed Ex 豆	DHL 📮	UPS II US Mail II Cou	rier Drop C		Other:			
Relinquished By: Bernice Bal	ete //	Relinquished By:	······························	Ti	Relinquished E	ły:		
Date / Time: 5/20/2016 / 11:			Date/Time:					
Received By: Qui Lto	FIE	Received By:		F	teceived By:			
One / Time: 5/23/16	9:40	500		1	Date/Time:			• '
Condition Acceptable? 2.Yes	□ No	Condition Acceptable?	Yes DNo	- (Condition Acco	eptable?	☐ Yes	I No

San Francisco Office: 3777 Depct Road, Suite 409. Hayward, California 94545-2761 / Ph: (510)887-8828 * (800)827-3274 / Fax: (510)887-4218
Los Angeles Office: 2959 Pacific Commerce Drive, Rancho Dominguez, California 90221 / Ph: (310)763-2374 * (888)813-9417 / Fax: (310)763-4450
Lat Yegas Office: 6765 5. Eastern Avenue, Suite 3, Las Vegas, Nevada 89119 / Ph: (702)784-0040 / Fax: (702)784-0030