

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

ALAMEDA COUNTY ENVIRONMENTAL HEALTH LABORATORY

Certification No. 1816

Laboratory No: 96-056

Sample Identification: East Bay Bridge Retrofitting Project

Analysis Requested By: Dale Kelette

Date Collected: 8/1/96

Collected By: Dale Kelette

Date Received: 8/1/96

Received By: D. Wong

Analysis Requested: Heavy Metals: Cd, Cr, Cu, Ni, Pb, Zn.

Background Information: 6 water samples were submitted for analysis.

ANALYTICAL RESULTS

<u>Parameter</u>	<u>Observation or Results</u>
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See Attached Sheet

Conclusion: Metal content below STLC limit for all of the water samples analyzed.

Date Analysis Completed: 8/8/96

Chemist: N. Leung

Approved: *D. Wong*

Distribution: Dale Kelette, Jun Makishima.

LABORATORY NUMBER: 96-056-1
 SAMPLE NUMBER: CT-1
 CLIENT: EAST BAY BRIDGE
 RETROFITTING PROJECT

DATE SAMPLED: 8/1/96
 DATE RECEIVED: 8/1/96
 DATE REPORTED: 8/8/96

METAL ANALYSIS RESULTS
 DIGESTION METHOD: 3050

METAL	RESULT TTLC mg/kg	TTLC LIMIT mg/kg	STLC LIMIT mg/kg	METHOD
Cadmium	0.1	100	1.0	EPA 7130
Chromium	0.1	2,500	560	EPA 7210
Copper	0.1	2,500	25	EPA 7190
Lead	0.2	1,000	5.0	EPA 7420
Nickel	0.1	2,000	20	EPA 7520
Zinc	0.7	5,000	250	EPA 7950

QA/QC SUMMARY

	RPD, %	RECOVERY, %
Cadmium	0	92
Chromium	10	74
Copper	0	106
Lead	16	95
Nickel	0	98
Zinc	0	100

LABORATORY NUMBER: 96-056-2
 SAMPLE NUMBER: CT-2
 CLIENT: EAST BAY BRIDGE
 RETROFITTING PROJECT

DATE SAMPLED: 8/1/966
 DATE RECEIVED: 8/1/96
 DATE REPORTED: 8/8/96

METAL ANALYSIS RESULTS
 DIGESTION METHOD: 3050

METAL	RESULT TTL mg/kg	TTL LIMIT mg/kg	STL LIMIT mg/kg	METHOD
Cadmium	0.1	100	1.0	EPA 7130
Chromium	0.1	2,500	560	EPA 7210
Copper	0.1	2,500	25	EPA 7190
Lead	0.3	1,000	5.0	EPA 7420
Nickel	0.1	2,000	20	EPA 7520
Zinc	0.2	5,000	250	EPA 7950

QA/QC SUMMARY

	RPD, %	RECOVERY, %
Cadmium	0	92
Chromium	10	74
Copper	0	106
Lead	16	95
Nickel	0	98
Zinc	0	100

LABORATORY NUMBER: 96-056-3
 SAMPLE NUMBER: CT-3
 CLIENT: EAST BAY BRIDGE
 RETROFITTING PROJECT

DATE SAMPLED: 8/1/966
 DATE RECEIVED: 8/1/96
 DATE REPORTED: 8/8/96

METAL ANALYSIS RESULTS
 DIGESTION METHOD: 3050

METAL	RESULT TTL mg/kg	TTL LIMIT mg/kg	STL LIMIT mg/kg	METHOD
Cadmium	0.1	100	1.0	EPA 7130
Chromium	0.2	2,500	560	EPA 7210
Copper	0.1	2,500	25	EPA 7190
Lead	0.5	1,000	5.0	EPA 7420
Nickel	0.03	2,000	20	EPA 7520
Zinc	0.7	5,000	250	EPA 7950

QA/QC SUMMARY

	RPD, %	RECOVERY, %
Cadmium	0	92
Chromium	10	74
Copper	0	106
Lead	16	95
Nickel	0	98
Zinc	0	100

LABORATORY NUMBER: 96-056-4
 SAMPLE NUMBER: CT-4
 CLIENT: EAST BAY BRIDGE
 RETROFITTING PROJECT

DATE SAMPLED: 8/1/966
 DATE RECEIVED: 8/1/96
 DATE REPORTED: 8/8/96

METAL ANALYSIS RESULTS
 DIGESTION METHOD: 3050

METAL	RESULT TTLT mg/kg	TTLT LIMIT mg/kg	STLT LIMIT mg/kg	METHOD
Cadmium	0.1	100	1.0	EPA 7130
Chromium	0.1	2,500	560	EPA 7210
Copper	0.1	2,500	25	EPA 7190
Lead	0.3	1,000	5.0	EPA 7420
Nickel	0.1	2,000	20	EPA 7520
Zinc	0.3	5,000	250	EPA 7950

QA/QC SUMMARY

	RPD, %	RECOVERY, %
Cadmium	0	92
Chromium	10	74
Copper	0	106
Lead	16	95
Nickel	0	98
Zinc	0	100

LABORATORY NUMBER: 96-056-5
 SAMPLE NUMBER: CT-5
 CLIENT: EAST BAY BRIDGE
 RETROFITTING PROJECT

DATE SAMPLED: 8/1/966
 DATE RECEIVED: 8/1/96
 DATE REPORTED: 8/8/96

METAL ANALYSIS RESULTS
 DIGESTION METHOD: 3050

METAL	RESULT TTLT mg/kg	TTLT LIMIT mg/kg	STLT LIMIT mg/kg	METHOD
Cadmium	0.1	100	1.0	EPA 7130
Chromium	0.1	2,500	560	EPA 7210
Copper	0.1	2,500	25	EPA 7190
Lead	0.3	1,000	5.0	EPA 7420
Nickel	0.04	2,000	20	EPA 7520
Zinc	0.3	5,000	250	EPA 7950

QA/QC SUMMARY

	RPD, %	RECOVERY, %
Cadmium	0	92
Chromium	10	74
Copper	0	106
Lead	16	95
Nickel	0	98
Zinc	0	100

white - lab
 yellow - insp. file
 pink - fac. file

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
 DIVISION OF HAZARDOUS MATERIALS
 80 SWAN WAY, ROOM 200
 OAKLAND, CA 94621
 (415) 271-4320

L 26796-056

LABORATORY SERVICE REQUEST

SITENAME EAST BAY BRIDGE RETROFITTING PROJECT

SEND ANALYTICAL REPORT TO ABOVE OR:

ADDRESS _____

ACHCSA

SAMPLE SUBMITTED TO: DARCY WONG

DATE SUBMITTED 8/1/96

ATTN: DALE KLETTE

SEND INVOICE TO: N/A

RUSH = ABOUT 1 WEEK TURNAROUND
 ROUTINE = ABOUT 2 WEEKS TURNAROUND

SAMPLE NO.	DATE/TIME COLLECTED	TYPE OF MATERIAL (WATER, SOIL OR MATRIX)	VOLUME/WEIGHT	FIELD OBSERVATION	ANALYSIS REQUESTED
CT-1	8/1/96/12:45PM	WATER	125ML	DISCHARGE POINT	Cu, Zn, Ni, Cd, Pb, Cr
CT-2	12:50PM			DISCHARGE POINT	
CT-3	12:55PM			POND # 1	
CT-4	1:00PM			POND # 2	
CT-5	1:00PM	↓	↓	POND # 3	↓

Chain of Custody:

- Signature: Dale Klette Title: HMS Inclusive Dates: 8/1/96
- Signature: Darcy Wong Title: Supr. Chemist Inclusive Dates: 8/1/96
- Signature: _____ Title: _____ Inclusive Dates: _____

**ALAMEDA COUNTY ENVIRONMENTAL
HEALTH SERVICES**

**ENVIRONMENTAL PROTECTION DIVISION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
Telephone (510) 567-6700 Fax (510) 337-9335**

FAX COVER SHEET

DATE: 8/15, 19 96

TO: SGT. KENNETH PARRIS

FAX # (510) 238-3030

Total number of pages including cover sheet 8

FROM: DALE KLETTKE
LOP

NOTE:

~~PLEASE RESPOND BY FAX ONLY.~~

567-6880

(SMILE) HAVE A NICE DAY
DO SOMETHING FOR OUR ENVIRONMENT