



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Wednesday, March 17, 2004

REVISED 03/17/2004

Barbara Sylvester
Brown & Caldwell
201 East Washington Street
Suite 500
Phoenix, AZ 85004
TEL: (602) 567-4000
FAX: (602) 567-4001

RE: Florence Copper

Order No.: 03121324

Dear Barbara Sylvester:

This report was revised on 3/17/04 to report the cation/anion balance as % difference and to report total xylenes by EPA Method 8260.

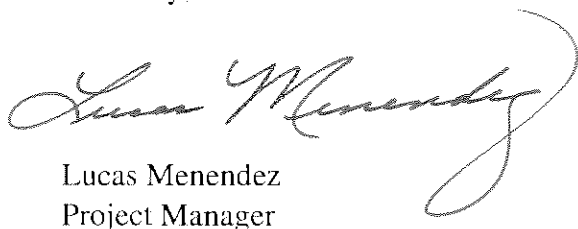
Aerotech Environmental received 12 sample(s) on 12/30/2003 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,



Lucas Menendez
Project Manager



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Aerotech Environmental

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 03121324

CASE NARRATIVE

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Aerotech Environmental Laboratories (AEL) holds Arizona certification no. AZ0610 and AEL-Tucson holds Arizona certification no. AZ0609.

Aerotech Laboratories, Inc. (AEL division - Laboratory ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation. AEL participates in the AIHA Environmental Lead Proficiency Analytical Testing (ELPAT) program for lead in soil, paint chips and dust wipes.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report

Data Qualifiers:

Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

- D2 Sample required dilution due to high concentration of target analyte.
- M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.000.



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CLIENT: Brown & Caldwell
Project: Florence Copper
Lab Order: 03121324

CASE NARRATIVE

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.
N1 See case narrative. Cation/anion ratio was outside laboratory acceptance criteria.

The major cation results were confirmed by reanalysis.

The sample selected as the duplicate and matrix spike contained high concentrations of chloride and/or sulfate. The analyte concentration in the sample is disproportionate to the spike level and it was not practical to analyze the sample at a dilution, as the spike would be diluted out. The LCS/LCSD were recovered acceptably demonstrating that the analytical process was in control.



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-01A

Client Sample ID: BHP-12
Tag Number:
Collection Date: 12/30/2003 8:05:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE						
Cation/Anion Balance	2.14	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)						
Nitrogen, Nitrate -N	0.45	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY						
Chloride	150	4.0	D2	mg/L	2	1/5/2004 8:18:00 PM
Fluoride	0.84	0.40		mg/L	1	12/31/2003 11:53:00 PM
Sulfate	76	2.0		mg/L	1	12/31/2003 11:53:00 PM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	130	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	130	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N						
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH						
pH	7.40	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE						
Total Dissolved Solids	500	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-01B

Client Sample ID: BHP-12
Tag Number:
Collection Date: 12/30/2003 8:05:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: TD		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/14/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/14/2004
Calcium, Dissolved	69	2.0		mg/L	1	1/14/2004
Copper, Dissolved	0.20	0.010		mg/L	1	1/14/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/14/2004
Magnesium, Dissolved	16	0.25		mg/L	1	1/14/2004
Potassium, Dissolved	5.8	2.0		mg/L	1	1/14/2004
Silica (Silicon dioxide-SiO ₂)	36	0.21		mg/L	1	1/14/2004
Sodium, Dissolved	91	2.0		mg/L	1	1/14/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/14/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Arsenic, Dissolved	0.0024	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Barium	0.052	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Chromium, Dissolved	0.0012	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Cobalt, Dissolved	0.0019	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Manganese, Dissolved	0.029	0.0025		mg/L	1	1/6/2004 3:45:42 PM
Nickel, Dissolved	0.0081	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:45:42 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:45:42 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-01C

Client Sample ID: BHP-12
Tag Number:
Collection Date: 12/30/2003 8:05:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.45	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-01D

Client Sample ID: BHP-12
Tag Number:
Collection Date: 12/30/2003 8:05:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	103	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-02A

Client Sample ID: BHP-11
Tag Number:
Collection Date: 12/30/2003 8:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: S S
Cation/Anion Balance	1.41	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: S S
Nitrogen, Nitrate -N	0.37	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	150	4.0	D2	mg/L	2	1/5/2004 9:07:00 PM
Fluoride	< 0.40	0.40		mg/L	1	1/1/2004 12:10:00 AM
Sulfate	97	2.0		mg/L	1	1/1/2004 12:10:00 AM
ALKALINITY		M2320 B				Analyst: L M
Alkalinity, Bicarbonate (As CaCO ₃)	130	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	130	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	7.73	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	520	10		mg/L	1	12/31/2003

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-02B

Client Sample ID: BHP-11
Tag Number:
Collection Date: 12/30/2003 8:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/5/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/5/2004
Calcium, Dissolved	67	2.0		mg/L	1	1/5/2004
Copper, Dissolved	0.048	0.010		mg/L	1	1/5/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
Magnesium, Dissolved	13	0.25		mg/L	1	1/5/2004
Potassium, Dissolved	6.5	2.0		mg/L	1	1/5/2004
Silica (Silicon dioxide-SiO ₂)	42	0.21		mg/L	1	1/5/2004
Sodium, Dissolved	93	2.0		mg/L	1	1/5/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Arsenic, Dissolved	0.0018	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Barium	0.017	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Chromium, Dissolved	0.0013	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Cobalt, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Manganese, Dissolved	< 0.0025	0.0025		mg/L	1	1/6/2004 3:50:01 PM
Nickel, Dissolved	0.0023	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:50:01 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:50:01 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-02C

Client Sample ID: BHP-11
Tag Number:
Collection Date: 12/30/2003 8:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.37	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-02D

Client Sample ID: BHP-11
Tag Number:
Collection Date: 12/30/2003 8:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	112	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	112	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-03A

Client Sample ID: OWB-4
Tag Number:
Collection Date: 12/30/2003 9:10:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE						
Cation/Anion Balance	1.52	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)						
Nitrogen, Nitrate -N	0.38	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY						
Chloride	150	4.0	D2	mg/L	2	1/5/2004 9:23:00 PM
Fluoride	< 0.40	0.40		mg/L	1	1/1/2004 12:26:00 AM
Sulfate	59	2.0		mg/L	1	1/1/2004 12:26:00 AM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	140	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	140	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N						
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH						
pH	7.75	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE						
Total Dissolved Solids	480	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-03B

Client Sample ID: OWB-4
Tag Number:
Collection Date: 12/30/2003 9:10:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/5/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/5/2004
Calcium, Dissolved	59	2.0		mg/L	1	1/5/2004
Copper, Dissolved	0.047	0.010		mg/L	1	1/5/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
Magnesium, Dissolved	13	0.25		mg/L	1	1/5/2004
Potassium, Dissolved	6.2	2.0		mg/L	1	1/5/2004
Silica (Silicon dioxide-SiO ₂)	43	0.21		mg/L	1	1/5/2004
Sodium, Dissolved	88	2.0		mg/L	1	1/5/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Arsenic, Dissolved	0.0020	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Barium	0.026	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Chromium, Dissolved	0.0014	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Cobalt, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Manganese, Dissolved	< 0.0025	0.0025		mg/L	1	1/6/2004 3:54:19 PM
Nickel, Dissolved	0.0020	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:54:19 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:54:19 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-03C

Client Sample ID: OWB-4
Tag Number:
Collection Date: 12/30/2003 9:10:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.38	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-03D

Client Sample ID: OWB-4
Tag Number:
Collection Date: 12/30/2003 9:10:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	103	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
- (2) AEL - Knudsen Laboratory



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-04A

Client Sample ID: OWB-2
Tag Number:
Collection Date: 12/30/2003 9:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: S S
Cation/Anion Balance	6.59	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: S S
Nitrogen, Nitrate -N	4.8	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	150	10	D2	mg/L	5	1/5/2004 9:40:00 PM
Fluoride	0.64	0.40		mg/L	1	1/1/2004 3:10:00 AM
Sulfate	180	10	D2	mg/L	5	1/5/2004 9:40:00 PM
ALKALINITY		M2320 B				Analyst: L M
Alkalinity, Bicarbonate (As CaCO ₃)	220	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	220	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	7.67	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	770	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-04B

Client Sample ID: OWB-2
Tag Number:
Collection Date: 12/30/2003 9:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: TD		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/14/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/14/2004
Calcium, Dissolved	92	2.0		mg/L	1	1/14/2004
Copper, Dissolved	< 0.010	0.010		mg/L	1	1/14/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/14/2004
Magnesium, Dissolved	21	0.25		mg/L	1	1/14/2004
Potassium, Dissolved	6.3	2.0		mg/L	1	1/14/2004
Silica (Silicon dioxide-SiO ₂)	36	0.21		mg/L	1	1/14/2004
Sodium, Dissolved	180	2.0		mg/L	1	1/14/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/14/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Arsenic, Dissolved	0.0026	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Barium	0.042	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Cobalt, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Manganese, Dissolved	< 0.0025	0.0025		mg/L	1	1/6/2004 3:58:39 PM
Nickel, Dissolved	0.0028	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 3:58:39 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-04C

Client Sample ID: OWB-2
Tag Number:
Collection Date: 12/30/2003 9:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	4.8	0.10	D2	mg/L	2	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-04D

Client Sample ID: OWB-2
Tag Number:
Collection Date: 12/30/2003 9:30:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	0.00060	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	98.0	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.
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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-05A

Client Sample ID: OWB-1
Tag Number:
Collection Date: 12/30/2003 9:55:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: S S
Cation/Anion Balance	5.51	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: S S
Nitrogen, Nitrate -N	0.41	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	140	10	D2	mg/L	5	1/5/2004 9:56:00 PM
Fluoride	< 0.40	0.40		mg/L	1	1/1/2004 3:59:00 AM
Sulfate	62	2.0		mg/L	1	1/1/2004 3:59:00 AM
ALKALINITY		M2320 B				Analyst: L M
Alkalinity, Bicarbonate (As CaCO ₃)	140	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	140	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	7.88	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	480	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-05B

Client Sample ID: OWB-1
Tag Number:
Collection Date: 12/30/2003 9:55:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: TD		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/14/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/14/2004
Calcium, Dissolved	65	2.0		mg/L	1	1/14/2004
Copper, Dissolved	0.039	0.010		mg/L	1	1/14/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/14/2004
Magnesium, Dissolved	15	0.25		mg/L	1	1/14/2004
Potassium, Dissolved	6.0	2.0		mg/L	1	1/14/2004
Silica (Silicon dioxide-SiO ₂)	38	0.21		mg/L	1	1/14/2004
Sodium, Dissolved	94	2.0		mg/L	1	1/14/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/14/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Arsenic, Dissolved	0.0023	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Barium	0.021	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Chromium, Dissolved	0.0013	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Cobalt, Dissolved	0.0045	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Manganese, Dissolved	0.0063	0.0025		mg/L	1	1/6/2004 4:02:58 PM
Nickel, Dissolved	0.0022	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Selenium, Dissolved	0.0011	0.0010		mg/L	1	1/6/2004 4:02:58 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:02:58 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-05C

Client Sample ID: OWB-1
Tag Number:
Collection Date: 12/30/2003 9:55:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.41	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.
(1) AEL - Tucson Laboratory
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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-05D

Client Sample ID: OWB-1
Tag Number:
Collection Date: 12/30/2003 9:55:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	105	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-06A

Client Sample ID: OWB-5
Tag Number:
Collection Date: 12/30/2003 10:25:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE						
Cation/Anion Balance	1.82	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)						
Nitrogen, Nitrate -N	0.38	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY						
Chloride	150	4.0	D2	mg/L	2	1/5/2004 10:12:00 PM
Fluoride	0.46	0.40		mg/L	1	1/1/2004 4:15:00 AM
Sulfate	60	2.0		mg/L	1	1/1/2004 4:15:00 AM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	140	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	140	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N						
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH						
pH	7.81	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE						
Total Dissolved Solids	470	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-06B

Client Sample ID: OWB-5
Tag Number:
Collection Date: 12/30/2003 10:25:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/5/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/5/2004
Calcium, Dissolved	60	2.0		mg/L	1	1/5/2004
Copper, Dissolved	< 0.010	0.010		mg/L	1	1/5/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
Magnesium, Dissolved	13	0.25		mg/L	1	1/5/2004
Potassium, Dissolved	6.3	2.0		mg/L	1	1/5/2004
Silica (Silicon dioxide-SiO ₂)	46	0.21		mg/L	1	1/5/2004
Sodium, Dissolved	89	2.0		mg/L	1	1/5/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Arsenic, Dissolved	0.0024	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Barium	0.020	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Chromium, Dissolved	0.0012	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Cobalt, Dissolved	0.0044	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Manganese, Dissolved	0.0061	0.0025		mg/L	1	1/6/2004 4:07:18 PM
Nickel, Dissolved	0.0021	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:07:18 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:07:18 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-06C

Client Sample ID: OWB-5
Tag Number:
Collection Date: 12/30/2003 10:25:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.38	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell

Client Sample ID: OWB-5

Lab Order: 03121324

Tag Number:

Project: Florence Copper

Collection Date: 12/30/2003 10:25:00 AM

Lab ID: 03121324-06D

Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	104	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-07A

Client Sample ID: OWB-7
Tag Number:
Collection Date: 12/30/2003 10:45:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: S S
Cation/Anion Balance	1.51	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: S S
Nitrogen, Nitrate -N	0.38	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	150	4.0	D2	mg/L	2	1/5/2004 11:01:00 PM
Fluoride	0.51	0.40		mg/L	1	1/1/2004 4:32:00 AM
Sulfate	60	2.0		mg/L	1	1/1/2004 4:32:00 AM
ALKALINITY		M2320 B				Analyst: L M
Alkalinity, Bicarbonate (As CaCO ₃)	140	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	140	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	7.87	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	480	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-07B

Client Sample ID: OWB-7
Tag Number:
Collection Date: 12/30/2003 10:45:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/5/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/5/2004
Calcium, Dissolved	60	2.0		mg/L	1	1/5/2004
Copper, Dissolved	< 0.010	0.010		mg/L	1	1/5/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
Magnesium, Dissolved	13	0.25		mg/L	1	1/5/2004
Potassium, Dissolved	6.2	2.0		mg/L	1	1/5/2004
Silica (Silicon dioxide-SiO ₂)	45	0.21		mg/L	1	1/5/2004
Sodium, Dissolved	88	2.0		mg/L	1	1/5/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Arsenic, Dissolved	0.0024	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Barium	0.020	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Chromium, Dissolved	0.0013	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Cobalt, Dissolved	0.0046	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Manganese, Dissolved	0.0065	0.0025		mg/L	1	1/6/2004 4:11:37 PM
Nickel, Dissolved	0.0020	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Selenium, Dissolved	0.0011	0.0010		mg/L	1	1/6/2004 4:11:37 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:11:37 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental Laboratories

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell

Client Sample ID: OWB-7

Lab Order: 03121324

Tag Number:

Project: Florence Copper

Collection Date: 12/30/2003 10:45:00 AM

Lab ID: 03121324-07C

Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.38	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-07D

Client Sample ID: OWB-7
Tag Number:
Collection Date: 12/30/2003 10:45:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	104	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-08A

Client Sample ID: CHI-R
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: S S
Cation/Anion Balance	2.56	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: S S
Nitrogen, Nitrate -N	0.40	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	140	20	D2	mg/L	10	1/5/2004 11:18:00 PM
Fluoride	0.93	0.40		mg/L	1	1/1/2004 4:48:00 AM
Sulfate	300	20	D2	mg/L	10	1/5/2004 11:18:00 PM
ALKALINITY		M2320 B				Analyst: L M
Alkalinity, Bicarbonate (As CaCO ₃)	70	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	70	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	6.87	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	740	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-08B

Client Sample ID: CHI-R
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/5/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/5/2004
Calcium, Dissolved	110	2.0		mg/L	1	1/5/2004
Copper, Dissolved	0.61	0.010		mg/L	1	1/5/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
Magnesium, Dissolved	26	0.25		mg/L	1	1/5/2004
Potassium, Dissolved	8.4	2.0		mg/L	1	1/5/2004
Silica (Silicon dioxide-SiO ₂)	52	0.21		mg/L	1	1/5/2004
Sodium, Dissolved	95	2.0		mg/L	1	1/5/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Arsenic, Dissolved	0.0015	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Barium	0.021	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Cobalt, Dissolved	0.0052	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Manganese, Dissolved	0.14	0.0025		mg/L	1	1/6/2004 4:15:55 PM
Nickel, Dissolved	0.029	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Selenium, Dissolved	0.0021	0.0010		mg/L	1	1/6/2004 4:15:55 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004 4:15:55 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-08C

Client Sample ID: CHI-R
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.40	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.
(1) AEL - Tucson Laboratory
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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-08D

Client Sample ID: CHI-R
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	100	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-09A

Client Sample ID: CHI-B
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE						
Cation/Anion Balance	-1.45	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)						
Nitrogen, Nitrate -N	0.38	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY						
Chloride	150	4.0	D2	mg/L	2	1/5/2004 11:34:00 PM
Fluoride	1.1	0.40		mg/L	1	1/1/2004 5:04:00 AM
Sulfate	140	4.0	D2	mg/L	2	1/5/2004 11:34:00 PM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	52	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	52	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N						
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH						
pH	6.53	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE						
Total Dissolved Solids	490	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-09B

Client Sample ID: CHI-B
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	< 0.10	0.10		mg/L	1	1/5/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/5/2004
Calcium, Dissolved	62	2.0		mg/L	1	1/5/2004
Copper, Dissolved	0.99	0.010		mg/L	1	1/5/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
Magnesium, Dissolved	16	0.25		mg/L	1	1/5/2004
Potassium, Dissolved	6.1	2.0		mg/L	1	1/5/2004
Silica (Silicon dioxide-SiO ₂)	63	0.21		mg/L	1	1/5/2004
Sodium, Dissolved	74	2.0		mg/L	1	1/5/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/5/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Arsenic, Dissolved	0.0032	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Barium	0.028	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 1:57:01 PM
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Cobalt, Dissolved	0.016	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 1:57:01 PM
Manganese, Dissolved	0.25	0.0025		mg/L	1	1/7/2004 3:04:14 PM
Nickel, Dissolved	0.029	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Selenium, Dissolved	0.0015	0.0010		mg/L	1	1/7/2004 3:04:14 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:04:14 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-09C

Client Sample ID: CHI-B
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.38	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-09D

Client Sample ID: CHI-B
Tag Number:
Collection Date: 12/30/2003 11:20:00 AM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	98.6	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.
(1) AEL - Tucson Laboratory
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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-10A

Client Sample ID: CH2-R
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: S S
Cation/Anion Balance	1.72	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: S S
Nitrogen, Nitrate -N	0.55	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	160	4.0	D2	mg/L	2	1/5/2004 11:50:00 PM
Fluoride	1.0	0.40		mg/L	1	1/1/2004 5:21:00 AM
Sulfate	100	4.0	D2	mg/L	2	1/5/2004 11:50:00 PM
ALKALINITY		M2320 B				Analyst: L M
Alkalinity, Bicarbonate (As CaCO ₃)	8.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	8.0	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	5.35	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	510	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-10B

Client Sample ID: CH2-R
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	0.78	0.10		mg/L	1	1/6/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004
Calcium, Dissolved	43	2.0		mg/L	1	1/6/2004
Copper, Dissolved	7.2	0.010		mg/L	1	1/6/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/6/2004
Magnesium, Dissolved	11	0.25		mg/L	1	1/6/2004
Potassium, Dissolved	5.2	2.0		mg/L	1	1/6/2004
Silica (Silicon dioxide-SiO ₂)	110	0.21		mg/L	1	1/6/2004
Sodium, Dissolved	70	2.0		mg/L	1	1/6/2004
Zinc, Dissolved	0.11	0.050		mg/L	1	1/6/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Arsenic, Dissolved	0.0029	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Barium	0.022	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:09:59 PM
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Cobalt, Dissolved	0.030	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:09:59 PM
Manganese, Dissolved	0.44	0.0025		mg/L	1	1/7/2004 3:17:06 PM
Nickel, Dissolved	0.034	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:17:06 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:17:06 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) AEL - Tucson Laboratory

(2) AEL - Knudsen Laboratory



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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-10C

Client Sample ID: CH2-R
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qnal	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.55	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

- (1) AEL - Tucson Laboratory
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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-10D

Client Sample ID: CH2-R
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	98.0	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.
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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-11A

Client Sample ID: CH2-B
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE		CALC				Analyst: SS
Cation/Anion Balance	-3.32	0		%	1	1/9/2004
NITROGEN, NITRATE AS N (CALCULATED)		CALC				Analyst: SS
Nitrogen, Nitrate -N	0.50	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LB
Chloride	160	4.0	D2	mg/L	2	1/6/2004 12:07:00 AM
Fluoride	1.5	0.40		mg/L	1	1/1/2004 5:37:00 AM
Sulfate	120	4.0	D2	mg/L	2	1/6/2004 12:07:00 AM
ALKALINITY		M2320 B				Analyst: LM
Alkalinity, Bicarbonate (As CaCO ₃)	4.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	< 6.0	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N		M4500-NO2 B				Analyst: AC
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH		E150.1				Analyst: AC
pH	4.95	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE		M2540 C				Analyst: HS
Total Dissolved Solids	520	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-11B

Client Sample ID: CH2-B
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	1.2	0.10		mg/L	1	1/6/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004
Calcium, Dissolved	46	2.0		mg/L	1	1/6/2004
Copper, Dissolved	8.3	0.010		mg/L	1	1/6/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/6/2004
Magnesium, Dissolved	12	0.25		mg/L	1	1/6/2004
Potassium, Dissolved	5.3	2.0		mg/L	1	1/6/2004
Silica (Silicon dioxide-SiO ₂)	100	0.21		mg/L	1	1/6/2004
Sodium, Dissolved	66	2.0		mg/L	1	1/6/2004
Zinc, Dissolved	0.058	0.050		mg/L	1	1/6/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Arsenic, Dissolved	0.0026	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Barium	0.024	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:14:16 PM
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Cobalt, Dissolved	0.031	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Lead, Dissolved	0.0011	0.0010		mg/L	1	1/8/2004 2:14:16 PM
Manganese, Dissolved	0.45	0.0025		mg/L	1	1/7/2004 3:21:23 PM
Nickel, Dissolved	0.035	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Selenium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:21:23 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/7/2004 3:21:23 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Aerotech Environmental

Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-11C

Client Sample ID: CH2-B
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	0.50	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-11D

Client Sample ID: CH2-B
Tag Number:
Collection Date: 12/30/2003 12:00:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	104	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-12A

Client Sample ID: Evap Pond
Tag Number:
Collection Date: 12/30/2003 1:30:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CATION/ANION BALANCE						
Cation/Anion Balance	-32.2	0	N1	%	1	1/21/2004
NITROGEN, NITRATE AS N (CALCULATED)						
Nitrogen, Nitrate -N	< 0.20	0.20		mg/L	1	1/6/2004
ANIONS BY ION CHROMATOGRAPHY						
Chloride	2400	200	D2	mg/L	100	1/6/2004 12:56:00 AM
Fluoride	6.2	2.0	D2	mg/L	5	1/8/2004 7:12:00 AM
Sulfate	10000	400	D2	mg/L	200	1/8/2004 7:29:00 AM
ALKALINITY						
Alkalinity, Bicarbonate (As CaCO ₃)	92	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Carbonate (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Hydroxide (As CaCO ₃)	< 2.0	2.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
Alkalinity, Total (As CaCO ₃)	92	6.0		mg/L CaCO ₃	1	1/5/2004 12:20:00 PM
NITROGEN, NITRITE AS N						
Nitrogen, Nitrite - N	< 0.010	0.010		mg/L	1	12/31/2003 2:24:00 PM
PH						
pH	8.17	2.00		pH units	1	12/31/2003 5:50:00 AM
RESIDUE, FILTERABLE						
Total Dissolved Solids	8700	10		mg/L	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-12B

Client Sample ID: Evap Pond
Tag Number:
Collection Date: 12/30/2003 1:30:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		E200.7		Analyst: PR		
Aluminum, Dissolved	0.46	0.10		mg/L	1	1/6/2004
Beryllium, Dissolved	< 0.0010	0.0010		mg/L	1	1/6/2004
Calcium, Dissolved	640	100	D2	mg/L	50	1/7/2004
Copper, Dissolved	0.18	0.010		mg/L	1	1/6/2004
Iron, Dissolved	< 0.050	0.050		mg/L	1	1/6/2004
Magnesium, Dissolved	460	12	D2	mg/L	50	1/7/2004
Potassium, Dissolved	120	40	D2	mg/L	20	1/7/2004
Silica (Silicon dioxide-SiO ₂)	59	0.21		mg/L	1	1/6/2004
Sodium, Dissolved	1600	100	D2	mg/L	50	1/7/2004
Zinc, Dissolved	< 0.050	0.050		mg/L	1	1/6/2004
ICP/MS METALS, DISSOLVED		E200.8		Analyst: HK		
Antimony, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Arsenic, Dissolved	0.0063	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Barium	0.067	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Cadmium, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Chromium, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Cobalt, Dissolved	0.0079	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Lead, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Manganese, Dissolved	0.22	0.0025		mg/L	1	1/8/2004 2:18:34 PM
Nickel, Dissolved	0.026	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Selenium, Dissolved	0.0077	0.0010		mg/L	1	1/8/2004 2:18:34 PM
Thallium, Dissolved	< 0.0010	0.0010		mg/L	1	1/8/2004 2:18:34 PM
MERCURY, DISSOLVED		E245.1		Analyst: CU		
Mercury	< 0.00020	0.00020		mg/L	1	1/23/2004 11:30:44 AM

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-12C

Client Sample ID: Evap Pond
Tag Number:
Collection Date: 12/30/2003 1:30:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NITRATE AND NITRITE IN WATER		E353.2				Analyst: D N
Nitrogen, Nitrate/Nitrite Total (As N)	< 0.050	0.050		mg/L	1	1/5/2004

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Analytical Report

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Lab Order: 03121324
Project: Florence Copper
Lab ID: 03121324-12D

Client Sample ID: Evap Pond
Tag Number:
Collection Date: 12/30/2003 1:30:00 PM
Matrix: DRINKING WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PURGEABLE ORGANIC COMPOUNDS		E524.2		Analyst: SP		
Benzene	< 0.00050	0.00050		mg/L	1	12/31/2003
Ethylbenzene	< 0.00050	0.00050		mg/L	1	12/31/2003
m,p-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
o-Xylene	< 0.00050	0.00050		mg/L	1	12/31/2003
Toluene	< 0.00050	0.00050		mg/L	1	12/31/2003
Total Xylene	< 0.0010	0.0010		mg/L	1	12/31/2003
Surr: 1,2-Dichlorobenzene-d4	108	70-130		%REC	1	12/31/2003
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	12/31/2003

Footnotes: All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

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Aerotech Environmental

Date: 17-Mar-04

CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	MB-15988	SampType: MBLK	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:		Batch ID: 15988	TestNo: E200.7		Analysis Date: 1/5/2004	SeqNo: 503682					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum, Dissolved	< 0.10	0.10
Beryllium, Dissolved	< 0.0010	0.0010
Calcium, Dissolved	< 2.0	2.0
Copper, Dissolved	< 0.010	0.010
Iron, Dissolved	< 0.050	0.050
Magnesium, Dissolved	< 0.25	0.25
Potassium, Dissolved	< 2.0	2.0
Silica (Silicon dioxide-SiO2)	< 0.21	0.21
Sodium, Dissolved	< 2.0	2.0
Zinc, Dissolved	< 0.050	0.050

Sample ID	LCS-15988	SampType: LCS	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:		Batch ID: 15988	TestNo: E200.7		Analysis Date: 1/5/2004	SeqNo: 503672					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum, Dissolved	1.030	0.10	1	0	103	85	115
Beryllium, Dissolved	0.4920	0.0010	0.5	0	98.4	85	115
Calcium, Dissolved	10.90	2.0	10.5	0	104	85	115
Copper, Dissolved	0.4980	0.010	0.5	0	99.6	85	115
Iron, Dissolved	0.4760	0.050	0.5	0	95.2	85	115
Magnesium, Dissolved	10.90	0.25	10.5	0	104	85	115
Potassium, Dissolved	11.20	2.0	10	0	112	85	115
Silica (Silicon dioxide-SiO2)	5.519	0.21	5.348	0	103	85	115
Sodium, Dissolved	10.70	2.0	10	0	107	85	115
Zinc, Dissolved	0.5000	0.050	0.5	0	100	85	115

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

Page 1 of 30



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	LCSD-15988	SampType:	LCSD	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	1/3/2004	RunNo:	42623
Client ID:		Batch ID:	15988	TestNo:	E200.7			Analysis Date:	1/5/2004	SeqNo:	503677
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved	1.000	0.10	1	0	100	85	115	1.030	2.96	20	
Beryllium, Dissolved	0.4870	0.0010	0.5	0	97.4	85	115	0.4920	1.02	20	
Calcium, Dissolved	10.80	2.0	10.5	0	103	85	115	10.90	0.922	20	
Copper, Dissolved	0.4920	0.010	0.5	0	98.4	85	115	0.4980	1.21	20	
Iron, Dissolved	0.4700	0.050	0.5	0	94.0	85	115	0.4760	1.27	20	
Magnesium, Dissolved	10.80	0.25	10.5	0	103	85	115	10.90	0.922	20	
Potassium, Dissolved	11.00	2.0	10	0	110	85	115	11.20	1.80	20	
Silica (Silicon dioxide-SiO2)	5.433	0.21	5.348	0	102	85	115	5.519	1.56	20	
Sodium, Dissolved	10.40	2.0	10	0	104	85	115	10.70	2.84	20	
Zinc, Dissolved	0.4940	0.050	0.5	0	98.8	85	115	0.5000	1.21	20	

Sample ID	03121286-11B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	1/3/2004	RunNo:	42623
Client ID:		Batch ID:	15988	TestNo:	E200.7			Analysis Date:	1/5/2004	SeqNo:	503629
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum, Dissolved	1.170	0.10	1	0	117	70	130				
Beryllium, Dissolved	0.4970	0.0010	0.5	0	99.4	70	130				
Calcium, Dissolved	56.30	2.0	10.5	44.50	112	70	130				
Copper, Dissolved	2.480	0.010	0.5	1.980	100	70	130				
Iron, Dissolved	0.4850	0.050	0.5	0	97.0	70	130				
Magnesium, Dissolved	23.60	2.0	10.5	12.60	105	70	130				
Potassium, Dissolved	21.90	2.0	10	6.210	157	70	130				M6
Silica (Silicon dioxide-SiO2)	55.40	0.21	5.348	49.60	108	70	130				
Zinc, Dissolved	0.5270	0.050	0.5	0	105	70	130				

Sample ID	03121286-11B MS	SampType:	MS	TestCode:	200.7_DISS	Units:	mg/L	Prep Date:	1/3/2004	RunNo:	42623
Client ID:		Batch ID:	15988	TestNo:	E200.7			Analysis Date:	1/5/2004	SeqNo:	503630
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	03121286-11B MS	SampType: MS	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:		Batch ID: 15988	TestNo: E200.7		Analysis Date: 1/5/2004	SeqNo: 503630					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sodium, Dissolved	87.00	10	10	75.00	120	70	130				
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Sample ID	03121234-09B MS	SampType: MS	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:		Batch ID: 15988	TestNo: E200.7		Analysis Date: 1/6/2004	SeqNo: 503685					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum, Dissolved	1.110	0.10	1	0	111	70	130				
Beryllium, Dissolved	0.4980	0.0010	0.5	0	99.6	70	130				
Calcium, Dissolved	72.10	2.0	10.5	62.30	93.3	70	130				
Copper, Dissolved	1.450	0.010	0.5	0.9870	92.6	70	130				
Iron, Dissolved	0.4770	0.050	0.5	0	95.4	70	130				
Magnesium, Dissolved	26.70	0.25	10.5	16.40	98.1	70	130				
Potassium, Dissolved	20.80	2.0	10	6.080	147	70	130				M6
Silica (Silicon dioxide-SiO2)	66.95	0.21	5.348	62.90	75.7	70	130				
Sodium, Dissolved	86.40	2.0	10	73.90	125	70	130				
Zinc, Dissolved	0.5460	0.050	0.5	0	109	70	130				

Sample ID	03121286-11B MSD	SampType: MSD	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:		Batch ID: 15988	TestNo: E200.7		Analysis Date: 1/5/2004	SeqNo: 503631					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum, Dissolved	1.130	0.10	1	0	113	70	130	1.170	3.48	20	
Beryllium, Dissolved	0.4920	0.0010	0.5	0	98.4	70	130	0.4970	1.01	20	
Calcium, Dissolved	54.30	2.0	10.5	44.50	93.3	70	130	56.30	3.62	20	
Copper, Dissolved	2.440	0.010	0.5	1.980	92.0	70	130	2.480	1.63	20	
Iron, Dissolved	0.4750	0.050	0.5	0	95.0	70	130	0.4850	2.08	20	
Magnesium, Dissolved	23.20	2.0	10.5	12.60	101	70	130	23.60	1.71	20	
Potassium, Dissolved	21.50	2.0	10	6.210	153	70	130	21.90	1.84	20	M6
Silica (Silicon dioxide-SiO2)	54.30	0.21	5.348	49.60	87.9	70	130	55.40	2.01	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_DISS

Sample ID	03121286-11B MSD	SampType: MSD	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:	Batch ID: 15988	TestNo: E200.7	Analysis Date: 1/5/2004	SeqNo: 503631							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc, Dissolved	0.5160	0.050	0.5	0	103	70	130	0.5270	2.11	20	
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Sample ID	03121286-11B MSD	SampType: MSD	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:	Batch ID: 15988	TestNo: E200.7	Analysis Date: 1/5/2004	SeqNo: 503632							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sodium, Dissolved	87.00	10	10	75.00	120	70	130	87.00	0	20	
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Sample ID	03121234-09B MSD	SampType: MSD	TestCode: 200.7_DISS	Units: mg/L	Prep Date: 1/3/2004	RunNo: 42623					
Client ID:	Batch ID: 15988	TestNo: E200.7	Analysis Date: 1/6/2004	SeqNo: 503687							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Aluminum, Dissolved	1.090	0.10	1	0	109	70	130	1.110	1.82	20	
Beryllium, Dissolved	0.4950	0.0010	0.5	0	99.0	70	130	0.4980	0.604	20	
Calcium, Dissolved	73.10	2.0	10.5	62.30	103	70	130	72.10	1.38	20	
Copper, Dissolved	1.460	0.010	0.5	0.9870	94.6	70	130	1.450	0.687	20	
Iron, Dissolved	0.4750	0.050	0.5	0	95.0	70	130	0.4770	0.420	20	
Magnesium, Dissolved	26.80	0.25	10.5	16.40	99.0	70	130	26.70	0.374	20	
Potassium, Dissolved	20.90	2.0	10	6.080	148	70	130	20.80	0.480	20	M6
Silica (Silicon dioxide-SiO2)	67.59	0.21	5.348	62.90	87.7	70	130	66.95	0.951	20	
Sodium, Dissolved	87.00	2.0	10	73.90	131	70	130	86.40	0.692	20	M6
Zinc, Dissolved	0.5410	0.050	0.5	0	108	70	130	0.5460	0.920	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	MB-16001	SampType:	MBLK	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	1/6/2004	RunNo:	42645		
Client ID:		Batch ID:	16001	TestNo:	E200.8			Analysis Date:	1/6/2004	SeqNo:	504057		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved	< 0.0010	0.0010
Arsenic, Dissolved	< 0.0010	0.0010
Barium	< 0.0010	0.0010
Cadmium, Dissolved	< 0.0010	0.0010
Chromium, Dissolved	< 0.0010	0.0010
Cobalt, Dissolved	< 0.0010	0.0010
Lead, Dissolved	< 0.0010	0.0010
Manganese, Dissolved	< 0.0025	0.0025
Nickel, Dissolved	< 0.0010	0.0010
Selenium, Dissolved	< 0.0010	0.0010
Thallium, Dissolved	< 0.0010	0.0010

Sample ID	MB-16007	SampType:	MBLK	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	1/6/2004	RunNo:	42690		
Client ID:		Batch ID:	16007	TestNo:	E200.8			Analysis Date:	1/7/2004	SeqNo:	504398		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved	< 0.0010	0.0010
Arsenic, Dissolved	< 0.0010	0.0010
Chromium, Dissolved	< 0.0010	0.0010
Cobalt, Dissolved	< 0.0010	0.0010
Manganese, Dissolved	< 0.0025	0.0025
Nickel, Dissolved	< 0.0010	0.0010
Selenium, Dissolved	< 0.0010	0.0010
Thallium, Dissolved	< 0.0010	0.0010

Sample ID	MB-16007	SampType:	MBLK	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	1/6/2004	RunNo:	42721			
Client ID:		Batch ID:	16007	TestNo:	E200.8			Analysis Date:	1/8/2004	SeqNo:	504780			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	MB-16007	SampType:	MBLK	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	1/6/2004	RunNo:	42721		
Client ID:		Batch ID:	16007	TestNo:	E200.8			Analysis Date:	1/8/2004	SeqNo:	504780		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cadmium, Dissolved	< 0.0010	0.0010									
Lead, Dissolved	< 0.0010	0.0010									

Sample ID	LCS-16001	SampType: LCS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:	Batch ID: 16001	TestNo: E200.8			Analysis Date: 1/6/2004	SeqNo: 504054					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved	0.05173	0.0010	0.05	0	103	85	115				
Arsenic, Dissolved	0.04817	0.0010	0.05	0	96.3	85	115				
Barium	0.05268	0.0010	0.05	0	105	85	115				
Cadmium, Dissolved	0.05134	0.0010	0.05	0	103	85	115				
Chromium, Dissolved	0.05187	0.0010	0.05	0	104	85	115				
Cobalt, Dissolved	0.05225	0.0010	0.05	0	104	85	115				
Lead, Dissolved	0.05141	0.0010	0.05	0	103	85	115				
Manganese, Dissolved	0.05239	0.0025	0.05	0	105	85	115				
Nickel, Dissolved	0.05309	0.0010	0.05	0	106	85	115				
Selenium, Dissolved	0.05140	0.0010	0.05	0	103	85	115				
Thallium, Dissolved	0.05087	0.0010	0.05	0	102	85	115				

Sample ID	LCS-16007	SampType:	LCS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	1/6/2004	RunNo:	42690			
Client ID:		Batch ID:	16007	TestNo:	E200.8			Analysis Date:	1/7/2004	SeqNo:	504396			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved	0.05688	0.0010	0.05	0	114	85	115				
Arsenic, Dissolved	0.04711	0.0010	0.05	0	94.2	85	115				
Chromium, Dissolved	0.05700	0.0010	0.05	0	114	85	115				
Cobalt, Dissolved	0.05508	0.0010	0.05	0	110	85	115				
Manganese, Dissolved	0.05337	0.0025	0.05	0	107	85	115				
Nickel, Dissolved	0.05036	0.0010	0.05	0	101	85	115				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID LCS-16007	SampType: LCS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42690						
Client ID:	Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/7/2004	SeqNo: 504396						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium, Dissolved	0.05390	0.0010	0.05	0	108	85	115				
Thallium, Dissolved	0.05320	0.0010	0.05	0	106	85	115				

Sample ID	LCS-16007	SampType:	LCS	TestCode:	200.8_DISS	Units:	mg/L	Prep Date:	1/6/2004	RunNo:	42721			
Client ID:		Batch ID:	16007	TestNo:	E200.8			Analysis Date:	1/8/2004	SeqNo:	504778			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium, Dissolved		0.04788		0.0010	0.05	0		95.8	85	115				
Lead, Dissolved		0.05375		0.0010	0.05	0		108	85	115				

Sample ID	LCSD-16001	SampType: LCSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:		Batch ID: 16001	TestNo: E200.8		Analysis Date: 1/6/2004	SeqNo: 504055					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	0.05323	0.0010	0.05	0	106	85	115	0.05173	2.86	20	
Arsenic, Dissolved	0.04974	0.0010	0.05	0	99.5	85	115	0.04817	3.21	20	
Barium	0.05096	0.0010	0.05	0	102	85	115	0.05268	3.32	20	
Cadmium, Dissolved	0.05262	0.0010	0.05	0	105	85	115	0.05134	2.46	20	
Chromium, Dissolved	0.05299	0.0010	0.05	0	106	85	115	0.05187	2.14	20	
Cobalt, Dissolved	0.05298	0.0010	0.05	0	106	85	115	0.05225	1.39	20	
Lead, Dissolved	0.05227	0.0010	0.05	0	105	85	115	0.05141	1.66	20	
Manganese, Dissolved	0.05338	0.0025	0.05	0	107	85	115	0.05239	1.87	20	
Nickel, Dissolved	0.05382	0.0010	0.05	0	108	85	115	0.05309	1.37	20	
Selenium, Dissolved	0.05268	0.0010	0.05	0	105	85	115	0.05140	2.46	20	
Thallium, Dissolved	0.05155	0.0010	0.05	0	103	85	115	0.05087	1.33	20	

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	LCSD-16007	SampType: LCSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42690					
Client ID:		Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/7/2004	SeqNo: 504397					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	0.05683	0.0010	0.05	0	114	85	115	0.05688	0.0879	20	
Arsenic, Dissolved	0.04685	0.0010	0.05	0	93.7	85	115	0.04711	0.553	20	
Chromium, Dissolved	0.05674	0.0010	0.05	0	113	85	115	0.05700	0.457	20	
Cobalt, Dissolved	0.05438	0.0010	0.05	0	109	85	115	0.05508	1.28	20	
Manganese, Dissolved	0.05013	0.0025	0.05	0	100	85	115	0.05337	6.26	20	
Nickel, Dissolved	0.04898	0.0010	0.05	0	98.0	85	115	0.05036	2.78	20	
Selenium, Dissolved	0.05323	0.0010	0.05	0	106	85	115	0.05390	1.25	20	
Thallium, Dissolved	0.05102	0.0010	0.05	0	102	85	115	0.05320	4.18	20	

Sample ID	LCSD-16007	SampType: LCSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42721					
Client ID:		Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/8/2004	SeqNo: 504779					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium, Dissolved	0.04743	0.0010	0.05	0	94.9	85	115	0.04788	0.944	20	
Lead, Dissolved	0.05313	0.0010	0.05	0	106	85	115	0.05375	1.16	20	

Sample ID	03121286-01B MS	SampType: MS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:		Batch ID: 16001	TestNo: E200.8		Analysis Date: 1/6/2004	SeqNo: 504020					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	0.04878	0.0010	0.05	0	97.6	70	130				
Arsenic, Dissolved	0.05834	0.0010	0.05	0.005970	105	70	130				
Barium	0.06027	0.0010	0.05	0.01383	92.9	70	130				
Cadmium, Dissolved	0.04764	0.0010	0.05	0	95.3	70	130				
Chromium, Dissolved	0.04805	0.0010	0.05	0	96.1	70	130				
Cobalt, Dissolved	0.07906	0.0010	0.05	0.03173	94.7	70	130				
Lead, Dissolved	0.05836	0.0010	0.05	0.003790	109	70	130				
Manganese, Dissolved	0.5051	0.0025	0.05	0.4720	66.4	70	130				M7
Nickel, Dissolved	0.08824	0.0010	0.05	0.04068	95.1	70	130				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	03121286-01B MS	SampType: MS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:		Batch ID: 16001	TestNo: E200.8		Analysis Date: 1/6/2004	SeqNo: 504020					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Selenium, Dissolved

0.05058

0.0010

0.05

0.001070

99.0

70

130

Thallium, Dissolved

0.05377

0.0010

0.05

0

108

70

130

Sample ID	03121286-11B MS	SampType: MS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:		Batch ID: 16001	TestNo: E200.8		Analysis Date: 1/6/2004	SeqNo: 504032					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved

0.04894

0.0010

0.05

0

97.9

70

130

Arsenic, Dissolved

0.05728

0.0010

0.05

0.004430

106

70

130

Barium

0.05368

0.0010

0.05

0.005790

95.8

70

130

Cadmium, Dissolved

0.04823

0.0010

0.05

0

96.5

70

130

Chromium, Dissolved

0.04838

0.0010

0.05

0.001070

94.6

70

130

Cobalt, Dissolved

0.05950

0.0010

0.05

0.01131

96.4

70

130

Lead, Dissolved

0.06388

0.0010

0.05

0

128

70

130

Manganese, Dissolved

0.2241

0.0025

0.05

0.1740

100

70

130

Nickel, Dissolved

0.06384

0.0010

0.05

0.01567

96.3

70

130

Selenium, Dissolved

0.04993

0.0010

0.05

0

99.9

70

130

Thallium, Dissolved

0.05423

0.0010

0.05

0

108

70

130

Sample ID	03121324-09B MS	SampType: MS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42690					
Client ID:	CHI-B	Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/7/2004	SeqNo: 504390					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved

0.05908

0.0010

0.05

0

118

70

130

Arsenic, Dissolved

0.05014

0.0010

0.05

0.003170

93.9

70

130

Cadmium, Dissolved

0.04955

0.0010

0.05

0

99.1

70

130

Chromium, Dissolved

0.05092

0.0010

0.05

0

102

70

130

Cobalt, Dissolved

0.06354

0.0010

0.05

0.01604

95.0

70

130

Lead, Dissolved

0.05287

0.0010

0.05

0

106

70

130

Qualifiers: E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	03121324-09B MS	SampType: MS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42690					
Client ID: CHI-B	Batch ID: 16007	TestNo: E200.8			Analysis Date: 1/7/2004	SeqNo: 504390					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Manganese, Dissolved

0.2844

0.0025

0.05

0.2469

75.0

70

130

Nickel, Dissolved

0.07058

0.0010

0.05

0.02850

84.2

70

130

Selenium, Dissolved

0.04999

0.0010

0.05

0.001520

96.9

70

130

Thallium, Dissolved

0.05353

0.0010

0.05

0

107

70

130

Sample ID	03121324-09B MS	SampType: MS	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42721					
Client ID:	CHI-B	Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/8/2004	SeqNo: 504772					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cadmium, Dissolved

0.04852

0.0010

0.05

0

97.0

70

130

Lead, Dissolved

0.05287

0.0010

0.05

0

106

70

130

Sample ID	03121286-01B MSD	SampType: MSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:		Batch ID: 16001	TestNo: E200.8		Analysis Date: 1/6/2004	SeqNo: 504021					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony, Dissolved

0.04847

0.0010

0.05

0

96.9

70

130

0.04878

0.638

20

Arsenic, Dissolved

0.05828

0.0010

0.05

0.005970

105

70

130

0.05834

0.103

20

Barium

0.05968

0.0010

0.05

0.01383

91.7

70

130

0.06027

0.984

20

Cadmium, Dissolved

0.04697

0.0010

0.05

0

93.9

70

130

0.04764

1.42

20

Chromium, Dissolved

0.04784

0.0010

0.05

0

95.7

70

130

0.04805

0.438

20

Cobalt, Dissolved

0.08001

0.0010

0.05

0.03173

96.6

70

130

0.07906

1.19

20

Lead, Dissolved

0.06026

0.0010

0.05

0.003790

113

70

130

0.05836

3.20

20

Manganese, Dissolved

0.5206

0.0025

0.05

0.4720

97.2

70

130

0.5051

3.00

20

Nickel, Dissolved

0.08909

0.0010

0.05

0.04068

96.8

70

130

0.08824

0.959

20

Selenium, Dissolved

0.05043

0.0010

0.05

0.001070

98.7

70

130

0.05058

0.297

20

Thallium, Dissolved

0.05478

0.0010

0.05

0

110

70

130

0.05377

1.86

20

Qualifiers: E Value above quantitation range

ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

J Analyte detected below quantitation limits

S Spike Recovery outside accepted recovery limits

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■ Tucson Facility: 4455 S. Park Ave. Ste. 110 Tucson, AZ 85714 Phone: 520.807.3801 Fax: 520.807.3803

■ Corporate Address: 1501 W. Knudsen Drive, Phoenix, Arizona 85027 Phone: 623.780.4800 Toll Free: 800.651.4802 Fax: 623.780.7695 www.aerotechlabs.com



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	03121286-11B MSD	SampType: MSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42645					
Client ID:	Batch ID: 16001	TestNo: E200.8	Analysis Date: 1/6/2004	SeqNo: 504033							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	0.04995	0.0010	0.05	0	99.9	70	130	0.04894	2.04	20	
Arsenic, Dissolved	0.05693	0.0010	0.05	0.004430	105	70	130	0.05728	0.613	20	
Barium	0.05352	0.0010	0.05	0.005790	95.5	70	130	0.05368	0.299	20	
Cadmium, Dissolved	0.04855	0.0010	0.05	0	97.1	70	130	0.04823	0.661	20	
Chromium, Dissolved	0.04830	0.0010	0.05	0.001070	94.5	70	130	0.04838	0.165	20	
Cobalt, Dissolved	0.05942	0.0010	0.05	0.01131	96.2	70	130	0.05950	0.135	20	
Lead, Dissolved	0.05493	0.0010	0.05	0	110	70	130	0.06388	15.1	20	
Manganese, Dissolved	0.2172	0.0025	0.05	0.1740	86.4	70	130	0.2241	3.13	20	
Nickel, Dissolved	0.06381	0.0010	0.05	0.01567	96.3	70	130	0.06384	0.0470	20	
Selenium, Dissolved	0.05033	0.0010	0.05	0	101	70	130	0.04993	0.798	20	
Thallium, Dissolved	0.05428	0.0010	0.05	0	109	70	130	0.05423	0.0922	20	

Sample ID	03121324-09B MSD	SampType: MSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42690					
Client ID:	CHI-B	Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/7/2004	SeqNo: 504391					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony, Dissolved	0.06260	0.0010	0.05	0	125	70	130	0.05908	5.79	20	
Arsenic, Dissolved	0.05212	0.0010	0.05	0.003170	97.9	70	130	0.05014	3.87	20	
Cadmium, Dissolved	0.05324	0.0010	0.05	0	106	70	130	0.04955	7.18	20	
Chromium, Dissolved	0.05223	0.0010	0.05	0	104	70	130	0.05092	2.54	20	
Cobalt, Dissolved	0.06674	0.0010	0.05	0.01604	101	70	130	0.06354	4.91	20	
Lead, Dissolved	0.05245	0.0010	0.05	0	105	70	130	0.05287	0.798	20	
Manganese, Dissolved	0.2950	0.0025	0.05	0.2469	96.2	70	130	0.2844	3.66	20	
Nickel, Dissolved	0.07164	0.0010	0.05	0.02850	86.3	70	130	0.07058	1.49	20	
Selenium, Dissolved	0.05310	0.0010	0.05	0.001520	103	70	130	0.04999	6.03	20	
Thallium, Dissolved	0.05117	0.0010	0.05	0	102	70	130	0.05353	4.51	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_DISS

Sample ID	03121324-09B MSD	SampType: MSD	TestCode: 200.8_DISS	Units: mg/L	Prep Date: 1/6/2004	RunNo: 42721					
Client ID:	CHI-B	Batch ID: 16007	TestNo: E200.8		Analysis Date: 1/8/2004	SeqNo: 504773					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium, Dissolved	0.04878	0.0010	0.05	0	97.6	70	130	0.04852	0.534	20	
Lead, Dissolved	0.05148	0.0010	0.05	0	103	70	130	0.05287	2.66	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_DISS

Sample ID MB-16200	SampType: MBLK	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285
Client ID:	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512606
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury < 0.00020 0.00020

Sample ID LCS-16200	SampType: LCS	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285
Client ID:	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512607
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.005490 0.00020 0.005 0 110 85 115

Sample ID LCSD-16200	SampType: LCSD	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285
Client ID:	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512608
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.005650 0.00020 0.005 0 113 85 115 0.005490 2.87 20

Sample ID 03121324-01BMS	SampType: MS	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285
Client ID: BHP-12	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512610
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.005660 0.00020 0.005 0 113 70 130

Sample ID 03121324-11BMS	SampType: MS	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285
Client ID: CH2-B	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512622
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Mercury 0.005860 0.00020 0.005 0 117 70 130

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_DISS

Sample ID	03121324-01BMSD	SampType: MSD	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285					
Client ID:	BHP-12	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512611					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005510	0.00020	0.005	0	110	70	130	0.005660	2.69	20	

Sample ID	03121324-11BMSD	SampType: MSD	TestCode: 245.1_W_DIS	Units: mg/L	Prep Date: 1/22/2004	RunNo: 43285					
Client ID:	CH2-B	Batch ID: 16200	TestNo: E245.1		Analysis Date: 1/23/2004	SeqNo: 512623					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005710	0.00020	0.005	0	114	70	130	0.005860	2.59	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	MB-R42578	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42578						
Client ID:		Batch ID: R42578	TestNo: E300		Analysis Date: 12/31/2003	SeqNo: 503082						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		< 2.0	2.0									
Fluoride		< 0.40	0.40									
Sulfate		< 2.0	2.0									

Sample ID	MB-R42579	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42579						
Client ID:		Batch ID: R42579	TestNo: E300		Analysis Date: 1/1/2004	SeqNo: 503096						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		< 0.40	0.40									
Sulfate		< 2.0	2.0									

Sample ID	MB-R42643	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42643						
Client ID:		Batch ID: R42643	TestNo: E300		Analysis Date: 1/5/2004	SeqNo: 503999						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		< 2.0	2.0									
Sulfate		< 2.0	2.0									

Sample ID	MB-R42679	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42679						
Client ID:		Batch ID: R42679	TestNo: E300		Analysis Date: 1/5/2004	SeqNo: 504278						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		< 2.0	2.0									
Sulfate		< 2.0	2.0									

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

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R RPD outside accepted recovery limits

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S Spike Recovery outside accepted recovery limits



Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	MB-R42792	SampType: MBLK	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42792					
Client ID:	Batch ID: R42792	TestNo: E300	Analysis Date: 1/8/2004			SeqNo: 505649					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluoride	< 0.40	0.40									
Sulfate	< 2.0	2.0									

Sample ID	LCS-R42578	SampType:	LCS	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	42578		
Client ID:		Batch ID:	R42578	TestNo:	E300			Analysis Date:	12/31/2003	SeqNo:	503083		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	9.910	2.0	10	0	99.1	90	110				N1
Fluoride	1.910	0.40	2	0	95.5	90	110				
Sulfate	10.09	2.0	10	0	101	90	110				N1

Sample ID	LCS-R42579	SampType: LCS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42579					
Client ID:	Batch ID: R42579	TestNo: E300	Analysis Date: 1/1/2004			SeqNo: 503097					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluoride	2.080	0.40	2	0	104	90	110				
Sulfate	10.86	2.0	10	0	109	90	110				N1

Sample ID	LCS-R42643	SampType: LCS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42643					
Client ID:	Batch ID: R42643	TestNo: E300	Analysis Date: 1/5/2004			SeqNo: 504000					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	9.900	2.0	10	0	99.0	90	110				
Sulfate	10.26	2.0	10	0	103	90	110				

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	LCS-R42679	SampType: LCS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42679					
Client ID:		Batch ID: R42679	TestNo: E300		Analysis Date: 1/5/2004	SeqNo: 504279					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.900	2.0	10	0	99.0	90	110				
Sulfate	10.26	2.0	10	0	103	90	110				N1

Sample ID	LCS-R42792	SampType: LCS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42792					
Client ID:		Batch ID: R42792	TestNo: E300		Analysis Date: 1/8/2004	SeqNo: 505650					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.970	0.40	2	0	98.5	90	110				
Sulfate	10.21	2.0	10	0	102	90	110				

Sample ID	LCSD-R42578	SampType: LCSD	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42578					
Client ID:		Batch ID: R42578	TestNo: E300		Analysis Date: 12/31/2003	SeqNo: 503095					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.920	2.0	10	0	99.2	90	110	9.910	0.101	20	N1
Fluoride	1.950	0.40	2	0	97.5	90	110	1.910	2.07	20	
Sulfate	10.37	2.0	10	0	104	90	110	10.09	2.74	20	N1

Sample ID	LCSD-R42579	SampType: LCSD	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42579					
Client ID:		Batch ID: R42579	TestNo: E300		Analysis Date: 1/1/2004	SeqNo: 503109					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.990	0.40	2	0	99.5	90	110	2.080	4.42	20	
Sulfate	10.42	2.0	10	0	104	90	110	10.86	4.14	20	N1

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	LCSD-R42643	SampType: LCSD	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42643					
Client ID:		Batch ID: R42643	TestNo: E300		Analysis Date: 1/5/2004	SeqNo: 504013					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.930	2.0	10	0	99.3	90	110	9.900	0.303	20	
Sulfate	9.840	2.0	10	0	98.4	90	110	10.26	4.18	20	

Sample ID	LCSD-R42679	SampType: LCSD	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42679					
Client ID:		Batch ID: R42679	TestNo: E300		Analysis Date: 1/5/2004	SeqNo: 504288					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.930	2.0	10	0	99.3	90	110	9.900	0.303	20	
Sulfate	9.840	2.0	10	0	98.4	90	110	10.26	4.18	20	N1

Sample ID	LCSD-R42792	SampType: LCSD	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42792					
Client ID:		Batch ID: R42792	TestNo: E300		Analysis Date: 1/8/2004	SeqNo: 505659					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	2.080	0.40	2	0	104	90	110	1.970	5.43	20	
Sulfate	10.51	2.0	10	0	105	90	110	10.21	2.90	20	

Sample ID	03121354-02AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42578					
Client ID:		Batch ID: R42578	TestNo: E300		Analysis Date: 12/31/2003	SeqNo: 503094					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.830	0.40	2	0	91.5	80	120				

Sample ID	03121324-04AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42579					
Client ID:	OWB-2	Batch ID: R42579	TestNo: E300		Analysis Date: 1/1/2004	SeqNo: 503100					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	2.550	0.40	2	0.6400	95.5	80	120				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	03121324-01AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42643					
Client ID:	BHP-12	Batch ID: R42643	TestNo: E300		Analysis Date: 1/5/2004	SeqNo: 504005					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	167.7	4.0	20	148.5	95.7	80	120				
Sulfate	89.88	4.0	20	69.92	99.8	80	120				

Sample ID	03121324-12AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42679					
Client ID:	Evap Pond	Batch ID: R42679	TestNo: E300		Analysis Date: 1/6/2004	SeqNo: 504287					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	3290	200	1000	2448	84.2	80	120				

Sample ID	04010565-01AMS	SampType: MS	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42792					
Client ID:		Batch ID: R42792	TestNo: E300		Analysis Date: 1/8/2004	SeqNo: 505657					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	3.360	0.40	2	1.280	104	80	120				
Sulfate	78.64	2.0	10	71.21	74.3	80	120				M7

Sample ID	03121354-02ADUP	SampType: DUP	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42578					
Client ID:		Batch ID: R42578	TestNo: E300		Analysis Date: 12/31/2003	SeqNo: 503093					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	< 0.40	0.40						0	0	20	

Sample ID	03121324-04ADUP	SampType: DUP	TestCode: 300_W	Units: mg/L	Prep Date:	RunNo: 42579					
Client ID:	OWB-2	Batch ID: R42579	TestNo: E300		Analysis Date: 1/1/2004	SeqNo: 503099					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.6700	0.40						0.6400	4.58	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 300_W

Sample ID	03121324-01ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	42643	
Client ID:	BHP-12	Batch ID:	R42643	TestNo:	E300			Analysis Date:	1/5/2004	SeqNo:	504004	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		148.7	4.0						148.5	0.148	20	
Sulfate		70.10	4.0						69.92	0.257	20	

Sample ID	03121324-12ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	42679	
Client ID:	Evap Pond	Batch ID:	R42679	TestNo:	E300			Analysis Date:	1/6/2004	SeqNo:	504286	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		2277	200						2448	7.24	20	

Sample ID	04010565-01ADUP	SampType:	DUP	TestCode:	300_W	Units:	mg/L	Prep Date:		RunNo:	42792	
Client ID:		Batch ID:	R42792	TestNo:	E300			Analysis Date:	1/8/2004	SeqNo:	505656	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		1.450	0.40						1.280	12.5	20	
Sulfate		70.74	2.0						71.21	0.662	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: 524_W_SDWA

Sample ID	MB-R42569	SampType: MBLK	TestCode: 524_W_SDW	Units: mg/L	Prep Date:	RunNo: 42569					
Client ID:	Batch ID: R42569	TestNo: E524.2	Analysis Date: 12/31/2003	SeqNo: 502923							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	< 0.00050	0.00050									
Ethylbenzene	< 0.00050	0.00050									
m,p-Xylene	< 0.00050	0.00050									
o-Xylene	< 0.00050	0.00050									
Toluene	< 0.00050	0.00050									
Surr: 1,2-Dichlorobenzene-d4	0.005060	0	0.005	0	101	70	130				
Surr: 4-Bromofluorobenzene	0.005010	0	0.005	0	100	70	130				

Sample ID	LCS-R42569	SampType: LCS	TestCode: 524_W_SDW	Units: mg/L	Prep Date:	RunNo: 42569					
Client ID:	Batch ID: R42569	TestNo: E524.2	Analysis Date: 12/31/2003	SeqNo: 502924							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	0.005030	0.00050	0.005	0	101	70	130				
Ethylbenzene	0.005020	0.00050	0.005	0	100	70	130				
m,p-Xylene	0.01011	0.00050	0.01	0	101	70	130				
o-Xylene	0.005160	0.00050	0.005	0	103	70	130				
Toluene	0.005040	0.00050	0.005	0	101	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.005140	0	0.005	0	103	70	130				
Surr: 4-Bromofluorobenzene	0.005150	0	0.005	0	103	70	130				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: ALKALINITY

Sample ID	MB-R42608	SampType:	MBLK	TestCode:	ALKALINITY	Units:	mg/L CaCO3	Prep Date:		RunNo:	42608		
Client ID:		Batch ID:	R42608	TestNo:	M2320 B			Analysis Date:	1/5/2004	SeqNo:	503418		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)

< 2.0

2.0

Alkalinity, Carbonate (As CaCO3)

< 2.0

2.0

Alkalinity, Hydroxide (As CaCO3)

< 2.0

2.0

Alkalinity, Total (As CaCO3)

< 6.0

6.0

Sample ID	MBLK1-R42608	SampType: MBLK	TestCode: ALKALINITY	Units: mg/L CaCO3	Prep Date:	RunNo: 42608					
Client ID:		Batch ID: R42608	TestNo: M2320 B		Analysis Date: 1/5/2004	SeqNo: 503436					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Bicarbonate (As CaCO3)

< 2.0

2.0

Alkalinity, Carbonate (As CaCO3)

< 2.0

2.0

Alkalinity, Hydroxide (As CaCO3)

< 2.0

2.0

Alkalinity, Total (As CaCO3)

< 6.0

6.0

Sample ID	LCS-R42608	SampType:	LCS	TestCode:	ALKALINITY	Units:	mg/L CaCO3	Prep Date:		RunNo:	42608		
Client ID:		Batch ID:	R42608	TestNo:	M2320 B			Analysis Date:	1/5/2004	SeqNo:	503419		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Total (As CaCO3)

252.0

6.0

250

0

101

90

110

Sample ID	LCS1-R42608	SampType:	LCS	TestCode:	ALKALINITY	Units:	mg/L CaCO3	Prep Date:		RunNo:	42608		
Client ID:		Batch ID:	R42608	TestNo:	M2320 B			Analysis Date:	1/5/2004	SeqNo:	503434		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Alkalinity, Total (As CaCO3)

252.0

6.0

250

0

101

90

110

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: ALKALINITY

Sample ID	03121329-01ADUP	SampType:	DUP	TestCode:	ALKALINITY	Units:	mg/L CaCO3	Prep Date:		RunNo:	42608	
Client ID:		Batch ID:	R42608	TestNo:	M2320 B			Analysis Date:	1/5/2004	SeqNo:	503433	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)		166.0	2.0						170.0	2.38	20	
Alkalinity, Carbonate (As CaCO3)		8.000	2.0						8.000	0	20	
Alkalinity, Hydroxide (As CaCO3)		< 2.0	2.0						0	0	20	
Alkalinity, Total (As CaCO3)		174.0	6.0						178.0	2.27	20	

Sample ID	03121324-10ADUP	SampType:	DUP	TestCode:	ALKALINITY	Units:	mg/L CaCO3	Prep Date:		RunNo:	42608	
Client ID:	CH2-R	Batch ID:	R42608	TestNo:	M2320 B			Analysis Date:	1/5/2004	SeqNo:	503437	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)		8.000	2.0						8.000	0	20	
Alkalinity, Carbonate (As CaCO3)		< 2.0	2.0						0	0	20	
Alkalinity, Hydroxide (As CaCO3)		< 2.0	2.0						0	0	20	
Alkalinity, Total (As CaCO3)		8.000	6.0						8.000	0	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: NO2_W

Sample ID MB-R42556	SampType: MBLK	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556
Client ID:	Batch ID: R42556	TestNo: M4500-NO2 B		Analysis Date: 12/31/2003	SeqNo: 502797
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrogen, Nitrite - N < 0.010 0.010

Sample ID LCS-R42556	SampType: LCS	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556
Client ID:	Batch ID: R42556	TestNo: M4500-NO2 B		Analysis Date: 12/31/2003	SeqNo: 502815
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrogen, Nitrite - N 0.09750 0.010 0.1 0 97.5 90 110

Sample ID LCSD-R42556	SampType: LCSD	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556
Client ID:	Batch ID: R42556	TestNo: M4500-NO2 B		Analysis Date: 12/31/2003	SeqNo: 502816
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrogen, Nitrite - N 0.09650 0.010 0.1 0 96.5 90 110 0.09750 1.03 20

Sample ID 03121324-10AMS	SampType: MS	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556
Client ID: CH2-R	Batch ID: R42556	TestNo: M4500-NO2 B		Analysis Date: 12/31/2003	SeqNo: 502808
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrogen, Nitrite - N 0.08680 0.010 0.1 0 86.8 80 120

Sample ID 03121353-03AMS	SampType: MS	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556
Client ID:	Batch ID: R42556	TestNo: M4500-NO2 B		Analysis Date: 12/31/2003	SeqNo: 502813
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Nitrogen, Nitrite - N 0.09550 0.010 0.1 0 95.5 80 120

Qualifiers: E Value above quantitation range
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S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: NO2_W

Sample ID	03121324-10AMSD	SampType: MSD	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556					
Client ID:	CH2-R	Batch ID: R42556	TestNo: M4500-NO2 B	Analysis Date: 12/31/2003	SeqNo: 502809						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite - N	0.08420	0.010	0.1	0	84.2	80	120	0.08680	3.04	20	

Sample ID	03121353-03AMSD	SampType: MSD	TestCode: NO2_W	Units: mg/L	Prep Date:	RunNo: 42556					
Client ID:		Batch ID: R42556	TestNo: M4500-NO2 B	Analysis Date: 12/31/2003	SeqNo: 502814						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrite - N	0.09390	0.010	0.1	0	93.9	80	120	0.09550	1.69	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

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R RPD outside accepted recovery limits

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S Spike Recovery outside accepted recovery limits

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: NO3/NO2_353.2

Sample ID	MB-R42621	SampType:	MBLK	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42621			
Client ID:		Batch ID:	R42621	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503549			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Nitrate/Nitrite Total (As N) < 0.050 0.050

Sample ID	MB-R42622	SampType:	MBLK	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42622			
Client ID:		Batch ID:	R42622	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503563			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Nitrate/Nitrite Total (As N) < 0.050 0.050

Sample ID	LCS-R42621	SampType:	LCS	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42621			
Client ID:		Batch ID:	R42621	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503550			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Nitrate/Nitrite Total (As N) 2.050 0.050 2 0 103 90 110

Sample ID	LCS-R42622	SampType:	LCS	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42622			
Client ID:		Batch ID:	R42622	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503564			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Nitrate/Nitrite Total (As N) 2.030 0.050 2 0 102 90 110

Sample ID	LCSD-R42621	SampType:	LCSD	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42621			
Client ID:		Batch ID:	R42621	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503562			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Nitrogen, Nitrate/Nitrite Total (As N) 2.050 0.050 2 0 103 90 110 2.050 0 20

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits



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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: NO3/NO2_353.2

Sample ID	LCSD-R42622	SampType:	LCSD	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42622			
Client ID:		Batch ID:	R42622	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503575			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate/Nitrite Total (As N)		2.040		0.050	2	0		102	90	110	2.030	0.491	20	

Sample ID	03121324-01CMS	SampType:	MS	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42621			
Client ID:	BHP-12	Batch ID:	R42621	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503555			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate/Nitrite Total (As N)		2.260		0.050	2	0.4500		90.5	90	110				

Sample ID	03121324-10CMS	SampType:	MS	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42622			
Client ID:	CH2-R	Batch ID:	R42622	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503569			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate/Nitrite Total (As N)		2.390		0.050	2	0.5500		92.0	90	110				

Sample ID	03121324-01CMSD	SampType:	MSD	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42621			
Client ID:	BHP-12	Batch ID:	R42621	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503556			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate/Nitrite Total (As N)		2.270		0.050	2	0.4500		91.0	90	110	2.260	0.442	20	

Sample ID	03121324-10CMSD	SampType:	MSD	TestCode:	NO3/NO2_35	Units:	mg/L	Prep Date:		RunNo:	42622			
Client ID:	CH2-R	Batch ID:	R42622	TestNo:	E353.2			Analysis Date:	1/5/2004	SeqNo:	503570			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate/Nitrite Total (As N)		2.370		0.050	2	0.5500		91.0	90	110	2.390	0.840	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: PH_W

Sample ID	LCS-R42584	SampType:	LCS	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	42584
Client ID:		Batch ID:	R42584	TestNo:	E150.1			Analysis Date:	12/31/2003	SeqNo:	503136
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
pH		7.030		2.00	7	0	100	99.28	100.72		

Sample ID	LCSD-R42584	SampType:	LCSD	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	42584
Client ID:		Batch ID:	R42584	TestNo:	E150.1			Analysis Date:	12/31/2003	SeqNo:	503150
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
pH		7.010		2.00	7	0	100	99.28	100.72	7.030	0.285 10

Sample ID	03121324-01A DUP	SampType:	DUP	TestCode:	PH_W	Units:	pH units	Prep Date:		RunNo:	42584
Client ID:	BHP-12	Batch ID:	R42584	TestNo:	E150.1			Analysis Date:	12/31/2003	SeqNo:	504058
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
pH		7.350		2.00						7.400	0.678 10

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

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Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell
Work Order: 03121324
Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: S_TDS

Sample ID MB-R42596	SampType: MBLK	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596
Client ID:	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503241
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids < 10 10

Sample ID MB2-R42596	SampType: MBLK	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596
Client ID:	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503267
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids < 10 10

Sample ID LCS-R42596	SampType: LCS	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596
Client ID:	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503264
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids 1025 10 1000 0 103 90 110

Sample ID LCS2-R42596	SampType: LCS	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596
Client ID:	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503268
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids 1017 10 1000 0 102 90 110

Sample ID LCSD-R42596	SampType: LCSD	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596
Client ID:	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503265
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids 995.0 10 1000 0 99.5 90 110 1025 2.97 10

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits



Aerotech Environmental Laboratories

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CLIENT: Brown & Caldwell

Work Order: 03121324

Project: Florence Copper

ANALYTICAL QC SUMMARY REPORT

TestCode: S_TDS

Sample ID	LCSD2-R42596	SampType: LCSD	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596					
Client ID:		Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503270					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1004	10	1000	0	100	90	110	1017	1.29	10	

Sample ID	03121324-01ADUP	SampType: DUP	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596					
Client ID:	BHP-12	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503250					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	492.0	10						502.0	2.01	10	

Sample ID	03121324-05ADUP	SampType: DUP	TestCode: S_TDS	Units: mg/L	Prep Date:	RunNo: 42596					
Client ID:	OWB-1	Batch ID: R42596	TestNo: M2540 C		Analysis Date: 12/31/2003	SeqNo: 503255					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	476.0	10						476.0	0	10	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

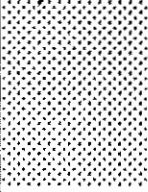
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Aerotech Environmental Laboratories Sample Receipt Checklist

Project checked by: Chk

Accession Number: <u>0-312-1324</u>		Checklist completed by: <u>T. MacArthur 12-30</u>	
Client Name: <u>Brown & Caldwell</u>		Signature/Date	
Matrix: <u>DW</u>	Carrier Name: <u>Barb S.</u>	Date/Time Rec'd: <u>12-30-03</u>	By: <u>TUM</u>

Temperature of Samples? 1.4 °C Circle one: Blue Ice Wet Ice Not Present

	Yes	No	Not Present	Containers:
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>			Brass Sleeve _____
Custody seals intact on shipping container/cooler?			<input checked="" type="checkbox"/>	Glass Jar _____
Custody seals intact on sample containers?			<input checked="" type="checkbox"/>	Methanol _____
Chain of Custody present and relinquished/received properly?	<input checked="" type="checkbox"/>			Plastic Bag _____
Chain of Custody agrees with sample labels?	<input checked="" type="checkbox"/>			
Samples in proper containers/bottles?	<input checked="" type="checkbox"/>			
Sample containers intact?	<input checked="" type="checkbox"/>			
All samples received within holding time?	<input checked="" type="checkbox"/>			
Do different containers of the same sample vary in appearance?		<input checked="" type="checkbox"/>	If Yes, Contact PM	
40mL vials for volatiles & SOC's received with zero headspace?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Total number of bottles received: <u>96</u>	IH sample media:
---	------------------

Number of containers received by preservative (by sample number):

Preservative	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A-General	3	3	3	3	3	3	3	3	3	3	3	3			
B-HNO3	1	1	1	1	1	1	1	1	1	1	1	1			
C-H2SO4	1	1	1	1	1	1	1	1	1	1	1	1			
D-HCl	3	3	3	3	3	3	3	3	3	3	3	3			
E-Na2S2O3															
F-NaOH															
G-Sulfide															
H-Na Sulfite															
I-MCAA															
J-Methanol															
K-HAA															
L-Other															

*If more than 15 samples are rec'd, please continue on separate sheet(s)

Water-pH acceptable upon receipt? Yes ☒ No ☐ N/A ☐

Preservative & pH	pH of samples upon receipt	If sample received with improper pH, list sample number and adjustments
Metals <2	<u>2.2</u>	
Nutrients <2	<u>2.2</u>	
Total Phenols <2		
413 (O&G) <2		
418 (TPH) <2		
Cyanide >12		
Sulfide >9		

Any No response must be detailed in the comments section below. Please continue on back if you run out of space.

Comments: ① No trip blank ② sample #09DD has headspace -

Corrective Action:



Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

[] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192

[] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216

[] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803

www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

0-312-1324

Customer Number:	Page 1 of 2
Customer: <u>Brown + Caldwell</u>	Sampler: <u>B. Sylvester</u>
Address: <u>201 E Washington Suite 500</u>	Project Name: <u>Fluoresce Copper</u>
City, State, Zip: <u>Phoenix AZ 85004</u>	Project Number: <u>21622 007</u>
Contact: <u>Burb Sylvester</u>	P.O. Number:
Phone: <u>602 567 3894</u> Fax:	Fax Results: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
E-Mail Address:	E-Mail Results: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>

Sample Type Codes

DW - Drinking Water A - Air

WW - Waste Water S - Soil

HW - Hazardous Waste

Other _____

Sample Receipt

Temperature 1.4 °C

Custody Seals: Yes ☐ No ☒

Custody Seals Intact: Yes ☐ No ☒

Total # of Containers: 94

Turn Around Request

24 Hours ☐ 48 Hours ☐

72 Hours ☐

5 Working Days ☐

☒ Standard 10 Working Days

Subject to scheduling & availability (surcharges apply).

Analyses Requested

Sample Information

Lab #	Sample Identification	Date	Time	Type	Analyses Requested																# of sample Containers
01	BHP-12	12-30-03	0805	DW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	8
02	BHP-11		0830		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
03	OWB-4		0910		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
04	OWB-2		0930		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
05	OWB-1		0965		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
06	OWB-5		1025		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
07	OWB-7		1045		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
08	CH1-R		1120		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
09	CH1-B		1120		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
10	CH2-R	12-30-03	1200	DW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Instructions / Special Requirements: Invoice to: Vinyard Properties 975 Atlanta FA John Sun Ferry Rd Suite 450

Atlanta FA 30342

Date:	Time:	Samples Relinquished By:	Received By:
12/30/03	1647	<u>Burb Sylvester</u>	<u>C. H. MacArthur</u>



LABORATORY REPORT

Prepared For: Aerotech Laboratories, Inc.-Tempe
4645 E. Cotton Center Blvd. Bldg 3 #189
Phoenix, AZ 85044
Attention: Lucas Menendez

Project: 0-312-1324

Sampled: 12/30/03
Received: 12/31/03
Issued: 01/08/04

AZ DHS #AZ0426

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.
This entire report was reviewed and approved for release.*

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 2°C, on ice and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

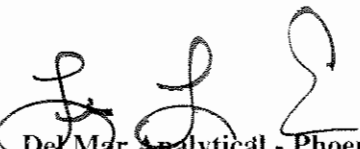
SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

LABORATORY ID

CLIENT ID

MATRIX

PML0804-01	BHP-12	Water
PML0804-02	BHP-11	Water
PML0804-03	OWB-4	Water
PML0804-04	OWB-2	Water
PML0804-05	OWB-1	Water
PML0804-06	OWB-5	Water
PML0804-07	OWB-7	Water
PML0804-08	CH1-R	Water
PML0804-09	CH1-B	Water
PML0804-10	CH2-R	Water
PML0804-11	CH2-B	Water
PML0804-12	Evap Pond	Water


Del Mar Analytical - Phoenix
Linda Eshelman
Project Manager



Aerotech Laboratories, Inc.-Tempe
 4645 E. Cotton Center Blvd. Bldg 3 #189
 Phoenix, AZ 85044
 Attention: Lucas Menendez

Project ID: 0-312-1324
 Report Number: PML0804

Sampled: 12/30/03
 Received: 12/31/03

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510/8015B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PML0804-01RE1 (BHP-12 - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0619	0.25	ND	0.98	1/6/2004	1/6/2004	
ORO (C22-C32)	EPA 8015B	P4A0619	0.25	ND	0.98	1/6/2004	1/6/2004	
Total (C10-C32)	EPA 8015B	P4A0619	0.50	ND	0.98	1/6/2004	1/6/2004	
Surrogate: n-Docosane (75-125%)				103 %				
Sample ID: PML0804-02 (BHP-11 - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	0.98	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	0.98	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	0.98	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				100 %				
Sample ID: PML0804-03 (OWB-4 - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	0.98	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	0.98	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	0.98	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				98 %				
Sample ID: PML0804-04 (OWB-2 - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	0.98	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	0.98	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	0.98	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				102 %				
Sample ID: PML0804-05 (OWB-1 - Water)								
Reporting Units: ug/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	0.982	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	0.982	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	0.982	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				105 %				
Sample ID: PML0804-06 (OWB-5 - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	0.963	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	0.963	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	0.963	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				99 %				

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 Linda Eshelman
 Project Manager

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Aerotech Laboratories, Inc.-Tempe
 4645 E. Cotton Center Blvd. Bldg 3 #189
 Phoenix, AZ 85044
 Attention: Lucas Menendez

Project ID: 0-312-1324
 Report Number: PML0804

Sampled: 12/30/03
 Received: 12/31/03

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510/8015B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PML0804-07 (OWB-7 - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	1.02	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	1.02	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	1.02	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				101 %				
Sample ID: PML0804-08 (CH1-R - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	1.02	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	1.02	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	1.02	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				102 %				
Sample ID: PML0804-09 (CH1-B - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	1.01	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	1.01	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	1.01	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				102 %				
Sample ID: PML0804-10 (CH2-R - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0505	0.25	ND	1.02	1/5/2004	1/5/2004	
ORO (C22-C32)	EPA 8015B	P4A0505	0.25	ND	1.02	1/5/2004	1/5/2004	
Total (C10-C32)	EPA 8015B	P4A0505	0.50	ND	1.02	1/5/2004	1/5/2004	
Surrogate: n-Docosane (75-125%)				104 %				
Sample ID: PML0804-11RE1 (CH2-B - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0619	0.25	ND	1	1/6/2004	1/6/2004	
ORO (C22-C32)	EPA 8015B	P4A0619	0.25	ND	1	1/6/2004	1/6/2004	
Total (C10-C32)	EPA 8015B	P4A0619	0.50	ND	1	1/6/2004	1/6/2004	
Surrogate: n-Docosane (75-125%)				121 %				
Sample ID: PML0804-12RE1 (Evap Pond - Water)								
Reporting Units: mg/l								
DRO (C10-C22)	EPA 8015B	P4A0619	0.25	ND	0.984	1/6/2004	1/6/2004	
ORO (C22-C32)	EPA 8015B	P4A0619	0.25	ND	0.984	1/6/2004	1/6/2004	
Total (C10-C32)	EPA 8015B	P4A0619	0.50	ND	0.984	1/6/2004	1/6/2004	
Surrogate: n-Docosane (75-125%)				105 %				

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 Linda Eshelman
 Project Manager

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Aerotech Laboratories, Inc.-Tempe
 4645 E. Cotton Center Blvd. Bldg 3 #189
 Phoenix, AZ 85044
 Attention: Lucas Menendez

Project ID: 0-312-1324
 Report Number: PML0804

Sampled: 12/30/03
 Received: 12/31/03

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510/8015B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: P4A0505 Extracted: 01/05/04									
Blank Analyzed: 01/05/04 (P4A0505-BLK1)									
DRO (C10-C22)	ND	0.25	mg/l						
ORO (C22-C32)	ND	0.25	mg/l						
Total (C10-C32)	ND	0.50	mg/l						
Surrogate: n-Docosane	0.343		mg/l	0.400		86 75-125			
LCS Analyzed: 01/05/04 (P4A0505-BS1)									
DRO (C10-C22)	1.88	0.25	mg/l	2.00		94 60-120			
ORO (C22-C32)	1.37	0.25	mg/l	2.00		68 55-130			
Surrogate: n-Docosane	0.486		mg/l	0.400		122 75-125			
LCS Analyzed: 01/05/04 (P4A0505-BS2)									
DRO (C10-C22)	1.88	0.25	mg/l	2.00		94 60-120			
ORO (C22-C32)	1.37	0.25	mg/l	2.00		68 55-130			
Surrogate: n-Docosane	0.486		mg/l	0.400		122 75-125			
LCS Dup Analyzed: 01/05/04 (P4A0505-BSD2)									
DRO (C10-C22)	1.78	0.25	mg/l	2.00		89 60-120	5	20	
ORO (C22-C32)	1.34	0.25	mg/l	2.00		67 55-130	2	20	
Surrogate: n-Docosane	0.473		mg/l	0.400		118 75-125			
Batch: P4A0619 Extracted: 01/06/04									
Blank Analyzed: 01/06/04 (P4A0619-BLK1)									
DRO (C10-C22)	ND	0.25	mg/l						
ORO (C22-C32)	ND	0.25	mg/l						
Total (C10-C32)	ND	0.50	mg/l						
Surrogate: n-Docosane	0.417		mg/l	0.400		104 75-125			

Del Mar Analytical - Phoenix
 Linda Eshelman
 Project Manager



Aerotech Laboratories, Inc.-Tempe
 4645 E. Cotton Center Blvd. Bldg 3 #189
 Phoenix, AZ 85044
 Attention: Lucas Menendez

Project ID: 0-312-1324
 Report Number: PML0804

Sampled: 12/30/03
 Received: 12/31/03

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510/8015B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P4A0619 Extracted: 01/06/04										
LCS Analyzed: 01/07/04 (P4A0619-BS1)										Q8
DRO (C10-C22)	1.84	0.25	mg/l	2.00		92	60-120			
ORO (C22-C32)	2.16	0.25	mg/l	2.00		108	55-130			
Surrogate: n-Docosane	0.496		mg/l	0.400		124	75-125			
LCS Dup Analyzed: 01/06/04 (P4A0619-BSD1)										
DRO (C10-C22)	1.79	0.25	mg/l	2.00		90	60-120	3	20	
ORO (C22-C32)	2.01	0.25	mg/l	2.00		100	55-130	7	20	
Surrogate: n-Docosane	0.444		mg/l	0.400		111	75-125			

Del Mar Analytical - Phoenix
 Linda Eshelman
 Project Manager



Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9494 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Aerotech Laboratories, Inc.-Tempe
4645 E. Cotton Center Blvd. Bldg 3 #189
Phoenix, AZ 85044
Attention: Lucas Menendez

Project ID: 0-312-1324
Report Number: PML0804

Sampled: 12/30/03
Received: 12/31/03

DATA QUALIFIERS AND DEFINITIONS

Q8 Insufficient sample received to meet method QC requirements. QC requirements satisfy ADEQ policies 0154 and 0155.
ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD Relative Percent Difference

ADDITIONAL COMMENTS

For Extractable Fuel Hydrocarbons (EFH, DRO, ORO) :

Unless otherwise noted, Extractable Fuel Hydrocarbons (EFH, DRO, ORO) are quantitated against a Diesel Fuel Standard.

Del Mar Analytical - Phoenix
Linda Eshelman
Project Manager



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PML0804 <Page 6 of 6>



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 Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192

[] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216

[] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803

www.aeroenvirolabs.com or call toll-free 866.772.5227

Lab Number:

PML0804

Sample Type Codes

DW - Drinking Water	A - Air
WW - Waste Water	S - Soil
HW - Hazardous Waste	
Other	

Customer Number:		Page <u>1</u> of <u>2</u>	
Customer: <u>AEL</u>		Sampler:	
Address:		Project Name: <u>0-312-1324</u>	
City, State, Zip:		Project Number:	
Contact: <u>Lucas Hernandez</u>		P.O. Number: <u>2816</u>	
Phone:	Fax:	Fax Results:	Y N
E-Mail Address:		E-Mail Results:	Y N

Sample Receipt

Temperature 2 °C
Custody Seals: Yes No
Custody Seals Intact: Yes No
Total # of Containers: 2

Turn Around Request

_____ 24 Hours _____ 48 Hours
 _____ 72 Hours
 _____ 5 Working Days
 _____ Standard 10 Working Days

Subject to scheduling & availability (surcharges apply)


Analyses Requested

Sample Information

[illegible]

Instructions / Special Requirements:

Please record which bottle was used in appropriate logbook

Date:	Time:	Samples Relinquished By:	Received By:
12/3/03	16:48	10 100 Kent J. Del.	
	17:00		