



ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT City of Riverside (WW) (7444)
ATTN: Anicia Yambot
5950 Acorn St.
Riverside, CA 92504

LAB REQUEST 113468

REPORTED 07/24/2003

RECEIVED 07/10/2003

PROJECT Old Treatment Plant

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.
444895

Client Sample Identification
Old Treatment Plant

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Robert A. Webber
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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TESTING & CONSULTING
Chemical
Microbiological
Environmental

Lab request 113468 cover, page 1 of 1

Order #: 444895

Client: City of Riverside (WW)

D

Matrix: SOLID

Client Sample ID: Old Treatment Plant

Date Sampled: 07/10/2003

Time Sampled: 10:00

mg/kg = ppm

Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst
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150.1 pH

pH	8.32	1		NA	07/18/03 LN
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245.5 Mercury in Solids by Manual Cold Vapor

Mercury	12.3	1	0.12	mg/Kg	07/16/03 MDJ
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300.0 Nitrate as NO3 by Ion Chromatography

Nitrate (as NO3)	ND	1	5.0	mg/Kg	07/16/03 CM
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335.4 Cyanide, Automated

Cyanide	ND	1	0.5	mg/Kg	07/11/03 MSZ
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350.2 Ammonia by Distillation

Ammonia-N	6760	1	5.0	mg/Kg	07/15/03 EK
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Higher than DLR
 3,976 times the allowable limit
 1.7 ppm all.

351.3 Total Kjeldahl Nitrogen (TKN)

Total Kjeldahl Nitrogen (TKN)	24,300	1	10.0	mg/Kg	07/15/03 EK
Total Organic Nitrogen (as N)	17,500	1	5.0	mg/Kg	07/15/03 EK

6010B ICP Metals - Solid/Liquid

Antimony	ND	1	3.00	mg/Kg	07/18/03 KN
Arsenic	8.74	1	1.00	mg/Kg	07/18/03 KN
Beryllium	ND	1	0.50	mg/Kg	07/18/03 KN
Cadmium	31.4	1	0.50	mg/Kg	07/18/03 KN
Chromium (III)	768	1	1.00	mg/Kg	07/18/03 KN
Copper	774	1	1.00	mg/Kg	07/18/03 KN
Lead	1050	1	0.50	mg/Kg	07/18/03 KN
Molybdenum	70.0	1	1.00	mg/Kg	07/18/03 KN

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ASSOCIATED LABORATORIES

Analytical Results Report



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Analyte	Result	DF	DLR	Units	Date/Analyst
6010B ICP Metals - Solid/Liquid					
Nickel	29.3 times 43.9	1	1.50	mg/Kg	07/18/03 KN
Phosphorus	324 16,200	1	50.0	mg/Kg	07/18/03 KN
Potassium	33.2 1660	1	50.0	mg/Kg	07/18/03 KN
Selenium	7.68 7.68	1	1.00	mg/Kg	07/18/03 KN
Silver	120 60.0	1	0.50	mg/Kg	07/18/03 KN
Thallium	80.5 80.5	1	1.00	mg/Kg	07/18/03 KN
Zinc	9,833 2950	1	5.00	mg/Kg	07/18/03 KN

7196 Hexavalent Chromium

Hexavalent Chromium	ND	1	0.5	mg/Kg	07/12/03 DK
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8081A - Organochlorine Pesticides by GC

4,4-DDD	ND	1000	5.0	mg/Kg	07/22/03 SD
4,4-DDE	ND	1000	4.0	mg/Kg	07/22/03 SD
4,4-DDT	ND	1000	5.0	mg/Kg	07/22/03 SD
Aldrin	ND	1000	4.0	mg/Kg	07/22/03 SD
Alpha BHC	ND	1000	2.0	mg/Kg	07/22/03 SD
Beta BHC	ND	1000	3.0	mg/Kg	07/22/03 SD
Chlordane	ND	1000	25.0	mg/Kg	07/22/03 SD
Delta BHC	ND	1000	5.0	mg/Kg	07/22/03 SD
Dieldrin	ND	1000	3.0	mg/Kg	07/22/03 SD
Endosulfan I	ND	1000	4.0	mg/Kg	07/22/03 SD
Endosulfan II	ND	1000	4.0	mg/Kg	07/22/03 SD
Endosulfan sulfate	ND	1000	4.0	mg/Kg	07/22/03 SD
Endrin	ND	1000	4.0	mg/Kg	07/22/03 SD
Endrin aldehyde	ND	1000	4.0	mg/Kg	07/22/03 SD
Heptachlor	ND	1000	4.0	mg/Kg	07/22/03 SD
Heptachlor epoxide	ND	1000	3.0	mg/Kg	07/22/03 SD
Lindane	ND	1000	3.0	mg/Kg	07/22/03 SD
Toxaphene	ND	1000	250.0	mg/Kg	07/22/03 SD

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Analytical Results Report



Order #: 444895

Client: City of Riverside (WW)

Matrix: SOLID

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Date Sampled: 07/10/2003

Time Sampled: 10:00

Analyzed By:

Analyte	Result	DF	DLR	Units	Date/Analyst
8270C Acid/Base/Neutral Extractables					
4-Chlorophenyl-phenylether	ND	5	1665.0	ug/Kg	07/19/03 DP
4-Nitrophenol	ND	5	8325.0	ug/Kg	07/19/03 DP
Acenaphthene	ND	5	1665.0	ug/Kg	07/19/03 DP
Acenaphthylene	ND	5	1665.0	ug/Kg	07/19/03 DP
Anthracene	ND	5	1665.0	ug/Kg	07/19/03 DP
Benzidine	ND	5	1665.0	ug/Kg	07/19/03 DP
Benzo(a)anthracene	ND	5	1665.0	ug/Kg	07/19/03 DP
Benzo(a)pyrene	ND	5	1665.0	ug/Kg	07/19/03 DP
Benzo(b)fluoranthene	ND	5	1665.0	ug/Kg	07/19/03 DP
Benzo(g,h,i)perylene	ND	5	1665.0	ug/Kg	07/19/03 DP
Benzo(k)fluoranthene	ND	5	1665.0	ug/Kg	07/19/03 DP
bis(2-Chloroethoxy)methane	ND	5	1665.0	ug/Kg	07/19/03 DP
bis(2-Chloroethyl)ether	ND	5	1665.0	ug/Kg	07/19/03 DP
bis(2-Chloroisopropyl) ether	ND	5	1665.0	ug/Kg	07/19/03 DP
* bis(2-Ethylhexyl)phthalate	212,000	5	1665.0	ug/Kg	07/19/03 DP
Butylbenzylphthalate	ND	5	1665.0	ug/Kg	07/19/03 DP
Chrysene	ND	5	1665.0	ug/Kg	07/19/03 DP
Di-n-butylphthalate	ND	5	1665.0	ug/Kg	07/19/03 DP
Di-n-octylphthalate	ND	5	1665.0	ug/Kg	07/19/03 DP
Dibenz(a,h)anthracene	ND	5	1665.0	ug/Kg	07/19/03 DP
Diethylphthalate	ND	5	1665.0	ug/Kg	07/19/03 DP
Dimethylphthalate	ND	5	1665.0	ug/Kg	07/19/03 DP
Fluoranthene	ND	5	1665.0	ug/Kg	07/19/03 DP
Fluorene	ND	5	1665.0	ug/Kg	07/19/03 DP
Hexachlorobenzene	ND	5	1665.0	ug/Kg	07/19/03 DP
Hexachlorobutadiene	ND	5	1665.0	ug/Kg	07/19/03 DP
Hexachlorocyclopentadiene	ND	5	1665.0	ug/Kg	07/19/03 DP
Hexachloroethane	ND	5	1665.0	ug/Kg	07/19/03 DP
Indeno(1,2,3-c,d)pyrene	ND	5	1665.0	ug/Kg	07/19/03 DP
Isophorone	ND	5	1665.0	ug/Kg	07/19/03 DP
N-Nitroso-di-n-propylamine	ND	5	1665.0	ug/Kg	07/19/03 DP
N-Nitrosodimethylamine	ND	5	1665.0	ug/Kg	07/19/03 DP
N-Nitrosodiphenylamine	ND	5	1665.0	ug/Kg	07/19/03 DP

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Analyst: [Redacted]

Analyte	Result	DF	DLR	Units	Date/Analyst
8260B Volatile Organic Compounds					
Ethyl benzene	ND	7	35.0	ug/Kg	07/13/03 AM
Methylene chloride	ND	7	35.0	ug/Kg	07/13/03 AM
Tetrachloroethene	322	7	35.0	ug/Kg	07/13/03 AM
Toluene	358.750 times 28,700	7	35.0	ug/Kg	07/13/03 AM
trans-1,2-Dichloroethene	ND	7	35.0	ug/Kg	07/13/03 AM
trans-1,3-Dichloropropene	ND	7	35.0	ug/Kg	07/13/03 AM
Trichloroethene	190	7	35.0	ug/Kg	07/13/03 AM
Vinyl chloride	ND	7	35.0	ug/Kg	07/13/03 AM

8270C Acid/Base/Neutral Extractables

1,2,4-Trichlorobenzene	Conversion	20,000	5	1665.0	ug/Kg	07/19/03 DP
50.000 1,2-Dichlorobenzene	Do conversion	35,000	5	1665.0	ug/Kg	07/19/03 DP
1,2-Diphenylhydrazine		ND	5	1665.0	ug/Kg	07/19/03 DP
1,3-Dichlorobenzene		ND	5	1665.0	ug/Kg	07/19/03 DP
1,4-Dichlorobenzene	65.560 times	13,100	5	1665.0	ug/Kg	07/19/03 DP
2,3,7,8 TCDD		ND	5	1665.0	ug/Kg	07/19/03 DP
2,4,6-Trichlorophenol		ND	5	8325.0	ug/Kg	07/19/03 DP
2,4-Dichlorophenol		ND	5	1665.0	ug/Kg	07/19/03 DP
2,4-Dimethylphenol		ND	5	1665.0	ug/Kg	07/19/03 DP
2,4-Dinitrophenol		ND	5	8325.0	ug/Kg	07/19/03 DP
2,4-Dinitrotoluene		ND	5	1665.0	ug/Kg	07/19/03 DP
2,6-Dinitrotoluene		ND	5	1665.0	ug/Kg	07/19/03 DP
2-Chloronaphthalene		ND	5	1665.0	ug/Kg	07/19/03 DP
2-Chlorophenol		ND	5	1665.0	ug/Kg	07/19/03 DP
2-Nitrophenol		ND	5	1665.0	ug/Kg	07/19/03 DP
3,3-Dichlorobenzidine		ND	5	1665.0	ug/Kg	07/19/03 DP
4,4-DDD		ND	5		ug/Kg	07/19/03 DP
4,4-DDE		ND	5		ug/Kg	07/19/03 DP
4,4-DDT		ND	5		ug/Kg	07/19/03 DP
4,6-Dinitro-2-methylphenol		ND	5	8325.0	ug/Kg	07/19/03 DP
4-Bromophenyl-phenylether		ND	5	1665.0	ug/Kg	07/19/03 DP
4-Chloro-3-methylphenol		ND	5	1665.0	ug/Kg	07/19/03 DP

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808Z - Polychlorinated Biphenyls (PCBs) by GC

PCB-1016	ND	1000	30.0	mg/Kg	07/22/03 SD
PCB-1221	ND	1000	60.0	mg/Kg	07/22/03 SD
PCB-1232	ND	1000	50.0	mg/Kg	07/22/03 SD
PCB-1242	4930	1000	50.0	mg/Kg	07/22/03 SD
PCB-1248	ND	1000	80.0	mg/Kg	07/22/03 SD
PCB-1254	ND	1000	30.0	mg/Kg	07/22/03 SD
PCB-1260	ND	1000	30.0	mg/Kg	07/22/03 SD

Surrogates

				Units	Control Limits
DCB(Sur)	133			%	50 - 135

8260B Volatile Organic Compounds

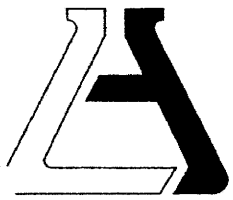
1,1,1-Trichloroethane	ND	7	35.0	ug/Kg	07/13/03 AM
1,1,2,2-Tetrachloroethane	ND	7	35.0	ug/Kg	07/13/03 AM
1,1,2-Trichloroethane	ND	7	35.0	ug/Kg	07/13/03 AM
1,1-Dichloroethane	ND	7	35.0	ug/Kg	07/13/03 AM
1,1-Dichloroethene	ND	7	35.0	ug/Kg	07/13/03 AM
1,2-Dichloroethane	ND	7	35.0	ug/Kg	07/13/03 AM
1,2-Dichloropropane	ND	7	35.0	ug/Kg	07/13/03 AM
2-Chloroethyl vinyl ether	ND	7	35.0	ug/Kg	07/13/03 AM
Acetonitrile	ND	7	35.0	ug/Kg	07/13/03 AM
Acrolein	ND	7	1400.0	ug/Kg	07/13/03 AM
Benzene	ND	7	35.0	ug/Kg	07/13/03 AM
Bromodichloromethane	ND	7	35.0	ug/Kg	07/13/03 AM
Bromoform	ND	7	35.0	ug/Kg	07/13/03 AM
Bromomethane	ND	7	35.0	ug/Kg	07/13/03 AM
Carbon tetrachloride	ND	7	35.0	ug/Kg	07/13/03 AM
Chlorobenzene	ND	7	35.0	ug/Kg	07/13/03 AM
Chloroethane	ND	7	35.0	ug/Kg	07/13/03 AM
Chloroform	ND	7	35.0	ug/Kg	07/13/03 AM
Chloromethane	ND	7	35.0	ug/Kg	07/13/03 AM
Dibromochloromethane	ND	7	35.0	ug/Kg	07/13/03 AM

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ASSOCIATED LABORATORIES

Analytical Results Report





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SUBMITTER Client

COMMENTS REVISED REPORT 07/31/03

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Sampled By:

Analyte

Result

DF

DLR

Units

Date/Analyst

8270C Acid/Base/Neutral Extractables

Naphthalene	ND	5	1665.0	ug/Kg	07/19/03	DP
Nitrobenzene	ND	5	1665.0	ug/Kg	07/19/03	DP
Pentachlorophenol	ND	5	8325.0	ug/Kg	07/19/03	DP
Phenanthrene	ND	5	1665.0	ug/Kg	07/19/03	DP
Phenol	ND	5	1665.0	ug/Kg	07/19/03	DP
Pyrene	ND	5	1665.0	ug/Kg	07/19/03	DP

Moisture, Oven Method

Moisture	80.4	1		%	07/14/03	EK
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Calc Trivalent Chromium

Trivalent Chromium	768	1	0.37	mg/Kg	07/21/03	DK
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ASSOCIATED LABORATORIES

Analytical Results Report

