Superior Analytical Laboratories, Inc.

Team Quality Control

Fax To: Scott Fax # 568-3706
Company Name: _____ Date 5/24/91
Job #: _____ Client Project #: _____

From: Superior Analytical
835 Arnold Dr. Ste 106
Martinez, CA 94553
(415) 229-0166
fax (415) 229-0916

Sender: Robert Watson
Total # of pages including cover 5
Comments:

Please FAX your Name, phone numbers and company name, so that I can write up that analysis scheme.

Thank you for your business. If we can be of any further assistance, please do not hesitate to call.

SUPERIOR ANALYTICAL LABORATORIES, INC.

June 3, 1991

Dear Scott

I have not received your fax with your full name, phone, and company name last week so that we respond to your questions regarding sampling and extraction in the field in more details than as follows.

Superior Analytical Laboratories, Inc. position on extraction in the field is that technique would lead to errors that would make it impossible for the laboratory to provide legally defensible and quality data to the client. Superior would have no control over the extraction procedures and would only be able to ensure quality of analyses.

Please call me if you have any further questions.

Sincerley,

Robert Watson
QA Officer

HAZARDOUS WASTE TESTING LABORATORY CERTIFICATION LIST

Hazardous Materials Laboratory Section, California Department of Health Services, 2151 Berkeley Way, Berkeley, CA 94704

Superior Analytical Services
825 Arnold Drive, Suite 114
Martinez, CA 94553

PHONE: (415)229-1512

LABORATORY CATEGORY: Commercial
CERTIFICATE NUMBER: 319

ORGANIC CHEMICAL TESTING	METHOD NUMBER (DATE CERTIFIED)	(Y = CERTIFIED; N = NOT CERTIFIED)
1.1 Halogenated Volatile Organics	8010(02-19-91)	Y
1.2 Non-Halogenated Volatile Organics		N
1.3 Aromatic Volatile Organics	8020(07-06-89)	Y
1.4 Acrolein, Acrylonitrile, Acetonitrile		N
1.5 Phenols		N
1.6 Phthalate Esters		N
1.7 Organochlorine Pesticides		N
1.8 Polychlorinated Biphenyls (PCBs)		N
1.9 Nitroaromatics and Cyclic Ketones	8090(03-10-89)	Y
1.10 Polynuclear Aromatic Hydrocarbons		N
1.11 Chlorinated Hydrocarbons		N
1.12 Organophosporus Pesticides		N
1.13 Chlorinated Herbicides		N
1.14 Carbamates		N
1.15 GC/MS Method for Volatile Organics		N
1.16 GC/MS Method for Semivolatile Organics		N

INORGANIC CHEMICAL TESTING	METHOD NUMBER (DATE CERTIFIED)	(Y = CERTIFIED; N = NOT CERTIFIED)
2.1 Antimony		N
2.2 Arsenic	7040(06-27-89)	Y
2.3 Barium		N
2.4 Beryllium		N
2.5 Cadmium		N
2.6 Chromium(VI)	7130(06-27-89)	Y
2.7 Chromium(total)		N
2.8 Cobalt	7190(06-27-89)	Y
2.9 Copper	7200(06-27-89)	Y
2.10 Lead	7210(06-27-89)	Y
2.11 Mercury	7420(06-27-89)	Y
2.12 Nickel		N
2.13 Selenium		N
2.14 Molybdenum	7520(06-27-89)	Y
2.15 Silver		N
2.16 Thallium	7760(06-27-89)	Y
2.17 Vanadium	7840(06-27-89)	Y
2.18 Zinc		N
2.19 Cyanide	7950(06-27-89)	Y
2.20 Fluoride		N
2.21 Sulfide		N

OTHER		
3.0 California Waste Extraction Test		N
4.0 Physical Property Testing	(02-19-91)	Y
5.0 Aquatic Toxicity Testing		N
6.0 Bulk Asbestos Testing		N
7.1 Total Organic Lead		N
7.2 Total Petroleum Hydrocarbons	(03-10-89)	Y
	(03-10-89)	Y

ENVIRONMENTAL LABORATORY ACCREDITATION/REGISTRATION
List of Approved Fields of Testing and Analytes

Superior Analytical Laboratory
1555 Burke, Unit I
San Francisco, CA 94124

PHONE: (415) 647-2081
COUNTY: San Francisco

LABORATORY CATEGORY: Commercial
CERTIFICATE NUMBER: 1332

Y = CERTIFIED; N = NOT CERTIFIED

1.0	Microbiology of Drinking Water and Wastewater		( )
1.1	Total Coliforms by Multiple Tube Fermentation	N	
1.2	Fecal Coliforms by Multiple Tube Fermentation	N	
1.3	Total coliforms by Membrane Filter	N	
1.4	Fecal coliforms by Membrane Filter	N	
1.5	Heterotrophic Plate Count	N	
2.0	Inorganic Chemistry and Physical Properties of Drinking Water excluding Toxic Chemical Elements		( )
2.1	Alkalinity	N	
2.2	Calcium	N	
2.3	Chloride	N	
2.4	Corrosivity	N	
2.5	Fluoride	N	
2.6	Hardness	N	
2.7	Magnesium	N	
2.8	MBAS	N	
2.9	Nitrate	N	
2.10	Nitrite	N	
2.11	Sodium	N	
2.12	Sulfate	N	
2.13	Total Filterable residue and Conductivity	N	
3.0	Analysis of Toxic Chemical Elements in Drinking Water		( )
3.1	Arsenic	N	
3.2	Barium	N	
3.3	Cadmium	N	
3.4	Chromium, total	N	
3.5	Copper	N	
3.6	Iron	N	
3.7	Lead	N	
3.8	Manganese	N	
3.9	Mercury	N	
3.10	Selenium	N	
3.11	Silver	N	
3.12	Zinc	N	
4.0	Organic Chemistry of Drinking Water (measurement by GC/MS combination)		( )
4.1	Volatile Organics	N	
4.2	Trihalomethanes	N	
4.3	Acid and Base/Neutral Compounds	N	
5.0	Organic Chemistry of Drinking Water (excluding measurements by GC/MS combination)		( )
5.1	Total Trihalomethanes	N	
5.2	Chlorinated pesticides	N	
5.3	Chlorophenoxy herbicides	N	
5.4	Halogenated Volatiles	N	
5.5	Aromatic Volatiles	N	
5.6	EDB and DBCP	N	
5.7	Polychlorinated Biphenyls	N	
5.8	Carbamates	N	
5.9	Nitrogen/Phosphorus Pesticides	N	
6.0	Radiochemistry		( )
6.1	Gross alpha and beta and counting error	N	
6.2	Total Radium	N	
6.3	Radium 226	N	
6.4	Uranium	N	
6.5	Radon 222	N	
6.6	Radioactive Cesium	N	
6.7	Iodine 131	N	
6.8	Radioactive Strontium	N	
6.9	Tritium	N	
6.10	Gamma emitting Isotopes	N	
6.11	Gross Alpha by Co-precipitation	N	
7.0	Shellfish Sanitation		( )
7.1	Shellfish meat Microbiology	N	
7.2	Paralytic Shellfish Poison	N	
8.0	Aquatic Toxicity Bioassays		( )
8.1	All Fresh Water: Static,Static/Renewal and Continuous Flow Bioassays; and Estuarine/Marine: Static, Static/Renewal, and Continuous Flow Bioassays	N	
8.2	Hazardous wastes Section 66696 (a) (4)	N	
9.0	Physical Properties Testing of Hazardous Waste		(12-21-88)
9.1	Ignitability (Flashpoint determination Section 66702)		

FIELDS OF TESTING AND ANALYTES (continued)

9.2 Corrosivity - pH determination ---- Y
9.3 Corrosivity - Corrosivity towards steel (Section 66708) ---- N
9.4 Reactivity (Section 66705) ---- Y

10.0 Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste
10.1 Antimony ---- N
10.2 Arsenic ---- N
10.3 Barium ---- N
10.4 Beryllium ---- N
10.5 Cadmium ---- N
10.6 Chromium, total ---- N
10.7 Cobalt ---- N
10.8 Copper ---- N
10.9 Lead ---- N
10.10 Mercury ---- N
10.11 Molybdenum ---- N
10.12 Nickel ---- N
10.13 Selenium ---- N
10.14 Silver ---- N
10.15 Thallium ---- N
10.16 Vanadium ---- N
10.17 Zinc ---- N
10.18 Chromium (VI) ---- N
10.19 Cyanide ---- N
10.20 Fluoride ---- N
10.21 Sulfide ---- N
10.22 Total Organic Lead ---- N

11.0 Extraction Tests of Hazardous Waste ---- (---)
11.1 Section 66700 ---- N

12.0 Organic Chemistry of Hazardous Waste (measurement by GC/MS combination)
12.1 Volatile compounds ---- 8240(06-20-89) ---- Y
12.2 Semivolatile compounds ---- N

13.0 Organic Chemistry of Hazardous Waste (excluding measurements by GC/MS combination)
13.1 Halogenated Volatiles ---- 8010(06-09-88) ---- Y
13.2 Non-Halogenated Volatiles ---- N
13.3 Aromatic Volatiles ---- 8020(01-04-88) ---- Y
13.4 Acrolein, Acrylonitrile, Acetonitrile ---- N
13.5 Phenols ---- N
13.6 Phthalate Esters ---- N
13.7 Organochlorine Pesticides ---- 8080(12-21-86) ---- Y
13.8 Polychlorinated Biphenyls (PCBs) ---- 8080(01-04-88) ---- Y
13.9 Nitroaromatics and Cyclic Ketones ---- N
13.10 Polynuclear Aromatic Hydrocarbons ---- N
13.11 Chlorinated Hydrocarbons ---- N
13.12 Organophosporus Pesticides ---- N
13.13 Chlorinated Herbicides ---- N
13.14 Carbamates ---- N
13.15 Total Petroleum Hydrocarbons ---- (06-10-88) ---- Y

14.0 Bulk Asbestos Analysis ---- (---)
14.1 Section 66699 (1% or greater asbestos concentrations) ---- N

15.0 Substances Regulated Under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) and Not Included in Other Listed Groups. ---- N

FIELDS OF TESTING AND ANALYTES (continued) Page [redacted]

16.0 Wastewater Inorganic Chemistry, Nutrients and Demand ----------(----------)
16.1 Acidity ----------N
16.2 Alkalinity ----------N
16.3 Ammonia ----------N
16.4 Biochemical Oxygen Demand ----------N
16.5 Boron ----------N
16.6 Bromide ----------N
16.7 Calcium ----------N
16.8 cBOD ----------N
16.9 Chemical Oxygen Demand ----------N
16.10 Chloride ----------N
16.11 Chlorine Residual, total ----------N
16.12 Cyanide ----------N
16.13 Cyanide amenable to Chlorination ----------N
16.14 Fluoride ----------N
16.15 Hardness ----------N
16.16 Kjeldahl Nitrogen ----------N
16.17 Magnesium ----------N
16.18 Nitrate ----------N
16.19 Nitrite ----------N
16.20 Oil and Grease ----------N
16.21 Organic Carbon ----------N
16.22 Oxygen, dissolved ----------N
16.23 pH ----------N
16.24 Phenols ----------N
16.25 Phosphate, ortho- ----------N
16.26 Phosphorus, total ----------N
16.27 Potassium ----------N
16.28 Residue, Total ----------N
16.29 Residue, Filterable (TDS) ----------N
16.30 Residue, Nonfilterable (TSS) ----------N
16.31 Residue, Settleable (SS) ----------N
16.32 Residue, Volatile ----------N
16.33 Silica ----------N
16.34 Sodium ----------N
16.35 Specific Conductance ----------N
16.36 Sulfate ----------N
16.37 Sulfide (includes total and soluble) ----------N
16.38 Sulfite ----------N
16.39 Surfactants (MBAS) ----------N
16.40 Tannin and Lignin ----------N
16.41 Turbidity ----------N

17.0 Toxic Chemical Elements in Wastewater ----------(----------)
17.1 Aluminum ----------N
17.2 Antimony ----------N
17.3 Arsenic ----------N
17.4 Barium ----------N
17.5 Beryllium ----------N
17.6 Cadmium ----------N
17.7 Chromium (VI) ----------N
17.8 Chromium, total ----------N
17.9 Cobalt ----------N
17.10 Copper ----------N
17.11 Gold ----------N
17.12 Iridium ----------N
17.13 Iron ----------N
17.14 Lead ----------N
17.15 Manganese ----------N
17.16 Mercury ----------N
17.17 Molybdenum ----------N
17.18 Nickel ----------N
17.19 Osmium ----------N
17.20 Palladium ----------N
17.21 Platinum ----------N
17.22 Rhodium ----------N
17.23 Ruthenium ----------N
17.24 Selenium ----------N
17.25 Silver ----------N
17.26 Strontium ----------N
17.27 Thallium ----------N
17.28 Tin ----------N
17.29 Titanium ----------N
17.30 Vanadium ----------N
17.31 Zinc ----------N

18.0 Organic Chemistry of Wastewater (measurements by GC/MS combination) ----------(09-25-00)
18.1 Volatile Organics ----------Y
18.2 Acid and Base/Neutral compounds ----------Y

19.0 Organic Chemistry of Wastewater (excluding measurements by GC/MS combination) ----------(09-25-9[redacted])
19.1 Halogenated Volatiles ----------Y
19.2 Aromatic Volatiles ----------Y
19.3 Acrolein, Acrylonitrile, Acetonitrile ----------N
19.4 Phenols ----------Y
19.5 Benzidine ----------N
19.6 Phthalate Esters ----------N
19.7 Nitrosoamines ----------N
19.8 Organochlorine Pesticides ----------Y
19.9 Polychlorinated Biphenyls ----------Y
19.10 Nitroaromatics and Cyclic Ketones ----------N
19.11 Polynuclear Aromatics ----------Y
19.12 Haloethers ----------N
19.13 Carbamates ----------N

This laboratory is also certified for additional hazardous material test categories under Certificate No. _____.

This laboratory is also certified for additional drinking water test categories under Certificate No. _____.