



## Environmental Services, Inc.

2111 Jennings Street, San Francisco, CA 94124-3224, Phone (415) 822-4555 FAX (415) 822-5290

August 25, 1989

L & W Project No. 9077.002

Mr. Robert P. Gates  
Erskine & Tulley  
580 Market Street  
San Francisco, California 94104

**RECEIVED**

*By Alameda County Environmental Health at 11:31 am, Mar 11, 2015*

**Subject: Supplemental Environmental Site Assessment and Subsurface Evaluation - Mike Roberts Color Productions property, 6707 Bay Street, Emeryville, California.**

Dear Mr. Gates:

Pursuant to your request, we have completed a supplemental environmental site assessment for the subject site recently acquired by Mike Roberts Color Productions (MRCP) located at 6707 Bay Street in Emeryville, California. Our purpose was to evaluate recent information provided by others concerning the site conditions and to report the findings of our soil analysis in reference to sampling performed during our initial subsurface evaluation.

### Scope

Our scope of services for this supplemental report are based on the following:

- \* A walk-through of the site conducted with Mike Roberts Color Production personnel and others on August 17, 1989 to evaluate reported discrepancies in the observed site conditions.
- \* Completion of analysis of subsurface soil samples collected during the initial environmental site assessment and subsurface evaluation.
- \* Preliminary findings concerning the status of three underground chemical storage tanks.
- \* Review structural drawings, building plans, and design modifications provided by Coldwell Banker on August 18, 1989.

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### Site Observations

On August 17, 1989, Mr. Tom Gram, Mr. Robert Gates, members of L & W Environmental Services, Inc. and Mike Roberts Color Productions met to discuss apparent incongruities in the findings presented by others concerning the subject site. A tour of the site was conducted to evaluate these discrepancies and provide recommendations for further site evaluation based on the findings of the walk-through.

Results of our site observations indicated the two reported water wells located in the Printing and Warehouse Facility were shallow (approximately 18 inches) compressor sumps used for the discharge of condensate from air lines (Figure 1). The sumps were connected to the municipal sewer system.

Drains, suspected of discharging chemical wastes into a sump at the rear of the building and then into near surface soils were discovered to be connected with the sewer system.

On August 14, 1989, three subsurface chemical storage tanks were located near the Bay Street side of the property, north of the Printing and Warehouse building, and approximately 35 feet up-gradient (inferred) of Monitoring Well MW-1 (Figure 1). The tanks were 2,000 gallon, 1,650 gallon, and 3,200 gallon containers located approximately three feet below the ground surface. The product delivery lines were found sealed and capped when traced into the Printing and Warehouse Facility. Product left inside the 2,000 gallon tank was measured to be approximately 700 gallons. The 1,650 and 3,200 gallon tanks were also probed and had approximately 220 and 350 gallons of product left, respectively. Subjective evidence indicates contamination of near surface soil is present in the vicinity of the tank cavity. Samples of product from each tank and from select areas of the excavation were collected for laboratory analysis.

On August 18, 1989, residue from four drains in the warehouse mezzanine was sampled for laboratory analysis. Drains were reportedly used for disposal of photographic developing solutions and were discovered to be connected to the sewer system.

The sump located at the rear of the facility, outside of the building, was excavated on August 21, 1989. It contained a submersible pump that discharged into the city sewer system. No subjective evidence of contamination was observed during the excavation. Samples of near surface soil and sump fluids were collected for laboratory analysis.

An area in the rear (west side) of the site, where runoff from the asphalt is channeled (Figure 1), was sampled by others and found to contain volatile organics, hydrocarbons, and chlorinated hydrocarbon isomers. Excavation and subjective observations of this area on August 21, 1989, indicated contamination appears to be shallow (within three feet). Soil from the excavation was sampled for laboratory analysis and stockpiled for later removal to a qualified disposal facility.

### **Analytical Results**

Soil samples collected during the preliminary investigation (July 5, 1989) were analyzed for CAM metals (Title 22, reference SW 846, third edition, EPA methods 6010 & 3050), polychlorinated biphenyls (PCB's) (EPA method 8080), total petroleum hydrocarbons (TPH) (EPA method 8015), oil and grease (Standard method 503D), and halogenated volatile organics (solvents) (EPA method 8010). These analyses were performed at Precision Analytical Laboratory in Richmond, California and Clayton Environmental Consultants, inc. in Pleasanton, California.

Analytical results of the soil samples collected from Monitoring Well B-1/MW-1 and soil boring B-2 indicated detectable concentrations of TPH as diesel, TPH as gasoline, and oil and grease were present (Table 1). Detectable concentrations of halogenated volatile organics [Method Detection Limit (MDL) = 0.03 mg/kg] and PCB's (MDL = 0.5 mg/kg) were not present. Analytical results for CAM metals indicate detectable concentrations are present at the subject site (Table 2).

Analytical results of purgeable organics compounds in water (EPA method 8240) sampled from Monitoring Well MW-1 indicate non-detectable concentrations (MDL between 3 & 20 ug/kg). A copy of the laboratory analytical reports are included in the Appendix to this report.

Analytical results of the recently sampled material from excavations, chemical storage tanks, sumps, and drains collected between August 14 and August 21, 1989, are pending their completion.

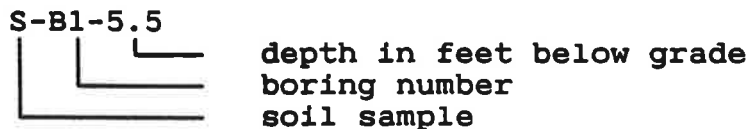
**TABLE 1**

**RESULTS OF HYDROCARBON AND PCB ANALYSIS  
 SUBSURFACE SOIL SAMPLES**

Mike Roberts Color Productions  
 6707 Bay Street  
 Emeryville, California

SAMPLE NO.	Diesel	Gasoline	Oil & Grease	PCB's
S-B1- 5.5	12	N D<10	845	N D<0.5
S-B1-10.5	N D<10	N D<10	N D<50	N D<0.5
S-B1-16	63	N D<10	1600	N D<0.5
S-B1-20.5	N D<10	N D<10	80	N D<0.5
S-B1-25.5	N D<10	N D<10	95	N D<0.5
S-B1-30.5	N D<10	N D<10	N D<50	N D<0.5
S-B2- 6.0	19	N D<10	1160	N D<0.5
S-B2-10	172	20	14,900	N D<0.5
S-B2-16	N D<10	N D<10	N D<50	N D<0.5
S-B2-20.5	N D<10	N D<10	N D<50	N D<0.5

Results: N D = Not Detected  
 Detection Limit for Diesel = 10 mg/kg  
 Detection Limit for Diesel, Sample No. S-B2-10 = 100 mg/kg  
 Detection Limit for Gasoline = 10 mg/kg  
 Detection Limit for Oil & Grease = 50 mg/kg  
 Detection Limit for PCB's = 0.5 mg/kg



<p style="text-align: center;"><b>TABLE 2</b></p> <p style="text-align: center;"><b>RESULTS OF METAL ANALYSIS OF SUBSURFACE SOIL SAMPLES</b></p> <p style="text-align: center;">Mike Roberts Color Productions            6707 Bay Street            Emeryville, California</p>						
METAL	SAMPLE NUMBERS					MDL
	S-B1-5.5	S-B1-10.5	S-B1-16	S-B1-20.5	S-B1-25.5	
Tl	N D	N D	N D	N D	N D	2.2
As	N D	N D	N D	N D	N D	2.2
Hg	N D	N D	N D	N D	N D	5.0
Se	N D	N D	N D	N D	N D	5.0
Mo	N D	N D	N D	N D	N D	1.0
Sb	N D	N D	N D	N D	N D	1.0
Zn	94	5.4	6040	106	27	0.15
Cd	1.4	0.6	12	2.4	2.0	0.3
Pb	61	3	160	77	8.0	1.1
Co	5.7	2.6	12.4	4.5	8.0	0.5
Ni	14	12.7	30	19	24	0.65
Cr	13	12.5	42	15	10	0.15
V	15	7	32	12	12	0.1
Be	N D	N D	N D	N D	N D	0.025
Cu	28	4	153	23	13	0.1
Ag	N D	N D	N D	N D	N D	0.1
Ba	92	21	78	61	67	0.1

Results: N D = Not Detected  
 MDL = Method detection limit: Compounds below this level would not be detected. Values are in mg/kg.

S-B1-5.5

depth in feet below grade  
 boring number  
 soil sample

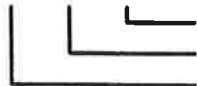
**TABLE 2**  
 (continued)  
**RESULTS OF METAL ANALYSIS OF SUBSURFACE SOIL SAMPLES**

Mike Roberts Color Productions  
 6707 Bay Street  
 Emeryville, California

METAL	SAMPLE NUMBERS					MDL
	S-B1- 30.5	S-B2- 6.0	S-B2- 10	S-B2- 16	S-B2- 20.5	
Tl	N D	N D	N D	N D	N D	2.2
As	N D	N D	N D	N D	N D	2.2
Hg	N D	N D	N D	N D	N D	5.0
Se	N D	N D	N D	N D	N D	5.0
Mo	N D	N D	N D	N D	N D	1.0
Sb	N D	1.2	N D	N D	N D	1.0
Zn	15	67	532	23	11	0.15
Cd	1.2	1.6	N D	2.4	1.4	0.3
Pb	4.5	167	1360	11	8.7	1.1
Co	3.6	5	2.7	12	1.9	0.5
Ni	22	18.5	12.5	79	16.6	0.65
Cr	9.9	11.8	12.7	43	7.8	0.15
V	6.7	9.7	13	10	17	0.1
Be	N D	N D	N D	N D	N D	0.025
Cu	7.4	92	22.5	10	9.0	0.1
Ag	N D	N D	N D	N D	N D	0.1
Ba	23	109	41	95	35	0.1

Results: N D = Not Detected  
 MDL = Method detection limit: Compounds below this level  
 would not be detected. Values are in mg/kg.

S-B1-30.5



depth in feet below grade  
 boring number  
 soil sample

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### Conclusions and Recommendations

Laboratory analytical results of the soil and water samples collected from Monitoring Well B-1/MW-1 and soil boring B-2, indicate detectable concentrations of Total Petroleum Hydrocarbons (TPH) as diesel, TPH as gasoline, oil and grease, and CAM metals. Halogenated solvents and PCB's were nondetectable. Analytical results of soil, residue, and fluid samples from underground chemical storage tanks, drains, sumps, and associated cavities are pending their completion.

Based on Title 22, Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Wastes, the following analyzed samples were found to contain concentrations exceeding the Total Threshold Limit Concentration (TTL) values:

<u>Sample No.</u>	<u>Concentration</u>	<u>TTL</u>
S-B1-16	6040 Zinc	5,000 mg/kg
S-B2-10	1360 Lead	1,000 mg/kg

Please refer to the Appendix for the complete list of substances, the Soluble Threshold Limit Concentrations, and their Total Threshold Limit Concentrations in Title 22, Article 11, Criteria for Identification of Hazardous and Extremely Hazardous Wastes.

Concentrations of hydrocarbon contamination in some soil samples are above action levels as recommended by local regulatory agencies. However, this hydrocarbon contamination in the vicinity of the subject site has been well documented and does not appear to be a result of the current practices of MCRP. Uncontrolled dumping, resulting in the contamination of the subsurface, had been relatively common prior to and during the infilling of the bay in the late 1940's. The area south of the subject site to 64th Street was a municipal dump between 1940 and 1960.

Based on the site history prior to Mike Roberts Color Productions, the background values for contamination will be high in hydrocarbon, as well as other miscellaneous contaminants as indicated by high values for lead and zinc. Results from our additional analysis of drain residue and our understanding of the chemicals used during production at Mike Roberts should indicate contamination existing at the property is a result of dumping procedures prior to the present MCRP operations. Results of our earlier sampling of the drum storage facility at the rear of the site also supports our opinion.

August 25, 1989  
Mike Roberts, 6707 Bay Street

L & W Project No. 9077.002

Three additional ground water monitoring wells are scheduled for completion by August 28, 1989 (Figure 1). Their installation will enable ground water flow directions and gradients to be calculated. Sampling procedures will be conducted for soil and ground water collection in accordance with EPA and local regulatory guidelines.

Analytical results of the soil and ground water samples will be provided in our final report containing the pending analytical results from the tank excavation, sump, and drain sampling.

### Limitations

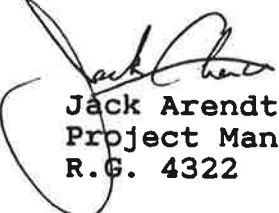
The field investigation, laboratory testing, and analysis presented in this report were prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. This investigation was conducted solely for the purpose of evaluating environmental conditions of the site with respect to hydrocarbon product, CAM metals concentration, pesticide, and chlorinated phenol contamination in the vicinity of the subject property. No soil engineering or geotechnical references are implied or should be inferred. Evaluation of the geologic conditions at the site for the purpose of this investigation is made from a limited number of available data points. Subsurface conditions may vary away from the available data points. Additional work, including further subsurface investigation, can reduce the inherent uncertainties associated with this type of study.

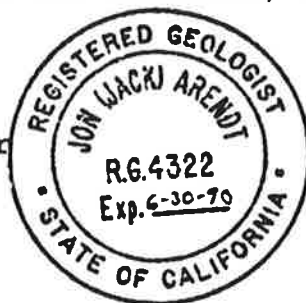
The information researched during our historical review to date was made available from government agencies and select interviews with relevant parties. We cannot make any assurances concerning the completeness of the data presented to us.

If you have any questions regarding this report, please contact the undersigned. We appreciate this opportunity to be of service.

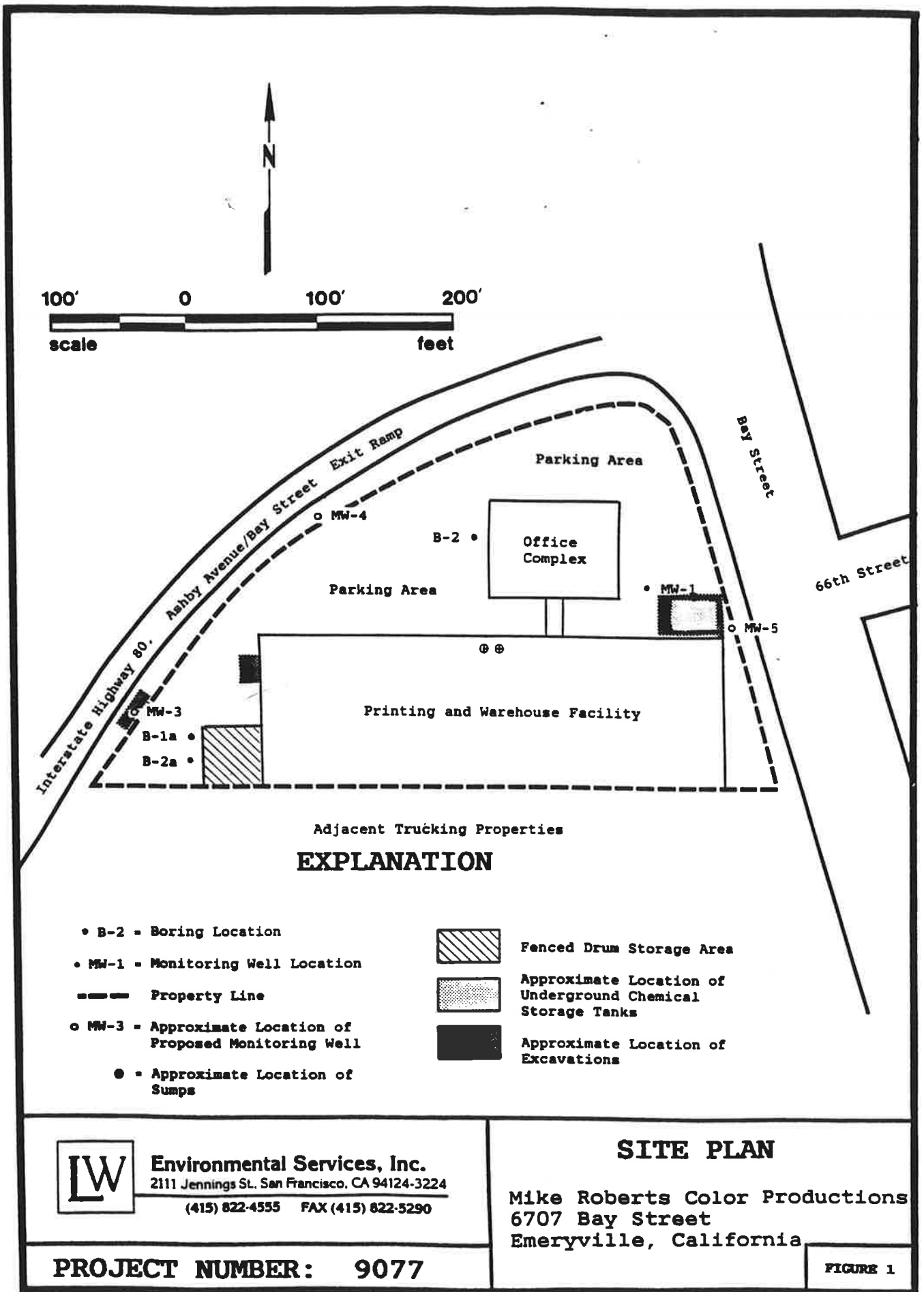
Sincerely,

L & W ENVIRONMENTAL SERVICES, INC.




  
Jack Arendt  
Project Manager  
R.G. 4322







**EXPLANATION**

- B-2 - Boring Location
- MW-1 - Monitoring Well Location
- Property Line
- MW-3 - Approximate Location of Proposed Monitoring Well
- - Approximate Location of Sumps
-  Fenced Drum Storage Area
-  Approximate Location of Underground Chemical Storage Tanks
-  Approximate Location of Excavations

**LW** Environmental Services, Inc.  
 2111 Jennings St. San Francisco, CA 94124-3224  
 (415) 822-4555 FAX (415) 822-5290

**SITE PLAN**

Mike Roberts Color Productions  
 6707 Bay Street  
 Emeryville, California

**PROJECT NUMBER: 9077**

**FIGURE 1**

## **APPENDIX**

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (415) 222-3002

FAX (415) 222-1251

**CERTIFICATE OF ANALYSIS**

STATE LICENSE NO. 211

Received: 07/05/89

Reported: 07/18/89

Job #: 70919

Attn: George Wilson  
 Mike Roberts Color Productions  
 7707 Bay Street  
 Emeryville, CA.

Analysis Method EPA 6010  
 Prep Method EPA 3050  
 mg/kg

Lab ID #:	70919-1	70919-2	70919-3	70919-4	70919-5		
Client ID:	S-B1- 5.5	S-B1- 10.5	S-B1- 16	S-B1- 20.5	S-B1- 25.5		% SPIKE RECOVERY
METAL						MDL	
Tl	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	2.2	74
As	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	2.2	88
Hg	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	5.0	98
Se	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	5.0	76
Mo	ND<1.0	ND<1.0	2.4	ND<1.0	ND<1.0	1.0	84
Sb	ND<1.0	ND<1.0	4	ND<1.0	ND<1.0	1.0	70
Zn	94	5.4	6040	106	27	0.15	85
Cd	1.4	0.6	12	2.4	2.0	0.3	86
Pb	61	3	160	77	8.0	1.1	84
Co	5.7	2.6	12.4	4.5	8.0	0.5	82
Ni	14	12.7	30	19	24	0.65	80
Cr	13	12.5	42	15	10	0.15	82
V	15	7	32	12	12	0.1	88
Be	ND<0.025	ND<0.025	ND<0.025	ND<0.025	ND<0.025	0.025	88
Cu	28	4	153	23	13	0.1	90
Ag	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	0.1	77
Ba	92	21	78	61	67	0.1	82

MDL: Method detection Limit: Compound below this level would not be detected.

*Jaime Chow*

Jaime Chow  
 Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (415) 222-3002

FAX (415) 222-1251

Mike Roberts Color Productions  
Job No. 70919

Page 2 of 2

Analysis Method EPA 6010  
Prep Method EPA 3050  
mg/kg

Lab ID #:	70919-6	70919-7	70919-8	70919-9	70919-10		
Client ID:	S-B1-	S-B2-	S-B2-	S-B2-	S-B2-		% SPIKE
	30.5	6.0	10	16	20.5		RECOVERY
METAL						MDL	
Tl	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	2.2	74
As	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	2.2	88
Hg	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	5.0	98
Se	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	5.0	76
Mo	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.0	84
Sb	ND<1.0	1.2	ND<1.0	1.2	ND<1.0	1.0	70
Zn	15	67	532	23	11	0.15	85
Cd	1.2	1.6	ND<0.3	2.4	1.4	0.3	86
Pb	4.5	167	1360	11	8.7	1.1	84
Co	3.6	5	2.7	12	1.9	0.5	82
Ni	22	18.5	12.5	79	16.6	0.65	80
Cr	9.9	11.8	12.7	43	7.8	0.15	82
V	6.7	9.7	13	10	17	0.1	88
Be	ND<0.025	ND<0.025	ND<0.025	ND<0.025	ND<0.025	0.025	88
Cu	7.4	92	22.5	10	9.0	0.1	90
Ag	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	0.1	77
Ba	23	109	41	95	35	0.1	82

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (415) 222-3002

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CERTIFICATE OF ANALYSIS

State License No. 211

Received: 07/05/89

Reported: 07/20/89

Job No #: 70919

Attn: George Wilson  
Mike Roberts Color Production  
7707 Bay Street  
Emeryville, CA.

Halogenated Volatile Organics Analysis:  
EPA Method 8010  
mg/kg

Lab ID	Client ID	Chloro -methane	Bromo -methane	Vinyl Chloride	Chloro -ethane	MDL
70919-1	S-B1- 5.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-2	S-B1-10.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-3	S-B1-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-4	S-B1-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-5	S-B1-25.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-6	S-B1-30.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-7	S-B2- 6.0	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-8	S-B2-10	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-9	S-B2-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-10	S-B2-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03

Lab ID	Client ID	Methylene Chloride	1,1- dichloro -ethene	1,1- dichloro -ethane	Trans-1,2 dichloro -ethene	MDL
70919-1	S-B1- 5.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-2	S-B1-10.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-3	S-B1-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-4	S-B1-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-5	S-B1-25.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-6	S-B1-30.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-7	S-B2- 6.	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-8	S-B2-10	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-9	S-B2-16.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-10	S-B2-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03

QA/QC: Spike Recovery for 1,1,1-trichloroethane: 115%

Surinder Sidhu  
Surinder Sidhu  
Senior Chemist

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (415) 222-3002

FAX (415) 222-1251

Mike Roberts Color Productions  
Job No. 70919

Page 2 of 3

Lab ID	Client ID	Chloro -form	1,2- Dichloro -ethane	1,1,1- Trichloro -ethene	Carbon Tetra- Chloride	MDL
70919-1	S-B1- 5.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-2	S-B1-10.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-3	S-B1-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-4	S-B1-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-5	S-B1-25.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-6	S-B1-30.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-7	S-B2- 6.0	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-8	S-B2-10	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-9	S-B2-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-10	S-B2-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03

Lab ID	Client ID	Bromo- dichloro -methane	1,2- dichloro -propene	Tri- Chloro -ethene	Dibromo -chloro	MDL
70919-1	S-B1- 5.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-2	S-B1-10.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-3	S-B1-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-4	S-B1-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-5	S-B1-25.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-6	S-B1-30.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-7	S-B2- 6.0	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-8	S-B2-10	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-9	S-B2-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-10	S-B2-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03

Lab ID	Client ID	1,1,2- Trichloro -ethane	Trans-1,3 dichloro -propene	2-Chloro -ethyl Vinyl ether	Tetra- chloro -ethene	MDL
70919-1	S-B1- 5.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-2	S-B1-10.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-3	S-B1-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-4	S-B1-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-5	S-B1-25.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-6	S-B1-30.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-7	S-B2- 6.0	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-8	S-B2-10	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-9	S-B2-16	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03
70919-10	S-B2-20.5	ND<0.03	ND<0.03	ND<0.03	ND<0.03	0.03

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (415) 222-3002 FAX (415) 222-1251

Mike Roberts Color Productions  
Job No. 70919

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<u>Lab ID</u>	<u>Client ID</u>	<u>1,1,2,2 Tetrachloro -ethane Chlorobenzene</u>	<u>Dichloro -difluoro methane</u>	<u>Trichloro- fluoro- methane</u>	<u>MDL</u>
70919-1	S-B1- 5.5	ND<0.03	ND<0.03	ND<0.03	0.03
70919-2	S-B1-10.5	ND<0.03	ND<0.03	ND<0.03	0.03
70919-3	S-B1-16	ND<0.03	ND<0.03	ND<0.03	0.03
70919-4	S-B1-20.5	ND<0.03	ND<0.03	ND<0.03	0.03
70919-5	S-B1-25.5	ND<0.03	ND<0.03	ND<0.03	0.03
70919-6	S-B1-30.5	ND<0.03	ND<0.03	ND<0.03	0.03
70919-7	S-B2- 6.0	ND<0.03	ND<0.03	ND<0.03	0.03
70919-8	S-B2-10	ND<0.03	ND<0.03	ND<0.03	0.03
70919-9	S-B2-16	ND<0.03	ND<0.03	ND<0.03	0.03
70919-10	S-B2-20.5	ND<0.03	ND<0.03	ND<0.03	0.03

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CERTIFICATE OF ANALYSIS

State License No. 211

Received: 07/05/89

Reported: 07/20/89

Job No #: 70919

Attn: George Wilson  
Mike Roberts Color Productions  
7707 Bay Street  
Emeryville, CA.

Total Petroleum Hydrocarbon Analysis: By Modified Method 8015  
Oil & Grease Analysis: By Standard Method 503D  
Polychlorinated BiPhenyls Analysis: By EPA 8080  
mg/kg

Lab ID	Client ID	TPH as Diesel	TPH as Gasoline	Oil & Grease	PCB's
70919-1	S-B1- 5.5	12	ND<10	845	ND<0.5
70919-2	S-B1-10.5	ND<10	ND<10	ND<50	ND<0.5
70919-3	S-B1-16	63	ND<10	1600	ND<0.5
70919-4	S-B1-20.5	ND<10	ND<10	80	ND<0.5
70919-5	S-B1-25.5	ND<10	ND<10	95	ND<0.5
70919-6	S-B1-30.5	ND<10	ND<10	ND<50	ND<0.5
70919-7	S-B2- 6.0	19	ND<10	1160	ND<0.5
70919-8	S-B2-10	172	20	14,900	ND<0.5
70919-9	S-B2-16	ND<10	ND<10	ND<50	ND<0.5
70919-10	S-B2-20.5	ND<10	ND<10	ND<50	ND<0.5

QA/QC: Spike Recovery for Diesel: 83%  
Spike Recovery for Gasoline: 99%  
Spike Recovery for Oil & Grease: 102%  
Spike Recovery for PCB's: 98%

Detection Limit for Diesel: 10, #8 = 100  
Detection Limit for Oil & Grease: 50  
Detection Limit for Gasoline: 10  
Detection Limit for PCB: 0.5

Surinder Sidhu  
Surinder Sidhu  
Senior Chemist



EPA METHOD 8240  
PURGEABLE ORGANICS  
(LOW-LEVEL METHOD)

Sample I.D.: 9077-W-MW1-11  
Sample Received: 07/07/89  
Sample Analyzed: 07/10/89  
Sample Matrix: WATER

Client: PRECISION ANALYTICAL  
Client Ref. No.: 9077  
Lab Client Code: 0642  
Lab No.: 8907049-01A

Compound	CAS #	Concentration ug/kg	Limit of Detection ug/kg
Chloromethane	74-87-3	ND	10
Bromomethane	74-83-9	ND	4
Vinyl chloride	75-01-4	ND	4
Chloroethane	75-00-3	ND	4
Methylene chloride	75-09-2	ND	10
Trichlorofluoromethane	75-69-4	ND	3
1,1-dichloroethene	75-35-4	ND	3
1,1-dichloroethane	75-35-3	ND	3
Trans-1,2-dichloroethene	156-60-5	ND	3
Chloroform	67-66-3	ND	3
1,2-dichloroethane	107-06-2	ND	3
1,1,1-trichloroethane	71-55-6	ND	3
Carbon tetrachloride	56-23-5	ND	3
Bromodichloromethane	75-27-4	ND	3
1,2-dichloropropane	78-87-5	ND	3
Cis-1,3-dichloropropene	10061-01-5	ND	3
Trichloroethene	79-01-6	ND	4
Benzene	71-43-2	ND	2
Dibromochloromethane	124-48-1	ND	2
1,1,2-trichloroethane	79-00-5	ND	6
Trans-1,3-dichloropropene	10061-02-6	ND	5
2-chloroethylvinylether	100-75-8	ND	3
Bromoform	75-25-2	ND	3
1,1,2,2-tetrachloroethane	79-34-5	ND	4
Tetrachloroethene	127-18-4	ND	4
Toluene	108-88-3	ND	2
Chlorobenzene	108-90-7	ND	3
Ethylbenzene	100-41-4	ND	3
1,3-dichlorobenzene	541-73-7	ND	3
1,2-dichlorobenzene	95-50-1	ND	3
1,4-dichlorobenzene	106-46-7	ND	3
Freon 113	76-13-1	ND	3
Total Xylenes	1330-20-7	ND	3
Acetone	67-64-1	ND	20
2-Butanone	78-93-3	ND	20
4-Methyl-2-pentanone	108-10-1	ND	20
2-Hexanone	591-78-6	ND	20
Vinyl acetate	108-05-4	ND	10
Carbon disulfide	75-15-0	ND	3
Styrene	100-42-5	ND	3

ND = Not detected at or above limit of detection

EPA METHOD 8240  
PURGEABLE ORGANICS  
(LOW-LEVEL METHOD)

Sample I.D.: Method Blank  
Sample Received: 07/07/89  
Sample Analyzed: 07/10/89  
Sample Matrix: WATER

Client: PRECISION ANALYTICAL  
Client Ref. No.: 9077  
Lab Client Code: 0642  
Lab No.: 8907049-02A

Compound	CAS #	Concentration ug/kg	Limit of Detection ug/kg
Chloromethane	74-87-3	ND	10
Bromomethane	74-83-9	ND	4
Vinyl chloride	75-01-4	ND	4
Chloroethane	75-00-3	ND	4
Methylene chloride	75-09-2	ND	10
Trichlorofluoromethane	75-69-4	ND	3
1,1-dichloroethene	75-35-4	ND	3
1,1-dichloroethane	75-35-3	ND	3
Trans-1,2-dichloroethene	156-60-5	ND	3
Chloroform	67-66-3	ND	3
1,2-dichloroethane	107-06-2	ND	3
1,1,1-trichloroethane	71-55-6	ND	3
Carbon tetrachloride	56-23-5	ND	3
Bromodichloromethane	75-27-4	ND	3
1,2-dichloropropane	78-87-5	ND	3
Cis-1,3-dichloropropene	10061-01-5	ND	3
Trichloroethene	79-01-6	ND	4
Benzene	71-43-2	ND	2
Dibromochloromethane	124-48-1	ND	2
1,1,2-trichloroethane	79-00-5	ND	6
Trans-1,3-dichloropropene	10061-02-6	ND	5
2-chloroethylvinylether	100-75-8	ND	3
Bromoform	75-25-2	ND	3
1,1,2,2-tetrachloroethane	79-34-5	ND	4
Tetrachloroethene	127-18-4	ND	4
Toluene	108-88-3	ND	2
Chlorobenzene	108-90-7	ND	3
Ethylbenzene	100-41-4	ND	3
1,3-dichlorobenzene	541-73-7	ND	3
1,2-dichlorobenzene	95-50-1	ND	3
1,4-dichlorobenzene	106-46-7	ND	3
Freon 113	76-13-1	ND	3
Total Xylenes	1330-20-7	ND	3
Acetone	67-64-1	ND	20
2-Butanone	78-93-3	ND	20
4-Methyl-2-pentanone	108-10-1	ND	20
2-Hexanone	591-78-6	ND	20
Vinyl acetate	108-05-4	ND	10
Carbon disulfide	75-15-0	ND	3
Styrene	100-42-5	ND	3

ND = Not detected at or above limit of detection



$$\text{Calculated oral or dermal LD}_{50} = \frac{100}{\sum_{x=1}^n \frac{\%A_x}{T_{Ax}}}$$

where %Ax is the weight percent of each component in the waste mixture and T<sub>Ax</sub> is the acute oral or dermal LD<sub>50</sub> or the acute oral LD<sub>LO</sub> of each component.

NOTE: Authority cited: Sections 208, 25141 and 25150, Health and Safety Code. Reference: Section 25141, Health and Safety Code.

**HISTORY:**

1. Editorial correction filed 10-5-84; designated effective 10-27-84 (Register 84, No. 41).

**66699. Persistent and Bioaccumulative Toxic Substance.**

(a) Any waste is a hazardous waste which contains a substance listed in subsections (b) or (c) of this section:

- (1) at a concentration in milligrams per liter as determined pursuant to Section 66700 which exceeds its listed soluble threshold limit concentration, or
- (2) at a concentration in milligrams per kilogram in the waste which exceeds its listed total threshold limit concentration.

(b) List of Inorganic Persistent and Bioaccumulative Toxic Substances and Their Soluble Threshold Limit Concentration (STLC) and Total Threshold Limit Concentration (TTLC) Values.

Substance	STLC	TTLC
	mg/l	Wet-Weight mg/kg
Antimony and/or antimony compounds.....	15	500
Arsenic and/or arsenic compounds .....	5.0	500
Asbestos .....	-	1.0
		(as percent)
Barium and/or barium compounds (excluding bar- ite) .....	100	10,000††
Beryllium and/or beryllium compounds.....	0.75	75
Cadmium and/or cadmium compounds .....	1.0	100
Chromium (VI) compounds .....	5	500
Chromium and/or chromium (III) compounds .....	560	2,500
Cobalt and/or cobalt compounds .....	80	8,000
Copper and/or copper compounds .....	25	2,500
Fluoride salts .....	180	18,000
Lead and/or lead compounds .....	5.0	1,000
Mercury and/or mercury compounds .....	0.2	20
Molybdenum and/or molybdenum compounds .....	350	3,500
Nickel and/or nickel compounds .....	20	2,000
Selenium and/or selenium compounds.....	1.0	100
Silver and/or silver compounds .....	5	500
Thallium and/or thallium compounds.....	7.0	700
Vanadium and/or vanadium compounds .....	24	2,400
Zinc and/or zinc compounds.....	250	5,000

\* STLC and TTLC values are calculated on the concentrations of the elements, not the compounds.

† In the case of asbestos and elemental metals, applies only if they are in a friable, powdered or finely divided state. Asbestos includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite.

†† Excluding barium sulfate.

- (2) Has an acute dermal LD<sub>50</sub> less than or equal to 43 milligrams per kilogram; or
- (3) Has an acute inhalation LC<sub>50</sub> less than or equal to 100 parts per million as a gas or vapor; or
- (4) Contains any of the substances listed in Section 66096(a) (5) at a single or combined concentration equal to or exceeding 0.1 percent by weight; or
- (5) Has been shown through experience or testing to pose an extreme hazard to the public health because of its carcinogenicity, high acute or chronic toxicity, bioaccumulative properties, or persistence in the environment; or
- (6) Is water-reactive.

(b) A waste containing one or more materials which are extremely toxic according to any criterion of paragraphs (a) (1) or (a) (2) of this section may be classified by the Department as not extremely hazardous if neither the calculated acute oral toxicity nor the calculated acute dermal toxicity of the waste using the equation in Section 66096(c) is numerically equal to or less than the toxicity limits prescribed in paragraphs (a) (1) or (a) (2) of this section and the waste is not extremely hazardous by any other criterion of this section.

NOTE: Authority cited: Sections 208, 25141 and 25150, Health and Safety Code. Reference: Section 25141, Health and Safety Code.

**HISTORY:**

- 1. Editorial correction filed 10-5-84; designated effective 10-27-84 (Register 84, No. 41).

**66723. Total Threshold Limit Concentration Values of Persistent and Bioaccumulative Toxic Substances in Extremely Hazardous Wastes.**

(a) Any waste containing a substance listed in subsection (b) of this section at a concentration equal to or exceeding its listed total threshold limit concentration is an extremely hazardous waste.

(b) List of Persistent and Bioaccumulative Toxic Substances and Their Total Threshold Limit Concentration (TTLC) Values.

<i>Substance</i>	<i>TTLC (Wet-Weight in mg/kg)</i>
Aldrin .....	140
Arsenic and/or arsenic compounds.....	50,000 (as As)
Beryllium and/or beryllium compounds* .....	7,500 (as Be)
Cadmium and/or cadmium compounds* .....	10,000 (as Cd)
Chlordan.....	250
2,4-Dichlorophenoxyacetic acid .....	10,000
Dieldrin .....	800
Dioxin (2,3,7,8-TCDD) .....	1
Endrin.....	20
Heptachlor .....	470
Kepone .....	2,100
Lead compounds, organic .....	1,300 (dry weight basis; as Pb)
Lindane.....	400
Mercury and/or mercury compounds .....	2,000 (as Hg)
Mirex .....	2,100
Polychlorinated biphenyls (PCBs) .....	5,000
Selenium and/or selenium compounds* .....	10,000 (as Se)
Thallium and/or thallium compounds* .....	70,000 (as Tl)
Toxaphene .....	500
2,4,5-Trichlorophenoxypropionic acid.....	1,000

\* In the case of elemental metals, applies only if they are in a friable, powdered or finely divided state.

NOTE: Authority cited: Sections 208, 25141 and 25150, Health and Safety Code. Reference: Section 25141, Health and Safety Code.

(d) The Department may require a water supplier to make such additional tests as is judged to be warranted.

(e) Acceptable data from the provider wholesaling agency may be used to satisfy these requirements.

**64433. Types of Analyses.**

(a) As a minimum, analyses shall be made for the following constituents:

(1) General mineral analyses for bicarbonate, carbonate, and hydroxide alkalinity, calcium, chloride, copper, foaming agents (MBAS), iron, magnesium, manganese, pH, sodium, sulfate, specific conductance, total dissolved solids, total hardness and zinc.

(2) General physical analyses for color, odor and turbidity.

(3) Inorganic chemical analyses for arsenic, barium, cadmium, chromium, lead, mercury, nitrate (as NO<sub>3</sub>), selenium silver and fluoride.

(4) Organic chemical analyses for endrin, lindane, methoxychlor, toxaphene and chlorophenoxy 2, 4—D and 2, 4, 5—TP Silvex.

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4024, Health and Safety Code.

**HISTORY:**

1. New NOTE filed 12-7-84 (Register 84, No. 49).

**64435. Maximum Contaminant Levels.**

(a) Water containing contaminants exceeding the maximum contaminant levels shown on Tables 2, 3 and 4 presents a risk to the health of humans when continually used for drinking or culinary purposes.

**Table 2**

**Maximum Contaminant Levels  
Inorganic Chemicals**

<i>Constituent</i>	<i>Maximum Contaminant Level, mg/l</i>
Arsenic.....	0.05
Barium.....	1.
Cadmium .....	0.010
Chromium .....	0.05
Lead .....	0.05
Mercury.....	0.002
Nitrate (as NO <sub>3</sub> ).....	45.
Selenium .....	0.01
Silver .....	0.05

**Table 3**

**Maximum Contaminant Levels  
Organic Chemicals**

<i>Constituent</i>	<i>Maximum Contaminant Level, mg/l</i>
(a) Chlorinated Hydrocarbons	
Endrin .....	0.002
Lindane .....	0.004
Methoxychlor .....	0.1
Toxaphene .....	0.005
(b) Chlorophenoxy	
2, 4—D.....	0.1
2,4,5—TP Silvex.....	0.01