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GROUNDWATER MONITORING DATA

Crown City Plating Co.
4350 Temple City Blvd.
El Monte, CA 91731

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Submitted to: California Regional Water Quality Control Board
Los Angeles Region
101 Centre Plaza Drive
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Attn. E. Solomon

October 16, 1995

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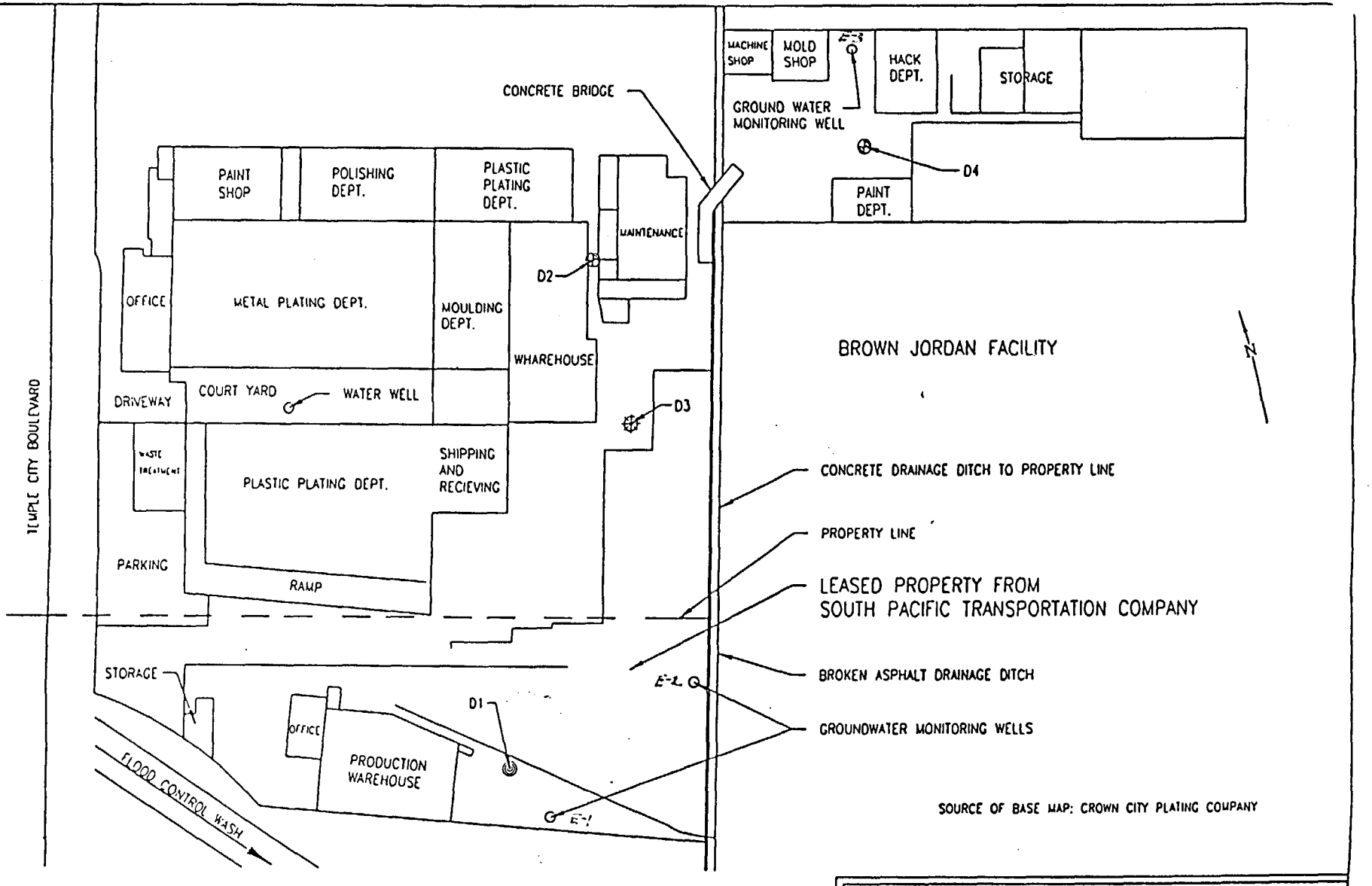
I. INTRODUCTION

The California Regional Water Quality Control Board-Los Angeles Region has required Crown City Plating Co. to sample its three shallow ground water wells on its property approximately every three months. This report details the ground water monitoring activities from March 8, 1995; July 24, 1995; September 13, 1995 and August 23, 1995.

II. FIELD PROCEDURES

Water samples were taken from three shallow ground water monitoring wells, E-1, E-2, and E-3 and a deep aquifer (800 feet) production well. Well E-1 is located near the south central edge of the property. Well E-2 is located adjacent to the storm water drainage ditch which runs along the eastern edge of the property and approximately fifty feet from the southern edge of the property. Well E-3 is located between the Mold Shop and the Rack Department on the northeastern edge of the property. The deep aquifer production well is located in the center of the manufacturing complex. The approximate location of the wells are shown on the plot plan (see Figure 1).



EXPLANATION

- ○ APPROXIMATE LOCATION OF A SOIL GAS SAMPLING PROBE AT 35 FEET BELOW GRADE
- ⊕ APPROXIMATE LOCATION OF A SOIL GAS SAMPLING PROBE AT 40 FEET BELOW GRADE
- ⊙ APPROXIMATE LOCATION OF A CLUSTERED SOIL GAS SAMPLING PROBE WITH PROBES AT 10, 20, 30 AND 40 FEET BELOW GRADE

FIGURE 1

APPROXIMATE LOCATIONS OF CLUSTERED AND DEEP SOIL GAS SAMPLING PROBES

CROWN CITY PLATING COMPANY
4300 TEMPLE CITY BOULEVARD, EL MONTE, CALIFORNIA
DEEP SOIL GAS SURVEY

DRAWN BY: JST SCALE: NOT TO SCALE DATE: 2-10-1995

A. March 8, 1995 Sampling

Well E-1 was not sampled due to excessive silt. This is a 2 inch well with a curvature which prevented the use of a 39 inch long purge pump. Hand bailing approximately 50 gallons did not appear to reduce the silt in the ground water extracted from this well.

Wells E-2 and E-3 were previously purged in December 1993. These wells had excessive silt which damaged the purge pump.

Water samples were taken on March 8, 1995 using a polypropylene disposable hand bailer manufactured by Timco Manufacturing, Inc. 851 15th Street, Pariel Drive, Sac, WI 53578. One bailer was dedicated to each well to eliminate cross contamination.

New No. 18 commercial nylon line was attached to the disposable bailers. Between 9 and 20 liters of water was bailed from each well prior to sampling. Silts and fines were noted in the ground water samples.

Water samples were transferred to 1 liter VWR Trace clean glass bottles with Teflon caps. The bottles were sealed; inverted to check for air bubbles, labeled, and refrigerated for transport to an analytical laboratory.

Chemical analysis of the water samples was conducted to determine volatile organics in the ground water. The samples were measured for turbidity. The results of volatile organic analysis is numerized in Table I and turbidity measurements in Table II.

B. July 25, 1995 Sampling

Due to the difficulty in obtaining samples free of silt and fines, a Keck Redi-Flo 2 Port-A-Reel pump was purchased. The pump is a compact electric submersible unit 11 inches long by 1.8 inches in diameter and is able to fit in the 2 inch E-1 well.

During purging of the wells, the silt ladened waters damaged the pump unit. After rebuilding the pump, all three monitoring wells were purged free of silt. Prior to sampling, each well was pumped a minimum of 1 hour at a flow rate of approximately 1.5 gallons per minute.

Ground water samples were then pumped directly into the glass bottles. The bottles were sealed; inverted to check for air bubbles, labeled, and refrigerated for transport to an analytical laboratory. The results of volatile organic analysis is nummerized in Table I and turbidity measurements in Table II.

In addition to the volatile organic, turbidity, and pH measurements, metals and general minerals analysis of the production well and E-1 shallow monitoring well were done. The results are detailed in Tables III and IV. Nitrate in the shallow ground water E-1 well is excessively high.

C. August 23, 1995

Well E-1 was sampled on this date for volatile organics after pumping for 1 hour prior to sampling as described in paragraph B, above. The results of volatile organics are noted in Table II.

D. September 13, 1995

Well E-1 was sampled on this date for volatile organics as described in paragraph above. The results of volatile organics are noted in Table II.

This well was pumped from August 31 through September 13 (15 days) at 8 1/2 hours per day at a flow of approximately 1.1 gallons per minute prior to sampling. Water remained visible clear and free of turbidity and was used in production processes. Approximately 8,415 gallons were purged prior to sampling. The volatile organic concentrations from the July 25, 1995 sampling and the September

13, 1995 sampling did not make a significant change after pumping the 8,415 gallons from the shallow aquifer.

E. Ground Water Elevation

Ground water depths were measured for each shallow monitoring well on a weekly basis. The ground water depths are tabulated in the Appendix as well as the ground water elevations from the well surveys.

Ground water elevations for all monitoring wells has increased approximately four feet within the past year. The ground water elevation data also indicates a south westerly hydraulic movement of water, i.e. ground water movement originates from off site sources.

Table I

SUMMARY
GROUND WATER ANALYSIS RESULTS

	REPORTED COMPOUNDS PARTS PER BILLION (UG/I)							
WELL IDENTIFICATION AND DATE SAMPLED	PCE	1,1,1 TCA	1,1,DCE	TCE	METHYLENE CLORIDE	CIS 1,2,DCE	CHLOROFORMS	1,3,DICHLOROBENZENE
E-1 (1)								
January 25, 1989	150	45	15	300	<10	ND	ND	
August 4, 1989 (2)	140	44	20	310	4(3)	ND	ND	
February 2, 1990 (2)	65	18	3	220	<4	ND	ND	
November 11, 1993	600	ND	<120	530	0.9	0.6	ND	
February 18, 1994	180	33	18	130	99	ND	6.5	
July 24, 1995	60	5	16	290	ND	ND	ND	
August 23, 1995	100	7.5	18	270	ND	ND	ND	
September 13, 1995	57	ND	8.5	300	ND	ND	ND	
E-2 (4)								
February 2, 1990	<20	<20	<20	2,000	<40	ND	ND	
November 11, 1993	26.0	4.6	36.0	740	0.5	2.0	1.0	0.6
February 18, 1994	ND	ND	ND	580	ND	ND	ND	
March 8, 1995	8.3	ND	ND	300	ND	ND	ND	
July 24, 1995	11.0	ND	8.0	290	ND	ND	ND	
E-3 (4)								
February 2, 1990	1.0	<1	<1	9	<2	ND	ND	
November 11, 1993	34.0	ND	13.0	730	0.6	0.6	ND	
February 18, 1994	14.0	ND	ND	370	ND	ND	ND	
March 8, 1995	9.7	ND	ND	99	ND	ND	ND	
July 24, 1995	15.0	ND	ND	200	ND	ND	ND	
PRODUCTION WELL								
August 4, 1989	ND	ND	ND	ND	4(3)	ND	ND	
February 2, 1990	ND	ND	ND	ND	ND	ND	ND	
February 18, 1994	ND	ND	ND	ND	ND	ND	ND	
July 24, 1995	ND	ND	ND	ND	ND	ND	ND	

(1) Drilled and installed by Emcon Associates as part of the Phase II Subsurface Investigation work.
(2) Sampled by Environmental Solutions, Inc.
(3) The laboratory report indicates the method blank contained 4 ug/l of methylene chloride.
(4) Drilled and installed by Environmental Solutions, Inc. as part of the Phase III Subsurface Investigation.
(5) November 11, 1993 and February 18, 1994 Sampling Inland Empire Environmental Solutions.
(6) ug/l = parts per billion.
(7) March 8, 1995 and July 24, 1995 Sampling by CCPC

TABLE II

Date	Well	Turbidity	pH
March 8, 1995	E-2	20	7.1
March 8, 1995	E-3	80	7.7
July 25, 1995	E-1	N.D.	7.1
July 25, 1995	E-2	7.0	7.0
July 25, 1995	E-3	N.D.	7.3
July 25, 1995	Production	1.5	7.6

TABLE III

Minerals
(July 25, 1995)

Analyte	EPA Method	Detection Limit mg/l (ppm)	Production Well Sample Result mg/l (ppm)	E -1 Well Sample Result mg/l (ppm)
Alkalinity	310.1	2.0	160	260
Aluminum	6010	0.50	N.D.	N.D.
Bicarbonate Alkalinity	310.1	2.0	160	260
Calcium	6010	2.0	40	120
Chloride	300	0.50	5.7	42
Color (color units)	110.2	1.0	N.D.	N.D.
Fluoride	300	0.50	1.3	1.1
Hardness	SM2340B	2.0	140	450
Iron	6010	0.050	N.D.	0.089
Magnesium	6010	0.050	9.5	37
Manganese	6010	0.050	N.D.	N.D
Nitrate as NO3	300	0.50	4.8	120
Odor (threshold units)	140.1	1.0	N.D.	N.D.
pH (pH units)	150.1	N.A.	7.6	7.1
Potassium	6010	0.50	1.6	2.6
Sodium	6010	0.50	21	24
Specific Conductance (umhos/cm)	120.1	1.0	370	930
Sulfate	300	0.50	12	61
Surfactants	425.1	0.10	N.D.	0.18
Total Dissolved Solids	160.1	5.0	230	650
Turbidity (NTU)	180.1	1.0	1.5	N.D.

TABLE IV

Metals
(July 25, 1995)

Analyte	EPA Method	Detection Limit mg/l (ppm)	Production Well Sample Result mg/l (ppm)	E -1 Well Sample Result mg/l (ppm)
Arsenic	6010	0.010	N.D.	N.D.
Barium	6010	0.050	N.D.	N.D.
Cadmium	6010	0.0050	N.D.	N.D.
Chromium, total	7191	0.0050	N.D.	0.015
Copper	6010	0.050	N.D.	N.D.
Lead	7421	0.0050	N.D.	N.D.
Mercury	7470	0.00020	N.D.	N.D.
Selenium	7740	0.010	N.D.	N.D.
Silver	6010	0.050	N.D.	N.D.
Zinc	6010	0.050	N.D.	N.D.

GROUND WATER DEPTH

DATE:	TIME:	GROUND WATER MONITORING WELLS			SIGNATURE
		E-1 (Feet)	E-2 (Feet)	E-3 (Feet)	
7-13-95	8:15	73.40	70.70	73.15	[illegible]
7-19-95	11:05	73.50	70.65	73.16	[illegible]
7-24-95	9:30	73.40	70.51	73.00	[illegible]
8-3-95	7:35	73.35	70.40	72.84	[illegible]
8-11-95	8:30	73.31	70.21	72.71	[illegible]
8-18-95	8:30	73.25	70.12	72.50	[illegible]
8-25-95	8:30	73.06	70.03	72.49	[illegible]
8-31-95	8:00	72.95	69.99	72.36	[illegible]
9-8-95	8:00	72.93	69.90	72.29	[illegible]
9-15-95	7:45	72.90	69.78	72.20	[illegible]
9-22-95	9:00	can't check the ~~depth~~ working the well	69.70	72.15	[illegible]
9-29-95	11:00	"	69.65	72.09	[illegible]
10-6-95	9:00	"	69.55	71.99	[illegible]
10-13-95	10:30	"	69.50	71.85	[illegible]

GROUND WATER DEPTH

DATE:	TIME:	GROUND WATER MONITORING WELLS			SIGNATURE
		E-1 (Feet)	E-2 (Feet)	E-3 (Feet)	
02-23-95	12:00	75.41	73.48	75.81	[illegible]
03/02/95	11:45	75.38	73.25	75.70	[illegible]
03/08/95	10:50	74.90	73.10	75.64	[illegible]
03/16/95	1:30	74.75	72.80	75.35	[illegible]
03-24-95	10:00	74.80	72.88	75.40	[illegible]
03-30-95	1:50	74.60	72.62	75.18	[illegible]
04-07-95	10:00	74.60	72.68	75.20	[illegible]
04-13-95	11:40	74.50	72.50	75.05	[illegible]
04-21-95	1:10	74.30	72.29	75.80	[illegible]
04-28-95	1:30 pm	74.20	72.15	75.70	[illegible]
05-04-95	12:10 pm	74.11	72.02	74.58	[illegible]
05-10-95	1:15 pm	73.99	71.80	74.30	[illegible]
5-19-95	11:00 Am	73.9	71.52	74.20	[illegible]
6-2-95	11:30 Am	73.63	71.40	74.50	[illegible]
6-8-95	10:45 Am	73.54	71.32	73.85	[illegible]
6-15-95	11:00 Am	73.46	71.12	73.67	[illegible]
6-23-95	1:10 pm	73.40	71.00	73.50	[illegible]
6-30-95	11:20	73.43	70.92	73.35	[illegible]

GROUND WATER DEPTH

DATE:	TIME:	GROUND WATER MONITORING WELLS			SIGNATURE
		E-1 (Feet)	E-2 (Feet)	E-3 (Feet)	
10-6-94	11:15	75.39	73.55	76.08	Elizabeth [illegible]
10-13-94	1:15	74.65	73.50	76.04	Elizabeth [illegible]
10-20-94	9:45	74.46	73.60	76.15	Elizabeth [illegible]
10-27-94	10:45	75.43	73.61	76.14	Elizabeth [illegible]
11-03-94	10:20	75.40	73.58	76.10	[illegible]
11-10-94	10:00	75.41	73.60	76.08	[illegible]
11-17-94	12:00	75.46	73.62	76.14	[illegible]
11-23-94	11:00	75.49	73.60	76.11	Elizabeth [illegible]
12-02-94	11:45	75.34	73.50	76.00	Elizabeth [illegible]
12-09-94	2:15	75.38	73.50	76.06	Elizabeth [illegible]
12-16-94		75.37	73.52	76.05	Elizabeth [illegible]
12-16-94 - 01-02-95	SHUT	down —	— —	— —	— —
01/18/95	11:20 am	75.50	73.69	76.20	Elizabeth [illegible]
01/19/95	1:30 pm	75.25	73.00	75.95	[illegible]
01/24/95	11:45 Am	75.35	73.15	75.96	Elizabeth [illegible]
01-30-95	10:00 Am	75.40	73.50	76.00	Elizabeth [illegible]
02-10-95		75.10	73.20	75.10	[illegible]
02-17-95	9:45	75.30	73.46	75.90	Elizabeth [illegible]

GROUND WATER DEPTH

DATE:	TIME:	GROUND WATER MONITORING WELLS			SIGNATURE
		E-1 (Feet)	E-2 (Feet)	E-3 (Feet)	
5-26-94	10:45 am	75.29	73.32	75.91	
6-2-94	10:45 am	75.20	73.25	75.85	
6-9-94	10:40 am	75.20	73.23	75.82	
6-16-94	11:45 am	75.27	73.31	75.90	
6-23-94	9:40 am	75.21	73.27	75.86	
6-30-94	10:30 am	75.25	73.35	75.90	
7-7-94	10:45 am	75.15	73.20	75.72	
7-14-94	10:25 am	75.18	73.25	75.82	
7-21-94	10:35 am	75.16	73.25	75.80	
7-28-94	10:45 am	75.11	73.18	75.75	
8-4-94	11:30 am	75.19	73.29	75.83	
8-18-94	11:00 Am	75.26	73.41	75.95	Kristmatthew
8-25-94	11:10 Am	75.21	73.43	75.93	Kristmatthew
8-31-94	11:00 Am	75.29	73.41 KH ~~72.41~~	75.96	Kristmatthew
9-8-94	12:00 Pm	75.29	73.41	76.41	Kristmatthew
9-15-94	11:45 Pm	75.31	73.40	75.92	Elizabeth Arafa
9-21-94	10:00	75.35	73.50	76.05	Elizabeth Arafa
9-29-94	12:00	73.32	73.51	76.00	Elizabeth Arafa

GROUND WATER DEPTH

DATE:	TIME:	GROUND WATER MONITORING WELLS			SIGNATURE
		E-1 (Feet)	E-2 (Feet)	E-3 (Feet)	
1-20-94	1:30 pm	76.75	74.75	77.45	[illegible]
1-27-94	12:50 pm	78.55	74.50	77.20	[illegible]
2-4-94	9:00 am	78.50	74.50	77.05	[illegible]
2-10-94	9:00 am	76.48	74.47	77.15	[illegible]
2-17-94	8:45 am	76.20	74.10	76.60	[illegible]
2-24-94	10:35 am	76.15	74.15	76.85	[illegible]
3-3-94	9:30 am	76.15	73.18	76.84	[illegible]
3-10-94	10:45 am	76.05	74.05	76.75	[illegible]
3-17-94	10:45 am	75.91	74.92	76.57	[illegible]
3-24-94	10:45 am	75.82	73.85	76.50	[illegible]
3-31-94	10:30 am	75.75	73.77	76.41	[illegible]
4-7-94	10:45 am	75.73	73.77	76.40	[illegible]
4-14-94	10:45 am	75.67	73.73	76.35	[illegible]
4-21-94	10:55 am	75.61	73.66	76.28	[illegible]
4-27-94	10:45 am	75.56	73.62	76.25	[illegible]
5-5-94	10:45 am	75.43	73.47	76.10	[illegible]
5-12-94	10:30 am	75.40	73.45	76.60	[illegible]
5-19-94	10:45 am	75.39	73.45	76.05	[illegible]

Laboratory Analysis Work Sheet 8

Groundwater Elevation

Date	Time	Groundwater Monitoring Wells Depth		
		E1 (295.04-depth)	E2 (293.34-depth)	E3 (296.81-depth)
6-15-95	11:00 AM	221.58	222.22	223.14
6-23-95	1:10 PM	221.64	222.34	223.31
6-30-95	11:20 AM	221.61	222.42	223.46
7-13-95	8:15 AM	221.64	222.64	223.66
7-14-95	11:05 AM	221.54	222.69	223.65
7-24-95	9:30 AM	221.64	222.83	223.81
8-3-95	7:35 AM	221.69	222.94	223.97
8-11-95	8:30 AM	221.73	223.13	224.10
8-18-95	8:30 AM	221.79	223.22	224.31
8-25-95	8:30 AM	221.98	223.31	224.32
8-31-95	8:00 AM	222.09	223.35	224.45
9-8-95	8:00 AM	222.11	223.44	224.52
9-15-95	7:45 AM	222.14	223.56	224.61
9-22-95	9:00 AM	working well	223.64	224.66
9-29-95	11:00 AM	"	223.66	224.72
10-6-95	9:00 AM	"	223.79	224.82
10-13-95	11:30 AM	"	223.84	224.96

Note: Depth is the measured depth of the groundwater from the field work sheet.

Laboratory Analysis Work Sheet 8

Groundwater Elevation

Date	Time	Groundwater Monitoring Wells Depth		
		E1 (295.04-depth)	E2 (293.34-depth)	E3 (296.81-depth)
12-16-94	—	219.67	219.82	220.76
12-16-94 to 1-3-95	shut down		shut down	shut down
1-13-95	11:20 AM	219.54	219.65	220.61
1-19-95	1:30 pm	219.79	220.31	220.86
1-24-95	11:45 AM	219.69	220.19	220.85
1-30-95	10:00 AM	219.64	219.84	220.81
2-10-95	—	219.94	220.14	220.91
2-17-95	9:45 AM	219.74	219.88	220.91
2-23-95	12:00 PM	219.63	219.68	221.00
3-02-95	11:45 AM	219.66	220.09	221.11
3-08-95	10:50 AM	220.14	220.24	221.17
3-16-95	1:30 PM	220.29	220.54	221.46
3-24-95	10:00 AM	220.24	220.46	221.41
3-30-95	1:50 PM	220.44	220.72	221.63
4-09-95	10:00 AM	220.44	220.66	221.61
4-13-95	11:40 AM	220.54	220.84	221.76
* 4-21-95	1:10 PM	220.74	221.05	221.01
* 4-28-95	1:30 pm	220.84	221.19	221.11
5-04-95	12:10 PM	220.93	221.32	222.23
5-10-95	1:15 PM	221.05	221.54	222.51
5-19-95	11:00 AM	221.14	221.82	222.61
6-02-95	11:30 AM	221.41	221.94	222.31
6-08-95	10:45 AM	221.50	222.02	222.46

Note: Depth is the measured depth of the groundwater from the field work sheet.

Laboratory Analysis Work Sheet 8

Groundwater Elevation

Date	Time	Groundwater Monitoring Wells Depth		
		E1 (295.04-depth)	E2 (293.34-depth)	E3 (296.81-depth)
6-30-94	10:30 AM	219.79	219.99	220.91
7-7-94	10:45 AM	219.89	220.14	221.09
7-14-94	10:25 AM	219.86	220.09	220.99
7-21-94	10:35 AM	219.88	220.09	221.01
7-28-94	10:45 AM	219.93	220.16	221.06
8-4-94	11:30 AM	219.85	220.05	220.98
8-18-94	11:00 AM	219.78	219.93	220.86
8-25-94	11:10 AM	219.83	219.91	220.88
8-31-94	11:00 AM	219.75	219.93	220.85
9-8-94	12:00 PM	219.75	219.93	220.40
9-15-94	11:45 AM	219.73	219.94	220.89
9-21-94	10:00 AM	219.69	219.84	220.76
* 9-29-94	12:00 PM.	221.72	219.83	220.81
10-6-94	11:15 AM	219.65	219.79	220.73
* 10-13-94	1:15 PM	220.39	219.84	220.77
* 10-20-94	9:45 am	220.58	219.74	220.66
10-27-94	10:45 AM	219.61	219.73	220.67
11-03-94	10:30 AM	219.64	219.76	220.66
11-10-94	10:00 AM	219.63	219.74	220.73
11-17-94	12:00 PM	219.58	219.72	220.67
11-23-94	11:00 AM	219.55	219.74	220.70
12-02-94	11:45 AM	219.70	219.84	220.81
12-09-94	2:15 PM.	219.66	219.84	220.75

Note: Depth is the measured depth of the groundwater from the field work sheet.

Laboratory Analysis Work Sheet 8

Groundwater Elevation

Date	Time	Groundwater Monitoring Wells Depth		
		E1 (295.04-depth)	E2 (293.34-depth)	E3 (296.81-depth)
1-20-94	1:30 PM	218.29	218.59	219.36
1-27-94	12:50 pm	216.49	218.84	219.61
2-4-94	9:00 AM	216.54	218.89	219.76
2-10-94	9:00 AM	218.56	218.87	219.66
2-17-94	8:45 AM	218.84	219.24	220.21
2-24-94	10:35 AM	218.89	219.19	219.96
* 3-3-94	9:30 AM	218.89	220.16	219.97
3-10-94	10:45 AM	218.99	219.29	220.06
3-17-94	10:45 AM	219.13	218.42	220.24
3-24-94	10:45 AM	219.22	219.45	220.31
3-31-94	10:30 AM	219.29	219.57	220.40
4-7-94	10:45 AM	219.31	219.57	220.41
4-14-94	10:45 AM	219.37	219.61	220.46
4-21-94	10:55 AM	219.43	219.68	220.53
4-27-94	10:45 AM	219.48	219.72	220.56
5-5-94	10:45 AM	219.61	219.87	220.71
5-12-94	10:30 AM	219.64	219.89	220.21
5-19-94	10:45 AM	219.65	219.89	220.76
5-26-94	10:45 AM	219.75	220.02	220.90
6-2-94	10:45 AM	219.84	220.09	220.96
6-9-94	10:40 AM	219.84	220.11	220.99
6-16-94	11:45 AM	219.77	220.03	220.91
6-23-94	9:40 AM	219.83	220.07	220.95

Note: Depth is the measured depth of the groundwater from the field work sheet.

Production Number: 4192092 VWR Cat. No. 15900-226 Certified for Analyte Group: M

VWR TraceClean™

Certificate of Analysis

This is your Certificate of Analysis for VWR TraceClean QA environmental sample containers. This product has been prepared in accordance with a Total Quality Management program and meets the U.S. EPA designated priority pollutant analyte specifications shown below.

Group M: Glass and HDPE Sample Containers for use in the analysis of Metals

Analyte	Detection Limit (µg/L)	Analyte	Detection Limit (µg/L)	Analyte	Detection Limit (µg/L)
Antimony	< 5	Copper	< 10	Selenium	< 2
Arsenic	< 2	Lead	< 2	Silver	< 5
Beryllium	< 0.5	Mercury	< 0.2	Thallium	< 5
Cadmium	< 1	Nickel	< 20	Zinc	< 10
Chromium	< 10			Zinc (Amber HDPE)	< 500

Group SP: Glass Sample Containers for use in the analysis of Semivolatiles and Pesticides/PCBs

Compound	Quantitation Limit (µg/L)	Compound	Quantitation Limit (µg/L)	Compound	Quantitation Limit (µg/L)
Acenaphthene	< 5	Acenaphthylene	< 5	Anthracene	< 5
Benzo(a)anthracene	< 5	Benzo(a)pyrene	< 5	Benzo(b)fluoranthene	< 5
Benzo(k)fluoranthene	< 5	Benzo(g,h,i)perylene	< 5	4-Bromophenyl-phenylether	< 5
Butylbenzylphthalate	< 5	4-Chloro-3-methylphenol	< 5	bis-(2-Chloroethoxy)methane	< 5
bis-(2-Chloroethyl)ether	< 5	bis-(2-Chloroisopropyl)ether	< 5	2-Chloronaphthalene	< 5
2-Chlorophenol	< 5	4-Chlorophenyl-phenylether	< 5	Chrysene	< 5
Di-n-butylphthalate	< 5	Di-n-octylphthalate	< 5	Dibenzo(a,h)anthracene	< 5
1,2-Dichlorobenzene	< 5	1,4-Dichlorobenzene	< 5	1,3-Dichlorobenzene	< 5
3,3'-Dichlorobenzidine	< 5	2,4-Dichlorophenol	< 5	Diethylphthalate	< 5
Dimethylphthalate	< 5	2,4-Dimethylphenol	< 5	4,6-Dinitro-2-methylphenol	< 20
2,4-Dinitrophenol	< 20	2,4-Dinitrotoluene	< 5	2,6-Dinitrotoluene	< 5
bis-(2-Ethylhexyl)phthalate	< 5	Fluoranthene	< 5	Fluorene	< 5
Hexachlorobenzene	< 5	Hexachlorobutadiene	< 5	Hexachlorocyclopentadiene	< 5
Hexachloroethane	< 5	Indeno(1,2,3-cd)pyrene	< 5	Isophorone	< 5
N-Nitroso-di-n-propylamine	< 5	N-Nitrosodimethylamine	< 5	N-Nitrosodiphenylamine	< 5
Naphthalene	< 5	Nitrobenzene	< 5	2-Nitrophenol	< 5
4-Nitrophenol	< 20	Pentachlorophenol	< 20	Phenanthrene	< 5
Phenol	< 5	Pyrene	< 5	1,2,4-Trichlorobenzene	< 5
2,4,5-Trichlorophenol	< 20	2,4,6-Trichlorophenol	< 5	Aldrin	< 0.01
4,4'-DDD	< 0.02	Endosulfan II	< 0.02	Alpha-BHC	< 0.01
4,4'-DDE	< 0.02	Endosulfan Sulfate	< 0.02	Beta-BHC	< 0.01
4,4'-DDT	< 0.02	Endrin	< 0.02	Delta-BHC	< 0.01
Dieldrin	< 0.02	Endrin Aldehyde	< 0.02	Gamma-BHC	< 0.01
Endosulfan I	< 0.01	Heptachlor	< 0.01	Heptachlor Epoxide	< 0.01
Toxaphene	< 0.30	Aroclor-1016	< 0.20	Aroclor-1221	< 0.20
Aroclor-1232	< 0.20	Aroclor-1242	< 0.20	Aroclor-1248	< 0.20
Aroclor-1254	< 0.20	Aroclor-1260	< 0.20		

Group V: Glass Sample Containers for use in the analysis of Volatiles

Compound	Quantitation Limits (µg/L)	Compound	Quantitation Limits (µg/L)	Compound	Quantitation Limits (µg/L)
Benzene	< 1	1,2-Dichloropropane	< 1	Bromodichloromethane	< 1
trans-1,3-Dichloropropene	< 1	Bromoform	< 1	cis-1,3-Dichloropropene	< 1
Bromomethane	< 1	Ethylbenzene	< 1	Carbon Tetrachloride	< 1
Chlorobenzene	< 1	Methylene Chloride	< 2	Chloroethane	< 1
Chloroform	< 1	Chloromethane	< 1	1,1,2,2-Tetrachloroethane	< 1
Tetrachloroethene	< 1	Dibromochloromethane	< 1	Toluene	< 1
1,4-Dichlorobenzene	< 1	1,1,2-Trichloroethane	< 1	1,3-Dichlorobenzene	< 1
1,1,1-Trichloroethane	< 1	1,2-Dichlorobenzene	< 1	Trichloroethene	< 1
Trichlorofluoromethane	< 1	1,2-Dichloroethane	< 1	1,1-Dichloroethane	< 1
trans-1,2-Dichloroethene	< 1	1,1-Dichloroethene	< 1	Vinyl Chloride	< 1

Please keep this certificate for your records.
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If additional information is required, call (800) 443-1689 or (800) 262-5006 inside California.

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Crown City Plating	Client Project ID: Ground Water Sampling	Sampled:	Mar 8, 1995
4350 Temple City Blvd.	Regional Water Quality Board	Received:	Mar 8, 1995
El Monte, CA 91731	Sample Descript: Water, Well E2	Analyzed:	Mar 10, 1995
Attention: L.P. Donovan	Lab Number: EC01195	Reported:	Mar 13, 1995

HALOGENATED AND AROMATIC VOLATILES (EPA 8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**8.3**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**300**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	10	N.D.
Benzene	5.0	N.D.
Ethylbenzene	5.0	N.D.
Toluene	5.0	N.D.
Total Xylenes	15	N.D.

CONFIDENTIAL

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. Detection limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
4-Bromofluorobenzene	114%
Fluorobenzene	86%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Crown City Plating	Client Project ID: Ground Water Sampling	Sampled:	Mar 8, 1995
4350 Temple City Blvd.	Regional Water Quality Board	Received:	Mar 8, 1995
El Monte, CA 91731	Sample Descript: Water, Well E3	Analyzed:	Mar 9, 1995
Attention: L.P. Donovan	Lab Number: EC01196	Reported:	Mar 13, 1995

HALOGENATED AND AROMATIC VOLATILES (EPA 8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**9.7**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**99**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	10	N.D.
Benzene	5.0	N.D.
Ethylbenzene	5.0	N.D.
Toluene	5.0	N.D.
Total Xylenes	15	N.D.

* PID/ELCD were used in series for this analysis.

CONFIDENTIAL

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. Detection limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
4-Bromofluorobenzene	94%
Fluorobenzene	104%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Crown City Plating	Client Project ID: Ground Water Sampling	Sampled:	Mar 8, 1995
4350 Temple City Blvd.	Regional Water Quality Board	Received:	Mar 8, 1995
El Monte, CA 91731	Sample Descript: Water	Analyzed:	Mar 9, 1995
Attention: L.P. Donovan	First Sample #: EC01195	Reported:	Mar 13, 1995

TURBIDITY (EPA 180.1)

Laboratory Number	Sample Description	Detection Limit NTU	Sample Result NTU
EC01195	Well E2	1.0	20
EC01196	Well E3	1.0	80

CONFIDENTIAL

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating	Client Project ID: Ground Water Sampling	Sampled:	Mar 8, 1995
4350 Temple City Blvd.	Regional Water Quality Board	Received:	Mar 8, 1995
El Monte, CA 91731	Sample Descript: Water	Analyzed:	Mar 8, 1995
Attention: L.P. Donovan	First Sample #: EC01195	Reported:	Mar 13, 1995

pH (EPA 150.1)

Laboratory Number	Sample Description	Sample Result
EC01195	Well E2	7.1
EC01196	Well E3	7.7

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DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Analyzed: Mar 9, 1995
Reported: Mar 13, 1995
Matrix: Water

HALOGENATED AND AROMATIC VOLATILES (EPA 8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl Chloride	1.0	N.D.
Benzene	0.50	N.D.
Ethylbenzene	0.50	N.D.
Toluene	0.50	N.D.
Total Xylenes	1.5	N.D.

CONFIDENTIAL

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
4-Bromofluorobenzene	98%
Fluorobenzene	103%

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Analyzed: Mar 10, 1995
Reported: Mar 13, 1995
Matrix: Water

HALOGENATED AND AROMATIC VOLATILES (EPA 8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl Chloride	1.0	N.D.
Benzene	0.50	N.D.
Ethylbenzene	0.50	N.D.
Toluene	0.50	N.D.
Total Xylenes	1.5	N.D.

* PID/ELCD were used in series for this analysis.

CONFIDENTIAL

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
4-Bromofluorobenzene	104%
Fluorobenzene	107%

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CRWQCB - L.A. REGION
WELL INVESTIGATION PROGRAM
QA/QC REPORT

PREPARED FOR CROWN CITY PLATING
PROJECT: GROUND WATER SAMPLING
SAMPLED: 3/8/95

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Van Nuys, California 91406
(818) 779-1844
FAX (818) 779-1843

10020

CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Client Name/Address: Lawrence P. Donovan, Crown City Plating Co, 4350 Temple City Blvd, El Monte, CA 91731

Project: Groundwater Sampling, Regional Water Quality Board, Well investigation program

Project Manager: L.P. Donovan

Sampler: L.P. Donovan/E. Assefa

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives	pH	Turbidity	EPA 8010/8020						Special Instructions
Well E2	water	Glass	1-	3-8-95 11:45AM.	refrigeration	✓	✓	✓						
Well E2	water	Glass	1	3-8-95 12:30P.M	refrigeration	✓	✓	✓						

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Relinquished By:	Date/Time:	Received By:	Date/Time:
M Donovan III	3-8-95 3:00 PM	L DeLong	3/8/95 3:00PM
L DeLong	3/8/95 4:40		
		Received in Lab By: [signature]	3-8-95 4:40

Note: Samples will be disposed of after 30 days.

Turnaround Time: (check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ✓ normal ____

Sample Integrity: (check)
intact ✓ on ice ✓

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM (COVER PAGE 1)

Laboratory Name: Del Mar Analytical

Address: 2852 Alton Avenue

Irvine, CA 92714

Telephone/FAX: (714) 261-1022 / (714) 261-1228

ELAP Certification No.: 1197 Expiration Date: May 31, 1996

Authorized Signature:
Name, Title (print) Dan Harbs, Project Manager

Signature, Date: Dan Harbs 3/29/95

Client Name: Crown City Plating

Project No.: Ground Water Sampling, Regional Water Quality Board

Date(s) Sampled: 3/8/95 To

Date(s) Received: 3/8/95 To

Date(s) Reported: 3/13/95 To

Chain of Custody received: Yes X No

Comments:

(RWQCB LabForm; Ver 12/94)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM (COVER PAGE 2)

Organic Analyses	# of Samples	# of Samples Subcontracted
EPA 8021	2	0

Sample Condition: Acceptable

Inorganic Analyses	# of Samples	# of Samples Subcontracted
pH	2	0
Turbidity	2	0

Sample Condition: Acceptable

Microbiological Analyses	# of Samples	# of Samples Subcontracted

Sample Condition:

Other Types of Analyses	# of Samples	# of Samples Subcontracted

Sample Condition:

PROJECT NO: Ground Water Sampling (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: **EPA 8021** **REPORTING UNIT:** **µg/l**

DATE ANALYZED		3/9/95	3/9/95		
DATE EXTRACTED		3/9/95	3/9/95		
LAB SAMPLE ID		Method Blank	EC01196		
CLIENT SAMPLE ID		n/a	Well E3		
EXTRACTION SOLVENT		n/a	n/a		
EXTRACTION METHOD		5030	5030		
DILUTION FACTOR		1	10		
COMPOUND	**CRDL**				
Bromodichloromethane	0.50	< 0.50	< 0.50		
Bromoform	0.50	< 0.50	< 0.50		
Bromomethane	1.0	< 1.0	< 1.0		
Carbon tetrachloride	0.50	< 0.50	< 0.50		
Chlorobenzene	1.0	< 1.0	< 1.0		
Chloroethane	1.0	< 1.0	< 1.0		
2-Chloroethylvinyl ether	1.0	< 1.0	< 1.0		
Chloroform	0.50	< 0.50	< 0.50		
Chloromethane	1.0	< 1.0	< 1.0		
Dibromochloromethane	0.50	< 0.50	< 0.50		
1,2-Dichlorobenzene	1.0	< 1.0	< 1.0		
1,3-Dichlorobenzene	1.0	< 1.0	< 1.0		
1,4-Dichlorobenzene	1.0	< 1.0	< 1.0		
1,1-Dichloroethane	0.50	< 0.50	< 0.50		
1,2-Dichloroethane	0.50	< 0.50	< 0.50		
1,1-Dichloroethene	0.50	< 0.50	< 0.50		
cis-1,2-Dichloroethene	0.50	< 0.50	< 0.50		
trans-1,2-Dichloroethene	0.50	< 0.50	< 0.50		
1,2-Dichloropropane	0.50	< 0.50	< 0.50		
cis-1,3-Dichloropropene	0.50	< 0.50	< 0.50		
trans-1,3-Dichloropropene	0.50	< 0.50	< 0.50		
Methylene chloride	1.0	< 1.0	**12**		
1,1,2,2-Tetrachloroethane	0.50	< 0.50	< 0.50		
Tetrachloroethene	0.50	< 0.50	**9.7**		
1,1,1-Trichloroethane	0.50	< 0.50	< 0.50		
1,1,2-Trichloroethane	0.50	< 0.50	< 0.50		
Trichloroethene	0.50	< 0.50	**99**		
Trichlorofluoromethane	0.50	< 0.50	< 0.50		
Vinyl chloride	0.50	< 0.50	< 0.50		

PROJECT NO: Ground Water Sampling

ANALYTICAL RESULT FOR ORGANICS (cont'd)

METHOD: **EPA 8021** **REPORTING UNIT:** **µg/l**

	LAB SAMPLE ID	Method Blank	EC01196		
	CLIENT SAMPLE ID	n/a	Well E3		
COMPOUND	**CRDL**				
Benzene	0.50	< 0.50	< 0.50		
Ethylbenzene	0.50	< 0.50	< 0.50		
Toluene	0.50	< 0.50	< 0.50		
Total Xylenes	1.0	< 1.0	< 1.0		

SURROGATE	SPIKE CONC	ACCEPT LIMITS %	% RECOVERY	% RECOVERY	% RECOVERY	% RECOVERY
4-Bromofluorobenzene	10	80-120	98	94		
Fluorobenzene	10	80-120	103	104		

PROJECT NO: Ground Water Sampling (RWQCB LabForm 10A; Ver12/94)

ANALYTICAL RESULT FOR ORGANICS

METHOD: **EPA 8021** **REPORTING UNIT:** **µg/l**

DATE ANALYZED		3/10/95	3/10/95		
DATE EXTRACTED		3/10/95	3/10/95		
LAB SAMPLE ID		Method Blank	EC01195		
CLIENT SAMPLE ID		n/a	Well E2		
EXTRACTION SOLVENT		n/a	n/a		
EXTRACTION METHOD		5030	5030		
DILUTION FACTOR		1	10		
COMPOUND	**CRDL**				
Bromodichloromethane	0.50	< 0.50	< 0.50		
Bromoform	0.50	< 0.50	< 0.50		
Bromomethane	1.0	< 1.0	< 1.0		
Carbon tetrachloride	0.50	< 0.50	< 0.50		
Chlorobenzene	1.0	< 1.0	< 1.0		
Chloroethane	1.0	< 1.0	< 1.0		
2-Chloroethylvinyl ether	1.0	< 1.0	< 1.0		
Chloroform	0.50	< 0.50	< 0.50		
Chloromethane	1.0	< 1.0	< 1.0		
Dibromochloromethane	0.50	< 0.50	< 0.50		
1,2-Dichlorobenzene	1.0	< 1.0	< 1.0		
1,3-Dichlorobenzene	1.0	< 1.0	< 1.0		
1,4-Dichlorobenzene	1.0	< 1.0	< 1.0		
1,1-Dichloroethane	0.50	< 0.50	< 0.50		
1,2-Dichloroethane	0.50	< 0.50	< 0.50		
1,1-Dichloroethene	0.50	< 0.50	< 0.50		
cis-1,2-Dichloroethene	0.50	< 0.50	< 0.50		
trans-1,2-Dichloroethene	0.50	< 0.50	< 0.50		
1,2-Dichloropropane	0.50	< 0.50	< 0.50		
cis-1,3-Dichloropropene	0.50	< 0.50	< 0.50		
trans-1,3-Dichloropropene	0.50	< 0.50	< 0.50		
Methylene chloride	1.0	< 1.0	**11**		
1,1,2,2-Tetrachloroethane	0.50	< 0.50	< 0.50		
Tetrachloroethene	0.50	< 0.50	**8.3**		
1,1,1-Trichloroethane	0.50	< 0.50	< 0.50		
1,1,2-Trichloroethane	0.50	< 0.50	< 0.50		
Trichloroethene	0.50	< 0.50	**300**		
Trichlorofluoromethane	0.50	< 0.50	< 0.50		
Vinyl chloride	0.50	< 0.50	< 0.50		

PROJECT NO: Ground Water Sampling

ANALYTICAL RESULT FOR ORGANICS (cont'd)

METHOD: **EPA 8021** **REPORTING UNIT:** **µg/l**

	LAB SAMPLE ID	Method Blank	EC01195		
	CLIENT SAMPLE ID	n/a	Well E2		
COMPOUND	**CRDL**				
Benzene	0.50	< 0.50	< 0.50		
Ethylbenzene	0.50	< 0.50	< 0.50		
Toluene	0.50	< 0.50	< 0.50		
Total Xylenes	1.0	< 1.0	< 1.0		

SURROGATE	SPIKE CONC	ACCEPT LIMITS %	% RECOVERY	% RECOVERY	% RECOVERY	% RECOVERY
4-Bromofluorobenzene	10	80-120	104	114		
Fluorobenzene	10	80-120	107	86		

PROJECT NO: Ground Water Sampling (RWQCB LabForm 10A; Ver12/94)

QA/QC REPORT

II. MATRIX SPIKE (MS)/ MATRIX SPIKE DUPLICATE (MSD)

Date Performed: 3/9/95
Batch Number: EC09101W
Lab Sample I.D.: EC00633
Analytical Method: EPA 8021
Reporting Unit: µg/L

Analyte	Sample Result	Spike Conc	MS	% MS	Spike Conc (Dup)	MSD	%MSD	RPD	MS/MSD Limit	RPD Limit
Benzene	0	10	9.3	93%	10	9.3	93%	0.0%	80-120	< 20%
Chloroform	0	10	9.0	90%	10	9.1	91%	1.1%	80-120	< 20%
1,1-Dichloroethane	0	10	9.4	94%	10	8.9	89%	5.5%	80-120	< 20%
1,2-Dichloroethane	0	10	9.5	95%	10	9.7	97%	2.1%	80-120	< 20%
1,1-Dichloroethene	0.023	10	9.7	97%	10	9.4	94%	3.1%	80-120	< 20%
Tetrachloroethene	0	10	8.7	87%	10	8.2	82%	5.9%	80-120	< 20%
Toluene	0	10	9.1	91%	10	9.0	90%	1.1%	80-120	< 20%
Trichloroethene	0	10	7.8	78%	10	7.7	77%	1.3%	80-120	< 20%

III. LABORATORY QUALITY CONTROL CHECK SAMPLE (LCS)

Date Performed: 3/9/95
Supply Source: Supelco
Lot Number: LA 28800
Date of Source: 9/3/94
Analytical Method: EPA 8021
Reporting Unit: µg/L
Lab LCS I.D.: LCS

Analyte	Spike Concentration	Result	% Recovery	Acceptance % Recovery Limit
Benzene	10	9.7	97%	80-120
Chloroform	10	9.1	91%	80-120
1,1-Dichloroethane	10	10	100%	80-120
1,2-Dichloroethane	10	9.7	97%	80-120
1,1-Dichloroethene	10	10	100%	80-120
Tetrachloroethene	10	9.6	96%	80-120
Toluene	10	9.8	98%	80-120
Trichloroethene	10	11	110%	80-120

PROJECT NO: Ground Water Sampling (RWQCB LabForm 10A; Ver12/94)

QA/QC REPORT

II. MATRIX SPIKE (MS)/ MATRIX SPIKE DUPLICATE (MSD)

Date Performed: 3/10/95
Batch Number: EC10101W
Lab Sample I.D.: EC01487
Analytical Method: EPA 8021
Reporting Unit: µg/L

Analyte	Sample Result	Spike Conc	MS	% MS	Spike Conc (Dup)	MSD	%MSD	RPD	MS/MSD Limit	RPD Limit
Benzene	0	10	9.1	91%	10	9.6	96%	5.3%	80-120	< 20%
Chloroform	0	10	9.1	91%	10	9.1	91%	0.0%	80-120	< 20%
1,1-Dichloroethane	0	10	9.3	93%	10	9.6	96%	3.2%	80-120	< 20%
1,2-Dichloroethane	0	10	11	110%	10	11	110%	0.0%	80-120	< 20%
1,1-Dichloroethene	0	10	7.9	79%	10	9.7	97%	20.5%	80-120	< 20%
Tetrachloroethene	0	10	7.9	79%	10	8.7	87%	9.6%	80-120	< 20%
Toluene	0	10	9.2	92%	10	9.7	97%	5.3%	80-120	< 20%
Trichloroethene	0	10	9.4	94%	10	10	100%	6.2%	80-120	< 20%

III. LABORATORY QUALITY CONTROL CHECK SAMPLE (LCS)

Date Performed: 3/10/95
Supply Source: Supelco
Lot Number: LA 28800
Date of Source: 9/3/94
Analytical Method: EPA 8021
Reporting Unit: µg/L
Lab LCS I.D.: LCS

Analyte	Spike Concentration	Result	% Recovery	Acceptance % Recovery Limit
Benzene	10	9.5	95%	80-120
Chloroform	10	9.2	92%	80-120
1,1-Dichloroethane	10	9.0	90%	80-120
1,2-Dichloroethane	10	9.2	92%	80-120
1,1-Dichloroethene	10	9.4	94%	80-120
Tetrachloroethene	10	8.3	83%	80-120
Toluene	10	9.6	96%	80-120
Trichloroethene	10	10	100%	80-120

Calibration data for Sequence file: **h:\data\gc10\m09p.seq**

Initial Calibration Date:	2/23/95	PID Sample File:	h:\data\gc10\p-602-c.smp	Supply Source:	Supelco
Created by:	AB/DM	ELCD Sample File:	h:\data\gc10\e-601-c.smp	Lot Number:	LA 31224
Midpoint Acquire Date:	3/9/95	PID MP File:	h:\data\gc10\m09a001.rst	Standard Prep. Date:	3/9/95
Date Printed:	03/27/95	ELCD MP File:	h:\data\gc10\m09b001.rst		

INITIAL CALIBRATION — DAILY MIDPOINT CALIBRATION

BROMODICHLOROMETHAN (RT = 18.69 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	31072	2.311
2	20	47608	1.401
3	50	160832	1.649
4	100	297724	1.491
5	150	451023	1.522
6	200	457695	1.187
7	300	667494	1.401

(Ave. RF = 1.566)
%RSD = 22.84

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.418	10.0	9.6	9.5	166128	≤ 15%

BROMOFORM (RT = 28.58 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	15872	0.467
3	50	49501	0.507
4	100	109194	0.547
5	150	170441	0.575
6	200	197399	0.512

(Ave. RF = 0.522)
%RSD = 7.88

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.459	10.0	8.8	12	53778	≤ 15%

BROMOMETHANE (RT = 4.09 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	40741	0.418
4	100	73704	0.369
5	150	139363	0.470
6	200	187598	0.487
7	300	234164	0.492

(Ave. RF = 0.447)
%RSD = 11.75

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.501	10.0	11.4	12	58651	≤ 15%

CARBON TETRACHLORIDE (RT = 15.91 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	21428	1.594
2	20	52432	1.543
3	50	193025	1.979
4	100	393465	1.970
5	150	551264	1.860
6	200	578137	1.500
7	300	864113	1.814

(Ave. RF = 1.751)
%RSD = 11.58

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.872	10.0	11.1	6.9	219334	≤ 15%

CHLOROETHANE (RT = 4.30 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	14099	1.049
2	20	34740	1.022
3	50	114135	1.170
4	100	172068	0.862
5	150	328261	1.108
6	200	432888	1.123
7	300	508896	1.068

(Ave. RF = 1.057)
%RSD = 9.40

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.002	10.0	9.9	5.3	117386	≤ 15%

CHLOROFORM (RT = 11.78 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	31788	2.365
2	20	79773	2.348
3	50	226520	2.322
4	100	447902	2.243
5	150	642194	2.167
6	200	837181	2.172
7	300	976997	2.051

(Ave. RF = 2.238)
%RSD = 5.15

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
2.029	10.0	9.4	9.4	237700	≤ 15%

CHLOROMETHANE

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	12829	0.954
2	20	30658	0.902
3	50	99360	1.019
4	100	154602	0.774
5	150	287139	0.969
6	200	371617	0.964
7	300	447447	0.939

(Ave. RF = 0.932)
%RSD = 8.34

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.776	10.0	8.7	17	90942	≤ 15%

DIBROMOCHLOROMETHAN (RT = 25.70 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	22062	0.649
3	50	83020	0.851
4	100	172337	0.863
5	150	265134	0.895
6	200	299313	0.777

(Ave. RF = 0.807)
%RSD = 12.17

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.794	10.0	9.8	1.5	93087	≤ 15%

MECL2 (RT = 6.57 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	30229	2.249
2	20	67309	1.981
3	50	189833	1.946
4	100	364250	1.824
5	150	536361	1.810
6	200	696434	1.807
7	300	906305	1.902

(Ave. RF = 1.931)
%RSD = 8.08

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.798	10.0	9.7	6.9	210670	≤ 15%

1,1-DCA (RT = 8.94 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	15297	1.138
2	20	42177	1.241
3	50	147553	1.513
4	100	299894	1.502
5	150	446989	1.508
6	200	560036	1.453
7	300	705795	1.482

(Ave. RF = 1.405)
%RSD = 10.79

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.430	10.0	10.5	1.8	167534	≤ 15%

1,2-DCA (RT = 14.35 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	39667	1.167
3	50	131503	1.348
4	100	281327	1.409
5	150	399411	1.348
6	200	429839	1.115
7	300	665910	1.398

(Ave. RF = 1.297)
%RSD = 9.61

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.283	10.0	10.0	1.1	150314	≤ 15%

1,1-DCE (RT = 6.22 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	15450	1.149
2	20	40377	1.188
3	50	132145	1.355
4	100	273509	1.370
5	150	391611	1.321
6	200	522961	1.357
7	300	662028	1.390

(Ave. RF = 1.304)
%RSD = 7.32

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.274	10.0	10.1	2.3	149242	≤ 15%

T-1,2-DCE (RT = 8.22 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	39117	1.151
3	50	131296	1.346
4	100	278939	1.397
5	150	411229	1.387
6	200	528364	1.371
7	300	669941	1.406

(Ave. RF = 1.343)
%RSD = 7.18

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.301	10.0	9.8	3.2	152419	≤ 15%

1,2-DCP (RT = 18.33 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	31329	0.922
3	50	118423	1.214
4	100	255328	1.278
5	150	385163	1.300
6	200	393915	1.022
7	300	602122	1.264

(Ave. RF = 1.167)
%RSD = 13.43

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.223	10.0	10.6	4.8	143327	≤ 15%

C-1,3-DCP (RT = 21.86 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	31275	2.327
2	20	69298	2.039
3	50	217335	2.228
4	100	426488	2.136
5	150	636304	2.147
6	200	663877	1.722
7	300	995129	2.089

(Ave. RF = 2.098)
%RSD = 9.08

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
2.013	10.0	10.0	4.1	235877	≤ 15%

T-1,3-DCP (RT = 24.15 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	31931	0.327
4	100	76179	0.381
5	150	121703	0.411
6	200	130395	0.338

(Ave. RF = 0.364)
%RSD = 10.60

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.376	10.0	10.3	3.3	44104	≤ 15%

1,1,2,2-TCA (RT = 29.10 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	14131	0.832
2	20	43178	1.271
3	50	103681	1.063
5	150	283452	0.956
7	300	554555	1.088

(Ave. RF = 1.042)
%RSD = 15.65

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.886	10.0	8.5	15	103771	≤ 15%

TETRACHLOROETHENE (RT = 26.67 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	32290	2.402
2	20	59707	1.757
3	50	186547	1.913
4	100	353649	1.771
5	150	529256	1.786
6	200	547253	1.420
7	300	1063362	2.232

(Ave. RF = 1.897)
%RSD = 17.26

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.665	10.0	9.2	12	195148	≤ 15%

1,1,1-TCA (RT = 14.65 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	23541	1.751
2	20	62199	1.830
3	50	188762	1.935
4	100	390470	1.955
5	150	541282	1.826
6	200	558639	1.449
7	300	830881	1.744

(Ave. RF = 1.785)
%RSD = 9.45

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.743	10.0	10.2	2.3	204212	≤ 15%

1,1,2-TCA (RT = 24.48 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	20885	1.554
2	20	43097	1.268
3	50	150498	1.543
4	100	292748	1.466
5	150	440838	1.487
6	200	459964	1.193
7	300	906105	1.902

(Ave. RF = 1.488)
%RSD = 15.39

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.289	10.0	9.1	13	151014	≤ 15%

TCE (RT = 18.53 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	55374	1.630
3	50	191388	1.962
4	100	446937	2.238

(Ave. RF = 1.896)
%RSD = 12.31

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits

5	150	571299	1.928		1.668	10.0	8.9	12	195417	≤ 15%
6	200	628272	1.630							
7	300	947132	1.988							

TRICHLOROFLUOROMETH (RT = 5.25 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	14283	1.062							
2	20	38876	1.144							
3	50	133781	1.372	(Ave. RF = 1.269)						
4	100	212584	1.064	%RSD = 13.38	1.402	10.0	11.5	11	164329	≤ 15%
5	150	414447	1.398							
6	200	547803	1.421							
7	300	675727	1.418							

VINYL CHLORIDE (RT = 3.55 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	9352	0.696							
2	20	24337	0.716							
3	50	86027	0.882	(Ave. RF = 0.803)						
4	100	138187	0.692	%RSD = 12.11	0.742	10.0	9.6	7.7	86901	≤ 15%
5	150	254837	0.860							
6	200	334262	0.867							
7	300	434285	0.912							

BENZENE (RT = 16.01 Minutes) PID

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	56382	1.246							
2	20	104369	1.166							
3	50	255508	1.162	(Ave. RF = 1.141)						
4	100	501554	1.113	%RSD = 4.83	1.128	10.0	9.9	1.2	240156	≤ 15%
5	150	739978	1.114							
6	200	978047	1.105							
7	300	1427571	1.084							

CHLOROBNZN (RT = 27.89 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
2	20	19684	0.579							
3	50	59415	0.609							
4	100	123240	0.617	(Ave. RF = 0.591)						
5	150	188694	0.637	%RSD = 8.03	0.607	10.0	10.3	2.6	71073	≤ 15%
6	200	198478	0.515							

1,2-DCB (RT = 31.45 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	16789	1.249							
2	20	40794	1.201							
3	50	98976	1.015	(Ave. RF = 1.115)						
4	100	200934	1.006	%RSD = 10.63	0.913	10.0	8.6	18	106986	≤ 15%
5	150	297839	1.005							
6	200	409668	1.063							
7	300	602094	1.264							

1,3-DCB (RT = 31.02 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	11773	0.876							
2	20	34849	1.026							
3	50	97898	1.004	(Ave. RF = 1.014)						
4	100	187379	0.938	%RSD = 11.70	0.954	10.0	9.8	5.9	111809	≤ 15%
5	150	286007	0.965							
6	200	400981	1.040							
7	300	596077	1.251							

1,4-DCB (RT = 31.10 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	22209	1.652							
2	20	51967	1.529							
3	50	111078	1.139	(Ave. RF = 1.317)						
4	100	230707	1.155	%RSD = 15.96	1.035	10.0	8.2	21	121236	≤ 15%
5	150	338161	1.141							

6	200	464378	1.205
7	300	664367	1.395

ETHYLBENZENE (RT = 28.22 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	10	49367	1.091
2	20	86329	0.964
3	50	208484	0.948
4	100	409596	0.909
5	150	609879	0.918
6	200	805009	0.910
7	300	1177586	0.894

(Ave. RF = 0.948)
%RSD = 7.16

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.940	10.0	9.9	0.82	200196	≤ 15%

TOLUENE (RT = 24.96 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	10	55189	1.220
2	20	97867	1.093
3	50	231032	1.051
4	100	457897	1.016
5	150	687977	1.036
6	200	895232	1.012
7	300	1317165	1.000

(Ave. RF = 1.061)
%RSD = 7.22

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.044	10.0	9.8	1.6	222288	≤ 15%

M,P-XYLENES (RT = 28.54 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	20	107112	1.184
2	40	194792	1.088
3	100	479602	1.091
4	200	946353	1.050
5	300	1408313	1.060
6	400	1859099	1.050
7	600	2700524	1.025

(Ave. RF = 1.078)
%RSD = 4.81

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.075	20.0	19.9	0.29	457942	≤ 15%

O-XYLENE (RT = 29.07 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	10	43459	0.961
2	20	81766	0.913
3	50	201063	0.915
4	100	397455	0.882
5	150	600050	0.903
6	200	793997	0.897
7	300	1161980	0.882

(Ave. RF = 0.908)
%RSD = 2.96

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.912	10.0	10.1	0.52	194298	≤ 15%

2-CVE (RT = 21.18 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	35449	0.363
4	100	82525	0.413
5	150	130162	0.439
6	200	135162	0.351
7	300	212663	0.446

(Ave. RF = 0.403)
%RSD = 10.83

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.057	10.0	1.4	86	6702	≤ 15%

DICHLORODIFLUOROMETH (RT = 3.12 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	10267	0.302
3	50	45164	0.463
4	100	78268	0.392
5	150	153369	0.517
6	200	203683	0.528
7	300	244754	0.514

(Ave. RF = 0.453)
%RSD = 19.79

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.295	10.0	6.6	35	34624	≤ 15%

CIS-1,2-DCE (RT = 10.92 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	42625	1.254
3	50	150803	1.546
4	100	310772	1.556
5	150	457847	1.545
6	200	594957	1.544
7	300	727895	1.528

(Ave. RF = 1.495)
%RSD = 7.92

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.412	10.0	9.5	5.6	165394	≤ 15%

EDB (RT = 26.22 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
3	50	45950	0.471							
4	100	99340	0.497							
5	150	159484	0.538	(Ave. RF = 0.487)						
6	200	170672	0.443	%RSD = 8.32	0.508	10.0	10.4	4.3	59560	≤ 15%

Calibration data for Sequence file: **h:\data\gc10\m10p.seq**

Initial Calibration Date:	2/23/95	PID Sample File:	h:\data\gc10\p-602-c.smp	Supply Source:	Supelco
Created by:	AB/DM	ELCD Sample File:	h:\data\gc10\e-601-c.smp	Lot Number:	LA 31224
Midpoint Acquire Date:	3/10/95	PID MP File:	h:\data\gc10\m10a001.rst	Standard Prep. Date:	3/9/95
Date Printed:	03/27/95	ELCD MP File:	h:\data\gc10\m10b001.rst		

INITIAL CALIBRATION — DAILY MIDPOINT CALIBRATION

BROMODICHLOROMETHAN (RT = 18.69 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	31072	2.311
2	20	47608	1.401
3	50	160832	1.649
4	100	297724	1.491
5	150	451023	1.522
6	200	457695	1.187
7	300	667494	1.401

(Ave. RF = 1.566)
%RSD = 22.84

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.344	10.0	9.1	14	162733	≤ 15%

BROMOFORM (RT = 28.58 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	15872	0.467
3	50	49501	0.507
4	100	109194	0.547
5	150	170441	0.575
6	200	197399	0.512

(Ave. RF = 0.522)
%RSD = 7.88

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.445	10.0	8.5	15	53911	≤ 15%

BROMOMETHANE (RT = 4.09 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	40741	0.418
4	100	73704	0.369
5	150	139363	0.470
6	200	187598	0.487
7	300	234164	0.492

(Ave. RF = 0.447)
%RSD = 11.75

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.558	10.0	12.7	25	67567	≤ 15%

CARBON TETRACHLORIDE (RT = 15.91 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	21428	1.594
2	20	52432	1.543
3	50	193025	1.979
4	100	393465	1.970
5	150	551264	1.860
6	200	578137	1.500
7	300	864113	1.814

(Ave. RF = 1.751)
%RSD = 11.58

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.894	10.0	11.2	8.1	229377	≤ 15%

CHLOROETHANE (RT = 4.30 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	14099	1.049
2	20	34740	1.022
3	50	114135	1.170
4	100	172068	0.862
5	150	328261	1.108
6	200	432888	1.123
7	300	508896	1.068

(Ave. RF = 1.057)
%RSD = 9.40

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.056	10.0	10.4	0.16	127878	≤ 15%

CHLOROFORM (RT = 11.78 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	31788	2.365
2	20	79773	2.348
3	50	226520	2.322
4	100	447902	2.243
5	150	642194	2.167
6	200	837181	2.172
7	300	976997	2.051

(Ave. RF = 2.238)
%RSD = 5.15

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
2.053	10.0	9.6	8.3	248720	≤ 15%

CHLOROMETHANE

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	12829	0.954
2	20	30658	0.902
3	50	99360	1.019
4	100	154602	0.774
5	150	287139	0.969
6	200	371617	0.964
7	300	447447	0.939

(Ave. RF = 0.932)
%RSD = 8.34

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.990	10.0	11.1	6.3	119946	≤ 15%

DIBROMOCHLOROMETHAN (RT = 25.70 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	22062	0.649
3	50	83020	0.851
4	100	172337	0.863
5	150	265134	0.895
6	200	299313	0.777

(Ave. RF = 0.807)
%RSD = 12.17

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.810	10.0	10.0	0.39	98118	≤ 15%

MECL2 (RT = 6.57 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	30229	2.249
2	20	67309	1.981
3	50	189833	1.946
4	100	364250	1.824
5	150	536361	1.810
6	200	696434	1.807
7	300	906305	1.902

(Ave. RF = 1.931)
%RSD = 8.08

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.833	10.0	9.9	5.1	222046	≤ 15%

1,1-DCA (RT = 8.94 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	15297	1.138
2	20	42177	1.241
3	50	147553	1.513
4	100	299894	1.502
5	150	446989	1.508
6	200	560036	1.453
7	300	705795	1.482

(Ave. RF = 1.405)
%RSD = 10.79

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.396	10.0	10.3	0.67	169064	≤ 15%

1,2-DCA (RT = 14.35 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	39667	1.167
3	50	131503	1.348
4	100	281327	1.409
5	150	399411	1.348
6	200	429839	1.115
7	300	665910	1.398

(Ave. RF = 1.297)
%RSD = 9.61

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.297	10.0	10.1	0.018	157129	≤ 15%

1,1-DCE (RT = 6.22 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	15450	1.149
2	20	40377	1.188
3	50	132145	1.355
4	100	273509	1.370
5	150	391611	1.321
6	200	522961	1.357
7	300	662028	1.390

(Ave. RF = 1.304)
%RSD = 7.32

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.336	10.0	10.6	2.5	161880	≤ 15%

T-1,2-DCE (RT = 8.22 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	39117	1.151
3	50	131296	1.346
4	100	278939	1.397
5	150	411229	1.387
6	200	528364	1.371
7	300	669941	1.406

(Ave. RF = 1.343)
%RSD = 7.18

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.343	10.0	10.1	0.028	162728	≤ 15%

1,2-DCP (RT = 18.33 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	31329	0.922
3	50	118423	1.214
4	100	255328	1.278
5	150	385163	1.300
6	200	393915	1.022
7	300	602122	1.264

(Ave. RF = 1.167)
%RSD = 13.43

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.294	10.0	11.2	11	156703	≤ 15%

C-1,3-DCP (RT = 21.86 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	31275	2.327
2	20	69298	2.039
3	50	217335	2.228
4	100	426488	2.136
5	150	636304	2.147
6	200	663877	1.722
7	300	995129	2.089

(Ave. RF = 2.098)
%RSD = 9.08

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
2.002	10.0	10.0	4.6	242525	≤ 15%

T-1,3-DCP (RT = 24.15 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	31931	0.327
4	100	76179	0.381
5	150	121703	0.411
6	200	130395	0.338

(Ave. RF = 0.364)
%RSD = 10.60

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.395	10.0	10.8	8.3	47808	≤ 15%

1,1,2,2-TCA (RT = 29.10 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	14131	0.832
2	20	43178	1.271
3	50	103681	1.063
5	150	283452	0.956
7	300	554555	1.088

(Ave. RF = 1.042)
%RSD = 15.65

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.957	10.0	9.2	8.1	115937	≤ 15%

TETRACHLOROETHENE (RT = 26.67 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	32290	2.402
2	20	59707	1.757
3	50	186547	1.913
4	100	353649	1.771
5	150	529256	1.786
6	200	547253	1.420
7	300	1063362	2.232

(Ave. RF = 1.897)
%RSD = 17.26

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.674	10.0	9.3	12	202785	≤ 15%

1,1,1-TCA (RT = 14.65 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	23541	1.751
2	20	62199	1.830
3	50	188762	1.935
4	100	390470	1.955
5	150	541282	1.826
6	200	558639	1.449
7	300	830881	1.744

(Ave. RF = 1.785)
%RSD = 9.45

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.764	10.0	10.3	1.1	213697	≤ 15%

1,1,2-TCA (RT = 24.48 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
1	10	20885	1.554
2	20	43097	1.268
3	50	150498	1.543
4	100	292748	1.466
5	150	440838	1.487
6	200	459964	1.193
7	300	906105	1.902

(Ave. RF = 1.488)
%RSD = 15.39

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.315	10.0	9.2	12	159229	≤ 15%

TCE (RT = 18.53 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	55374	1.630
3	50	191388	1.962
4	100	446937	2.238

(Ave. RF = 1.896)
%RSD = 12.31

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits

5	150	571299	1.928		1.668	10.0	8.9	12	202026	≤ 15%
6	200	628272	1.630							
7	300	947132	1.988							

TRICHLOROFLUOROMETH (RT = 5.25 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	14283	1.062							
2	20	38876	1.144							
3	50	133781	1.372	(Ave. RF = 1.269)						
4	100	212584	1.064	%RSD = 13.38	1.504	10.0	12.3	19	182180	≤ 15%
5	150	414447	1.398							
6	200	547803	1.421							
7	300	675727	1.418							

VINYL CHLORIDE (RT = 3.55 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	9352	0.696							
2	20	24337	0.716							
3	50	86027	0.882	(Ave. RF = 0.803)						
4	100	138187	0.692	%RSD = 12.11	0.891	10.0	11.5	11	107965	≤ 15%
5	150	254837	0.860							
6	200	334262	0.867							
7	300	434285	0.912							

BENZENE (RT = 16.01 Minutes) PID

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	56382	1.246							
2	20	104369	1.166							
3	50	255508	1.162	(Ave. RF = 1.141)						
4	100	501554	1.113	%RSD = 4.83	1.147	10.0	10.1	0.53	243964	≤ 15%
5	150	739978	1.114							
6	200	978047	1.105							
7	300	1427571	1.084							

CHLOROBNZN (RT = 27.89 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
2	20	19684	0.579							
3	50	59415	0.609							
4	100	123240	0.617	(Ave. RF = 0.591)						
5	150	188694	0.637	%RSD = 8.03	0.640	10.0	10.8	8.1	77462	≤ 15%
6	200	198478	0.515							

1,2-DCB (RT = 31.45 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	16789	1.249							
2	20	40794	1.201							
3	50	98976	1.015	(Ave. RF = 1.115)						
4	100	200934	1.006	%RSD = 10.63	0.936	10.0	8.8	16	113392	≤ 15%
5	150	297839	1.005							
6	200	409668	1.063							
7	300	602094	1.264							

1,3-DCB (RT = 31.02 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	11773	0.876							
2	20	34849	1.026							
3	50	97898	1.004	(Ave. RF = 1.014)						
4	100	187379	0.938	%RSD = 11.70	0.915	10.0	9.4	9.7	110876	≤ 15%
5	150	286007	0.965							
6	200	400981	1.040							
7	300	596077	1.251							

1,4-DCB (RT = 31.10 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response		Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1	10	22209	1.652							
2	20	51967	1.529							
3	50	111078	1.139	(Ave. RF = 1.317)						
4	100	230707	1.155	%RSD = 15.96	0.996	10.0	7.9	24	120646	≤ 15%
5	150	338161	1.141							

6	200	464378	1.205
7	300	664367	1.395

ETHYLBENZENE (RT = 28.22 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	10	49367	1.091
2	20	86329	0.964
3	50	208484	0.948
4	100	409596	0.909
5	150	609879	0.918
6	200	805009	0.910
7	300	1177586	0.894

(Ave. RF = 0.948)
%RSD = 7.16

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.968	10.0	10.2	2.1	205835	≤ 15%

TOLUENE (RT = 24.96 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	10	55189	1.220
2	20	97867	1.093
3	50	231032	1.051
4	100	457897	1.016
5	150	687977	1.036
6	200	895232	1.012
7	300	1317165	1.000

(Ave. RF = 1.061)
%RSD = 7.22

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.075	10.0	10.1	1.4	228653	≤ 15%

M,P-XYLENES (RT = 28.54 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	20	107112	1.184
2	40	194792	1.088
3	100	479602	1.091
4	200	946353	1.050
5	300	1408313	1.060
6	400	1859099	1.050
7	600	2700524	1.025

(Ave. RF = 1.078)
%RSD = 4.81

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.092	20.0	20.3	1.3	464554	≤ 15%

O-XYLENE (RT = 29.07 Minutes) PID

Calibration Levels

Level	Amount	Area	Response
1	10	43459	0.961
2	20	81766	0.913
3	50	201063	0.915
4	100	397455	0.882
5	150	600050	0.903
6	200	793997	0.897
7	300	1161980	0.882

(Ave. RF = 0.908)
%RSD = 2.96

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.991	10.0	10.9	9.1	210615	≤ 15%

2-CVE (RT = 21.18 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	35449	0.363
4	100	82525	0.413
5	150	130162	0.439
6	200	135162	0.351
7	300	212663	0.446

(Ave. RF = 0.403)
%RSD = 10.83

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.038	10.0	1.0	91	4606	≤ 15%

DICHLORODIFLUOROMETH (RT = 3.12 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	10267	0.302
3	50	45164	0.463
4	100	78268	0.392
5	150	153369	0.517
6	200	203683	0.528
7	300	244754	0.514

(Ave. RF = 0.453)
%RSD = 19.79

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.683	10.0	15.3	51	82743	≤ 15%

CIS-1,2-DCE (RT = 10.92 Minutes) ELCD

Calibration Levels

Level	Amount	Area	Response
2	20	42625	1.254
3	50	150803	1.546
4	100	310772	1.556
5	150	457847	1.545
6	200	594957	1.544
7	300	727895	1.528

(Ave. RF = 1.495)
%RSD = 7.92

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
1.460	10.0	9.9	2.3	176899	≤ 15%

EDB (RT = 26.22 Minutes)

ELCD

Calibration Levels

Level	Amount	Area	Response
3	50	45950	0.471
4	100	99340	0.497
5	150	159484	0.538
6	200	170672	0.443

(Ave. RF = 0.487)
%RSD = 8.32

Daily RF	Amount	Result	% diff	Area	% diff Accep. limits
0.519	10.0	10.6	6.4	62826	≤ 15%

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Crown City Plating	Client Project ID: Ground Water Sampling	Sampled:	Mar 8, 1995
4350 Temple City Blvd.	Regional Water Quality Board	Received:	Mar 8, 1995
El Monte, CA 91731	Sample Descript: Water	Analyzed:	Mar 8, 1995
Attention: L.P. Donovan	First Sample #: EC01195	Reported:	Mar 13, 1995

pH (EPA 150.1)

Laboratory Number	Sample Description	Sample Result
EC01195	Well E2	7.1
EC01196	Well E3	7.7

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DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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10020

CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Client Name/Address: Lawrence P. Donovan, Crown City Plating Co., 4350 Temple City Blvd., El Monte, CA 91731

Project: Groundwater Sampling, Regional Water Quality Board Well investigation program

Project Manager: L. P. Donovan

Sampler: L. P. Donovan/E. Assefa

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives	pH	Turbidity	EPA 8010/8020						Special Instructions
Well E2	water	Glass	1-	3-8-95 11:45AM.	refrigeration	✓	✓	✓						
Well E2	water	Glass	1	3-8-95 12:30P.M	refrigeration	✓	✓	✓						

Relinquished By:	Date/Time:	Received By:	Date/Time:
M Donovan	3-8-95 3:00PM	L DeLacy	3/8/95 3:00PM
L. DeLacy	3/8/95 4:40		
		Received in Lab By:	3-8-95 4:40

Note: Samples will be disposed of after 30 days.

Turnaround Time: (check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ✓ normal ____

Sample Integrity: (check)
intact ✓ on ice ✓

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Crown City Plating	Client Project ID:	Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.		Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript:	Water, Well E-1	Extracted: Jul 26, 1995
Attention: L.P. Donovan	Lab Number:	EG02569	Analyzed: Jul 26, 1995
			Reported: Aug 4, 1995

HALOGENATED AND AROMATIC VOLATILES by GC (EPA 5030/8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	**5.0**	**16**
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**60**
1,1,1-Trichloroethane	**5.0**	**5.0**
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**290**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	10	N.D.
Benzene	5.0	N.D.
Ethylbenzene	5.0	N.D.
Toluene	5.0	N.D.
Total Xylenes	15	N.D.

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. Detection limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	106%
a,a,a-Trifluorotoluene	106%

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Crown City Plating	Client Project ID: Groundwater Monitoring	Sampled:	Jul 24, 1995
4350 Temple City Blvd.	Well Investigation Program	Received:	Jul 25, 1995
El Monte, CA 91731	Sample Descript: Water, Well E-2	Extracted:	Jul 26, 1995
Attention: L.P. Donovan	Lab Number: EG02570	Analyzed:	Jul 26, 1995
		Reported:	Aug 4, 1995

HALOGENATED AND AROMATIC VOLATILES by GC (EPA 5030/8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	**5.0**	**8.0**
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**11**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**290**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	10	N.D.
Benzene	5.0	N.D.
Ethylbenzene	5.0	N.D.
Toluene	5.0	N.D.
Total Xylenes	15	N.D.

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. *Detection limits for this sample have been raised by a factor of 10.*

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	104%
a,a,a-Trifluorotoluene	109%

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Crown City Plating	Client Project ID: Groundwater Monitoring	Sampled:	Jul 24, 1995
4350 Temple City Blvd.	Well Investigation Program	Received:	Jul 25, 1995
El Monte, CA 91731	Sample Descript: Water, Well E-3	Extracted:	Jul 26, 1995
Attention: L.P. Donovan	Lab Number: EG02571	Analyzed:	Jul 26, 1995
		Reported:	Aug 4, 1995

HALOGENATED AND AROMATIC VOLATILES by GC (EPA 5030/8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**15**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**200**
Trichlorofluoromethane	5.0	N.D.
Vinyl Chloride	10	N.D.
Benzene	5.0	N.D.
Ethylbenzene	5.0	N.D.
Toluene	5.0	N.D.
Total Xylenes	15	N.D.

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. Detection limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	108%
a,a,a-Trifluorotoluene	108%

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Crown City Plating	Client Project ID: Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.	Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript: Water, Production Well	Extracted: Jul 26, 1995
Attention: L.P. Donovan	Lab Number: EG02572	Analyzed: Jul 26, 1995
		Reported: Aug 4, 1995

HALOGENATED AND AROMATIC VOLATILES by GC (EPA 5030/8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl Chloride	1.0	N.D.
Benzene	0.50	N.D.
Ethylbenzene	0.50	N.D.
Toluene	0.50	N.D.
Total Xylenes	1.5	N.D.

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	110%
a,a,a-Trifluorotoluene	103%

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Crown City Plating	Client Project ID:	Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.		Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript:	Water, Well E-1	Extracted: Jul 27-28, 1995
Attention: L.P. Donovan	Lab Number:	EG02569	Analyzed: 7/27-8/1, 1995
			Reported: Aug 4, 1995

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
Arsenic	6010	0.010	N.D.
Barium	6010	0.050	N.D.
Cadmium	6010	0.0050	N.D.
Chromium, total	7191	0.0050	0.015
Copper	6010	0.050	N.D.
Lead	6010	0.0050	N.D.
Mercury	7470	0.00020	N.D.
Selenium	6010	0.010	N.D.
Silver	6010	0.050	N.D.
Zinc	6010	0.050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating	Client Project ID:	Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.		Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript:	Water, Production Well	Extracted: Jul 27-28, 1995
Attention: L.P. Donovan	Lab Number:	EG02572	Analyzed: Jul 27-28, 1995
			Reported: Aug 4, 1995

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
Arsenic	6010	0.010	N.D.
Barium	6010	0.050	N.D.
Cadmium	6010	0.0050	N.D.
Chromium, total	7191	0.0050	N.D.
Copper	6010	0.050	N.D.
Lead	7421	0.0050	N.D.
Mercury	7470	0.00020	N.D.
Selenium	7740	0.010	N.D.
Silver	6010	0.050	N.D.
Zinc	6010	0.050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

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Laboratory Director

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Crown City Plating	Client Project ID: Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.	Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript: Water, Well E-1	Extracted: 7/25-8/2, 1995
Attention: L.P. Donovan	Lab Number: EG02569	Analyzed: 7/25-8/2, 1995
		Reported: Aug 4, 1995

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
Alkalinity	310.1	2.0	260
Aluminum	6010	0.50	N.D.
Bicarbonate Alkalinity	310.1	2.0	260
Calcium	6010	2.0	120
Chloride	300	5.0	42
Color (color units)	110.2	1.0	N.D.
Fluoride	300	0.50	1.1
Hardness	SM 2340B	2.0	450
Iron	6010	0.050	0.089
Magnesium	6010	0.050	37
Manganese	6010	0.050	N.D.
Nitrate as NO3	300	5.0	120
Odor (threshold units)	140.1	1.0	N.D.
pH (pH units)	150	N.A.	7.1
Potassium	6010	0.50	2.6
Sodium	6010	0.50	24
Specific Conductance (µmhos/cm)	120.1	1.0	930
Sulfate	300	0.50	61
Surfactants	425.1	0.10	0.18
Total Dissolved Solids	160.1	5.0	650
Turbidity (NTU)	180.1	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating	Client Project ID: Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.	Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript: Water Well E-2	Extracted: Jul 25-26, 1995
Attention: L.P. Donovan	Lab Number: EG02570	Analyzed: Jul 25-26, 1995
		Reported: Aug 4, 1995

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
pH (pH units)	150.1	N.A.	7.0
Turbidity (NTU)	180.1	1.0	7.0

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating	Client Project ID: Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.	Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript: Water, Well E-3	Extracted: Jul 25-26, 1995
Attention: L.P. Donovan	Lab Number: EG02571	Analyzed: Jul 25-26, 1995
		Reported: Aug 4, 1995

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
pH (pH units)	150.1	N.A.	7.3
Turbidity (NTU)	180.1	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating	Client Project ID:	Groundwater Monitoring	Sampled: Jul 24, 1995
4350 Temple City Blvd.		Well Investigation Program	Received: Jul 25, 1995
El Monte, CA 91731	Sample Descript:	Water, Production Well	Extracted: 7/25-8/2, 1995
Attention: L.P. Donovan	Lab Number:	EG02572	Analyzed: 7/25-8/2, 1995
			Reported: Aug 4, 1995

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
Alkalinity	310.1	2.0	160
Aluminum	6010	0.50	N.D.
Bicarbonate Alkalinity	310.1	2.0	160
Calcium	6010	2.0	40
Chloride	300	0.50	5.7
Color (color units)	110.2	1.0	N.D.
Fluoride	300	0.50	1.3
Hardness	SM 2340B	2.0	140
Iron	6010	0.050	N.D.
Magnesium	6010	0.050	9.5
Manganese	6010	0.050	N.D.
Nitrate as NO3	300	0.50	4.8
Odor (threshold units)	140.1	1.0	N.D.
pH (pH units)	150.1	N.A.	7.6
Potassium	6010	0.50	1.6
Sodium	6010	0.50	21
Specific Conductance (µmhos/cm)	120.1	1.0	370
Sulfate	300	0.50	12
Surfactants	425.1	0.10	N.D.
Total Dissolved Solids	160.1	5.0	230
Turbidity (NTU)	180.1	1.0	1.5

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Extracted: Jul 26, 1995
Analyzed: Jul 26, 1995
Reported: Aug 4, 1995
Matrix: Water

HALOGENATED AND AROMATIC VOLATILES by GC (EPA 5030/8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl Chloride	1.0	N.D.
Benzene	0.50	N.D.
Ethylbenzene	0.50	N.D.
Toluene	0.50	N.D.
Total Xylenes	1.5	N.D.

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	107%
a,a,a-Trifluorotoluene	107%

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Extracted: Jul 27-28, 1995
Analyzed: 7/27-8/1, 1995
Reported: Aug 4, 1995
Matrix Water

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
Arsenic	7060	0.010	N.D.
Barium	6010	0.050	N.D.
Cadmium	6010	0.0050	N.D.
Chromium, total	7191	0.0050	N.D.
Copper	6010	0.050	N.D.
Lead	7421	0.0050	N.D.
Mercury	7470	0.00020	N.D.
Selenium	7740	0.010	N.D.
Silver	6010	0.050	N.D.
Zinc	6010	0.050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Extracted: Jul 27, 1995
Analyzed: Jul 27, 1995
Reported: Aug 4, 1995
Matrix Water

LABORATORY ANALYSIS

Analyte	EPA Method	Detection Limit mg/L (ppm)	Sample Result mg/L (ppm)
Aluminum	6010	0.50	N.D.
Calcium	6010	2.0	N.D.
Iron	6010	0.050	N.D.
Magnesium	6010	0.050	N.D.
Manganese	6010	0.050	N.D.
Potassium	6010	0.50	N.D.
Sodium	6010	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

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MS/MSD DATA REPORT

METHOD: **Metals**
Instrument: ICP
Matrix: WATER

DATE: 7/27/95

SAMPLE #: Blank

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppb	ppb	ppb	ppb	%	%	%	%
Aluminum	0	10000	9463	9425	95%	94%	0.4%	94%
Antimony	0	10000	9937	10090	99%	101%	1.5%	100%
Arsenic	0	10000	9592	9666	96%	97%	0.8%	96%
Barium	0	10000	9829	9796	98%	98%	0.3%	98%
Beryllium	0	10000	10213	10405	102%	104%	1.9%	103%
Boron	0	10000	10029	9911	100%	99%	1.2%	100%
Cadmium	0	10000	9868	9809	99%	98%	0.6%	98%
Calcium	0	10000	9193	9105	92%	91%	1.0%	91%
Chromium	0	10000	9040	8965	90%	90%	0.8%	90%
Cobalt	0	10000	10228	10186	102%	102%	0.4%	102%
Copper	0	10000	10071	9927	101%	99%	1.4%	100%
Iron	0	10000	10178	10436	102%	104%	2.5%	103%
Lead	0	10000	10000	10164	100%	102%	1.6%	101%
Magnesium	0	10000	8871	8749	89%	87%	1.4%	88%
Manganese	0	10000	10079	9977	101%	100%	1.0%	100%
Molybdenum	0	10000	9766	9905	98%	99%	1.4%	98%
Nickel	0	10000	9437	9540	94%	95%	1.1%	95%
Potassium	0	100000	101486	103235	101%	103%	1.7%	102%
Selenium	0	10000	9772	9902	98%	99%	1.3%	98%
Silver	0	10000	9744	9669	97%	97%	0.8%	97%
Thallium	0	10000	9542	9667	95%	97%	1.3%	96%
Vanadium	0	10000	9707	9617	97%	96%	0.9%	97%
Zinc	0	10000	9942	9854	99%	99%	0.9%	99%

R1..... ..... Result of Sample Analysis
Sp..... ..... Spike Concentration Added to Sample
MS..... ..... Matrix Spike Result
MSD..... ..... Matrix Spike Duplicate Result
PR1..... ..... Percent Recovery of MS; (MS-R1) / SP X 100
PR2..... ..... Percent Recovery of MSD; ((MSD-R1) / SP X 100
RPD..... ..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-13

MS/MSD DATA REPORT

METHOD: **Metals**
Instrument: ICP
Matrix: WATER

DATE: 7/28/95

SAMPLE #: Blank

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppb	ppb	ppb	ppb	%	%	%	%
Sodium	0	10000	10010	10536	100%	105%	5.1%	103%

R1..... ..... Result of Sample Analysis
Sp..... ..... Spike Concentration Added to Sample
MS..... ..... Matrix Spike Result
MSD..... ..... Matrix Spike Duplicate Result
PR1..... ..... Percent Recovery of MS; (MS-R1) / SP X 100
PR2..... ..... Percent Recovery of MSD; ((MSD-R1) / SP X 100
RPD..... ..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100

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MS/MSD DATA REPORT

EPA Method 601/602

Matrix: Water

Date: 07/26/95

Sample #: EG02325

Batch #: EG26111W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	Mean PR
Benzene	0	10	10	9.7	100	97	3.0	98	≤14	88 - 110
Chloroform	0	10	8.4	8.2	84	82	2.4	83	≤13	70 - 130
1,1-Dichloroethane	0	10	9.3	8.6	93	86	7.8	90	≤16	70 - 128
.,2-Dichloroethane	0	10	9.8	9.3	98	93	5.2	96	≤25	70 - 130
1,1-Dichloroethene	0	10	11	10	110	100	9.5	105	≤19	76 - 122
Tetrachloroethene	0	10	10	9.8	100	98	2.0	99	≤16	82 - 116
Toluene	0	10	11	10	110	100	9.5	105	≤10	70 - 128
Trichloroethene	0	10	9.3	9.5	93	95	2.1	94	≤25	70 - 130

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by in-house Control Charts

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QC DATA REPORT

EPA METHOD: **7470**
Matrix: Water

DATE: 7/28/95

SAMPLE #: EG02689

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Mercury	0	8.0	8.2	7.9	103%	99%	3.7%	101%

Definition of Terms:

R1..... Result of Sample Analysis

Sp..... Spike Concentration Added to Sample

MS..... Matrix Spike Result

MSD..... Matrix Spike Duplicate Result

PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100

PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100

RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100

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QC DATA REPORT

EPA METHOD: **425.1**
Matrix: Water

DATE: 7/26/95

SAMPLE #: Blank

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Surfactants (MBAS)	0	0.50	0.54	0.56	108%	112%	3.6%	110%

Definition of Terms:

R1..... Result of Sample Analysis

Sp..... Spike Concentration Added to Sample

MS..... Matrix Spike Result

MSD..... Matrix Spike Duplicate Result

PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100

PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100

RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100

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MS/MSD DATA REPORT

EPA METHOD: **300**
Instrument: IC
Matrix: Water

DATE: 7/27/95

SAMPLE #: Blank

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Fluoride	0	1.0	0.95	0.99	95%	99%	4.1%	97%
Chloride	0	1.5	1.7	1.4	113%	93%	19.4%	103%
Nitrite	0	5.0	4.5	4.7	90%	94%	4.3%	92%
Nitrate	0	5.0	4.7	4.8	94%	96%	2.1%	95%
Orthophosphate	0	7.5	7.1	7.4	95%	99%	4.1%	97%
Sulfate	0	7.5	7.2	7.3	96%	97%	1.4%	97%

R1..... ..... Result of Sample Analysis

Sp..... ..... Spike Concentration Added to Sample

MS..... ..... Matrix Spike Result

MSD..... ..... Matrix Spike Duplicate Result

PR1..... ..... Percent Recovery of MS; (MS-R1) / SP X 100

PR2..... ..... Percent Recovery of MSD; ((MSD-R1) / SP X 100

RPD..... ..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100

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MS/MSD DATA REPORT

EPA METHOD: **300**
Instrument: IC
Matrix: Water

DATE: 8/1/95

SAMPLE #: Blank

Analyte	R1	SP	MS	MSD	PR1	PR2	RPD	MEAN PR
	ppm	ppm	ppm	ppm	%	%	%	%
Fluoride	0	1.0	0.96	0.94	96%	94%	2.1%	95%
Chloride	0	1.5	1.4	1.4	93%	93%	0.0%	93%
Nitrite	0	5.0	4.5	4.5	90%	90%	0.0%	90%
Nitrate	0	5.0	4.6	4.5	92%	90%	2.2%	91%
Orthophosphate	0	7.5	7.0	6.9	93%	92%	1.4%	93%
Sulfate	0	7.5	6.8	6.9	91%	92%	1.5%	91%

R1..... ..... Result of Sample Analysis

Sp..... ..... Spike Concentration Added to Sample

MS..... ..... Matrix Spike Result

MSD..... ..... Matrix Spike Duplicate Result

PR1..... ..... Percent Recovery of MS; (MS-R1) / SP X 100

PR2..... ..... Percent Recovery of MSD; ((MSD-R1) / SP X 100

RPD..... ..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2)) X 100

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46350

CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Client Name/Address: Crown City Plating Co. 4350 Temple City Blvd. El Monte, CA 91731

Project: Groundwater Monitoring Regional Water Control Board Well Investigation Program

Project Manager: Lawrence P. Donovan

Sampler: L.P. Donovan

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives	pH	Turbidity	EPA 8010	EPA 8020	Title 22 Cal. Drinking Water				Special Instructions
Well E-1	water	Glass	1	7-24-95 1:00PM	refrigeration	✓	✓	✓	✓	✓				
Well E-2	Water	Glass	1	7-24-94 10:30AM	refrigerate	✓	✓	✓	✓					
Well E-3	water	Glass	1	7-24-94 11:00AM	refrigeration	✓	✓	✓	✓					
Production Well	water	Glass	1	7-24-94 1:30P.M.	refrigeration	✓	✓	✓	✓	✓				

Title 22 Analysis on E-1 and Production Well: TDS, Hardness, Alkalinity, chloride, Sulfate, Flouride nitrate, bicarbonate, MBAS, Al, As, Ba, Cd, Cr, Pb, Hg, Se, Ag, Cu, Fe, Mn, Zn Ca, Na, Mg, K, conductance, Tubidity, Odor, Color, pH

Relinquished By:	Date/Time:	Received By:	Date/Time:
LPDonovan	7-24-95 / 2:00 P.M.	[illegible]	7-24-95 / 2:05 pm
[illegible]	7-25-95 11:30 am	Monica Lomas	7-25-95 11:30 am
Monica Lomas	7-25-95 1:15	[illegible] Williams	7/25/95 1:15

Note: Samples will be disposed of after 30 days.

Turnaround Time: (check)
same day ____ 72 hours ____
24 hours ____ 5 days ✓
48 hours ____ normal ____

Sample Integrity: (check)
intact ✓ on ice ✓

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Crown City Plating	Client Project ID:	Beneficial Use of Contaminated Groundwater	Sampled: Aug 23, 1995
4350 Temple City Blvd.			Received: Aug 24, 1995
El Monte, CA 91731	Sample Descript:	Water, Groundwater E-1	Extracted: Aug 28, 1995
Attention: L.P. Donovan	Lab Number:	EH04025	Analyzed: Aug 28, 1995
			Reported: Aug 29, 1995

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	**5.0**	**18**
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**100**
1,1,1-Trichloroethane	**5.0**	**7.5**
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**270**
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
Benzene	5.0	N.D.
Ethylbenzene	5.0	N.D.
Toluene	5.0	N.D.
Total Xylenes	15	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. Detection limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	106%
a,a,a-Trifluorotoluene	99%

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Extracted: Aug 28, 1995
Analyzed: Aug 28, 1995
Reported: Aug 29, 1995
Matrix: Water

HALOGENATED AND AROMATIC VOLATILES by GC (EPA 5030/8010/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl Chloride	1.0	N.D.
Benzene	0.50	N.D.
Ethylbenzene	0.50	N.D.
Toluene	0.50	N.D.
Total Xylenes	1.5	N.D.

* PID/ELCD were used in series for this analysis.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Gary Steube
Laboratory Director

Surrogate Standard Recoveries:	
1-Chloro-3-fluorobenzene	112%
a,a,a-Trifluorotoluene	99%

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MS/MSD DATA REPORT

EPA Method 601/602

Matrix: Water

Date: 08/28/95

Sample #: EH04018

Batch #: EH28111W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR		Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%		RPD	Mean PR
Benzene	0	10	10	10	100	100	0	100		≤13	89 - 109
Chloroform	0	10	11	10	110	100	9.5	105		≤11	81 - 117
1,1-Dichloroethane	2.3	10	13	14	107	117	8.9	112		≤11	84 - 114
1,2-Dichloroethane	0	10	11	11	110	110	0	110		≤11	86 - 112
1,1-Dichloroethene	0	10	13	13	130	130	0	130	*	≤16	77 - 121
Tetrachloroethene	0.069	10	9.8	9.1	97	90	7.5	94		≤13	80 - 118
Toluene	0	10	9.7	9.5	97	95	2.1	96		≤20	83 - 115
Trichloroethene	0	10	10	10	100	100	0	100		≤16	70 - 130

* QC results are not within acceptance limits
When applicable, see corrective action report

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by in-house Control Charts

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46351

CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Client Name/Address: Crown City Plating Co. 4350 Temple City Blvd El Monte, CA 91731

Project: Beneficial Use of Contaminated Groundwater

Project Manager: L. P. Donovan

Sampler: L. P. Donovan

Analysis Required: EPA 8010/8020

Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives	EPA 8010/8020								Special Instructions
Groundwater E-1	Water	Glass	1	8-23-95 1:45PM	<4°C	✓								X See
Groundwater E-1 with 0.144 g/l CrO_3		Glass	1	8-23-95 1:45PM	<4°C	✓								X below

Special Instructions: Allow sediment to settle.
Allow Groundwater sample with 0.144 g/l CrO_3 to remain at 70 to 80°F for 4± 0.5 hours before analysis

The purpose of this test is to determine if dilute CrO_3 will oxidize portions of volatile organics in groundwater, so that this water may be used for rinsing after Chrome plating.

Relinquished By:	Date/Time:	Received By:	Date/Time:
L P Donovan	8-23-95 2:30PM.	[illegible]	8-23-95 2:30pm
[illegible]	8-24-95 10:20Am	[illegible]	8/24/95 1020
[illegible]	8/24/95 1530	[illegible]	8/24/95 1520

Note: Samples will be disposed of after 30 days.

Turnaround Time: (check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours X normal ____

Sample Integrity: (check)
intact ✓ on ice ✓

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Crown City Plating	Client Project ID: Beneficial Use of Contaminated Groundwater	Sampled:	Sep 13, 1995
4350 Temple City Blvd.		Received:	Sep 14, 1995
El Monte, CA 91731	Sample Descript: Water, Well Water E-1	Extracted:	Sep 23, 1995
Attention: L.P. Donovan	Lab Number: EI01805	Analyzed:	Sep 23, 1995
		Reported:	Sep 25, 1995

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
2-Chloroethylvinyl ether	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	**5.0**	**8.5**
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	**5.0**	**57**
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	**5.0**	**300**
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Due to matrix effects and/or other factors, the sample required dilution. *Detection limits for this sample have been raised by a factor of 10.*

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Dan Harbs
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene	99%

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Crown City Plating
4350 Temple City Blvd.
El Monte, CA 91731
Attention: L.P. Donovan

Method Blank

Extracted: Sep 23, 1995
Analyzed: Sep 23, 1995
Reported: Sep 25, 1995
Matrix: Water

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Detection Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Dan Harbs
Project Manager

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene	104%

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MS/MSD DATA REPORT

EPA Method 601/602

Matrix: Water

Date: 09/23/95

Sample #: BLANK

Batch #: EI23101W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	Mean PR
Benzene	0	10	9.5	9.6	95	96	1.0	96	≤10	92 - 104
Chloroform	0	10	10	10	100	100	0	100	≤14	82 - 114
1,1-Dichloroethane	0	10	9.6	9.7	96	97	1.0	96	≤11	76 - 120
,2-Dichloroethane	0	10	11	10	110	100	9.5	105	≤13	78 - 118
1,1-Dichloroethene	0	10	9.7	9.5	97	95	2.1	96	≤11	70 - 127
Tetrachloroethene	0	10	9.8	10	98	100	2.0	99	≤12	74 - 122
Toluene	0	10	10	9.7	100	97	3.0	98	≤10	86 - 110
Trichloroethene	0	10	10	10	100	100	0	100	≤13	70 - 126

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by in-house Control Charts

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46352

CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Client Name/Address: Crown City Plating Co. 4350 Temple City Blvd. El Monte, CA 91731

Project: Beneficial Use of Contaminated Groundwater

Project Manager: L.P. Donovan III

Sampler: L.P. Donovan III

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont	Sampling Date/Time	Preservatives	EPA 5030/8010	Halogenated Volatile Organics		Special Instructions					Special Instructions
Well Water E-1	water	Glass	2	9:45 AM 9-13-95	Refrigeration	✓			✓					✓ Attached
Chromic Acid Rinse	water	Glass	1	9:45 AM 9-13-95	"	✓								
Grab Waste Water Effluent	water	Glass	1	10:05 AM 9-13-95	"	✓								
Chrome treat after reduction	water	Glass	1	10:15 AM 9-13-95	"	✓								
chrome neutralizer	water	Glass	1	10:15 AM 9-13-95	"	✓			✓					✓ Attached
Miller Dial Discharge	water	Glass	1	10:00 AM 9-13-95	"	✓								

Relinquished By:	Date/Time:	Received By:	Date/Time:
M Donovan III	9-13-95 1:55 PM.	Kishathal	9-13-95 1:55 PM
Kishathal	9-14-95 9:15 AM	Marco Lemus	9-14-95 9:15 AM
Marco Lemus	9-14-95 12:25	Received in Lab By: [signature]	9/14/95 12:25

Note: Samples will be disposed of after 30 days.

Turnaround Time: (check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (check)
intact ✓ on ice ✓