



GROVE VALVE AND REGULATOR COMPANY

6529 HOLLIS STREET OAKLAND CALIFORNIA 94608

(510) 655-7700 FAX (510) 420-2150

November 30, 1992

Mr. Lester Feldman  
Environmental Specialist  
Regional Water Quality Control Board  
2101 Webster Street, Suite 500  
Oakland, California 94612

Subject: Grove Valve and Regulator Company  
6529 Hollis Street, Emeryville, CA 94608

Dear Mr. Feldman:


Pursuant to our letter to you dated June 24, 1992 (copy enclosed) we have completed our first update of the groundwater chemical analysis at the three groundwater monitoring wells located at 6529 Hollis Street, Emeryville, CA. The update was performed by our consultants, Woodward-Clyde, based on a new round of sampling taken on October 15, 1992.

The chemical analysis of the groundwater showed the same chemicals to be present during this sampling round as during the earlier sampling round. However, the concentrations of chemicals declined from the earlier sampling, with the upgradient well now showing a concentration of 99 hg/L trichloroethene and the downgradient well showing 1100 hg/L trichloroethene. Readings at the third well continued to be below detection or present MCL standards.

Based on this data, Grove intends to continue to monitor the groundwater on a periodic basis to confirm that the contamination is localized and not the result of on-site sources. We will send the analytical results to you and to other appropriate agencies. If you have any comments or questions on this matter, please do not hesitate to call Mr. Bill Talent, Plant Services Manager, at 655-7700.

Very truly yours,

GROVE VALVE AND REGULATOR COMPANY

  
John P. Tescher  
President and Chief Operating Officer

JPT:sdb  
Enclosure

**TABLE 1**  
**SUMMARY OF ANALYSES FOR GROUNDWATER SAMPLES FROM GROVE VALVE AND REGULATOR COMPANY**

Well Number	Date	HALOGENATED VOLATILE ORGANICS EPA Method 8010*							
		Chloroform (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	1,1,1-Trichloroethane (µg/L)	Trichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-1	15 Oct 1992	ND	ND	ND	24.0	8.0	ND	99.0	ND
MW-1 Dup	15 Oct 1992	ND	ND	ND	24.0	8.0	ND	98.0	ND
MW-2	15 Oct 1992	ND	2.0	ND	1.0	ND	0.8	3.0	ND
MW-3	15 Oct 1992	ND	0.7	1.0	13.0	ND	0.7	1100.0	2.0
Detection Limits		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA	MCL	100.0	--	7.0	70.0	100.0	200.0	5.0	2.0
CA-STATE	MCL	--	5.0	6.0	6.0	10.0	200.0	5.0	0.5

**General Notes**

"ND" denotes not detected above analytical detection limit  
 "--" denotes sample not regulated or no MCL established

**Specific Notes**

\* = see lab sheets for complete list of method-specific target compounds  
 Shaded area = amount exceeds either EPA or CA State Maximum Contaminant Level (MCL)

Hollis Street

MW-1

13.50'

13

Parking Lot

Grove Valve and Regulator Company

MAIN PLANT BUILDING

12

X-Ray

MW-4?

66TH STREET

11

10

65TH STREET

9

Testing Pit

MW-3

7.66'

8

MW-2

8.53'

Engineering Testing Facility



NOTE: Not to scale

BAY STREET

Project No. 92C091A	Grove Valve	Groundwater Elevation in Feet Above MSL October 15, 1992	Figure 1
Woodward-Clyde Consultants		Grove Valve and Regulator Company	

## Certificate of Analysis

PAGE 1 OF 8

DOHS CERTIFICATION NO. E772

AIHA ACCREDITATION NO. 332

WOODWARD-CLYDE CONSULTANTS  
500 12TH STREET  
SUITE 100  
OAKLAND, CA 94607-4014  
ATTN: GEORGE CHANG

REPORT DATE: 10/27/92  
DATE SAMPLED: 10/15/92  
DATE RECEIVED: 10/15/92  
QUANTEQ JOB NO: 9210113

CLIENT PROJECT ID: 92C0544-1000  
PROJ. NAME: GROVE VALVE

### PROJECT SUMMARY:

On October 15, 1992, this laboratory received five (5) water samples. Samples were received cold and in appropriate preserved containers.

Client requested samples be analyzed for Halogenated Volatile Organics by EPA Method 8010.

Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

All laboratory quality control parameters were found to be within established limits. Batch QC data is included at the end of this report.

If you have any questions, please contact Client Services at (510) 930-9090.



Larry Klein  
Laboratory Manager

Results FAXed 10/26/92

WOODWARD-CLYDE CONSULTANTS

SAMPLE ID: MW-1  
CLIENT PROJ. ID: 92C0544-1000 GROVE VALVE  
DATE SAMPLED: 10/15/92  
DATE RECEIVED: 10/15/92  
REPORT DATE: 10/27/92

QUANTEQ LAB NO: 9210113-01A  
QUANTEQ JOB NO: 9210113  
DATE ANALYZED: 10/16/92  
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)  
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	24	0.5
trans-1,2-Dichloroethene	156-60-5	8	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	99	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro- 1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

WOODWARD-CLYDE CONSULTANTS

SAMPLE ID: MW-2  
 CLIENT PROJ. ID: 92C0544-1000 GROVE VALVE  
 DATE SAMPLED: 10/15/92  
 DATE RECEIVED: 10/15/92  
 REPORT DATE: 10/27/92

QUANTEQ LAB NO: 9210113-02A  
 QUANTEQ JOB NO: 9210113  
 DATE ANALYZED: 10/16/92  
 INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)  
 HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	2	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	1	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	0.8	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	3	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro- 1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

WOODWARD-CLYDE CONSULTANTS

SAMPLE ID: MW-3  
CLIENT PROJ. ID: 92C0544-1000 GROVE VALVE  
DATE SAMPLED: 10/15/92  
DATE RECEIVED: 10/15/92  
REPORT DATE: 10/27/92

QUANTEQ LAB NO: 9210113-03A  
QUANTEQ JOB NO: 9210113  
DATE ANALYZED: 10/16-19/92  
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)  
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	0.7	0.5
1,2-Dichloroethane	107-06-2	0.6	0.5
1,1-Dichloroethene	75-35-4	1	0.5
cis-1,2-Dichloroethene	156-59-2	13	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	0.7	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	1,100	5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro- 1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	2	0.5

ND = Not Detected

WOODWARD-CLYDE CONSULTANTS

SAMPLE ID: MW-4  
CLIENT PROJ. ID: 92C0544-1000 GROVE VALVE  
DATE SAMPLED: 10/15/92  
DATE RECEIVED: 10/15/92  
REPORT DATE: 10/27/92

QUANTEQ LAB NO: 9210113-04A  
QUANTEQ JOB NO: 9210113  
DATE ANALYZED: 10/16-19/92  
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)  
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	24	0.5
trans-1,2-Dichloroethene	156-60-5	8	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	98	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-			
1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected



WOODWARD-CLYDE CONSULTANTS

SAMPLE ID: TRIP BLANK  
CLIENT PROJ. ID: 92C0544-1000 GROVE VALVE  
DATE SAMPLED: 10/15/92  
DATE RECEIVED: 10/15/92  
REPORT DATE: 10/27/92

QUANTEQ LAB NO: 9210113-05A  
QUANTEQ JOB NO: 9210113  
DATE ANALYZED: 10/16/92  
INSTRUMENT: G

EPA METHOD 8010 (WATER MATRIX)  
HALOGENATED VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
cis-1,2-Dichloroethene	156-59-2	ND	0.5
trans-1,2-Dichloroethene	156-60-5	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro- 1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

QUALITY CONTROL DATA

INSTRUMENT: G

QUANTEQ JOB NO: 9210113

CLIENT PROJ. ID: 92C0544-1000

SURROGATE STANDARD RECOVERY SUMMARY

METHOD 8010/8020  
(WATER MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)		
Date Analyzed	Client Id.	Lab No.	Bromochloro-methane	1-Bromo-2-chloro-propene	1-Chloro-2-fluoro-benzene
10/16/92	MW-1	01A	103.1	93.2	93.5
10/16/92	MW-2	02A	96.1	91.0	94.1
10/16/92	MW-3	03A	101.3	96.2	95.9
10/16/92	MW-4	04A	103.5	87.4	93.6
10/16/92	TRIP BLANK	05A	94.1	87.1	96.8

CURRENT QC LIMITS (Revised 01/06/92)

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
Bromochloromethane	(70-127)
1-Bromo-2-chloropropane	(71-128)
1-Chloro-2-fluorobenzene	(76-124)

QUALITY CONTROL DATA

DATE ANALYZED: 10/16/92

QUANTEQ JOB NO: 9210113

INSTRUMENT: G

CLIENT PROJ. ID: 92C0544-1000

MATRIX SPIKE RECOVERY SUMMARY

METHOD 8010/8020  
(WATER MATRIX)

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	ND	38.8	39.9	78.7	2.8
Trichloroethene	50.0	ND	44.6	45.9	90.5	2.9
Benzene	50.0	ND	47.5	47.2	94.7	0.6
Toluene	50.0	ND	46.7	46.8	93.5	0.2
Chlorobenzene	50.0	ND	36.9	39.0	75.9	5.5

CURRENT QC LIMITS (Revised 06/22/92)

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
1,1-Dichloroethene	(52-116)	5.6
Trichloroethene	(68-123)	5.8
Benzene	(79-112)	5.0
Toluene	(77-113)	5.0
Chlorobenzene	(62-104)	5.5

MS = Matrix Spike  
MSD = Matrix Spike Duplicate  
RPD = Relative Percent Difference  
ND = Not Detected

R-3,S-2

QUANTED Lab

**Woodward-Clyde Consultants**

500 12th Street, Suite 100, Oakland, CA 94607-4014  
(510) 893-3600

9210113

**Chain of Custody Record**

PROJECT NO. GROVE-VALUE

9200544-1000

SAMPLES: (Signature)

*Bill [Signature]*

ANALYSES

Sample Matrix  
(Soil, Water, Air)

EPA Method 8010

EPA Method

EPA Method

EPA Method

Number of Containers

REMARKS  
(Sample preservation, handling procedures, etc.)

DATE TIME SAMPLE NUMBER

10/5/92	1150	MW-1	O1AB	W	X							2
10/5/92	1435	MW-2	O2AB	W	X							2
10/5/92	1555	MW-3	O3AB	W	X							2
10/5/92	1250	MW-4	O4AB	W	X							2
10/5/92		trip blank	O5AB	W	X							2

Standard TAT

Snd results to George Chang @ (510) 874-3287 WCC-Oakland

TOTAL NUMBER OF CONTAINERS 10

RELINQUISHED BY: (Signature)

*Bill [Signature]*

DATE/TIME

10/5/92 11705

RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

METHOD OF SHIPMENT:

Hand Delivery

SHIPPED BY: (Signature)

COURIER: (Signature)

RECEIVED FOR LAB BY: (Signature)

*Denise Harrington*

DATE/TIME

10/15/92 1705