

5/13/96  
of

October 2, 1995

Department of Environmental Health  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6700

Attn: Amy Leech  
Hazardous Materials Specialist

Subject: Investigations at 23040 Clawiter Rd, Hayward, CA  
StId #3736

Dear Ms. Leech,

Enclosed is a copy of the last report dated July 24, 1995 on the groundwater sampling for 23040 Clawiter Road. I wasn't sure if Blaine Tech Services sent you a copy. Sorry I took so long, I have been out of town most of the summer. Chester Clark is my father. My husband Bob Price and I handle all this for him.

Sincerely,



Shirley Price  
537 Hidden Valley Road  
Grants Pass, OR 97527  
(503) 476-9977

ENVIRONMENTAL  
PROTECTION  
95 OCT -5 PM 1:46

July 24, 1995

Chester Clark  
537 Hidden Valley Road  
Grants Pass, OR 97527

ATTN: Bob Price

Site:  
Clark's Home and Garden  
23040 Clawiter Road  
Hayward, California

Date:  
July 7, 1995

## **GROUNDWATER SAMPLING REPORT 950707-V-3**

---

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. does not participate in the interpretation of analytical results, or become involved with the marketing or installation of remedial systems.

This report deals with the groundwater well sampling performed by our firm in response to your request. Data collected in the course of our work at the site are presented in the TABLE OF MONITORING DATA. This information was collected during our inspection, well evacuation and sample collection. Measurements include the total depth of the well and the depth to water. Water surfaces were further inspected for the presence of immiscibles. A series of electrical conductivity, pH, and temperature readings were obtained during well evacuation and at the time of sample collection.

## STANDARD PRACTICES

---

### Evacuation and Sampling Equipment

As shown in the TABLE OF MONITORING DATA, the wells at this site were evacuated according to a protocol requirement for the three case volumes. The wells were evacuated using bailers.

Samples were collected using bailers.

**Bailers:** A bailer, in its simplest form, is a hollow tube which has been fitted with a check valve at the lower end. The device can be lowered into a well by means of a cord. When the bailer enters the water, the check valve opens and liquid flows into the interior of the bailer. The bottom check valve prevents water from escaping when the bailer is drawn up and out of the well.

Two types of bailers are used in groundwater wells at sites where fuel hydrocarbons are of concern. The first type of bailer is made of a clear material such as acrylic plastic and is used to obtain a sample of the surface and the near surface liquids, in order to detect the presence of visible or measurable fuel hydrocarbon floating on the surface. The second type of bailer is made of Teflon or stainless steel and is used as an evacuation and/or sampling device.

Bailers are inexpensive and relatively easy to clean. Because they are manually operated, variations in operator technique may have a greater influence than would be found with more automated sampling equipment. Also where fuel hydrocarbons are involved, the bailer may include near surface contaminants that are not representative of water deeper in the well.

### Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

### Effluent Materials

The evacuation process creates a volume of effluent water which must be contained. Blaine Tech Services, Inc. will place this water in appropriate containers of the client's choice or bring new 55 gallon DOT 17 E drums to the site, which are appropriate for the containment of the effluent materials. The determination of how to properly dispose of the effluent water must usually await the results of laboratory analyses of the sample collected from the groundwater

well. If that sample does not establish whether or not the effluent water is contaminated, or if effluent from more than one source has been combined in the same container, it may be necessary to conduct additional analyses on the effluent material.

### **Sampling Methodology**

Samples were obtained by standardized sampling procedures that follow an evacuation and sample collection protocol. The sampling methodology conforms to both State and Regional Water Quality Control Board standards and specifically adheres to EPA requirements for apparatus, sample containers and sample handling as specified in publication SW 846 and T.E.G.D. which is published separately.

### **Sample Containers**

Sample containers are supplied by the laboratory performing the analyses.

### **Sample Handling Procedures**

Following collection, samples are promptly placed in an ice chest containing deionized ice or an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

### **Sample Designations**

All sample containers are identified with both a sampling event number and a discrete sample identification number. Please note that the sampling event number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days, as jobs and projects often do.

### **Chain of Custody**

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under our standard chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date and signature of person accepting custody of the samples).

## **Hazardous Materials Testing Laboratory**

The samples obtained at this site were delivered to Curtis & Tompkins Laboratory in Berkeley, California. Curtis & Tompkins Laboratory is certified by the California Department of Health Services as a Hazardous Materials Testing Laboratory, and is listed as DOHS HMTL #1459.

### **Personnel**

All Blaine Tech Services, Inc. personnel receive 29 CFR 1910.120(e)(2) training as soon after being hired as is practical. In addition, many of our personnel have additional certifications that include specialized training in level B supplied air apparatus and the supervision of employees working on hazardous materials sites. Employees are not sent to a site unless we are confident they can adhere to any site safety provisions in force at the site and unless we know that they can follow the written provisions of an SSP and the verbal directions of an SSO.

In general, employees sent to a site to perform groundwater well sampling will assume an OSHA level D (wet) environment exists unless otherwise informed. The use of gloves and double glove protocols protects both our employees and the integrity of the samples being collected. Additional protective gear and procedures for higher OSHA levels of protection are available.

### **Reportage**

Submission to the Regional Water Quality Control Board and the local implementing agency should include copies of the sampling report, the chain of custody and the certified analytical report issued by the Hazardous Materials Testing Laboratory.

The following addresses have been listed here for your convenience:

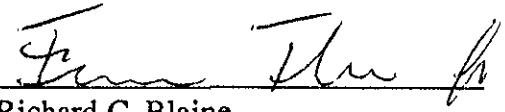
Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, 5th Floor  
Oakland, CA 94612

ATTN: Dennis Mishek

Alameda Fire Dept.  
300 Park Street  
Alameda, CA 94501

ATTN: Albert L. Smith

Please call if we can be of any further assistance.

  
Richard C. Blaine

RCB/lp

attachments: table of well monitoring data  
chain of custody

## TABLE OF WELL MONITORING DATA

Well I.D.	#1		#1			
Date Sampled	04/21/95		07/07/95			
Well Diameter (in.)	2		2			
Total Well Depth (ft.)	23.65		23.53			
Depth To Water (ft.)	13.39		14.08			
Free Product (in.)	NONE		NONE			
Reason If Not Sampled	--		--			
1 Case Volume (gal.)	1.64		1.51			
Did Well Dewater?	NO		NO			
Gallons Actually Evacuated	5.0		5.0			
Purging Device	BAILER		BAILER			
Sampling Device	BAILER		BAILER			
Time	14:01	14:05	14:07	14:08	14:11	14:13
Temperature (Fahrenheit)	64.2	63.2	64.2	65.0	64.6	64.6
pH	7.8	7.4	7.4	7.2	7.0	7.0
Conductivity (micromhos/cm)	3800	1800	1800	800	800	800
Nephelometric Turbidity Units	>200	>200	>200	>200	>200	>200
BTS Chain of Custody	950421-V-4		950707-V-3			
BTS Sample I.D.	#1		#1			
Analysis	TPH (GAS), BTEX & TPH (DIESEL)		TPH (GAS), BTEX & TPH (DIESEL)			

S U M M A R Y O F C A R R E S U L T S in parts per billion unless otherwise noted
---

DOHS HMTL Laboratory	CURTIS & TOMPKINS	CURTIS & TOMPKINS
Laboratory Sample I.D.	120767-001	121686-001
TPH Gasoline	1500+	3100
Benzene	3.1	7.7
Toluene	5.9	8.1
Ethyl Benzene	45	54
Xylene Isomers	62	92
TPH Diesel	1900	3200

In the interest of clarity, an addendum has been added to the TABLE which lists analytical results in such a way that our field observations are presented together with the analytical results. This addendum is entitled a **SUMMARY OF CAR RESULTS**. As indicated by the title, the source documents for these numbers are the laboratory's certified analytical reports. These certified analytical reports (CARs) are generated by the laboratory as the sole official documents in which they issue their findings. Any discrepancy between the CAR and a tabular or text presentation of analytical values must be decided in favor of the CAR on the grounds that the CAR is the authoritative legal document.







Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Clark's Home & Garden  
537 Hidden Valley Rd.  
Grant's Pass, OR 97527

Date: 26-JUL-95  
Lab Job Number: 121869  
Project ID: 950707-V3  
Location: Clarks Home & Garden

Reviewed by:

Reviewed by:

Kevin Hahn

This package may be reproduced only in its entirety.



Volatile Organics by GC/MS		
Client: Clark's Home & Garden	Analysis Method: EPA 8240	
Project#: 950707-V3	Prep Method: EPA 5030	
Location: Clarks Home & Garden		
Field ID: 1	Sample Date: 07/07/95	
Lab ID: 121869-001	Received Date: 07/10/95	
Matrix: Water	Prep Date: 07/24/95	
Batch#: 22134	Analysis Date: 07/24/95	
Units: ug/L		
Diln Fac: 1		
Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	7.2	5.0
trans-1,3-Dichloropropene	ND	5.0
2-Chloroethylvinylether	ND	10
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	51	5.0
Styrene	ND	5.0
m,p-Xylenes	65	5.0
o-Xylene	23	5.0
Surrogate	%Recovery	Recovery Limits
Toluene-d8	102	88-110
Bromofluorobenzene	105	86-115
1,2-Dichloroethane-d4	103	76-114



Lab #: 121869

## BATCH QC REPORT

Page 1 of 1

EPA 8240 Volatile Organics			
Client:	Clark's Home & Garden	Analysis Method:	EPA 8240
Project#:	950707-V3	Prep Method:	EPA 5030
Location:	Clarks Home & Garden		
LABORATORY CONTROL SAMPLE			
Matrix:	Water	Prep Date:	07/25/95
Batch#:	22134	Analysis Date:	07/25/95
Units:	ug/L		
Diln Fac:	1		

LCS Lab ID: QC99343

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	51.96	50	104	61-145
Trichloroethene	55.03	50	110	71-120
Benzene	57.16	50	114	76-127
Toluene	58.48	50	117	76-125
Chlorobenzene	59.53	50	119	75-130
Surrogate	%Rec	Limits		
Toluene-d8	98	88-110		
Bromofluorobenzene	99	85-115		
1,2-Dichloroethane-d4	100	76-114		

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits



Lab #: 121869

BATCH QC REPORT

Page 1 of 1

EPA 8240 Volatile Organics		
Client: Clark's Home & Garden	Analysis Method: EPA 8240	
Project#: 950707-V3	Prep Method: EPA 5030	
Location: Clarks Home & Garden		
METHOD BLANK		
Matrix: Water	Prep Date: 07/24/95	
Batch#: 22134	Analysis Date: 07/24/95	
Units: ug/L		
Diln Fac: 1		

MB Lab ID: QC99342

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
2-Chloroethylvinylether	ND	10
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Surrogate	%Rec	Recovery Limits
Toluene-d8	93	88-110
Bromofluorobenzene	94	86-115
1,2-Dichloroethane-d4	91	76-114



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

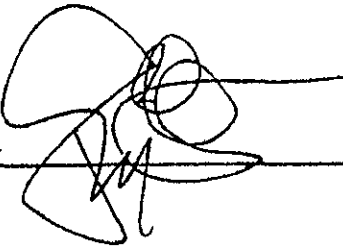
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

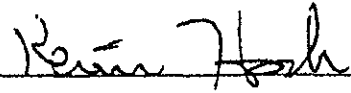
ANALYTICAL REPORT

Prepared for:

Clark's Home & Garden  
537 Hidden Valley Rd.  
Grant's Pass, OR 97527

Date: 23-JUL-95  
Lab Job Number: 121686  
Project ID: 950707-V3  
Location: Clarks Home & Garden

Reviewed by: 

Reviewed by: 

This package may be reproduced only in its entirety.



Curtis &amp; Tompkins, Ltd.

LABORATORY NUMBER: 121686  
 CLIENT: CLARK'S HOME & GARDEN  
 PROJECT ID: 950707-V3  
 LOCATION: CLARK'S HOME & GARDEN

DATE SAMPLED: 07/07/95  
 DATE RECEIVED: 07/10/95  
 DATE EXTRACTED: 07/10/95  
 DATE ANALYZED: 07/14/95  
 DATE REPORTED: 07/23/95  
 BATCH NO: 21826

Extractable Petroleum Hydrocarbons in Aqueous Solutions  
 California DOHS Method  
 LUFT Manual October 1989

LAB ID	CLIENT ID	DIESEL RANGE (ug/L)	REPORTING LIMIT (ug/L)
121686-001	1	3,200	50
METHOD BLANK	N/A	ND	50

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	15
RECOVERY, %	89



LABORATORY NUMBER: 121686  
 CLIENT: CLARK'S HOME & GARDEN  
 PROJECT ID: 950707-V3  
 LOCATION: CLARK'S HOME & GARDEN

DATE SAMPLED: 07/07/95  
 DATE RECEIVED: 07/10/95  
 DATE ANALYZED: 07/12/95  
 DATE REPORTED: 07/23/95  
 BATCH NO.: 21878

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions  
 TVH by California DOHS Method/LUFT Manual October 1989  
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
121686-001	1	3,100	7.7	8.1*	54	92
METHOD BLANK	N/A	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

\* Presence of this compound confirmed by second column; however, the confirmation concentration differed from the reported result by more than a factor of two.

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY: MS/MSD of 121503-009

=====  
 RPD, % <1  
 RECOVERY, % 108  
 =====