

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106

91 DEC 12 1991 23

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

December 12, 1991

Clayton Project No. 38379.00

Mr. Dennis Byrne  
**ALAMEDA COUNTY HEALTH DEPARTMENT**  
80 Swan Way, Room 200  
Oakland, CA 94621

Subject: Quarterly Groundwater Sampling at  
South Shore Center  
Park Street and Shoreline Drive  
Alameda, California

Dear Mr. Byrne:

Clayton Environmental Consultants, Inc. is pleased to present our laboratory report for the quarterly sampling conducted on November 19, 20, and 21, 1991, at the subject property.

Groundwater samples were collected from wells MW-2, MW-3, MW-4, MW-5B (inadvertently marked 5A in the chain of custody and the laboratory report), MW-7B, MW-8B, MW-9B, and MW-14, and analyzed by the following methods:

- Environmental Protection Agency (EPA) Method 5030/8015/8020 for volatile hydrocarbons and gasoline
- EPA Method 3510/8015 for diesel fuel
- EPA Method 5520 for hydrocarbons
- EPA Method 601 for purgeable halocarbons

The enclosed table lists groundwater analytical results from the November 1991 quarterly sampling event. Regulatory guidelines are also listed for comparison. Only compounds that were detected in a sample from at least one of the wells are included in the table. All other compounds for which analyses were conducted were below detection limits (Appendix).

Volatile hydrocarbons were detected in groundwater samples collected from MW-5B and MW-14.

In the sample from MW-5B, analysis revealed 21 parts per billion (ppb) benzene, 4.6 ppb toluene, 10 ppb ethylbenzene, and 2.2 ppb xylenes. The groundwater sample

Mr. Dennis Byrne  
ACHD  
December 12, 1991

Page 2  
Clayton Project No. 38379.00

from MW-5B also contained 710 ppb total petroleum hydrocarbons as gasoline (TPH-G) and 220 ppb of total petroleum hydrocarbons as diesel (TPH-D).

Analysis of the sample from MW-14 revealed a benzene concentration of 2.2 ppb and a xylenes concentration of 1.8 ppb.

Analysis of the MW-14 sample also revealed 50 ppb TPH-G and 140 ppb TPH-D.

Benzene concentrations in groundwater samples from MW-5B and MW-14 exceeded the Maximum Contaminant Levels (MCL) of 1 ppb set by the California Department of Health Services (DHS) for drinking water standards. The TPH-D concentrations in groundwater samples from these wells also exceeded Health Advisories or Suggested No-Adverse-Response Level of 100 ppb set by USEPA.

Chlorinated hydrocarbons were present in groundwater samples from:

- MW-3 -- 1.3 ppb tetrachloroethene
- MW-7B -- 140 ppb cis-1,2-dichloroethene, 700 ppb trichloroethene, and 6,600 ppb tetrachloroethene
- MW-8B -- 6.3 ppb cis-1,2-dichloroethene, 12 ppb trichloroethene, and 5 ppb tetrachloroethene
- MW-14 -- 1.5 ppb 1,2-dichloroethane

The concentration of chlorinated hydrocarbons in groundwater samples from MW-7B, MW-8B, and MW-14 exceeded regulatory guidelines, as listed in the table.

If you have any questions, please call me at (415) 426-2676.

Sincerely,



Alan D. Gibbs, R.G.  
Supervisor, Geology  
Western Operations

ADG/dd

Mr. Dennis Byrne  
ACHD  
December 12, 1991

Page 3  
Clayton Project No. 38379.00

**Summary of Analytical Results for Quarterly Groundwater Sampling  
at  
South Shore Center  
Park Street and Shoreline Drive  
Alameda, California  
November 1991**

Chemical	MW-2 (ppb)	MW-3 (ppb)	MW-4 (ppb)	MW-5B (ppb)	MW-7B (ppb)	MW-8B (ppb)	MW-9B (ppb)	MW-14 (ppb)	Regulatory Guidelines (ppb)
<b>EPA Method 8012/8020 for:</b>									
Benzene	<0.4	<0.4	<0.4	21	<0.4	<0.4	<0.4	2.2	1 <sup>(1)</sup>
Toluene	<0.3	<0.3	<0.3	4.6	<0.3	<0.3	<0.3	<0.3	100 <sup>(2)</sup>
Ethylbenzene	<0.3	<0.3	<0.3	10	<0.3	<0.3	<0.3	<0.3	680 <sup>(1)</sup>
Xylenes	<0.4	<0.4	<0.4	2.2	<0.4	<0.4	<0.4	1.8	1,750 <sup>(1)</sup>
Gasoline	<50	<50	<50	710	<50	<50	<50	50	not applicable
<b>EPA Method 8510 for:</b>									
Diesel	<50	<50	<50	220	<50	<50	<50	140	100 <sup>(3)</sup>
<b>EPA Method 5520 for:</b>									
Total Oil and Grease Hydrocarbons	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	not applicable
<b>EPA Method 601 for Purgeable Halocarbons:</b>									
Cis-1,2-Dichloroethene	<0.4	<0.4	<0.4	<0.4	140	6.3	<0.4	<0.4	6 <sup>(2)</sup>
1,2-Dichloroethane	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.5	0.5 <sup>(1)</sup>
Trichloroethene	<0.3	<0.3	<0.3	<0.3	700	12	<0.3	<0.3	5 <sup>(1)</sup>
Tetrachloroethene	<0.5	1.3	<0.5	<0.5	6,600	5.0	<0.5	<0.5	5 <sup>(1)</sup>

ppb = parts per billion, which is approximately equal to micrograms per liter (µg/L)  
<0.3 = less than detection limit

- (1) Maximum Contaminant Level (MCL) for Drinking Water Standards (DHS)
- (2) California State Action Levels (DHS)
- (3) Health Advisories or Suggested No-Adverse-Response Levels (EPA)

Regulatory guidelines are taken from Jon B. Marshack's *A Compilation of Water Quality Goals, October 1990* published by Regional Water Quality Control Board Central Valley Region

**APPENDIX**

**LABORATORY REPORTS AND WATER SAMPLING FIELD  
SURVEY FORMS**

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

November 25, 1991

Mr. Dariush Dastmalchi  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
1252 Quarry Lane  
Pleasanton, CA 94566

Client Ref. 38379.00  
Clayton Project No. 91111.83

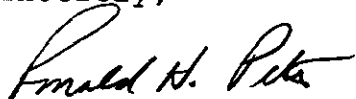
Dear Mr. Dastmalchi:

Attached is our analytical laboratory report for the samples received on November 19, 1991. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (510) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/caa  
Attachments

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.83

Sample Identification:	MW-5A	Date Sampled:	11/19/91
Lab Number:	9111183-01A	Date Received:	11/19/91
Sample Matrix/Media:	WATER	Date Prepared:	11/20/91
Preparation Method:	EPA 5030	Date Analyzed:	11/20/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	21	0.4
Toluene	108-88-3	4.6	0.3
Ethylbenzene	100-41-4	10	0.3
Xylenes	1330-20-7	2.2	0.4
Gasoline	-----	710	50

ND Not detected at or above limit of detection  
 -- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.83

Sample Identification:	MW-9B	Date Sampled:	11/19/91
Lab Number:	9111183-02A	Date Received:	11/19/91
Sample Matrix/Media:	WATER	Date Prepared:	11/20/91
Preparation Method:	EPA 5030	Date Analyzed:	11/20/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
 -- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.83

Sample Identification:	MW-2	Date Sampled:	11/19/91
Lab Number:	9111183-03A	Date Received:	11/19/91
Sample Matrix/Media:	WATER	Date Prepared:	11/20/91
Preparation Method:	EPA 5030	Date Analyzed:	11/20/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
 -- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.83

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9111183-06A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	11/20/91
Preparation Method:	EPA 5030	Date Analyzed:	11/20/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-5A

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	93	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.83

Sample Identification: MW-9B	Date Sampled: 11/19/91
Lab Number: 9111183-02C	Date Received: 11/19/91
Sample Matrix/Media: WATER	Date Analyzed: 11/21/91
Analytical Method: EPA 601	

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Purgeable Halocarbons</u>			
Chloromethane	74-87-3	ND	0.6
Bromomethane	74-83-9	ND	0.7
Vinyl chloride	75-01-4	ND	0.5
Chloroethane	75-00-3	ND	0.5
Methylene chloride	75-09-2	ND	2
1,1-Dichloroethene	75-35-4	ND	0.2
1,1-Dichloroethane	75-35-3	ND	0.4
Trans-1,2-Dichloroethene	156-60-5	ND	0.4
Cis-1,2-Dichloroethene	156-59-2	ND	0.4
Chloroform	67-66-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.3
1,1,1-Trichloroethane	71-55-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.6
Bromodichloromethane	75-27-4	ND	0.7
1,2-Dichloropropane	78-87-5	ND	0.5
Cis-1,3-Dichloropropene	10061-01-5	ND	0.5
Trichloroethene	79-01-6	ND	0.3
Dibromochloromethane	124-48-1	ND	0.6
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trans-1,3-Dichloropropene	10061-02-6	ND	0.6

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-9B

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	90	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-2

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	93	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable





Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: METHOD BLANK

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	90	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.83

Sample Identification: TRIP BLANK (0111491)HCl      Date Sampled: --  
Lab Number: 9111183-04A      Date Received: 11/19/91  
Sample Matrix/Media: WATER      Date Analyzed: 11/20/91  
Analytical Method: EPA 8020

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX</u>			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
Xylenes	1330-20-7	ND	0.4

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.83

Sample Identification:	See below	Date Received:	11/19/91
Lab Number:	9111183	Date Extracted:	11/20/91
Sample Matrix/Media:	WATER	Date Analyzed:	11/20/91
Extraction Method:	EPA 3510		
Analytical Method:	EPA 8015		

Lab No.	Sample I.D.	Date Collected	Diesel Fuel (ug/L)	Detection Limit (ug/L)
-01E	MW-5A	11/19/91	220	50
-02E	MW-9B	11/19/91	ND	50
-03E	MW-2	11/19/91	ND	50
-06A	METHOD BLANK	--	ND	50

ND = Less than the indicated limit of detection (LOD)  
-- = Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.83

Sample Matrix/Media: WATER	Date Received: 11/19/91
Preparation Method: SM 5520B	Date Prepared: 11/22/91
Analysis Method: SM 5520F	Date Analyzed: 11/22/91

Lab No.	Sample ID	Date Sampled	Hydrocarbons (mg/L)
01F	MW-5A	11/19/91	<5
02F	MW-9B	11/19/91	<5
03F	MW-2	11/19/91	<5
06A	METHOD BLANK	--	<5

Detection Limit: 5

ND Not detected at or above limit of detection  
< Not detected at or above limit of detection  
-- Information not available or not applicable

# Clayton

ENVIRONMENTAL  
CONSULTANTS

A Marsh & McLennan Company

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page 1 of 2

Project No. \_\_\_\_\_

Batch No. 911183

Client No. \_\_\_\_\_

Date Logged In 11/19/91 By RJR

REPORT RESULTS TO	Name <u>Daryush Dastmalchi</u> Title _____		Purchase Order No. _____		Client Job No. <u>38379.00</u>	
	Company <u>Clayton</u> Dept. _____		Name <u>Harsch Investment Corp.</u>		Company _____ Dept. _____	
	Mailing Address _____		Address _____		City, State, Zip _____	
	City, State, Zip _____		Telephone No. _____		Telefax No. _____	
Date Results Required. <u>Normal TAT</u>		Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Phone Results <input type="checkbox"/>		ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)
Special Instructions (method, limit of detection, etc.) _____		Samples are: (check if applicable) <input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York		Number of Containers		
* Explanation of Preservative. <u>P = Hel</u>						
CLIENT SAMPLE IDENTIFICATION		DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	FOR LAB USE ONLY	
MW-SA		11-19-91	Water	40 mL	2	TOIA, B
↓				40 mL	2	C, D
↓				1 Liter	1	E
↓				1-Liter	1	F
MW-9B				40 mL	2	TO2A, B
↓				40 mL	2	C, D
↓				1 Liter	1	E
↓				1 Liter	1	F
CHAIN OF CUSTODY		Relinquished by: <u>M. Spangman</u> Date/Time: <u>11-19-91 4:42PM</u>		Received by: _____ Date/Time: _____		
		Relinquished by: _____ Date/Time: _____		Received at Lab by: <u>Rebecca Turner Chiswick</u> Date/Time: <u>11/19/91 4:42PM</u>		
Method of Shipment _____				Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain) _____		
Authorized by: <u>M. Spangman</u> Date <u>11-19-91</u> (Client Signature Must Accompany Request)						

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

- |   |   |  |  |
|---|---|--|--|
| 22345 Roethel Drive<br>Novi, MI 48375<br>(313) 344-1770 | Raritan Center<br>160 Fieldcrest Ave.<br>Edison, NJ 08837<br>(201) 225-6040 | 400 Chastain Center Blvd., N.W.<br>Suite 490<br>Kennesaw, GA 30144<br>(404) 499-7500 | 1252 Quarry Lane<br>Pleasanton, CA 94566<br>(415) 426-2600 |
|---|---|--|--|

DISTRIBUTION:  
WHITE - Clayton Laboratory  
YELLOW - Clayton Accounting  
PINK - Client Copy



1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

November 25, 1991

Mr. Dariush Dastmalchi  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
1252 Quarry Lane  
Pleasanton, CA 94566

Client Ref. 38379.00  
Clayton Project No. 91111.97

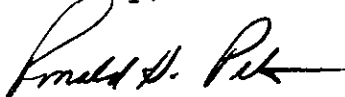
Dear Mr. Dastmalchi:

Attached is our analytical laboratory report for the samples received on November 20, 1991. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (510) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/tb  
Attachments



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Identification:	MW-7B	Date Sampled:	11/20/91
Lab Number:	9111197-01A	Date Received:	11/20/91
Sample Matrix/Media:	WATER	Date Prepared:	11/21/91
Preparation Method:	EPA 5030	Date Analyzed:	11/21/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Identification:	MW-4	Date Sampled:	11/20/91
Lab Number:	9111197-02A	Date Received:	11/20/91
Sample Matrix/Media:	WATER	Date Prepared:	11/21/91
Preparation Method:	EPA 5030	Date Analyzed:	11/21/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.97

Sample Identification:	MW-14	Date Sampled:	11/20/91
Lab Number:	9111197-03A	Date Received:	11/20/91
Sample Matrix/Media:	WATER	Date Prepared:	11/21/91
Preparation Method:	EPA 5030	Date Analyzed:	11/21/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	2.2	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	1.8	0.4
Gasoline	-----	50	50

ND Not detected at or above limit of detection  
 -- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.97

Sample Identification:	MW-8B	Date Sampled:	11/20/91
Lab Number:	9111197-04A	Date Received:	11/20/91
Sample Matrix/Media:	WATER	Date Prepared:	11/22/91
Preparation Method:	EPA 5030	Date Analyzed:	11/22/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
 -- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9111197-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	11/21/91
Preparation Method:	EPA 5030	Date Analyzed:	11/21/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.97

Sample Identification: TRIP BLANK (0111491)HCl      Date Sampled: --  
 Lab Number: 9111197-05A      Date Received: 11/20/91  
 Sample Matrix/Media: WATER      Date Analyzed: 11/21/91  
 Analytical Method: EPA 8020

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX</u>			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
Xylenes	1330-20-7	ND	0.4

ND Not detected at or above limit of detection  
 -- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Identification: METHOD BLANK  
Lab Number: 9111197-07A  
Sample Matrix/Media: WATER  
Analytical Method: EPA 8020  
Date Sampled: --  
Date Received: --  
Date Analyzed: 11/21/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX</u>			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
Xylenes	1330-20-7	ND	0.4

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Identification:	MW-7B	Date Sampled:	11/20/91
Lab Number:	9111197-01C	Date Received:	11/20/91
Sample Matrix/Media:	WATER	Date Analyzed:	11/21/91
Analytical Method:	EPA 601		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection <sup>a</sup> (ug/L)
<u>Purgeable Halocarbons</u>			
Chloromethane	74-87-3	ND	60
Bromomethane	74-83-9	ND	70
Vinyl chloride	75-01-4	ND	50
Chloroethane	75-00-3	ND	50
Methylene chloride	75-09-2	ND	200
1,1-Dichloroethene	75-35-4	ND	20
1,1-Dichloroethane	75-35-3	ND	40
Trans-1,2-Dichloroethene	156-60-5	ND	40
Cis-1,2-Dichloroethene	156-59-2	140	40
Chloroform	67-66-3	ND	50
1,2-Dichloroethane	107-06-2	ND	30
1,1,1-Trichloroethane	71-55-6	ND	50
Carbon tetrachloride	56-23-5	ND	60
Bromodichloromethane	75-27-4	ND	70
1,2-Dichloropropane	78-87-5	ND	50
Cis-1,3-Dichloropropene	10061-01-5	ND	50
Trichloroethene	79-01-6	700	30
Dibromochloromethane	124-48-1	ND	60
1,1,2-Trichloroethane	79-00-5	ND	60
Trans-1,3-Dichloropropene	10061-02-6	ND	60

ND Not detected at or above limit of detection  
-- Information not available or not applicable

<sup>a</sup> Detection limits increased due to dilution necessary for quantitation



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-7B

Analyte	CAS #	Concentration (ug/L)	Limit of Detection <sup>a</sup> (ug/L)
2-Chloroethylvinylether	100-75-8	ND	100
Bromoform	75-25-2	ND	70
Tetrachloroethene	127-18-4	6,600	50
1,1,2,2-Tetrachloroethane	79-34-5	ND	50
Chlorobenzene	108-90-7	ND	70
1,3-Dichlorobenzene	541-73-7	ND	200
1,2-Dichlorobenzene	95-50-1	ND	400
1,4-Dichlorobenzene	106-46-7	ND	400
Dichlorodifluoromethane	75-71-8	ND	100
Trichlorofluoromethane	75-69-4	ND	40
Freon 113	76-13-1	ND	60
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	95	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable

<sup>a</sup> Detection limits increased due to dilution necessary for quantitation

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Identification:	MW-4	Date Sampled:	11/20/91
Lab Number:	9111197-02C	Date Received:	11/20/91
Sample Matrix/Media:	WATER	Date Analyzed:	11/21/91
Analytical Method:	EPA 601		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Purgeable Halocarbons</u>			
Chloromethane	74-87-3	ND	0.6
Bromomethane	74-83-9	ND	0.7
Vinyl chloride	75-01-4	ND	0.5
Chloroethane	75-00-3	ND	0.5
Methylene chloride	75-09-2	ND	2
1,1-Dichloroethene	75-35-4	ND	0.2
1,1-Dichloroethane	75-35-3	ND	0.4
Trans-1,2-Dichloroethene	156-60-5	ND	0.4
Cis-1,2-Dichloroethene	156-59-2	ND	0.4
Chloroform	67-66-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.3
1,1,1-Trichloroethane	71-55-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.6
Bromodichloromethane	75-27-4	ND	0.7
1,2-Dichloropropane	78-87-5	ND	0.5
Cis-1,3-Dichloropropene	10061-01-5	ND	0.5
Trichloroethene	79-01-6	ND	0.3
Dibromochloromethane	124-48-1	ND	0.6
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trans-1,3-Dichloropropene	10061-02-6	ND	0.6

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-4

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	95	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-14

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	88	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-8B

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	5.0	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	101	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable





Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: METHOD BLANK

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	90	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91111.97

Sample Identification:	See below	Date Received:	11/20/91
Lab Number:	9111197	Date Extracted:	11/21/91
Sample Matrix/Media:	WATER	Date Analyzed:	11/21/91
Extraction Method:	EPA 3510		
Analytical Method:	EPA 8015		

Lab No.	Sample I.D.	Date Collected	Diesel Fuel (ug/L)	Detection Limit (ug/L)
-01E	MW-7B	11/20/91	ND	50
-02E	MW-4	11/20/91	ND	50
-03E	MW-14	11/20/91	140	50
-04E	MW-8B	11/20/91	ND	50
-07A	METHOD BLANK	--	ND	50

ND = Less than the indicated limit of detection (LOD)  
 -- = Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91111.97

Sample Matrix/Media: WATER	Date Received: 11/20/91
Preparation Method: SM 5520B	Date Prepared: 11/22/91
Analysis Method: SM 5520F	Date Analyzed: 11/22/91

Lab No.	Sample ID	Date Sampled	Hydrocarbons (mg/L)
01F	MW-7B	11/20/91	<5
02F	MW-4	11/20/91	<5
03F	MW-14	11/20/91	<5
04G	MW-8B	11/20/91	<5
07A	METHOD BLANK	--	<5

Detection Limit: 5

ND Not detected at or above limit of detection  
< Not detected at or above limit of detection  
-- Information not available or not applicable



# Clayton

## ENVIRONMENTAL CONSULTANTS

A Marsh & McLennan Company

### REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page 1 of 2

Project No. \_\_\_\_\_

Batch No. 9111197

Client No. \_\_\_\_\_

Date Logged In 11/20/91 By RJR

REPORT RESULTS TO

Name Dariusz Dastmalchi Title \_\_\_\_\_

Company Clayton Dept. \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Telephone No. \_\_\_\_\_ Telefax No. \_\_\_\_\_

Date Results Required Normal TAT Rush Charges Authorized?  Yes  No Phone Results

Special Instructions (method, limit of detection, etc.) \_\_\_\_\_

\* Explanation of Preservative: P=Hcl

Samples are: (check if applicable)

Drinking Water

Collected in the State of New York

Purchase Order No. \_\_\_\_\_ Client Job No. 38379.00

SEND INVOICE TO Name Horsch Investment Corp. Dept. \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added)

Number of Containers	ANALYSIS REQUESTED							FOR LAB USE ONLY
	Gas + BTEX	601	Diesel	5520 FW	BTEX	Hold		
2	X							-03A,B
2	X							C,D
1								E
1								F
2	X							-04A,B
2	X							C,D
2								E,F
2								G,H
1								-05A
1								06 ↓

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)
MW-14	11-20-91	Water	40 mL
			40 mL
			1 Liter
			1 Liter
MW-8B			40 mL
			40 mL
			1 Liter
			1 Liter
Trip Blank (0111491) Hcl			40 mL
Trip Blank			40 mL

Date/Time \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_

Received at Lab by: \_\_\_\_\_ Date/Time \_\_\_\_\_

Sample Condition Upon Receipt:  Acceptable  Other (explain)

Authorized by: M. Spragman Date 11-20-91

(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

- 22345 Roethel Drive, Novi, MI 48375, (313) 344-1770
- Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (201) 225-6040
- 400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
- 1252 Quarry Lane, Pleasanton, CA 94566, (415) 426-2600

DISTRIBUTION:

- WHITE - Clayton Laboratory
- YELLOW - Clayton Accounting
- PINK - Client Copy

Western Operations

1252 Quarry Lane  
P.O. Box 9019  
Pleasanton, CA 94566  
(510) 426-2600  
Fax (510) 426-0106

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

November 26, 1991

Mr. Dariush Dastmalchi  
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
1252 Quarry Lane  
Pleasanton, CA 94566

Client Ref. 38379.00  
Clayton Project No. 91112.12

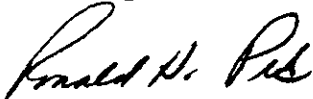
Dear Mr. Dastmalchi:

Attached is our analytical laboratory report for the samples received on November 21, 1991. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (510) 426-2657.

Sincerely,



Ronald H. Peters, CIH  
Director, Laboratory Services  
Western Operations

RHP/caa  
Attachments

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91112.12

Sample Identification:	MW-3	Date Sampled:	11/21/91
Lab Number:	9111212-01A	Date Received:	11/21/91
Sample Matrix/Media:	WATER	Date Prepared:	11/22/91
Preparation Method:	EPA 5030	Date Analyzed:	11/22/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91112.12

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9111212-04A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	11/22/91
Preparation Method:	EPA 5030	Date Analyzed:	11/22/91
Analytical Method:	EPA 8015/8020		

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX/Gasoline</u>			
Benzene	71-43-2	ND	0.4
Toluene	108-88-3	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes	1330-20-7	ND	0.4
Gasoline	-----	ND	50

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91112.12

Sample Identification: TRIP BLANK (0111491)HCl      Date Sampled: --  
Lab Number: 9111212-02A      Date Received: 11/21/91  
Sample Matrix/Media: WATER      Date Analyzed: 11/22/91  
Analytical Method: EPA 8020

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>BTEX</u>			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
Xylenes	1330-20-7	ND	0.4

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00  
Clayton Project No. 91112.12

Sample Identification: MW-3  
Lab Number: 9111212-01C  
Sample Matrix/Media: WATER  
Analytical Method: EPA 601  
Date Sampled: 11/21/91  
Date Received: 11/21/91  
Date Analyzed: 11/22/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
<u>Purgeable Halocarbons</u>			
Chloromethane	74-87-3	ND	0.6
Bromomethane	74-83-9	ND	0.7
Vinyl chloride	75-01-4	ND	0.5
Chloroethane	75-00-3	ND	0.5
Methylene chloride	75-09-2	ND	2
1,1-Dichloroethene	75-35-4	ND	0.2
1,1-Dichloroethane	75-35-3	ND	0.4
Trans-1,2-Dichloroethene	156-60-5	ND	0.4
Cis-1,2-Dichloroethene	156-59-2	ND	0.4
Chloroform	67-66-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.3
1,1,1-Trichloroethane	71-55-6	ND	0.5
Carbon tetrachloride	56-23-5	ND	0.6
Bromodichloromethane	75-27-4	ND	0.7
1,2-Dichloropropane	78-87-5	ND	0.5
Cis-1,3-Dichloropropene	10061-01-5	ND	0.5
Trichloroethene	79-01-6	ND	0.3
Dibromochloromethane	124-48-1	ND	0.6
1,1,2-Trichloroethane	79-00-5	ND	0.6
Trans-1,3-Dichloropropene	10061-02-6	ND	0.6

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: MW-3

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	1.3	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	91	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable



Results of Analysis  
for  
Harsch Investments

Client Reference: 38379.00

Sample Identification: METHOD BLANK

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
2-Chloroethylvinylether	100-75-8	ND	1
Bromoform	75-25-2	ND	0.7
Tetrachloroethene	127-18-4	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.7
1,3-Dichlorobenzene	541-73-7	ND	2
1,2-Dichlorobenzene	95-50-1	ND	4
1,4-Dichlorobenzene	106-46-7	ND	4
Dichlorodifluoromethane	75-71-8	ND	1
Trichlorofluoromethane	75-69-4	ND	0.4
Freon 113	76-13-1	ND	0.6
<u>Surrogates</u>		<u>Recovery (%)</u>	<u>QC Limits (%)</u> LCL UCL
Bromochloromethane	74-97-5	88	50 - 150

ND Not detected at or above limit of detection  
-- Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91112.12

Sample Identification:	See below	Date Received:	11/21/91
Lab Number:	9111212	Date Extracted:	11/21/91
Sample Matrix/Media:	WATER	Date Analyzed:	11/21/91
Extraction Method:	EPA 3510		
Analytical Method:	EPA 8015		

Lab No.	Sample I.D.	Date Collected	Diesel Fuel (ug/L)	Detection Limit (ug/L)
-01E	MW-3	11/21/91	ND	50
-04A	METHOD BLANK	--	ND	50

ND = Less than the indicated limit of detection (LOD)  
 -- = Information not available or not applicable

Results of Analysis  
 for  
 Harsch Investments

Client Reference: 38379.00  
 Clayton Project No. 91112.12

Sample Matrix/Media: WATER Date Received: 11/21/91  
 Preparation Method: SM 5520B Date Prepared: 11/22/91  
 Analysis Method: SM 5520F Date Analyzed: 11/22/91

Lab No.	Sample ID	Date Sampled	Hydrocarbons (mg/L)
01G	MW-3	11/21/91	<5
04A	METHOD BLANK	--	<5
Detection Limit:			5

ND Not detected at or above limit of detection  
 < Not detected at or above limit of detection  
 -- Information not available or not applicable



# Clayton

ENVIRONMENTAL  
CONSULTANTS

A Marsh & McLennan Company

## REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only Page \_\_\_\_\_ of \_\_\_\_\_  
 Project No. \_\_\_\_\_  
 Batch No. 9111212  
 Client No. \_\_\_\_\_  
 Date Logged In 11/21/91 By RPM

REPORT RESULTS TO	Name <u>Darush Dastmalchi</u> Title _____	Purchase Order No. _____		Client Job No. <u>38379.00</u>		
	Company <u>Clayton</u> Dept. _____	Name <u>Harsch Investment Corp</u>		Company _____ Dept. _____		
	Mailing Address _____	Address _____		City, State, Zip _____		
	City, State, Zip _____	Telephone No. _____		Telefax No. _____		
Date Results Required: <u>Normal TAT</u>	Rush Charges Authorized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Phone Results <input type="checkbox"/>	Samples are: (check if applicable) <input type="checkbox"/> Drinking Water <input type="checkbox"/> Collected in the State of New York			
Special Instructions: (method, limit of detection, etc.)			ANALYSIS REQUESTED (Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)			
* Explanation of Preservative <u>P=Hcl</u>			Number of Containers	FOR LAB USE ONLY		
CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/MEDIA		AIR VOLUME (specify units)		
<u>MW-3</u>	<u>11-21-91</u>	<u>Water</u>		<u>40 mL</u>	<u>2</u>	<u>-01A, B</u>
				<u>40 mL</u>	<u>2</u>	<u>1 C, D</u>
				<u>1 Liter</u>	<u>2</u>	<u>1 E, F</u>
				<u>1 Liter</u>	<u>2</u>	<u>1 G, H</u>
<u>TRIP BLANK (0111491) Hcl</u>				<u>40 mL</u>	<u>1</u>	<u>-02A</u>
			<u>40 mL</u>	<u>1</u>	<u>-03 ↓</u>	
CHAIN OF CUSTODY	Relinquished by: <u>M Spragmen (Sampler)</u>	Date/Time: <u>11-21-91 2:55AM</u>	Received by: _____		Date/Time: _____	
	Relinquished by: _____	Date/Time: _____	Received at Lab by: <u>Rebecca Turner Chantla</u>		Date/Time: <u>11/21/91 2:55</u>	
	Method of Shipment: _____		Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)			
Authorized by: <u>M Spragmen</u> Date <u>11-21-91</u> (Client Signature Must Accompany Request)						

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive  
Novi, MI 48375  
(313) 344-1770

Raritan Center  
160 Fieldcrest Ave.  
Edison, NJ 08837  
(201) 225-6040

400 Chastain Center Blvd., N.W.  
Suite 490  
Kennesaw, GA 30144  
(404) 499-7500

1252 Quarry Lane  
Pleasanton, CA 94566  
(415) 426-2600

6/90

DISTRIBUTION:  
 WHITE - Clayton Laboratory  
 YELLOW - Clayton Accounting  
 PINK - Client Copy

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/19/91

Well No: MW-2

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Clear, calm, cool

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well: 14.3 ft.

Time: 1345

Depth to Water Before Purging: 6.1 ft.

<u>Volume Height of Water Column:</u> 8.2 ft.	*	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	*	<u>Purge Factor</u>	=	<u>To Purge</u>
		.16	.65		5.33 gals		4		21.32 gals.

Depth Purging From: 13 ft.

Time Purging Begins: 1355

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1355	5	7.6	300	68°F	Cloudy, silty
1359	10	7.6	500	68°F	Clear
1404	15	7.6	400	68°F	Clear
1407	20	7.6	500	68°F	Clear

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1430

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.6	7.6	7.6	7.6
Conductivity	400	400	400	400
T°C	66	66	66	66

Pre-Sample Collection Gallons Purged: 20  
Time Sample Collection Begins: 1420  
Time Sample Collection Ends: 1425  
Total Gallons Purged: 22

Comments: No well cap

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/21/91

Well No: MW-3

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Clear, calm, cool

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well: 12.9 ft.

Time: 1135

Depth to Water Before Purging: 5.74 ft.

<u>Volume Height of Water Column:</u> 7.16 ft.	*	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	*	<u>Purge Factor</u>	=	<u>To Purge</u>
		.16	.65		4.65 gals		4		18.6 gals.

Depth Purging From: 12 ft.

Time Purging Begins: 1149

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1152	5	7.0	900	68°F	Clear
1154	10	7.4	1000	68°F	Clear
1157	15	7.4	1000	70°F	Clear
1200	20	7.4	1200	70°F	Clear

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1225

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.4	7.6	7.6	7.6
Conductivity	1000	1000	1000	1000
T°C	68	68	68	68

Pre-Sample Collection Gallons Purged: 20  
Time Sample Collection Begins: 1215  
Time Sample Collection Ends: 1220  
Total Gallons Purged: 22

Comments:

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/20/91

Well No: MW-4

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Overcast, cool

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well:

15.6 ft.

Time:

1410

Depth to Water Before Purging:

5.74 ft.

Volume Height of Water Column:

9.86 ft.

\*

2-inch

.16

4-inch

.65

=

Volume

6.40 gals

\*

Purge Factor

4

=

To Purge

25.6 gals.

Depth Purging From: 14 ft.

Time Purging Begins: 1420

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1423	5	7.8	1200	66°F	Clear
1427	10	7.8	1600	68°F	Clear
1430	15	7.8	1700	68°F	Clear
1434	20	7.8	1600	68°F	Clear
1438	25	7.8	1600	68°F	Clear

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.**  
**WATER SAMPLING FIELD SURVEY FORM**  
**(CONTINUED)**

Time Field Parameter Measurement Begins: 1500

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8.0	8.0	8.0	8.0
Conductivity	1700	1700	1700	1700
T°C	66	66	66	66

Pre-Sample Collection Gallons Purged: 25  
Time Sample Collection Begins: 1450  
Time Sample Collection Ends: 1455  
Total Gallons Purged: 27

Comments:

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/19/91

Well No: MW-5A

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Clear, calm, cool

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well:

12.7 ft.

Time: 1015

Depth to Water Before Purging:

4.28 ft.

Volume Height of Water Column:

8.42 ft.

\*

2-inch

.16

4-inch

.65

=

Volume

5.47 gals

\*

Purge Factor

4

=

To Purge

21.88 gals.

Depth Purging From: 11 ft.

Time Purging Begins: 1030

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1034	5	7.2	1400	68°F	Slightly cloudy
1037	10	7.4	1500	68°F	Clear
1039	15	7.4	2000	68°F	Clear
1042	20	7.4	2000	68°F	Clear



**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.**  
**WATER SAMPLING FIELD SURVEY FORM**  
**(CONTINUED)**

Time Field Parameter Measurement Begins: 1120

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.4	7.4	7.4	7.4
Conductivity	1400	1400	1400	1400
T°C	66	66	66	66

Pre-Sample Collection Gallons Purged: 20

Time Sample Collection Begins: 1110

Time Sample Collection Ends: 1115

Total Gallons Purged: 22

Comments: Site map shows well ID as MW-5B. Well is marked MW-5A.

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/20/91

Well No: MW-7B

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Overcast, cool, slight breeze

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well:

13.1 ft.

Time: 1255

Depth to Water Before Purging:

4.76 ft.

Volume Height of Water Column:

8.34 ft.

\*

2-inch

.16

4-inch

.65

=

Volume

5.42 gals

\*

Purge Factor

4

=

To Purge

21.68 gals.

Depth Purging From: 12 ft.

Time Purging Begins: 1302

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1304	5	8.0	3000	66°F	Slightly cloudy
1307	10	8.0	3300	68°F	Slightly cloudy
1310	15	8.0	3400	68°F	Slightly cloudy
1312	20	8.0	3400	68°F	Slightly cloudy

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1342

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8.0	8.0	8.0	8.0
Conductivity	1100	1100	1100	1100
T°C	68	68	68	68

Pre-Sample Collection Gallons Purged: 20  
Time Sample Collection Begins: 1330  
Time Sample Collection Ends: 1340  
Total Gallons Purged: 22

Comments:

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/20/91

Well No: MW-8B

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Overcast, cool, slight breeze

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well:

22 ft.

Time:

1135

Depth to Water Before Purging:

6.16 ft.

Volume Height of Water Column:

15.84 ft.

2-inch

.16

4-inch

.65

=

Volume

10.29 gals

\*

Purge Factor

4

=

To Purge

41.16 gals.

Depth Purging From: 21 ft.

Time Purging Begins: 1143

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1146	10	8.0	1400	64°F	Clear
1152	20	8.0	5000	66°F	Clear
1156	30	8.2	5000+	66°F	Clear
1159	40	8.2	5000+	66°F	Clear
1201	45	8.2	5000+	66°F	Clear

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.**  
**WATER SAMPLING FIELD SURVEY FORM**  
**(CONTINUED)**

*Time Field Parameter Measurement Begins:* 1220

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8.0	8.0	8.0	8.0
Conductivity	5000+	5000+	5000+	5000+
T°C	64	64	64	64

*Pre-Sample Collection Gallons Purged:* 45  
*Time Sample Collection Begins:* 1210  
*Time Sample Collection Ends:* 1215  
*Total Gallons Purged:* 47

*Comments:*

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/19/91

Well No: MW-9B

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Clear, calm, cool

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well: 14.9 ft.

Time: 1145

Depth to Water Before Purging: 6.06 ft.

<u>Volume Height of Water Column:</u> 8.84 ft.	*	<u>2-inch</u>	<u>4-inch</u>	=	<u>Volume</u>	*	<u>Purge Factor</u>	=	<u>To Purge</u>
		.16	.65		5.74 gals		4		22.96 gals.

Depth Purging From: 14 ft.

Time Purging Begins: 1155

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1155	5	7.6	900	62°F	Clear
1158	10	7.6	1200	64°F	Clear
1201	15	7.8	1200	64°F	Clear
1208	20	7.6	1500	64°F	Clear
1211	25	7.6	1500	64°F	Clear

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM  
(CONTINUED)

Time Field Parameter Measurement Begins: 1235

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.8	7.8	7.8	7.8
Conductivity	1400	1400	1400	1400
T°C	64	64	64	64

Pre-Sample Collection Gallons Purged: 25  
Time Sample Collection Begins: 1225  
Time Sample Collection Ends: 1230  
Total Gallons Purged: 27

Comments:

**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.  
WATER SAMPLING FIELD SURVEY FORM**

Job No: 38379.00

Site: Harsch - Alameda

Date: 11/20/91

Well No: MW-14

Sampling Team: M. Springman

Sampling Method: Submersible pump, disposable bailer

Field Conditions: Overcast, cool, calm

Describe Equipment Decontamination Before Sampling This Well:

Submersible pump decontaminated with detergent wash, double rinse, and steam cleaned

Total Depth of Well: 14.16 ft.

Time: 1015

Depth to Water Before Purging: 5.46 ft.

Volume Height of Water Column: 9.1 ft. \* 2-inch .16 4-inch .65 = Volume 5.91 gals \* Purge Factor 4 = To Purge 23.64 gals.

Depth Purging From: 13 ft.

Time Purging Begins: 025

Notes on Initial Discharge: Clear, no odor

Time	Volume Purged	pH	Conductivity	T	Comments
1028	5	8	1700	70°F	Clear
1031	10	8	2200	70°F	Clear
1034	15	8	2900	70°F	Clear
1037	20	8	3100	70°F	Clear
1040	25	8	3100	70°F	Clear



**CLAYTON ENVIRONMENTAL CONSULTANTS, INC.**  
**WATER SAMPLING FIELD SURVEY FORM**  
**(CONTINUED)**

Time Field Parameter Measurement Begins: 1105

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8	8	8	8
Conductivity	2600	2600	2600	2600
T°C	70	70	70	70

Pre-Sample Collection Gallons Purged: 25  
Time Sample Collection Begins: 1055  
Time Sample Collection Ends: 1100  
Total Gallons Purged: 27

Comments: