

December 4, 1997

ENVIRONMENTAL
PROTECTION
97 DEC -9 PM 3:46

Susan Hugo
Alameda County Environmental Health Services
1131 Harbor Bay Parkway #250
Alameda, California 94502-6577

Re: STID #819

**Fourth Quarter 1997 Groundwater Monitoring Reports for the
former City of Paris Cleaners, 3516 Adeline Oakland, California
94608**

Dear Susan,

I am enclosing the monitoring report for the fourth quarter of 1997. You indicated in our telephone conversation last June that after the event in June was completed we would discuss our next step. I have called and left many messages for you and have not heard back. I understand you were ill. I hope you have recovered well. The reports show wells #2 and #3 to be in good standing. Well #1 still shows some level of stoddard. We are clean in all other aspects of testing. I have had numerous conversations with our geologist, and would really like your input. I look forward to hearing from you and await your advice.

Thank you,



Linda Champion
9441 Laguna Lake Way
Elk Grove, California 95758
(916) 684-2993
(916) 684-9799 Fax

Enclosures

11/6/98
New:

DUGAN ASSOCIATES
SOIL & GROUNDWATER SAMPLING LIC. RG#6253

1180 DELMAS AVE
SAN JOSE, CA 95125
TEL. 408-287-2175
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GROUNDWATER SAMPLING REPORT
Fourth Quarter 1997

Client: Linda Champion
9441 Laguna Lake Way
Elk Grove, CA 95758

Site: Former City of Paris Cleaners
3516 Adeline Street
Oakland, CA

Report Date: December 3, 1997
Report #: DA-218-97Q4
Date Sampled: November 14, 1997

Introduction: This report summarizes sampling performed by Dugan Associates for groundwater quality assessment purposes. Supporting documentation provided by an independent State-certified laboratory are included in Attachment A.

Wells Sampled: Groundwater monitoring wells MW-1, MW-2, and MW-3.

Scope of Work: The following inspection, measurement, purge, and sample collection tasks were performed by Dugan Associates: 1) measured depth to water, and total depth for each well; 2) inspected water surfaces for floating product, and petroleum odors; 3) purged at least three well volumes of water from each well; 4) measured electrical conductivity, pH, and temperature of purged water; 5) collected groundwater samples in laboratory supplied containers; 6) transported the groundwater samples to a State-certified laboratory for the analyses requested; and 7) prepared this certified groundwater sampling report.

Data Summary: Groundwater gradient: Estimated to be 0.08 to 0.10 towards the north [11/14/97 data set].
Groundwater Quality: Low to high levels of EPA Method 8015M/8020 compounds reported [See Attachment A, and Figure 1].

Well Sampling Procedure: The wells at the site were sampled using the following sampling protocol: Wells which do not contain floating product are purged of approximately 3 well casing volumes of water using a submersible pump or bailer. Sampling equipment are steam-cleaned or cleaned with Alconox and water prior to use. A series of electrical conductivity, pH, and temperature readings are obtained during removal of well purge water. A sample of the formation water is then collected at a well-specific depth using either a stainless-steel or disposal bailer, or from the discharge point of the submersible pump system. Because the water samples are then gently poured into laboratory supplied containers. Care is taken to minimize air bubbles within containers. Samples are labeled and promptly place on ice-storage. Purge water is placed in 55-gallon drums and remain the responsibility of the client. A chain of custody record is initiated by the sampling geologist, and updated throughout the handling of the samples.

Analytical Results:

Legend

MW-3 = Existing Monitoring Well

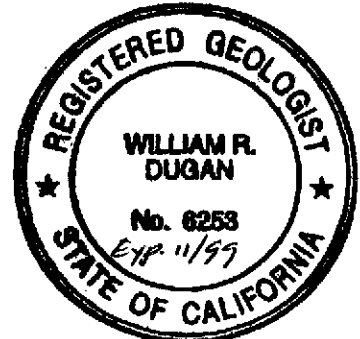
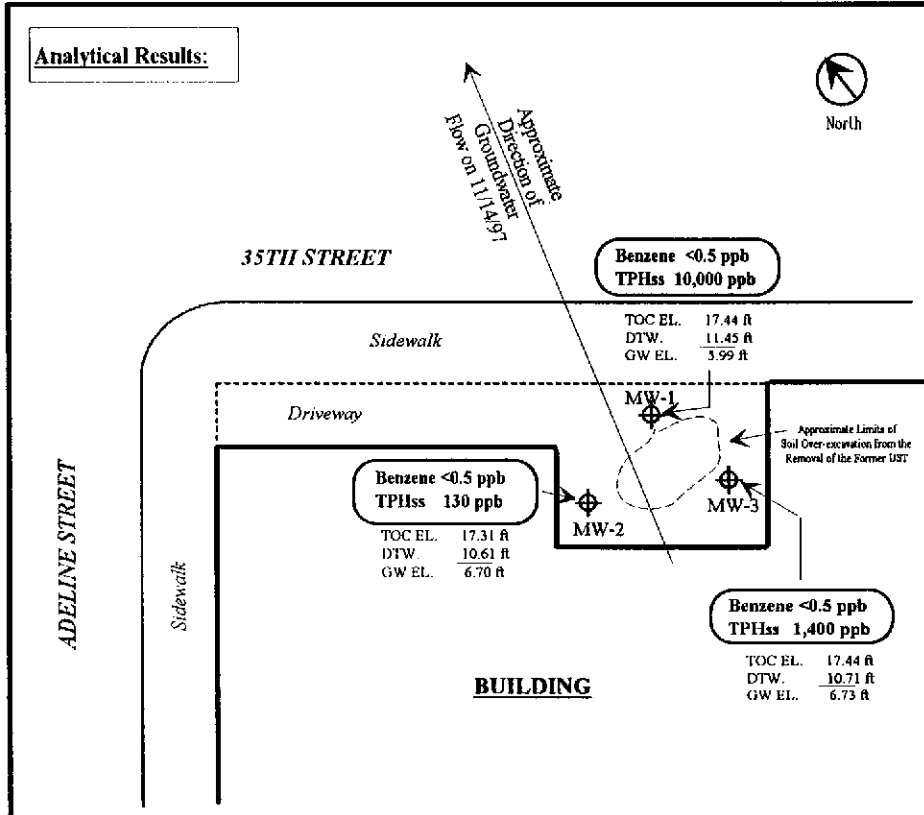
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Approximate Scale: 1 inch = 15 feet

Base Map Source: BT Associates (1995) for approximate locations of wells

TPHss = Total Petroleum Hydrocarbons as Stoddard Solvent

6.73 = Groundwater Elevation in feet



William R. Dugan
12/3/97

Concentrations in Parts Per Billion (ppb)

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING DATA
 3516 Adeline Street
 Oakland, California

<u>Well</u> Date	Elevation of Wellhead	Depth to Water	Elevation of Groundwater
MW-1			
11/18/92	17.44	13.99	3.45
11/04/93		16.79	0.65
03/08/94		14.14	3.30
08/02/94		13.18	4.26
02/08/95		10.92	6.52
07/08/96		11.62	5.82
10/09/96		14.11	3.33
03/18/97		12.37	5.07
06/19/97		13.26	4.18
11/14/97		11.45	5.99
MW-2			
11/18/92	17.31	13.18	4.13
11/04/93		14.84	2.47
03/08/94		11.50	5.81
08/02/94		13.14	4.17
02/08/95		8.18	9.13
07/08/96		11.06	6.25
10/09/96		12.38	4.93
03/18/97		10.61	6.70
06/19/97		11.68	5.63
11/14/97		10.61	6.70
MW-3			
11/18/92	17.44	13.93	3.51
11/04/93		15.16	2.28
03/08/94		13.43	4.01
08/02/94		12.82	4.62
02/08/95		7.62	9.82
07/08/96		10.97	6.47
10/09/96		11.84	5.60
03/18/97		10.16	7.28
06/19/97		11.40	6.04
11/14/97		10.71	6.73

Well Elevation per BT Associates . BM taken as 20 ft located at cement at gate entrance

TABLE 2
RESULTS OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES
3516 Adeline Street
Oakland, California

Well Date	TPHss	TPHd	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MtBE	TPHg
<u>MW-1</u>								
11/18/92	1,800	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
11/04/93	2,000	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
03/28/94	150	<50	35	40	72	120	NA	NA
08/02/94	2,100	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
02/08/95	620	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
07/08/96	37,000	<50	1.6	<0.5	<0.5	74	7.9	110,000*
10/09/96	42,000	NA	<0.5	5.0	<0.5	<0.5	NA	NA
03/18/97	2,600	NA	<0.5	1.5	1.5	9.6	<6.0	NA
06/19/97	660	NA	<0.5	<0.5	1.2	0.71	<5.0	NA
11/14/97	10,000	NA	<0.5	<0.5	110	1.2	<5.0	NA
<u>MW-2</u>								
11/18/92	630	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
11/04/93	3,200	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
03/28/94	45	<50	1.4	2	11	19	NA	NA
08/02/94	170	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
02/08/95	570	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
07/08/96	1,800	<50	<0.5	2.6	15	24	6.3	2,800*
10/09/96	4,100	NA	<0.5	0.57	<0.5	<0.5	NA	NA
03/18/97	240	NA	<0.5	0.57	<0.5	<0.5	5.3	NA
06/19/97	2,500	NA	<0.5	<0.5	9.1	<0.5	<5.0	NA
11/14/97	130	NA	<0.5	<0.5	0.9	1.2	<5.0	NA
<u>MW-3</u>								
11/18/92	11,000	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
11/04/93	320	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
03/28/94	45	<50	0.8	0.9	5	10	NA	NA
08/02/94	<20	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
02/08/95	<20	<50	<0.5	<0.5	<0.5	<0.5	NA	<50
07/08/96	2,500	<50	1.0	<0.5	8.8	8	10	2,200*
10/09/96	2,600	NA	<0.5	<0.5	<0.5	<0.5	NA	NA
03/18/97	2,500	NA	<0.5	0.61	0.63	5.2	NA	NA
06/19/97	21,000	NA	<0.5	<0.5	11	<0.5	<5.0	NA
11/14/97	1,400	NA	<0.5	<0.5	28	28	<5.0	NA
MCLs	----	1.0	----	680	1,750	-----	-----	-----
DWALs	----	---	100	----	-----	-----	-----	-----

Results in micrograms/liter ($\mu\text{g/l}$) = parts per billion (ppb).

ND: Less than the detection limit for the method of analysis (See laboratory data sheets).

MCLs: Maximum Contaminant Levels in Drinking Water, DHS (October 1990)

DWALs: Drinking Water Action Levels, DHS (October 1990) MtBE: Methyl-tert-Butyl-Ether

*: Components found in the gasoline range, however they are not characteristic of gasoline components.

Field Data Sheets:

WELL NO.: MW-1
DATE: 11/14/97
WELL DIAMETER: 2-in.
DEPTH TO WATER: 11.45 ft.
WELL DEPTH: 30 ft.
PURGE METHOD: Disposable Bailer
SAMPLE METHOD: Disposable Bailer
SAMPLED BY: Bill Dugan

SAMPLE I.D.: W-MW-1
PARAMETERS: TPHss, BTEX
CONTAINERS: 1) 3 VOAs (40 ml) 2) 2 liter amber
PRESERVATIVE: 1) HCl
LABORATORY: EnviroChem Analytical (DHS LAB 2186)
COMMENTS: Product odor, spotty sheen.

TIME	CUMULATIVE GAL. PURGED	TURBIDITY*	pH	E.C.#	TEMP [^]
10:00	2 gallons	<1	6.8	1300	69.0
-:-	7 gallons	<1	1300	67.0	
10:45	8 gallons	<1	6.8	1300	67.0

* = ml/liter # = umhos/cm ^ = fahrenheit

WELL NO.: MW-2
DATE: 11/14/97
WELL DIAMETER: 2-in.
DEPTH TO WATER: 10.61 ft.
WELL DEPTH: 29.5 ft.
PURGE METHOD: Disposable Bailer
SAMPLE METHOD: Disposable Bailer
SAMPLED BY: Bill Dugan

SAMPLE I.D.: W-MW-1
PARAMETERS: TPHss, BTEX
CONTAINERS: 1) 3 VOAs (40 ml) 2) 2 liter amber
PRESERVATIVE: 1) HCl
LABORATORY: EnviroChem Analytical (DHS LAB 2186)
COMMENTS: Product odor, spotty sheen.

TIME	CUMULATIVE GAL. PURGED	TURBIDITY*	pH	E.C.#	TEMP [^]
9:30	2 gallons	<1	6.9	1340	66.9
-:-	7 gallons	<1	1300	66.7	
9:40	9 gallons	<1	6.6	1300	66.8

* = ml/liter # = umhos/cm ^ = fahrenheit

WELL NO.: MW-3
DATE: 11/14/97
WELL DIAMETER: 2-in.
DEPTH TO WATER: 10.71 ft.
WELL DEPTH: 30 ft.
PURGE METHOD: Disposable Bailer
SAMPLE METHOD: Disposable Bailer
SAMPLED BY: Bill Dugan

SAMPLE I.D.: W-MW-1
PARAMETERS: TPHss, TPHd, TPHg, BTEX, MTBE
CONTAINERS: 1) 3 VOAs (40 ml) 2) 2 liter amber
PRESERVATIVE: 1) HCl
LABORATORY: EnviroChem Analytical (DHS LAB 2186)
COMMENTS: Product odor, spotty sheen.

TIME	CUMULATIVE GAL. PURGED	TURBIDITY*	pH	E.C.#	TEMP [^]
9:50	2 gallons	<1	6.8	1300	66.2
-:-	7 gallons	<1	1310	66.5	
9:10	10 gallons	<1	6.8	1300	66.5

* = ml/liter # = umhos/cm ^ = fahrenheit



Batch #: **M1-234**

Company: Dugan Associates	Project Name: City of Paris Cleaners	
Address: 1180 Delmas Ave. San Jose, CA 95125	Date Sampled: 11/14/97	Project #: 218
	Date Received: 11/17/97	Sample Matrix: Water
Attn.: Bill Dugan	Date Analyzed: 11/18/97	Reporting Units: ug/L

DHS Certification : 2186

Sample	8020					
ID	Dilution Factor	MTBE	B	T	E	X
PQL		5.0	0.5	0.5	0.5	0.5
W-MW-1	10	ND	ND	ND	110	140
W-MW-2	1	ND	ND	ND	0.9	1.2
W-MW-3	1	ND	ND	ND	28	36

ND - Sample result is less than reporting limit.

PQL - Practical Quantitation Limit

DF - Dilution Factor

Note: Reporting Limit = DF X PQL

Quality Control Results

LCS Recovery	72%	92%	100%	88%	92%
LCSD Recovery	72%	92%	100%	87%	91%
RPD	0%	0%	0%	2%	1%

Brett Politzer

Brett Politzer

Laboratory Director



Batch # : M1-234

Company: Dugan Associates	Project Name: City of Paris Cleaners	
Address: 1180 Delmas Ave. San Jose, CA 95125	Date Sampled: 11/14/97	Project #: 218
	Date Received: 11/17/97	Sample Matrix: Water
Attn.: Bill Dugan	Date Analyzed: 11/18/97	Reporting Units: ug/L

DHS Certification : 2186

Sample	Dilution Factor	TPH-Stoddard
ID		
PQL		100
W-MW-1	100	10,000
W-MW-2	1	130
W-MW-3	10	1,400

ND - Sample result is less than reporting limit.
 PQL - Practical Quantitation Limit
 DF - Dilution Factor

Note: Reporting Limit = DF X PQL

Quality Control Results

MS Recovery	89%
MSD Recovery	82%
RPD	8%

Brett Politzer
 Brett Politzer

Laboratory Director

DUGAN ASSOCIATES
SOIL & GROUNDWATER SAMPLING LIC. RG#6253

1180 DELMAS AVE
SAN JOSE, CA 95125
TEL. 408-287-2175
FAX. 408-287-2176

Chain of Custody

DAES C O C Form #:

Sample Delivered: <u>Via Enwire-CHEM</u>		Project Name: <u>City of Paris Cleaners</u>																			
Work Scope:		Site Address:																			
Project Manager: <u>Bill Dugan</u>		Project PC#: <u>218</u>																			
Phone: <u>287-2175</u> FAX: <u>287-2176</u>		Laboratory: <u>Enwirechem</u>		Turn Around: <u>Standard</u>																	
SAMPLE ID	LOCATION DESCRIPTION	SAMPLED		Received Time	= of Ctrs	MATRIX			EPA Method 1631 Diesel	EPA Method 1631 Gasoline	BTEX/MTBE	Purgeable Aromatics (R22/RD/20) & TPH Gasoline	Total Lead	EPA Method 8210	EPA Method 8240	EPA Method 8010	TPH _{ss}	TPH as Monot Oil	pH	Acidified	
		Time	Date			Soil	Water	Air													
<u>W-MW-1</u>			<u>11/14/97</u>		<u>4</u>						X										
<u>W-MW-2</u>					<u>4</u>						X										
<u>W-MW-3</u>					<u>4</u>						X										
Sampler's name: <u>William R Dugan</u>		Comments: <u>TPH_{ss} = Total Petroleum Hydrocarbons as Standard</u>																			
Sampler's signature: <u>[Signature]</u>																Date: <u>11/16</u>					
Reinquished by: <u>[Signature]</u> <u>7:45AM 11/17/97</u>		Received by: <u>Brett Politzer</u>														Date:					
Reinquished by:		Received by:														Date:					