JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

November 30, 1998
Project 220

Mr. Harold Turner
Snow Cleaners
2678 Coolidge Avenue
Oakland, California

#72

RE: Snow Cleaners, Transmittal of Test Results

Dear Mr. Turner:

This letter accompanies the results of testing at the 2678 Coolidge Avenue site. We apologize for this document being later than the County- requested submittal date of November 24, but we needed the additional time to assess the results and internally discuss options.

As you will see, test results still show high levels of contaminants. In addition to stoddard solvent, there are also traces of compounds not normally associated with dry cleaning operations - toluene, benzene, and xylene (TBX). We used new and clean samplers at the site, so there is an exceedingly low risk of these being the source of the TBX compounds. Because of presence of these compounds, we considered resampling the site, and this was the source of delay.

In the time since drilling the two holes at your property, a small track-mounted drill has become available for well drilling. This equipment could possibly access the upslope portion of the property without trespassing on the adjacent property. A third hole near or at the uphill property line could serve to better define the hydraulic gradient across the site, and also might help clarify the source of the TBX and similar compounds.

At this time, we submit these documents only to you, for your distribution as necessary. We will await further direction from you or the county.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, P.E.
Civil/Geological Engineer
CE 37716

C. M. Chambers and Assoc.

Training and Environmental Services

March 5, 1991

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report presents the final laboratory reports and disposition of the excavated soil from the tank removal project that occurred on your property in 1990.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Soil samples were grab samples from the excalated soil as directed by Alameda County employees. The samples were placed in glass containers, placed in coolers and transported to the laboratory.

The final sample was taken from the approximate center of the soil, which was placed on plastic tarps. The sample was placed in a glass container, placed in coolers and transported to the laboratory.

Results

P.O. Box 524 * Alta, California 95701 * (916) 888-4002

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND
	B1;193	ND	ND	ND	ND	ND
	B1;1102	ND	ND	ND	ND	ND
	B1:1113	ND	ND	ND	ND	ND
	B2;212	ND	ND	ND	ND	ND
	B2;222	440	ND	ND	.36	5.5
	B2;233	2000	ND	.59	1.0	28
	B2;241	2100	ND	.60	ND	25
	B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

ND = Non Detected

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-23-98	191010A	ND	13ppb	ND	ND	ND

Conclusions

Soil and water contamination was discovered at your site. The soil contamination was small in volume and found in a localized area of the excavation. The clean soil was separated at the storage location(the contaminated soil was easily determined by odor and color). The contaminated soil amounted to approx. 25 yards and was located bottom and north east side of the excavation.

The soil sampling taken during the placement of the monitoring wells indicated that the contaminated soil was limited to a level of approx. 22 feet to 24 feet.

The final soil sample taken on January 23, 1991 indicated that the soil was safe to release. The final sample was taken near the lower center of the pile of contaminated soil. The material had been spread out on plastic to a depth of 4-6 inches to dry. Black plastic was placed on top to assist in the heating and drying the soil. The level of benzene at 13 ppb with a non-detect level of 10-ppb (soil) was considered safe for use in parking lot fill (the intended use of the soil by the individuals receiving the soil).

need a cpy of VOC analytical should have received an approval prior to reuse

The soil was released in the spring/summer of 1991.

Very truly yours,
C.M. Chambers and Assoc.

Charles M. Chambers

TOTAL PETROLEUM HYDROCARBONS
MODIFIED EPA METHOD 8015 (GC-FID) FOR SOIL

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-01-195
Hazardous Waste Testing
Certification No.: E765

CLIENT: C M CHAMBERS & ASSOC
REPORT UNIT: ppm (mg/Kg)
SAMPLE LOCATION:
SAMPLE ID: 1-91-010A Aerated Spoils

DATE SAMPLED: 01/23/91
DATE RECEIVED: 01/23/91
DATE EXTRACTED: 01/23/91
DATE COMPLETED: 01/24/91
DILUTION FACTOR: 1.00

PETROLEUM HYDROCARBONS	RESULT	DETECTION LIMIT
Gasoline Range	<5	5
Diesel Range	<10	10
Motor Oil Range	31	25
Total Petroleum Hydrocarbons	31	
CARBON NO. RANGE		
Gasoline Range	-	
Diesel Range	-	
Motor Oil Range	C18-C30	
PEAK CARBON NO.		
Gasoline Range	-	
Diesel Range	-	
Motor Oil Range	C24	

Chemist _____ 01/24/91

Mark Shih, Ph.D. Date

TOTAL PETROLEUM HYDROCARBONS
MODIFIED EPA METHOD 8015 (GC-FID) FOR SOIL

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-01-195
Hazardous Waste Testing
Certification No.: E765

CLIENT: C M CHAMBERS & ASSOC
REPORT UNIT: ppm (mg/Kg)
SAMPLE LOCATION:
SAMPLE ID: METHOD BLANK

DATE SAMPLED:
DATE RECEIVED: 01/23/91
DATE EXTRACTED: 01/23/91
DATE COMPLETED: 01/24/91
DILUTION FACTOR: 1.00

PETROLEUM HYDROCARBONS	RESULT	DETECTION LIMIT
Gasoline Range	<5	5
Diesel Range	<10	10
Motor Oil Range	<25	25
Total Petroleum Hydrocarbons		
CARBON NO. RANGE		
Gasoline Range	-	
Diesel Range	-	
Motor Oil Range	-	
PEAK CARBON NO.		
Gasoline Range	-	
Diesel Range	-	
Motor Oil Range	-	

Chemist _____ 01/24/91

Mark Shih, Ph.D. Date

TOTAL PETROLEUM HYDROCARBONS
MODIFIED EPA METHOD 8015 (GC-FID) FOR SOIL

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-01-195
Hazardous Waste Testing
Certification No.: E765

CLIENT: C M CHAMBERS & ASSOC
REPORT UNIT: %
SAMPLE LOCATION:
SAMPLE ID: SPIKE RECOVERY

DATE SAMPLED:
DATE RECEIVED: 01/23/91
DATE EXTRACTED: 01/23/91
DATE COMPLETED: 01/24/91

PETROLEUM HYDROCARBONS	RESULT
Gasoline Range	**NA**
Diesel Range	**109%**
Motor Oil Range	**NA**
Total Petroleum Hydrocarbons	
CARBON NO. RANGE	
Gasoline Range	-
Diesel Range	-
Motor Oil Range	-
PEAK CARBON NO.	
Gasoline Range	-
Diesel Range	-
Motor Oil Range	-

This set of matrix spike is from another sample of the same matrix & of the same analytical batch.

Chemist _____ 01/24/91

Mark Shih, Ph.D. Date

TOTAL PETROLEUM HYDROCARBONS
MODIFIED EPA METHOD 8015 (GC-FID) FOR SOIL

EUREKA LABORATORIES, INC.
6790 Florin Perkins Road
Sacramento, CA 95828
(916)381-7953

Order No.: 91-01-195
Hazardous Waste Testing
Certification No.: E765

CLIENT: C M CHAMBERS & ASSOC
REPORT UNIT: %
SAMPLE LOCATION:
SAMPLE ID: SPIKE RECOVERY DUPLICATE

DATE SAMPLED:
DATE RECEIVED: 01/23/91
DATE EXTRACTED: 01/23/91
DATE COMPLETED: 01/24/91

PETROLEUM HYDROCARBONS	RESULT
Gasoline Range	**NA**
Diesel Range	**99%**
Motor Oil Range	**NA**
Total Petroleum Hydrocarbons	
CARBON NO. RANGE	
Gasoline Range	-
Diesel Range	-
Motor Oil Range	-
PEAK CARBON NO.	
Gasoline Range	-
Diesel Range	-
Motor Oil Range	-

This set of matrix spike is from another sample of the same matrix & of the same analytical batch.

Chemist Mark Shih

Mark Shih, Ph.D.

01/24/91

Date

ORGANIC ANALYSIS REPORT
Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-01-195
Hazardous Waste Testing
Certification: E765

CLIENT: CM CHAMBERS AND ASSOCIATES
PROJECT: ALLEN
SAMPLE ID: BLANK

DATE RECEIVED: 01/23/1991
DATE EXTRACTED: 01/23/1991
DATE ANALYZED: 01/24/1991

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	<1	1
V2	Chlorobenzene	<1	1
V3	1,2-Dichlorobenzene	<1	1
V4	1,3-Dichlorobenzene	<1	1
V5	1,4-Dichlorobenzene	<1	1
V6	Ethyl benzene	<1	1
V7	Toluene	<1	1
V8	Xylenes (Dimethyl benzenes)	<1	1

Hueychen Chow
Chemist

January 29, 1991
Date

Aerated Spoils

ORGANIC ANALYSIS REPORT
Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-01-195
Hazardous Waste Testing
Certification: E765

CLIENT: CM CHAMBERS AND ASSOCIATES
PROJECT: ALLEN
SAMPLE ID: 1-91-010A

DATE RECEIVED: 01/23/1991
DATE EXTRACTED: 01/23/1991
DATE ANALYZED: 01/24/1991
DATE SAMPLED: 01/23/1991

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	13	1
V2	Chlorobenzene	<1	1
V3	1,2-Dichlorobenzene	<1	1
V4	1,3-Dichlorobenzene	<1	1
V5	1,4-Dichlorobenzene	<1	1
V6	Ethyl benzene	<1	1
V7	Toluene	<1	1
V8	Xylenes (Dimethyl benzenes)	<1	1

Note:
All positively identified compounds were second column confirmed.

Huey-Chen Chow
Chemist

January 29, 1991
Date

ORGANIC ANALYSIS REPORT
Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-01-195
Hazardous Waste Testing
Certification: E765

CLIENT: CM CHAMBERS AND ASSOCIATES
PROJECT: ALLEN
SAMPLE ID: MATRIX SPIKE RECOVERY *

DATE RECEIVED: 01/23/1991
DATE EXTRACTED: 01/23/1991
DATE ANALYZED: 01/24/1991

COMP. NO.	COMPOUND	SPIKE RECOVERY
V1	Benzene	97%
V2	Chlorobenzene	100%
V3	1,2-Dichlorobenzene	92%
V4	1,3-Dichlorobenzene	91%
V5	1,4-Dichlorobenzene	100%
V6	Ethyl benzene	98%
V7	Toluene	101%
V8	Xylenes (Dimethyl benzenes)	110%

* This set of matrix spike is from another sample of the same matrix and of the same analytical batch.

Huey Chen Chow
Chemist

January 29, 1991
Date

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ORGANIC ANALYSIS REPORT
Aromatic Volatile Organics, EPA Method 8020

EUREKA LABORATORIES, INC.
6790 Florin-Perkins Road
Sacramento, CA 95828
(916) 381-7953

Order No: 91-01-195
Hazardous Waste Testing
Certification: E765

CLIENT: CM CHAMBERS AND ASSOCIATES
PROJECT: ALLEN
SAMPLE ID: MATRIX SPIKE RECOVERY DUP. *

DATE RECEIVED: 01/23/1991
DATE EXTRACTED: 01/23/1991
DATE ANALYZED: 01/24/1991

COMP. NO.	COMPOUND	SPIKE RECOVERY
V1	Benzene	92%
V2	Chlorobenzene	96%
V3	1,2-Dichlorobenzene	96%
V4	1,3-Dichlorobenzene	94%
V5	1,4-Dichlorobenzene	86%
V6	Ethyl benzene	94%
V7	Toluene	91%
V8	Xylenes (Dimethyl benzenes)	104%

* This set of matrix spike is from another sample of the same matrix and of the same analytical batch.

Huey-Chen Chow
Chemist

January 29, 1991
Date

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EUREKA LABORATORIES, INC.

6790 FLORIN PERKINS ROAD
SACRAMENTO, CA 95828
TEL: (916) 381-7953
LAB: (916) 381-9357
FAX: (916) 381-4013

CLIENT: (LEWIS ALLEN)
CONTACT: MIKE CHAMBERS
TELEPHONE: PAGER 888-4002
1507 TULIP CIRCLE
AUBURN, CA 95603

B-85

PROJECT REF. #	ELI ORDER #	PROJECT NAME
ALLEN	91.01.195	ALLEN

SAMPLERS (Signature): C. Chambers

ANALYSIS REQUIRED: TPH-G; BTEX — EX 1-23-91 JL; An 1-24-91 SH

CLIENT SAMPLE ID	SAMPLE LOCATION	COMP.	GRAB	DATE/TIME	CONTAINER TYPE	TPH-G	BTEX	TYPE OF PRESERVATIVE USED	CONTAINER CONDITION	COMMENTS
1-91-0104	SPOILS		X	1-23-91	GLASS	X	X			

RUSH

Paid 410.00
CK# 2037

48 HR

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
C. Chambers	1-23-91 1030				
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE/TIME		
		Nicole Deahan	1/23/91		

ELI SM-01

JOSLIN GEOTECHNICAL
CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

January 20, 1994

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the test results from the installation of monitoring wells at your site.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND
	B1;193	ND	ND	ND	ND	ND
	B1;1102	ND	ND	ND	ND	ND
	B1:1113	ND	ND	ND	ND	ND
	B2;212	ND	ND	ND	ND	ND
	B2;222	440	ND	ND	.36	5.5
	B2;233	2000	ND	.59	1.0	28
	B2;241	2100	ND	.60	ND	25
	B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Soil and water contamination was discovered at your site. The soil contamination was small in volume and found in a localized area of the excavation.

Monitoring well sampling will continue on a quarterly basis to review contamination levels of the groundwater at the site.

Additional monitoring wells and soil investigation are necessary to determine the limits of the contamination area. We are currently waiting for a date for a soil probe survey of the area of the site with the Richards Corporation. We hope to complete the soil probe survey as soon as possible.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 793 Dutch Flat, CA 95714	Client Project ID:# 220; Snow Cleaners	Date Sampled: 01/03-01/04/94
		Date Received: 01/04/94
	Client Contact: Bob Joslin	Date Extracted: 01/04/94
	Client P.O:	Date Analyzed: 01/04-01/05/94

Stoddard Solvent Range (C8-C12) Volatile Hydrocarbons as Stoddard Solvent*, with BTEX*
EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(ss)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
33708	B-1;113	S	ND	ND	ND	ND	ND	101
33709	B-1;123	S	ND	ND	ND	ND	ND	101
33710	B-1;133	S	ND	ND	ND	ND	ND	103
33711	B-1;142	S	ND	ND	ND	ND	ND	102
33712	B-1;153	S	ND	ND	ND	ND	ND	105
33713	B-1;163	S	ND	ND	ND	ND	ND	101
33714	B-1;172	S	ND	ND	ND	ND	ND	98
33715	B-1;182	S	ND	ND	ND	ND	ND	100
33716	B-1;193	S	ND	ND	ND	ND	ND	102
33717	B-1;1102	S	ND	ND	ND	ND	ND	103
33718	B-4;1113	S	ND	ND	ND	ND	ND	105
33719	B-2;212	S	ND	ND	ND	ND	ND	105
33720	B-2;222	S	440,e	ND< 0.05	ND< 0.05	0.36	5.5	100
33721	B-2;233	S	2000,e	ND< 0.05	0.59	1.0	28	102
33722	B-2;241	S	2100,e	ND< 0.05	0.60	ND< 0.05	25	102
33723	B-2;253	S	ND	ND	ND	ND	ND	95
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak co-elutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds are significant; no recognizable pattern; e) TPH pattern that does not appear to be derived from gasoline (Stoddard solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible phase is present.

DHS Certification No. 1644 Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 793 Dutch Flat, CA 95714	Client Project ID:# 220; Snow Cleaners	Date Sampled: 01/03-01/04/94
		Date Received: 01/04/94
	Client Contact: Bob Joslin	Date Extracted: 01/09/94
	Client P.O:	Date Analyzed: 01/09/94

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	33722			
Client ID	B-2;241			
Matrix	S			
Compound[1]	Concentration*	Concentration*	Concentration*	Concentration*
Bromodichloromethane	ND			
Bromoform[2]	ND			
Bromomethane	ND			
Carbon Tetrachloride[3]	ND			
Chlorobenzene	ND			
Chloroethane	ND			
2-Chloroethyl Vinyl Ether[4]	ND			
Chloroform[5]	ND			
Chloromethane	ND			
Dibromochloromethane	ND			
1,2-Dichlorobenzene	ND			
1,3-Dichlorobenzene	ND			
1,4-Dichlorobenzene	ND			
1,1-Dichloroethane	ND			
1,2-Dichloroethane	ND			
1,1-Dichloroethene	ND			
cis 1,2-Dichloroethene	ND			
trans 1,2-Dichloroethene	ND			
1,2-Dichloropropane	ND			
cis 1,3-Dichloropropene	ND			
trans 1,3-Dichloropropene	ND			
Methylene Chloride[6]	ND			
1,1,2,2-Tetrachloroethane	ND			
Tetrachloroethene[7]	ND			
1,1,1-Trichloroethane	ND			
1,1,2-Trichloroethane	ND			
Trichloroethene	ND			
Trichlorofluoromethane	ND			
Vinyl Chloride[8]	ND			
% Recovery Surrogate	89			
Comments				

Detection limit unless otherwise stated: water, ND< 0.5ug/L; soil, ND< 100ug/kg.

* water samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L

(1) IUPAC allows "ylene" or "ene"; ex. ethylene or ethene; (2) tribromomethane; (3) tetrachloromethane; (4) (2-chloroethoxy) ethene; (5) trichlormethane; (6) dichloromethane; (7) perchlorethylene, PCE or perclor; (8) chloroethene; (9) unidentified peak(s) present.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/04-01/05/94 Matrix: Soil

Analyte	Concentration (mg/kg)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.230	2.046	2.03	110	101	8.6
Benzene	0.000	0.194	0.190	0.2	97	95	2.1
Toluene	0.000	0.196	0.192	0.2	98	96	2.1
Ethylbenzene	0.000	0.196	0.192	0.2	98	96	2.1
Xylenes	0.000	0.596	0.584	0.6	99	97	2.0
TPH (diesel)	0	294	301	300	98	100	2.4
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR EPA 8010/8020/EDB

Date: 01/09/94 Matrix: Soil

Analyte	Concentration (ug/kg)				% Recovery		
	Sample	MS	MSD	Amount Spiked	MS	MSD	RPD
1,1-DCE	0	78	90	100	78	90	14.3
Trichloroethene	0	86	96	100	86	96	11.0
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0	94	100	100	94	100	6.2
Benzene	0	90	108	100	90	108	18.2
Toluene	0	92	104	100	92	104	12.2
Chlorobz (PID)	0	90	98	100	90	98	8.5

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

1954 ASOS70

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

REPORT TO: Bob Joslin BILL TO: C. M. Chambers

COMPANY: Joslin Geotechnical
P. O. Box 193
Dutch Flat, CA 95714

TELE: (916) 389-2581 FAX #: (916) 389-8833

PROJECT NUMBER: 220 PROJECT NAME: Snow Cleaners

PROJECT LOCATION: Coolidge & Davis St; Oakland SAMPLER SIGNATURE: Robert D. Joslin

ANALYSIS REQUEST

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER	BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 501/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER	COMMENTS
B-1; 113		1-3-94			Brass tube		✓							✓																33706
B1; 123		"			"		✓																							33707
B-1; 133		"			"		✓																							33708
B-1; 142		"			"		✓																							33709
B-1; 153		"			"		✓																							33710
B-1; 163		"			"		✓																							33711
B-1; 172		"			"		✓																							33712
B-1; 182		"			"		✓																							33713
B-1; 193		"			"		✓																							33714
B-1; 1102		"			"		✓																							33715
B4; 1113		"			"		✓																							33716
B-2; 212		1-4-94					✓																							33717
B-2 222		"					✓																							33718
B-2		"					✓																							33719
																														33720
																														33721

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Robert D. Joslin	1-4-94	1625	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

REMARKS: Test highest TPH / Stoddard

VOAS O&G METALS OTHER

ICE ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE APPROPRIATE
CONTAINERS ✓

1954A50576

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☑ 5 DAY

REPORT TO: Bob Joslin BILL TO: C.M. Chambers

COMPANY: Joslin Geotechnical

P.O. Box 193
Dutch Flat, CA 95714

TELE: (916) 389-2581 FAX #: (916) 389-8833

PROJECT NUMBER: 220 PROJECT NAME: Snow Cleaners

PROJECT LOCATION: Coolidge + Davis st, Oakland SAMPLER SIGNATURE: Robert D. Joslin

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER
B-2; 233		1-4-94			Brass Tube		✓						
B-2; 241		"			"		✓						
B-2; 253		"			"		✓						

ANALYSIS REQUEST

3TEX & TPH as Gasoline (602/8020 & 8015)	THP as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 501/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI
✓														
✓														
✓														

OTHER: 3372 3372A 3372B

COMMENTS

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATIVE: VOAS O&G METALS OTHER
APPROPRIATE ✓
CONTAINERS ✓

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Robert D Joslin	1-4-94	1625	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

REMARKS:

JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

~~July 27, 1994~~

where is a site map? 1st one

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the latest test results in our quarterly monitoring program for the monitoring wells located on your site. Included in this report are all monitoring well results taken from the wells since installation.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
[illegible]-94	MW1A,B	ND	ND	ND	ND	ND
	MW2A,B	6400	15	100	43	220

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND
	B1;193	ND	ND	ND	ND	ND
	B1;1102	ND	ND	ND	ND	ND
	B1:1113	ND	ND	ND	ND	ND
	B2;212	ND	ND	ND	ND	ND
	B2;222	440	ND	ND	.36	5.5
	B2;233	2000	ND	.59	1.0	28
	B2;241	2100	ND	.60	ND	25
	B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Soil and water contamination was discovered at your site. The soil contamination was small in volume and found in a localized area of the excavation.

Monitoring well sampling will continue on a quarterly basis to review contamination levels of the groundwater at the site.

Additional monitoring wells and soil investigation are necessary to determine the limits of the contamination area. We are currently waiting for a date for a soil probe survey of the area of the site with the Richards Corporation. We hope to complete the soil probe survey as soon as possible.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

Copies: Alameda County
San Francisco RQCB

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 793 Dutch Flat, CA 95714	Client Project ID: Snow	Date Sampled: 05/31/94
		Date Received: 05/31/94
	Client Contact: Mike Chambers / Bob Joslin	Date Extracted: 06/02-06/03/94
	Client P.O:	Date Analyzed: 06/02-06/03/94

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
35807	MW1 A,B	W	ND	ND	ND	ND	ND	101
35808	MW2 A,B	W	6400,e	15	100	43	220	92
Detection Limit unless other-wise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak co-elutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds are significant; no recognizable pattern; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible phase is present.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 06/02/94 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	97.7	98.6	100	97.7	98.6	0.9
Benzene	0	9.4	9.9	10	94.0	99.0	5.2
Toluene	0	9.3	10	10	93.0	100.0	7.3
Ethyl Benzene	0	9.7	10.3	10	97.0	103.0	6.0
Xylenes	0	29.3	31	30	97.7	103.3	5.6
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 06/03-06/04/94 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	100.3	101.1	100	100.3	101.1	0.7
Benzene	0	9.7	10	10	97.0	100.0	3.0
Toluene	0	9.6	9.9	10	96.0	99.0	3.1
Ethyl Benzene	0	9.8	10.2	10	98.0	102.0	4.0
Xylenes	0	29.8	30.9	30	99.3	103.0	3.6
TPH (diesel)	0	169	169	150	112	113	0.3
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

2441

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☐ 5 DAY

REPORT TO: BOB JOSLIN BILL TO: JOSLIN

COMPANY: JOSLIN GEOTECHNICAL

TELE: (916) 3?9-2581 FAX #:

PROJECT NUMBER: PROJECT NAME: SNOW

PROJECT LOCATION: OAKLAND SAMPLER SIGNATURE: C Clark

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER (ICE)	BTEX & TPH as Gasoline (602/8020 & 8015)	THP as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER				COMMENTS
MW1	OAKLAND	5/31/94	1220	1	AG	X							X																				HOLD
MW1A	"	"	1225	1	40	X					X		X	X																			
MW1B	"	"	1225	1	40	X					X		X	X																			
MW2	"	"	1240	1	AG	X							X																				HOLD
MW2A	"	"	1245	1	40	X					X		X	X																			
MW2B	"	"	1245	1	40	X					X		X	X																			

35807

35808

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE ✓
APPROPRIATE CONTAINERS ✓
VOAS O&G METALS OTHER

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
C Clark	5/31/94	1400	[illegible signature]
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

REMARKS:

JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

August 20, 1994

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the latest test results in our quarterly monitoring program for the monitoring wells located on your site. Included in this report are all monitoring well results taken from the wells since installation.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
7-29-94	MW1A	ND	ND	ND	ND	ND
	MW2A	21000	21	150	53	150
5-31-94	MW1A,B	ND	ND	ND	ND	ND
	MW2A,B	6400	15	100	43	220

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND
	B1;193	ND	ND	ND	ND	ND
	B1;1102	ND	ND	ND	ND	ND
	B1:1113	ND	ND	ND	ND	ND
	B2;212	ND	ND	ND	ND	ND
	B2;222	440	ND	ND	.36	5.5
	B2;233	2000	ND	.59	1.0	28
	B2;241	2100	ND	.60	ND	25
	B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Soil and water contamination was discovered at your site. The soil contamination was small in volume and found in a localized area of the excavation.

Monitoring well sampling will continue on a quarterly basis to review contamination levels of the groundwater at the site.

Additional monitoring wells and soil investigation are necessary to determine the limits of the contamination area. I suggest that you continue your efforts in trying to convince the up-gradient property owner to allow us to place an additional monitoring well. The well will be on your property, but we will need access across his property. We believe the information received from a monitoring well placed in an up-gradient location will help measure the background contamination in your area and well as flow direction.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

Copies: Alameda County
San Francisco RQCB

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 793 Dutch Flat, CA 95714	Client Project ID:# 220; Snow	Date Sampled: 07/29/94
		Date Received: 07/29/94
	Client Contact: Mike Chambers/Bob Joslin	Date Extracted: 07/29/94
	Client P.O:	Date Analyzed: 07/29/94

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
40081	MW1A	W	ND	ND	ND	ND	ND	93
40082	MW2A	W	21,000,e,a,h	21	150	53	150	90
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak co-elutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds are significant; no recognizable pattern; e) TPH pattern that does not appear to be derived from gasoline (Stoddards solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 07/28-07/29/94 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	83.8	82.1	100	83.8	82.1	2.0
Benzene	0	10.2	10.3	10	102.0	103.0	1.0
Toluene	0	10.2	9.9	10	102.0	99.0	3.0
Ethyl Benzene	0	10.2	10	10	102.0	100.0	2.0
Xylenes	0	32.6	32	30	108.7	106.7	1.9
TPH (diesel)	0	157	157	150	105	105	0.2
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

2705AJ031

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☐ 5 DAY

REPORT TO: MIKE CHAMBERS BILL TO: JOSLIN

COMPANY: JOSLIN GEOTECHNICAL

TELE: 916 389-2581 FAX #:

PROJECT NUMBER: 220 PROJECT NAME: SNOW

PROJECT LOCATION: OAKLAND SAMPLER SIGNATURE: C. Kamler

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	MATRIX: OTHER	METHOD PRESERVED: HCL	METHOD PRESERVED: HNO_3	METHOD PRESERVED: OTHER	BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER	COMMENTS
MW1A	OAKLAND	7/29/94	0910	1	40	X								X																40081
MW1B	"	"	0910	1	40	X																								
MW2A	"	"	0940	1	40	X								X																40082
MW2B	"	"	0946	1	40	X																								

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
C. Kamler	7/29/94	1030	Wendi Rieca
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

REMARKS:

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE APPROPRIATE ✓
CONTAINERS ✓

VOA O&G METALS OTHER

JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

October 5, 1994

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the latest test results in our quarterly monitoring program for the monitoring wells located on your site. Included in this report are all monitoring well results taken from the wells since installation.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
9-14-94	MW1	ND	ND	ND	ND	ND
	MW2	200,000	ND	170	400	2600 ← F.P.
7-29-94	MW1A	ND	ND	ND	ND	ND
	MW2A	21,000	21	150	53	150
5-31-94	MW1A,B	ND	ND	ND	ND	ND
	MW2A,B	6400	15	100	43	220

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND
	B1;193	ND	ND	ND	ND	ND
	B1;1102	ND	ND	ND	ND	ND
	B1:1113	ND	ND	ND	ND	ND
	B2;212	ND	ND	ND	ND	ND
	B2;222	440	ND	ND	.36	5.5
	B2;233	2000	ND	.59	1.0	28

B2;241	2100	ND	.60	ND	25
B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Monitoring well sampling will continue on a quarterly basis to review contamination levels of the groundwater at the site.

Additional monitoring wells are necessary to determine the limits of the contamination area. Another consideration for an additional monitoring well on the up gradient side is the continuing presence of product more consistent with gasoline than Stoddard solvent. We may be dealing with off site contamination. We are prepared to continue the investigation when you are able.

Attempts to purge well #2 were unsuccessful due to minimal water flow. Floating product was recovered and placed in 55 gallon drums to be distilled at the site with equipment

designed to recover Stoddard solvent from water. Attempts to purge the well casing will continue.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

Copies: Alameda County
San Francisco RQCB

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 793 Dutch Flat, CA 95714	Client Project ID: Snow	Date Sampled: 09/14/94
		Date Received: 09/15/94
	Client Contact: Mike Chambers / Bob Joslin	Date Extracted: 09/18-09/19/94
	Client P.O:	Date Analyzed: 09/18-09/19/94

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
41009	MW1	W	ND,f	ND	ND	ND	ND	95
41010	MW2	W	200,000,e,h	ND< 15	170	400	2600	105
Detection Limit unless other-wise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak co-elutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds are significant; no recognizable pattern; e) TPH pattern that does not appear to be derived from gasoline (Stoddards solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible phase is present.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/19-09/20/94 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	97.5	95.0	100	97.5	95.0	2.6
Benzene	0	10.2	10	10	102.0	100.0	2.0
Toluene	0	10.4	10	10	104.0	100.0	3.9
Ethyl Benzene	0	10.1	9.8	10	101.0	98.0	3.0
Xylenes	0	31.3	30.7	30	104.3	102.3	1.9
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	0	22900	22800	23700	97	96	0.4

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

CHROMALAB, INC.

Environmental Services (SDB)

September 26, 1994 *Submission #:* 9409260

MCCAMPBELL ANALYTICAL, INC.
Atten: Ed Hamilton
Project: J/SNOW *Project#:* 2917
Received: September 14, 1994
re: One sample for Volatile Organic Compounds analysis.

Sample ID: **MW2A**
Spl#: 63152 *Matrix:* WATER
Sampled: September 19, 1994 *Run#:* 3981 *Analyzed:* September 25, 1994
Method: EPA 8240/8260

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE RESULT (%)
ACETONE	120	25	N.D.	--
BENZENE	24	10	N.D.	117
BROMODICHLOROMETHANE	N.D.	10	N.D.	--
BROMOFORM	N.D.	10	N.D.	--
BROMOMETHANE	N.D.	10	N.D.	--
METHYL ETHYL KETONE	N.D.	10	N.D.	--
CARBON TETRACHLORIDE	N.D.	10	N.D.	--
CHLOROBENZENE	N.D.	10	N.D.	107
CHLOROETHANE	N.D.	10	N.D.	--
2-CHLOROETHYLVINYL ETHER	N.D.	10	N.D.	--
CHLOROFORM	25	10	N.D.	--
CHLOROMETHANE	N.D.	10	N.D.	--
DIBROMOCHLOROMETHANE	N.D.	10	N.D.	--
1,1-DICHLOROETHANE	N.D.	10	N.D.	--
1,2-DICHLOROETHANE	N.D.	10	N.D.	--
1,1-DICHLOROETHENE	N.D.	10	N.D.	120
CIS-1,2-DICHLOROETHENE	20	10	N.D.	--
TRANS-1,2-DICHLOROETHENE	N.D.	10	N.D.	--
1,2-DICHLOROPROPANE	N.D.	10	N.D.	--
CIS-1,3-DICHLOROPROPENE	N.D.	10	N.D.	--
TRANS-1,3-DICHLOROPROPENE	N.D.	10	N.D.	--
ETHYLBENZENE	300	10	N.D.	--
2-HEXANONE	N.D.	10	N.D.	--
METHYLENE CHLORIDE	N.D.	25	N.D.	--
METHYL ISOBUTYL KETONE	N.D.	10	N.D.	--
STYRENE	N.D.	10	N.D.	--
1,1,2,2-TETRACHLOROETHANE	N.D.	10	N.D.	--
TETRACHLOROETHENE	N.D.	10	N.D.	--
TOLUENE	140	10	N.D.	103
1,1,1-TRICHLOROETHANE	N.D.	10	N.D.	--
1,1,2-TRICHLOROETHANE	N.D.	10	N.D.	--
TRICHLOROETHENE	N.D.	10	N.D.	105
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.	--
VINYL ACETATE	N.D.	10	N.D.	--
VINYL CHLORIDE	N.D.	10	N.D.	--
XYLENES	31	10	N.D.	--

Aaron McMichael
Chemist

Ali Kharrazi
Organic Manager

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

QC AARON 12:36:17

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-162

SUBM #: 9409260
CLIENT: MCCAM
DUE: 09/26/94
REF #: 18462

0/60157

RECORD

☐ 3 HOUR ☒ 5 DAY

REPORT TO: Ed Hamilton BILL TO: McCampbell
COMPANY: MAF

TELE: 510-798-1620 FAX #: 798-1622
PROJECT NUMBER: 2917 PROJECT NAME: 5/SNOW
PROJECT LOCATION: SAMPLER SIGNATURE:

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER
MW2A	OAKLAND	9-14-94	1751	1	VOA	X					X		

ANALYSIS REQUEST

BTEX & TPH as Gasoline (602/8020 & 8015)	THP as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER	OTHER	OTHER	OTHER
								X										

COMMENTS: 41010

RELINQUISHED BY	DATE	TIME	RECEIVED BY
Heidi Ricia	9/19		
RELINQUISHED BY	DATE	TIME	RECEIVED BY
RELINQUISHED BY	DATE	TIME	RECEIVED BY LABORATORY
	9/19/94	1139	

REMARKS: Samples received cold in good condition 9/19/94 SVC

2917A5053

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
(510) 798-1620 PACHECO, CA 94553 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☐ 5 DAY

REPORT TO: MIKE CHAMBERS BILL TO: JOSLIN

COMPANY: JOSLIN GEOTECHNICAL

TELE: 916 389-2581 FAX #:

PROJECT NUMBER: PROJECT NAME: SNOW

PROJECT LOCATION: OAKLAND SAMPLER SIGNATURE: C. Chambers

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO3	OTHER
MW 1	OAKLAND	9/14	1210	1	40	X							
MW 1A	"	"	1211	1	40	X							
MW 2	"	"	1250	1	40	X							
MW 2A	"	"	1251	1	40	X							

ANALYSIS REQUEST

BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI
X								X						

OTHER

COMMENTS: [redacted]

ICE/T° ✓ GOOD CONDITION ✓ HEAD SPACE ABSENT ✓ PRESERVATIVE APPROPRIATE ✓ CONTAINERS ✓ VOAs O&G METALS OTHER

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
C. Chambers	9/15/94	17:45	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

REMARKS: STODDARD SOLVENT

JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

January 20, 1995

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the latest test results in our quarterly monitoring program for the monitoring wells located on your site. Included in this report are all monitoring well results taken from the wells since installation.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
12-22-94	MW-1	ND	ND	ND	ND	ND
	MW-2	20,000	22	170	89	470
9-14-94	MW1	ND	ND	ND	ND	ND
	MW2	200,000	ND	170	400	2600
7-29-94	MW1A	ND	ND	ND	ND	ND
	MW2A	21,000	21	150	53	150
5-31-94	MW1A,B	ND	ND	ND	ND	ND
	MW2A,B	6400	15	100	43	220

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND
	B1;193	ND	ND	ND	ND	ND
	B1;1102	ND	ND	ND	ND	ND
	B1:1113	ND	ND	ND	ND	ND

B2;212	ND	ND	ND	ND	ND
B2;222	440	ND	ND	.36	5.5
B2;233	2000	ND	.59	1.0	28
B2;241	2100	ND	.60	ND	25
B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Monitoring well sampling will continue upon request to review contamination levels of the groundwater at the site.

Additional monitoring wells are necessary to determine the limits of the contamination area. We are prepared to continue the investigation when we can.

Per our discussion with you, we are going forward with plans to remove product from monitoring well #2 and explore your capability to remove the solvent from the water with your distilling process at your facility. We hope to have a preliminary plan for your consideration and review within 4 weeks.

Why wasn't County informed?

Additional monitoring wells and soil investigation are necessary to determine the limits of the contamination area.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

Copies: Alameda County
San Francisco RQCB

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 793 Dutch Flat, CA 95714	Client Project ID: Snow	Date Sampled: 12/22/94
		Date Received: 12/22/94
	Client Contact: Bob Joslin / Mike Chambers	Date Extracted: 12/22-12/3/94
	Client P.O:	Date Analyzed: 12/22-12/3/94

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
43275	MW-1	W	ND	ND	ND	ND	ND	102
43276	MW-2	W	20,000,e,f	22	170	89	470	104
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak co-elutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds are significant; no recognizable pattern; e) TPH pattern that does not appear to be derived from gasoline (Stoddards solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible phase is present.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 12/22-12/24/94 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	102.9	103.6	100	102.9	103.6	0.6
Benzene	0	10.5	10.3	10	105.0	103.0	1.9
Toluene	0	10.7	10.5	10	107.0	105.0	1.9
Ethyl Benzene	0	10.8	10.5	10	108.0	105.0	2.8
Xylenes	0	33.4	32.6	30	111.3	108.7	2.4
TPH (diesel)	0	151	153	150	101	102	0.8
TRPH (oil & grease)	0	25800	25700	23700	109	108	0.4

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

CHROMALAB, INC.

Environmental Services (SDB)

December 30, 1994 *Submission #:* 9412330

MCCAMPBELL ANALYTICAL, INC.
Atten: Ed Hamilton
Project: JG/S
Received: December 23, 1994
re: One sample for Volatile Organic Compounds analysis.

Sample ID: MW-2
Spl#: 73729 *Matrix:* WATER
Sampled: December 22, 1994 *Run#:* 4997 *Analyzed:* December 28, 1994
Method: EPA 8240/8260

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE RESULT (%)
ACETONE	N.D.	5.0	N.D.	--
BENZENE	21	2.0	N.D.	118
BROMODICHLOROMETHANE	N.D.	2.0	N.D.	--
BROMOFORM	N.D.	2.0	N.D.	--
BROMOMETHANE	N.D.	2.0	N.D.	--
METHYL ETHYL KETONE	N.D.	2.0	N.D.	--
CARBON TETRACHLORIDE	N.D.	2.0	N.D.	--
CHLOROBENZENE	N.D.	2.0	N.D.	105
CHLOROETHANE	6.7	2.0	N.D.	--
2-CHLOROETHYLVINYL ETHER	N.D.	2.0	N.D.	--
CHLOROFORM	N.D.	2.0	N.D.	--
CHLOROMETHANE	N.D.	2.0	N.D.	--
DIBROMOCHLOROMETHANE	N.D.	2.0	N.D.	--
1,1-DICHLOROETHANE	2.8	2.0	N.D.	--
1,2-DICHLOROETHANE	N.D.	2.0	N.D.	--
1,1-DICHLOROETHENE	N.D.	2.0	N.D.	132
CIS-1,2-DICHLOROETHENE	1100	50	N.D.	--
TRANS-1,2-DICHLOROETHENE	15	2.0	N.D.	--
1,2-DICHLOROPROPANE	N.D.	2.0	N.D.	--
CIS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--
TRANS-1,3-DICHLOROPROPENE	N.D.	2.0	N.D.	--
ETHYLBENZENE	48	2.0	N.D.	--
2-HEXANONE	N.D.	2.0	N.D.	--
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--
METHYL ISOBUTYL KETONE	N.D.	2.0	N.D.	--
STYRENE	N.D.	2.0	N.D.	--
1,1,2,2-TETRACHLOROETHANE	N.D.	2.0	N.D.	--
TETRACHLOROETHENE	N.D.	2.0	N.D.	--
TOLUENE	170	2.0	N.D.	101
1,1,1-TRICHLOROETHANE	N.D.	2.0	N.D.	--
1,1,2-TRICHLOROETHANE	N.D.	2.0	N.D.	--
TRICHLOROETHENE	N.D.	2.0	N.D.	103
TRICHLOROFLUOROMETHANE	N.D.	2.0	N.D.	--
VINYL ACETATE	N.D.	2.0	N.D.	--
VINYL CHLORIDE	N.D.	2.0	N.D.	--
TOTAL XYLENES	180	2.0	N.D.	--

Aaron McMichael
Chemist

Ali Khazrazi
Organic Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

QC AARON 15:05:15

330/73729

19913

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

REPORT TO: G. Hamilton BILL TO: MAI

COMPANY: MAI

TELE: FAX #:

PROJECT NUMBER: PROJECT NAME: 56/5

PROJECT LOCATION: SAMPLER SIGNATURE:

SUBM #: 9412330
CLIENT: MCCAM
DUE: 01/03/95
REF #: 19913

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	MATRIX: OTHER	METHOD PRESERVED: HCL	METHOD PRESERVED: HNO_3	METHOD PRESERVED: OTHER	BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER	OTHER	OTHER	COMMENTS
MW-2		12-22-94	1505	1	VOA	X					X											X										4327G

RELINQUISHED BY	DATE	TIME	RECEIVED BY
[signature]	12-23-94	16:30	
RELINQUISHED BY	DATE	TIME	RECEIVED BY
RELINQUISHED BY	DATE	TIME	RECEIVED BY LABORATORY
	12-23-94	1634	[signature]

REMARKS: Received cold in good cond 12-23-94

3443A5057

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECOR

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR 5

REPORT TO: MIKE CHAMBERS BILL TO: JOSLIN

COMPANY: JOSLIN GEOTECHNICAL
P.O. Box 3.192
DUTCH FLAT CA

TELE: 916 389-2581 FAX #:

PROJECT NUMBER: PROJECT NAME: SNOW

PROJECT LOCATION: OAKLAND SAMPLER SIGNATURE:

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER	ANALYSIS REQUEST: BTEX & TPH as Gasoline (602/8020 & 8015)	THP as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/8520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI	OTHER	COMMENTS
MW-1	OAKLAND	12/24/97	4:30P	1	AG	Y								X																
MW-1 AIR	"	"		2	40	Y																								
MW-2	"	"	5:05P	1	AG	Y															X									624
MW-2 AIR	"	"		2	40	Y																								

43275
43276

RELINQUISHED BY: DATE 12/24/97 TIME 1825 RECEIVED BY:

RELINQUISHED BY: DATE TIME RECEIVED BY:

RELINQUISHED BY: DATE TIME RECEIVED BY LABORATORY:

REMARKS:

ICE/T* ✓ GOOD CONDITION ✓ HEAD SPACE ABSENT ✓

PRESERVATIVE ✓ APPROPRIATE CONTAINERS ✓

VOAS | O&G | METALS | OTHER

JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

June 10, 1995

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the latest test results in our quarterly monitoring program for the monitoring wells located on your site. Included in this report are all monitoring well results taken from the wells since installation.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
5-15-95	MW1	ND	ND	ND	ND	ND
	MW2	12000	17	96	50	200
12-22-94	MW-1	ND	ND	ND	ND	ND
	MW-2	20,000	22	170	89	470
9-14-94	MW1	ND	ND	ND	ND	ND
	MW2	200,000	ND	170	400	2600
7-29-94	MW1A	ND	ND	ND	ND	ND
	MW2A	21,000	21	150	53	150
5-31-94	MW1A,B	ND	ND	ND	ND	ND
	MW2A,B	6400	15	100	43	220

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND
	B1;163	ND	ND	ND	ND	ND
	B1:172	ND	ND	ND	ND	ND
	B1;182	ND	ND	ND	ND	ND

B1;193	ND	ND	ND	ND	ND
B1;1102	ND	ND	ND	ND	ND
B1:1113	ND	ND	ND	ND	ND
B2;212	ND	ND	ND	ND	ND
B2;222	440	ND	ND	.36	5.5
B2;233	2000	ND	.59	1.0	28
B2;241	2100	ND	.60	ND	25
B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Monitoring well sampling will continue to review contamination levels of the groundwater at the site. Monitoring well #2 continues to have very low water flow at this time.

Per our discussion with you, we are going to continue with efforts to remove product from monitoring well #2 and continue with your capability to remove the solvent from the water with your distilling process at your facility.

Monitoring well sampling will continue upon request to review contamination levels of the groundwater at the site.

Additional monitoring wells and soil investigation are necessary to determine the limits of the contamination area.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

Copies: Alameda County
San Francisco RQCB

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Joslin Geotechnical P.O. Box 193 Dutch Flat, CA 95714	Client Project ID: # 220; Snow	Date Sampled: 05/15/95
		Date Received: 05/15/95
	Client Contact: Bob Joslin / Mike Chambers	Date Extracted: 05/15-05/17/95
	Client P.O:	Date Analyzed: 05/15-05/17/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
52462	MW1	W	ND	ND	ND	ND	ND	106
52463	MW2	W	12,000,e,a	17	96	50	200	94
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (Stoddard's Solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 05/15-05/16/95 Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample	MS	MSD		MS	MSD	
TPH (gas)	0.0	102.4	102.3	100	102.4	102.3	0.0
Benzene	0	9.5	9.8	10	95.0	98.0	3.1
Toluene	0	9.7	10.2	10	97.0	102.0	5.0
Ethyl Benzene	0	9.7	10.1	10	97.0	101.0	4.0
Xylenes	0	29.9	31.5	30	99.7	105.0	5.2
TPH (diesel)	0	194	195	200	97	97	0.4
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

4123 A505X10

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553
(510) 798-1620 FAX (510) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☑ 5 DAY

REPORT TO: MIKE CHAMBERS BILL TO: JOSLIN
COMPANY: JOSLIN GEOTECHNICAL
TELE: (510) 351-2581 FAX #:
PROJECT NUMBER: 220 PROJECT NAME: SNOW
PROJECT LOCATION: OAKLAND SAMPLER SIGNATURE: Peter J. Ehlers

SAMPLE ID	LOCATION	SAMPLING DATE	SAMPLING TIME	# CONTAINERS	TYPE CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	METHOD PRESERVED: HCL	HNO_3	OTHER
MW 1	OAKLAND	5/15/15	1128	1	AG	X							
MW 1A	"	"	1131	1	AG	X							
MW 2	"	"	1420	1	AG	X							
MW 2A	"	"	1425	1	AG	X							

ANALYSIS REQUEST

BTEX & TPH as Gasoline (602/8020 & 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/5520 B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010	EPA 602/8020	EPA 608/8080	EPA 608/8080 - PCBs Only	EPA 624/8240/8260	EPA 625/8270	CAM - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7421/239.2/6010)	ORGANIC LEAD	RCI
X														
X														

OTHER

COMMENTS

52462
52463

RELINQUISHED BY	DATE	TIME	RECEIVED BY
Peter J. Ehlers	5/15/15	1520	Heidi Rucker
RELINQUISHED BY	DATE	TIME	RECEIVED BY
RELINQUISHED BY	DATE	TIME	RECEIVED BY LABORATORY

REMARKS:

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATIVE APPROPRIATE ✓
CONTAINERS

VOAS | O&G | METALS | OTHER

JOSLIN GEOTECHNICAL

CIVIL, SOIL, GEOLOGICAL & MINING
ENGINEERING CONSULTANTS
MATERIALS TESTING SERVICES

924 Stockton Street ▪ P. O. Box 193 ▪ Dutch Flat, California 95714 ▪ 916-389-2581 ▪ Fax 916-389-8833

November 20, 1998

Harold Turner
Snow Cleaners
2678 Coolidge Ave.
Oakland, CA

Dear Mr. Turner:

This report contains the latest test results in our monitoring program for the monitoring wells located on your site. Included in this report are all monitoring well results taken from the wells since installation.

History

In the summer of 1990, six underground tanks were removed from the site. Two of these tanks, with capacities of about 1000 gallons each, were in use up to the time of the tank field removal. These two tanks were visually examined by C.M. Chambers and Associates at the time of removal and were noted to be intact. Four additional tanks of differing sizes, from about 100 to 400 gallon capacity, were also removed. Holes were observed in two of these tanks. These four tanks had not been used by Mr. Turner during his operation of the site.

Contents and use of the additional four tanks was not determined at time of removal. Date stamps on one of the tanks indicated a manufacturing date of 1927.

Methods

Water samples were acquired by first purging the well (removal of 2 to 4 well volumes) with a precleaned PVC bailer, then sampling the well water with a precleaned bailer unless otherwise noted. Bailer cleaning was performed by first washing with tap water mixed with trisodium phosphate, then rinsing with tap water. Upon recovery, water samples were promptly poured into laboratory supplied 40 ml septa-capped vials (without head space) and 1000 ml amber bottles. Samples were then labeled, put on ice and transported to McCampbell Analytical Laboratory under EPA protocol (see chain-of-custody forms, attached).

Results

The results of the sampling are presented in the table below. The current analytical results of the monitoring wells indicated the presence of petroleum hydrocarbons in the groundwater. By copy of this report, the results are being submitted to the Alameda County Health Care Services, Department of Environmental Health, and San Francisco Regional Water Quality Control Board.

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
11-3-98	MW-1	ND	ND	ND	ND	ND
	MW-2	7800	11	110	41	230
5-15-95	MW1	ND	ND	ND	ND	ND
	MW2	12000	17	96	50	200
12-22-94	MW-1	ND	ND	ND	ND	ND
	MW-2	20,000	22	170	89	470
9-14-94	MW1	ND	ND	ND	ND	ND
	MW2	200,000	ND	170	400	2600
7-29-94	MW1A	ND	ND	ND	ND	ND
	MW2A	21,000	21	150	53	150
5-31-94	MW1A,B	ND	ND	ND	ND	ND
	MW2A,B	6400	15	100	43	220

Results from Monitoring Well Installation

Soil Samples

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-4-94	B1;113	ND	ND	ND	ND	ND
	B1;123	ND	ND	ND	ND	ND
	B1;133	ND	ND	ND	ND	ND
	B1;142	ND	ND	ND	ND	ND
	B1;153	ND	ND	ND	ND	ND

B1;163	ND	ND	ND	ND	ND
B1:172	ND	ND	ND	ND	ND
B1;182	ND	ND	ND	ND	ND
B1;193	ND	ND	ND	ND	ND
B1;1102	ND	ND	ND	ND	ND
B1:1113	ND	ND	ND	ND	ND
B2;212	ND	ND	ND	ND	ND
B2;222	440	ND	ND	.36	5.5
B2;233	2000	ND	.59	1.0	28
B2;241	2100	ND	.60	ND	25
B2;253	ND	ND	ND	ND	ND

NOTE: LEVELS IN PARTS PER MILLION

Sample number B2;241 was sampled for Volatile Halocarbons and was non-detect.

WATER SAMPLES

Date	Sample Number	TPH (Diesel)	Benzene	Toluene	Ethyl Benzene	Xylenes
1-26-94	MW1A	ND	ND	ND	ND	ND
	MW2A	20,000	15	180	39	200

NOTES: LEVELS IN PARTS PER BILLION

ND = Non Detected

Conclusions

Monitoring well #2 continues to have very low water flow at this time. Purging and recharge are slow.

The lab reports now include MTBE testing and it was reported as non-detectable.

Per our discussion with you, we are going to continue with efforts to remove product from monitoring well #2 and

continue with your capability to remove the solvent from the water with your distilling process at your facility. This process continues to be ineffective with the low water flow at the site of monitoring well #2.

Additional monitoring wells and soil investigation are necessary to determine the limits of the contamination area.

Very truly yours,
JOSLIN GEOTECHNICAL

Robert D. Joslin

Robert D. Joslin, PE
Civil/Geological Engineer
CE 37716

Copies: Alameda County
San Francisco RQCB

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Joslin Geotechnical P.O. Box 193 Dutchflat, CA 95714	Client Project ID: #270; Snow	Date Sampled: 11/03/98
		Date Received: 11/03/98
	Client Contact: Mike Chambers	Date Extracted: 11/06-11/09/98
	Client P.O:	Date Analyzed: 11/06-11/09/98

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)'	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
98090	MW-2	W	7800,c,f,h	ND	11	110	41	230	98
98091	MW-1	W	ND	ND	ND	ND	ND	ND	92
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/l.

* cluttered chromatogram; sample peak coelutes with surrogate peak

'The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

Joslin Geotechnical P.O. Box 193 Dutchflat, CA 95714	Client Project ID: #270; Snow	Date Sampled: 11/03/98
		Date Received: 11/03/98
	Client Contact: Mike Chambers	Date Extracted: 11/08/98
	Client P.O:	Date Analyzed: 11/08/98

Volatile Organics By GC/MS

EPA method 624 or 8240

Lab ID	98091
Client ID	MW1
Matrix	W

Compound	Concentration*	Compound	Concentration*
Acetone (b)	ND	cis-1,3-Dichloropropene	ND
Benzene	ND	trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methyl butyl ketone (d)	ND
Bromomethane	ND	Methylene Chloride (e)	ND
Carbon Disulfide	ND	Methyl ethyl ketone (f)	ND
Carbon Tetrachloride	ND	Methyl isobutyl ketone (g)	ND
Chlorobenzene	ND	Styrene (h)	ND
Chloroethane	ND	1,1,2,2-Tetrachloroethane	ND
2-Chloroethyl Vinyl Ether (c)	ND	Tetrachloroethene	ND
Chloroform	ND	Toluene (i)	ND
Chloromethane	ND	1,1,1-Trichloroethane	ND
Dibromochloromethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Acetate (a)	ND
1,1-Dichloroethane	ND	Vinyl Chloride (e)	ND
1,2-Dichloroethane	ND	Xylenes, total (o)	ND
1,1-Dichloroethene	ND	**Surrogate Recoveries (%)**	
cis-1,2-Dichloroethene	ND	Dibromofluoromethane	93
trans-1,2-Dichloroethene	ND	Toluene-d8	100
1,2-Dichloropropane	ND	4-Bromofluorobenzene	108

Comments:

*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

Reporting limits unless otherwise stated: water samples 1 ug/L; vapor samples 0.5 ug/L; solid and sludge samples 5 ug/kg; wipes 0.2ug/wipe

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene; (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

Joslin Geotechnical P.O. Box 193 Dutchflat, CA 95714	Client Project ID: #270; Snow	Date Sampled: 11/03/98
		Date Received: 11/03/98
	Client Contact: Mike Chambers	Date Extracted: 11/08-11/09/98
	Client P.O:	Date Analyzed: 11/08-11/09/98

Volatile Organics By GC/MS

EPA method 624 or 8240

Lab ID	98090
Client ID	MW2
Matrix	W

Compound	Concentration*	Compound	Concentration*
Acetone (b)	ND<35	cis-1,3-Dichloropropene	ND<10
Benzene	11	trans-1,3-Dichloropropene	ND<10
Bromodichloromethane	ND<10	Ethylbenzene	40
Bromoform	ND<10	Methyl butyl ketone (d)	ND<10
Bromomethane	ND<10	Methylene Chloride(e)	ND<10
Carbon Disulfide	ND<10	Methyl ethyl ketone (f)	ND<10
Carbon Tetrachloride	ND<10	Methyl isobutyl ketone (g)	ND<10
Chlorobenzene	ND<10	Styrene (h)	ND<10
Chloroethane	ND<10	1,1,2,2-Tetrachloroethane	ND<10
2-Chloroethyl Vinyl Ether(c)	ND<10	Tetrachloroethene	ND<10
Chloroform	ND<10	Toluene (i)	130
Chloromethane	ND<10	1,1,1-Trichloroethane	ND<10
Dibromochloromethane	ND<10	1,1,2-Trichloroethane	ND<10
1,2-Dichlorobenzene	ND<10	Trichloroethene	ND<10
1,3-Dichlorobenzene	ND<10	Trichlorofluoromethane	ND<10
1,4-Dichlorobenzene	ND<10	Vinyl Acetate (m)	ND<10
1,1-Dichloroethane	ND<10	Vinyl Chloride (n)	18
1,2-Dichloroethane	ND<10	Xylenes, total (o)	160
1,1-Dichloroethene	ND<10	**Surrogate Recoveries (%)**	
cis-1,2-Dichloroethene	480	Dibromofluoromethane	99
trans-1,2-Dichloroethene	28	Toluene-d8	102
1,2-Dichloropropane	ND<10	4-Bromofluorobenzene	101

Comments: h

*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/L

Reporting limits unless otherwise stated: water samples 1 ug/L; vapor samples 0.5 ug/L; solid and sludge samples 5 ug/kg; wipes 0.2ug/wipe

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) 2-propanone or dimethyl ketone; (c) (2-chloroethoxy) ethene; (d) 2-hexanone; (e) dichloromethane; (f) 2-butanone; (g) 4-methyl-2-pentanone or isopropylacetone; (h) lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content; (k) ethenylbenzene, (l) methylbenzene; (m) acetic acid ethenyl ester; (n) chloroethene; (o) dimethylbenzenes.

DHS Certification No. 1644

Edward Hamilton, Lab Director

12389 x 3/05 x 35

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: MIKE CHAMBERS Bill To: JOSLIN
Company: JOSLIN GEOTECHNICAL
Tele: 530 389-8071 Fax: 530 389-8071
Project #: 270 Project Name: SNOW
Project Location: OAKLAND
Sampler Signature: C M Chamber

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO_3	Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Other	Other	Comments
MW2	OAKLAND	1-3-98	1350	1	40	X						X			X								X									98090
MW1	OAKLAND	1-3-98	1310	1	40	X						X			X								X									98091
		1-3-98		1	40																											
		1-3-98		1	40																											
		1-3-98		1	40																											
		1-3-98		1	40																											

Relinquished By:	Date:	Time:	Received By:
C. Chamber	1-3-98	1445	Ana A Ruiz
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATION APPROPRIATE ✓
CONTAINERS ✓
VOAS O&G METALS OTHER
Y