

July 23, 1990

90 JUL 25 AM 10:42



Mr. Aria Levy
Hazardous Materials Specialist
Division of Hazardous Materials
Department of Environmental Health
Alameda Health Agency
80 Swan Way
Oakland, CA 94621

Dear Mr. Levy:

Enclosed are the laboratory test results for groundwater samples collected from four monitoring wells (OW-1 to OW-4) in April, 1990. Samples were analyzed for total petroleum hydrocarbons by IR (Standard method 503E); total petroleum hydrocarbons as diesel (EPA method 3510/8015); total petroleum hydrocarbons as gasoline with benzene, toluene, ethylbenzene, and xylenes distinction (EPA method 5030/8015/8020); and purgeable priority pollutants (EPA method 8240). The samples designated "OW-5" on the laboratory data sheets are duplicate samples collected from well OW-3 for quality control purposes. All samples were preserved and transmitted within allowable holding times under proper chain-of-custody record.

Table 1 summarizes the laboratory results for petroleum hydrocarbons. The laboratory detected diesel hydrocarbons in all four wells; gasoline hydrocarbons in wells OW-1 and OW-3; benzene, toluene, and/or ethylbenzene in concentrations below 1 ppb in all wells; and xylenes in concentrations below 3 ppb in all wells. None of the compounds were detected in concentrations at or above state or federal maximum contaminant levels (MCLs) set for drinking water standards.

Table 2 summarizes the purgeable priority pollutants detected in the groundwater samples. Seven purgeable compounds were detected in the low ppb range in some of the wells. Of the purgeable compounds identified in the groundwater samples, only 1,4-Dichlorobenzene was detected in concentrations exceeding a MCL for drinking water. A concentration of 13 ppb 1,4-Dichlorobenzene was semi-quantified in the sample collected from well OW-1; the MCL set by the state is 5 ppb.

Water level measurements collected from the wells prior to sampling indicate that the uppermost groundwater beneath the site continues to flow to the southwest toward Coliseum Way.

If you have any questions, please call me at 973-5601.

Sincerely,

A handwritten signature in cursive script that reads "Nancy Crane".

Nancy L. Crane

cc: Mr. Scott Hugenberg (w/ attachments)
California Regional Water Quality Control Board
1111 Jackson St.
Oakland, CA 94607

TABLE 1

Analytical Results of Groundwater Samples Collected
on 23 April 1990. All results are in ppb.

Sample Location	TPHIR	TPHD	TPHG	B	T	E	X
OW-1	ND	300	82	ND	0.4	ND	2.4
OW-2	ND	140	ND	ND	0.6	ND	0.8
OW-3	ND	470	52	ND	0.8	0.5	2.1
OW-3 (dup)	ND	570	120	0.5	0.9	0.8	1.3
OW-4	ND	210	ND	0.5	0.6	0.3	2.0
Detection Limit	5000	50	50	0.3	0.3	0.3	0.3

TPHIR = total petroleum hydrocarbons by IR (EPA method 418.1)

TPHD = total petroleum hydrocarbons as diesel
(EPA method 3510/8015)

TPHG = total petroleum hydrocarbons as gasoline
(EPA method 5030/8015)

B = benzene T = toluene E = ethylbenzene X = xylenes

TABLE 2

Purgeable Priority Pollutants Detected in the Groundwater
Samples Collected on 23 April 1990. All results are in ppb.

Compound	OW-1	OW-2	OW-3	OW-3 (dup)	OW-4
1,1-Dichloroethane	4	ND	13	14	5
Methylene Chloride	ND	ND	10	9	ND
cis-1,2-Dichloroethene	ND	ND	40	33	ND
1,3-Dichlorobenzene	4	ND	ND	ND	ND
1,4-Dichlorobenzene	13 ^a	ND	ND	ND	ND
Diisopropyl Ether	7	ND	ND	ND	ND
Fluorobenzene	ND	ND	ND	10	ND

^a Exceeds state maximum contaminant level for drinking water.

Analytical Report

LOG NO: E90-04-675

Received: 23 APR 90

Reported: 07 MAY 90

Coliseum Way

Mr. Eric Johnson
 PG&E Technical & Eco. Services
 3400 Crow Canyon Road
 San Ramon, California 94583

Purchase Order: Z19-0-128-809

Project: 3647

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED				
04-675-1	OW-1	23 APR 90				
04-675-2	OW-2	23 APR 90				
04-675-3	OW-3	23 APR 90				
04-675-4	OW-4	23 APR 90				
04-675-5	OW-5	23 APR 90				
PARAMETER	04-675-1	04-675-2	04-675-3	04-675-4	04-675-5	
Petroleum Hydrocarbons by IR, mg/L	<5	<5	<5	<5	<5	
Diesel Method 3510						
Date Analyzed	05.01.90	05.01.90	05.01.90	05.01.90	05.01.90	
Dilution Factor, Times	1	1	1	1	1	
Total Fuel Hydrocarbons, ug/L	300	140	470	210	570	
Other Diesel Method 3510	---	---	---	---	---	
TPH-Volatile Hydrocarbons/BTEX						
Date Analyzed	04.27.90	04.27.90	04.27.90	04.27.90	04.27.90	
Dilution Factor, Times	1	1	1	1	1	
Benzene, ug/L	<0.3	<0.3	<0.3	0.5	0.5	
Ethylbenzene, ug/L	<0.3	<0.3	0.5	0.3	0.8	
Toluene, ug/L	0.4	0.6	0.8	0.6	0.9	
Total Xylene Isomers, ug/L	2.4	0.8	2.1	1.3	2.0	
C4 to C12 Hydrocarbons, ug/L	82	<50	52	<50	120	
Other TPH-Volatile Hydrocarbons/BTEX---	---	---	---	---	---	

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Page 2

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES					DATE SAMPLED
04-675-1	OW-1					23 APR 90
04-675-2	OW-2					23 APR 90
04-675-3	OW-3					23 APR 90
04-675-4	OW-4					23 APR 90
04-675-5	OW-5					23 APR 90
PARAMETER	04-675-1	04-675-2	04-675-3	04-675-4	04-675-5	
Purgeable Priority Pollutants						
Date Extracted	05.01.90	04.27.90	05.01.90	04.28.90	05.01.90	
1,1,1-Trichloroethane, ug/L	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane, ug/L	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane, ug/L	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane, ug/L	4	<1	13	5	14	
1,1-Dichloroethene, ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane, ug/L	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane, ug/L	<1	<1	<1	<1	<1	<1
1,3-Dichloropropene, ug/L	<1	<1	<1	<1	<1	<1
2-Chloroethylvinylether, ug/L	<1	<1	<1	<1	<1	<1
2-Hexanone, ug/L	<1	<1	<1	<1	<1	<1
Acetone, ug/L	<10	<10	<10	<10	<10	<10
Acrolein, ug/L	<10	<10	<10	<10	<10	<10
Acrylonitrile, ug/L	<10	<10	<10	<10	<10	<10
Bromodichloromethane, ug/L	<1	<1	<1	<1	<1	<1
Bromomethane, ug/L	<1	<1	<1	<1	<1	<1
Benzene, ug/L	<1	<1	<1	<1	<1	<1
Bromoform, ug/L	<1	<1	<1	<1	<1	<1
Chlorobenzene, ug/L	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride, ug/L	<1	<1	<1	<1	<1	<1
Chloroethane, ug/L	<1	<1	<1	<1	<1	<1
Chloroform, ug/L	<1	<1	<1	<1	<1	<1

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REPORT OF ANALYTICAL RESULTS

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LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED				
04-675-1	OW-1	23 APR 90				
04-675-2	OW-2	23 APR 90				
04-675-3	OW-3	23 APR 90				
04-675-4	OW-4	23 APR 90				
04-675-5	OW-5	23 APR 90				
PARAMETER	04-675-1	04-675-2	04-675-3	04-675-4	04-675-5	
Chloromethane, ug/L	<1	<1	<1	<1	<1	
Carbon Disulfide, ug/L	<1	<1	<1	<1	<1	
Dibromochloromethane, ug/L	<1	<1	<1	<1	<1	
Ethylbenzene, ug/L	<1	<1	<1	<1	<1	
Freon 113, ug/L	<1	<1	<1	<1	<1	
Methyl ethyl ketone, ug/L	<20	<20	<20	<20	<20	
Methyl isobutyl ketone, ug/L	<1	<1	<1	<1	<1	
Methylene chloride, ug/L	<1	<1	10	<1	9	
Styrene, ug/L	<1	<1	<1	<1	<1	
Trichloroethene, ug/L	<1	<1	<1	<1	<1	
Trichlorofluoromethane, ug/L	<1	<1	<1	<1	<1	
Toluene, ug/L	<1	<1	<1	<1	<1	
Tetrachloroethene, ug/L	<1	<1	<1	<1	<1	
Vinyl acetate, ug/L	<1	<1	<1	<1	<1	
Vinyl chloride, ug/L	<1	<1	<1	<1	<1	
Total Xylene Isomers, ug/L	<1	<1	1	<1	<1	
cis-1,2-Dichloroethene, ug/L	<1	<1	40	<1	33	
trans-1,2-Dichloroethene, ug/L	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene, ug/L	<1	<1	<1	<1	<1	
Semi-Quantified Results **						
1,3-Dichlorobenzene, ug/L	4	---	---	---	---	
Diisopropyl Ether, ug/L	7	---	---	---	---	

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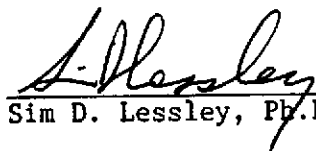
REPORT OF ANALYTICAL RESULTS

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LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
04-675-1	OW-1	23 APR 90
04-675-2	OW-2	23 APR 90
04-675-3	OW-3	23 APR 90
04-675-4	OW-4	23 APR 90
04-675-5	OW-5	23 APR 90

PARAMETER	04-675-1	04-675-2	04-675-3	04-675-4	04-675-5
Fluorobenzene, ug/L	---	---	---	---	10
1,4-Dichlorobenzene, ug/L	13	---	---	---	---

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.



Sim D. Lessley, Ph.D., Laboratory Director



BROWN AND CALDWELL ANALYTICAL LABORATORIES

BATCH QC REPORT Definitions and Terms

- Accuracy:** The ability of a procedure to determine the "true" concentration of an analyte.
- Batch:** A group of samples analyzed sequentially using the same calibration curve, reagents, and instrument.
- Laboratory Control Standard (LCS):** Laboratory reagent water spiked with known compounds and subjected to the same procedures as the samples. The LCS thus indicates the accuracy of the analytical method and, because it is prepared from a different source than the standard used to calibrate the instrument, it also serves to double-check the calibration.
- LC Result:** Laboratory result of an LCS analysis.
- LT Result:** Expected result, or true value, of the LCS analysis.
- Matrix QC:** Quality control tests performed on actual client samples. For most inorganic analyses, the laboratory uses a pair of duplicate samples and a spiked sample. For most organic analyses, the laboratory uses a pair of spiked samples (duplicate spikes).
- Percent Recovery:** The percentage of analyte recovered.
For LCS, the percent recovery calculation is
$$LC \div LT \times 100.$$

For spike recoveries, the percent recovery calculation is
$$\frac{(S \text{ Bar} - \text{Sample Concentration})}{\text{Spike Amount}} \times 100$$
- Precision:** The reproducibility of a procedure demonstrated by the agreement between analyses performed on either duplicates of the same sample or a pair of duplicate spikes.
- R1, R2 Result:** Result of the analysis of replicate aliquots of a sample, with R1 indicating the first analysis of the sample and R2 its corresponding duplicate; used to determine precision.
- Relative Percent Difference (RPD):** Calculated using one of the following:
$$\frac{(R1 - R2) \times 100}{(R1 + R2) \div 2} \qquad \frac{(S1 - S2) \times 100}{(S1 + S2) \div 2}$$
- S Bar Result:** The average of spike analysis results.
- S1, S2 Result:** Result of the analysis of replicate spiked aliquots, with S1 indicating one spike of the sample and S2 the second spike; used to determine precision and accuracy.
- True value:** The theoretical, or expected, result of a spike sample analysis.

: ORDER PLACED FOR CLIENT: PG&E Technical & Eco. Services 9004675 :
 : BC ANALYTICAL : EMVL LAB : 12:59:01 08 MAY 1990 - P. 1 :
 =====

SAMPLES...	SAMPLE DESCRIPTION..	DETERM CODE....	DATE....	METHOD.....	EQUIP.	BATCH ID.NO
			ANALYZED			
9004675*1	OW-1	PETROHC	05.04.90	418.1	513-03	47 7453
		DIESEL.3510	05.01.90	3510/8015	516-08	112 7194
		GASOLINE.5030.B	04.27.90	5030/8015	516-19	120 7194
		TEX				
		VOA.8240.NP	05.01.90	8240	517-03	147 7038
9004675*2	OW-2	PETROHC	05.04.90	418.1	513-03	47 7453
		DIESEL.3510	05.01.90	3510/8015	516-08	112 7194
		GASOLINE.5030.B	04.27.90	5030/8015	516-19	120 7194
		TEX				
		VOA.8240.NP	04.27.90	8240	517-03	143 7038
9004675*3	OW-3	PETROHC	05.04.90	418.1	513-03	47 7453
		DIESEL.3510	05.01.90	3510/8015	516-08	112 7194
		GASOLINE.5030.B	04.27.90	5030/8015	516-19	120 7194
		TEX				
		VOA.8240.NP	05.01.90	8240	517-03	147 7038
9004675*4	OW-4	PETROHC	05.04.90	418.1	513-03	47 7453
		DIESEL.3510	05.01.90	3510/8015	516-08	112 7194
		GASOLINE.5030.B	04.27.90	5030/8015	516-19	120 7194
		TEX				
		VOA.8240.NP	04.27.90	8240	517-03	143 7038
9004675*5	OW-5	PETROHC	05.04.90	418.1	513-03	47 7453
		DIESEL.3510	05.01.90	3510/8015	516-08	112 7194
		GASOLINE.5030.B	04.27.90	5030/8015	516-19	120 7194
		TEX				
		VOA.8240.NP	05.01.90	8240	517-03	147 7038

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

DATE REPORTED : 05/08/90

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LABORATORY CONTROL STANDARDS

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
Petroleum Hydrocarbons by IR Diesel Method 3510	05.04.90	47	6	6	mg/L	100
Dilution Factor	05.01.90	112	1	1	Times	100
Total Fuel Hydrocarbons	05.01.90	112	1100	1000	ug/L	110
TPH-Volatile Hydrocarbons/BTEX						
Dilution Factor	04.27.90	120	1	1	Times	100
Benzene	04.27.90	120	94	100	ug/L	94
Ethylbenzene	04.27.90	120	95	100	ug/L	95
Toluene	04.27.90	120	95	100	ug/L	95
Total Xylene Isomers	04.27.90	120	215	200	ug/L	108
C4 to C12 Hydrocarbons	04.27.90	120	740	790	ug/L	94
TPH-Volatile Hydrocarbons/BTEX						
Dilution Factor	04.27.90	120	1	1	Times	100
Benzene	04.27.90	120	94	100	ug/L	94
Ethylbenzene	04.27.90	120	94	100	ug/L	94
Toluene	04.27.90	120	95	100	ug/L	95
Total Xylene Isomers	04.27.90	120	220	200	ug/L	110
C4 to C12 Hydrocarbons	04.27.90	120	740	790	ug/L	94
Purgeable Priority Pollutants						
Dilution Factor	04.27.90	143	1	1	Times	100
1,1,1-Trichloroethane	04.27.90	143	59	50	ug/L	118
1,1,2,2-Tetrachloroethane	04.27.90	143	57	50	ug/L	114
1,1,2-Trichloroethane	04.27.90	143	53	50	ug/L	106
1,1-Dichloroethane	04.27.90	143	59	50	ug/L	118
1,1-Dichloroethene	04.27.90	143	55	50	ug/L	110
1,2-Dichloroethane	04.27.90	143	56	50	ug/L	112
1,2-Dichlorobenzene	04.27.90	143	58	50	ug/L	116
1,2-Dichloropropane	04.27.90	143	56	50	ug/L	112
1,3-Dichlorobenzene	04.27.90	143	61	50	ug/L	122
1,3-Dichloropropene	04.27.90	143	53	50	ug/L	106
1,4-Dichlorobenzene	04.27.90	143	58	50	ug/L	116
2-Chloroethylvinylether	04.27.90	143	57	50	ug/L	114
2-Hexanone	04.27.90	143	49	50	ug/L	98
4-Methyl-2-Pentanone	04.27.90	143	46	50	ug/L	92
Acetone	04.27.90	143	56	50	ug/L	112
Acrolein	04.27.90	143	280	250	ug/L	112
Acrylonitrile	04.27.90	143	300	250	ug/L	120
Bromodichloromethane	04.27.90	143	53	50	ug/L	106
Bromomethane	04.27.90	143	57	50	ug/L	114
Benzene	04.27.90	143	55	50	ug/L	110
Bromoform	04.27.90	143	54	50	ug/L	108

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

DATE REPORTED : 05/08/90

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LABORATORY CONTROL STANDARDS

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
Chlorobenzene	04.27.90	143	55	50	ug/L	110
Carbon Tetrachloride	04.27.90	143	55	50	ug/L	110
Chloroethane	04.27.90	143	58	50	ug/L	116
Chloroform	04.27.90	143	57	50	ug/L	114
Chloromethane	04.27.90	143	60	50	ug/L	120
Carbon Disulfide	04.27.90	143	55	50	ug/L	110
Dibromochloromethane	04.27.90	143	53	50	ug/L	106
Ethylbenzene	04.27.90	143	55	50	ug/L	110
Freon 113	04.27.90	143	51	50	ug/L	102
Methyl ethyl ketone	04.27.90	143	59	50	ug/L	118
Methylene chloride	04.27.90	143	58	50	ug/L	116
Styrene	04.27.90	143	54	50	ug/L	108
Trichloroethene	04.27.90	143	51	50	ug/L	102
Trichlorofluoromethane	04.27.90	143	56	50	ug/L	112
Toluene	04.27.90	143	54	50	ug/L	108
Tetrachloroethene	04.27.90	143	57	50	ug/L	114
Vinyl acetate	04.27.90	143	54	50	ug/L	108
Vinyl chloride	04.27.90	143	57	50	ug/L	114
Total Xylene Isomers	04.27.90	143	110	100	ug/L	110
cis-1,2-Dichloroethene	04.27.90	143	56	50	ug/L	112
trans-1,2-Dichloroethene	04.27.90	143	57	50	ug/L	114
trans-1,3-Dichloropropene	04.27.90	143	54	50	ug/L	108

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

DATE REPORTED : 05/08/90

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MATRIX QC PRECISION (DUPLICATES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	R1 RESULT	R2 RESULT	UNIT	RELATIVE %DIFF
Petroleum Hydrocarbons by IR	05.04.90	47	<5	<5	mg/L	NA

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

DATE REPORTED : 05/08/90

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MATRIX QC PRECISION (DUPLICATE SPIKES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	S1 RESULT	S2 RESULT	UNIT	RELATIVE RECOVERY
Diesel Method 3510						
Dilution Factor	05.01.90	112	1	1	Times	0
Total Fuel Hydrocarbons	05.01.90	112	1300	1700	ug/L	27
TPH-Volatile Hydrocarbons/BTEX						
Dilution Factor	04.27.90	120	1	1	Times	0
C4 to C12 Hydrocarbons	04.27.90	120	720	730	ug/L	1

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

DATE REPORTED : 05/08/90

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MATRIX QC ACCURACY (SPIKES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	SBAR RESULT	TRUE RESULT	RBAR RESULT	UNIT	PERCENT RECOVERY
Diesel Method 3510 Total Fuel Hydrocarbons	05.01.90	112	1500	2100	5.01.90	ug/L	69
TPH-Volatile Hydrocarbons/BTEX C4 to C12 Hydrocarbons	04.27.90	120	725	790	<50	ug/L	92

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

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METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT
Petroleum Hydrocarbons by IR Diesel Method 3510	05.04.90	47	0	50	mg/L
Date Analyzed	05.01.90	112	5.01.90	NA	Date
Dilution Factor	05.01.90	112	1	NA	Times
Total Fuel Hydrocarbons	05.01.90	112	14	NA	ug/L
TPH-Volatile Hydrocarbons/BTEX					
Date Analyzed	04.27.90	120	4.27.90	NA	Date
Dilution Factor	04.27.90	120	1	NA	Times
Benzene	04.27.90	120	0	0.1	ug/L
Ethylbenzene	04.27.90	120	0	0.1	ug/L
Toluene	04.27.90	120	0	0.1	ug/L
Total Xylene Isomers	04.27.90	120	0.21	0.1	ug/L
C4 to C12 Hydrocarbons	04.27.90	120	5.7	5	ug/L
Purgeable Priority Pollutants					
Date Analyzed	04.27.90	143	4.27.90	NA	Date
Date Extracted	04.27.90	143	4.27.90	NA	Date
Dilution Factor	04.27.90	143	1	NA	Times
1,1,1-Trichloroethane	04.27.90	143	0	0.2	ug/L
1,1,2,2-Tetrachloroethane	04.27.90	143	0	0.2	ug/L
1,1,2-Trichloroethane	04.27.90	143	0	0.2	ug/L
1,1-Dichloroethane	04.27.90	143	0	0.2	ug/L
1,1-Dichloroethene	04.27.90	143	0	0.2	ug/L
1,2-Dichloroethane	04.27.90	143	0	0.2	ug/L
1,2-Dichlorobenzene	04.27.90	143	0	0.2	ug/L
1,2-Dichloropropane	04.27.90	143	0	0.2	ug/L
1,3-Dichlorobenzene	04.27.90	143	0	0.2	ug/L
1,3-Dichloropropene	04.27.90	143	0	0.2	ug/L
1,4-Dichlorobenzene	04.27.90	143	0	0.2	ug/L
2-Chloroethylvinylether	04.27.90	143	0	0.2	ug/L
2-Hexanone	04.27.90	143	0	2	ug/L
4-Methyl-2-Pentanone	04.27.90	143	0	2	ug/L
Acetone	04.27.90	143	0	5	ug/L
Acrolein	04.27.90	143	0	1	ug/L
Acrylonitrile	04.27.90	143	0	2	ug/L
Bromodichloromethane	04.27.90	143	0	0.2	ug/L
Bromomethane	04.27.90	143	0	0.2	ug/L
Benzene	04.27.90	143	0	0.2	ug/L
Bromoform	04.27.90	143	0	0.2	ug/L
Chlorobenzene	04.27.90	143	0	0.2	ug/L
Carbon Tetrachloride	04.27.90	143	0	0.2	ug/L

BC ANALYTICAL

BATCH QC REPORT
ORDER E9004675

DATE REPORTED : 05/08/90

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METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT
Chloroethane	04.27.90	143	0	0.2	ug/L
Chloroform	04.27.90	143	0	0.2	ug/L
Chloromethane	04.27.90	143	0	0.2	ug/L
Carbon Disulfide	04.27.90	143	0	0.2	ug/L
Dibromochloromethane	04.27.90	143	0	0.2	ug/L
Ethylbenzene	04.27.90	143	0	0.2	ug/L
Freon 113	04.27.90	143	0	0.2	ug/L
Methyl ethyl ketone	04.27.90	143	0	2	ug/L
Methylene chloride	04.27.90	143	0.87	0.2	ug/L
Styrene	04.27.90	143	0	0.2	ug/L
Trichloroethene	04.27.90	143	0	0.2	ug/L
Trichlorofluoromethane	04.27.90	143	0	0.2	ug/L
Toluene	04.27.90	143	0	0.2	ug/L
Tetrachloroethene	04.27.90	143	0	0.2	ug/L
Vinyl acetate	04.27.90	143	0	0.2	ug/L
Vinyl chloride	04.27.90	143	0	0.2	ug/L
Total Xylene Isomers	04.27.90	143	0	0.2	ug/L
cis-1,2-Dichloroethene	04.27.90	143	0	0.2	ug/L
trans-1,2-Dichloroethene	04.27.90	143	0	NA	ug/L
trans-1,3-Dichloropropene	04.27.90	143	0	0.2	ug/L
1,2-Dichloroethane-d4 Reported	04.27.90	143	50	NA	ug/L
1,2-Dichloroethane-d4 Theo.	04.27.90	143	50	NA	ug/L
4-Bromofluorobenzene Reported	04.27.90	143	48	NA	ug/L
4-Bromofluorobenzene Theo.	04.27.90	143	50	NA	ug/L
Toluene-d8 Reported	04.27.90	143	50	NA	ug/L
Toluene-d8 Theo.	04.27.90	143	50	NA	ug/L

9004675



CHAIN OF CUSTODY RECORD
Technical and Ecological Services
 3400 Crow Canyon Road, San Ramon, California 94583

SHIP TO: BROWN AND CALDWELL
1255 POWELL ST
EMERYVILLE, CA
94608
 ATTENTION: LHI-SAN HU PHONE: 428-2306

Project Number: <u>3647</u>		Project Name: <u>OAK G.L.</u>			Project Manager: <u>E. JOHNSON</u>			3518 WASTE EPA 3030/BOIS EPA 3030/BOIS EPA 3030/BOIS TOTAL FUELS PETROLEUM							
Samplers: (Signatures) <u>Kevin Capone</u>					Field Team Leader: <u>ROBERT GRAY</u>										
SAMPLE NUMBER	DATE	TIME	SAMPLE TYPE	SAMPLE INFORMATION	STATION LOCATION	NUMBER OF CONTAINERS	REMARKS								
	<u>4-23-90</u>	<u>1335</u>	<u>GW</u>	<u>MONITOR WELL SAMPLE</u>	<u>OW-3</u>	<u>3</u>	<u>8</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>CONTRACT #</u> <u>7-19-0-128-889</u>			
	<u>4-23-90</u>	<u>1350</u>	<u>"</u>	<u>" " "</u>	<u>OW-5</u>	<u>5</u>	<u>8</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
	<u>4-23-90</u>	<u>1410</u>	<u>"</u>	<u>" " "</u>	<u>OW-4</u>	<u>4</u>	<u>8</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
	<u>4-23-90</u>	<u>1435</u>	<u>"</u>	<u>" " "</u>	<u>OW-1</u>	<u>1</u>	<u>8</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
	<u>4-23-90</u>	<u>1450</u>	<u>"</u>	<u>" " "</u>	<u>OW-2</u>	<u>2</u>	<u>8</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
	<u>4-23-90</u>	<u>1230</u>	<u>AQ</u>	<u>FIELD BLANK</u>	<u>6</u>	<u>4</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>					
				<u>TRIP BLANK</u>	<u>7</u>	<u>1</u>	<u>X</u>	<u>X</u>							
Relinquished By: (Signature) <u>Robert M. Gray</u>		Date/Time: <u>4-23-90 1506</u>		Received By: (Signature) <u>Monika A. A. 4-23-90</u>		Date/Time: <u>3:00 PM</u>		Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		Ship Via:	
Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		Date/Time:		Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		BU/Airbit Number:	
Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		Date/Time:		Relinquished By: (Signature)		Date/Time:		Received By: (Signature)		Date:	