SECOR
International Incorporated

September 23, 1997

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

QUARTERLY GROUNDWATER MONITORING REPORT FOR JULY 1997, 580 JULIE ANN WAY, OAKLAND, CALIFORNIA, St ID #4008, FOR METZ BAKING COMPANY

Dear Mr. Chan:

SECOR International Incorporated (*SECOR*) is pleased to submit this Quarterly Groundwater Monitoring Report presenting the results of groundwater monitoring conducted at 580 Julie Ann Way in Oakland, California (the Site, see Figure 1, Site Location Map). We are providing this document to the Alameda County Department of Environmental Health (ACDEH) in accordance with recommended activities outlined in *SECOR*'s Summary Report for additional site characterization dated February 5, 1997. This report presents monitoring well sounding, groundwater elevation, and groundwater quality data collected from four Site wells on July 31, 1997.

BACKGROUND

The Site formerly operated one 8,000-gallon capacity gasoline underground storage tank (UST) and one 10,000-gallon capacity diesel UST for fueling delivery trucks (Figure 2). Previous subsurface investigations conducted by Groundwater Technology, Inc. (GTI) in June 1991 and *SECOR* in November 1993 indicated the presence of total petroleum hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) in soil samples collected in the immediate vicinity of the USTs. At soil boring locations further away from the USTs, low to non-detectable concentrations of TPHg and TPHd were reported; however, elevated concentrations of high-boiling point hydrocarbons (total oil and grease/total recoverable petroleum hydrocarbons) were reported at all boring locations where analyzed.

SECOR supervised the excavation and removal of the two USTs in September 1995. Petroleum hydrocarbon-impacted soil and groundwater were observed during UST removal activities, laboratory analysis of collected soil and groundwater samples revealed the presence of TPHg, TPHd, and high-boiling hydrocarbons. Based on the apparent composition of these high-boiling point hydrocarbons and their pervasive presence in fill soil underlying the Site, it was determined that the source of these hydrocarbons is not related to the USTs. *SECOR* supervised the installation of four groundwater monitoring wells (MW-1 through MW-4) adjacent to the former USTs in February and August 1996. Soil and groundwater samples collected and analyzed during these activities revealed the presence of TPHg, TPHd, TPH as motor oil (TPHmo), and benzene, toluene, ethylbenzene, and xylenes (BTEX).

GROUNDWATER MONITORING PROCEDURES

On July 31, 1997, *SECOR* sounded four groundwater monitoring wells (MW-1 through MW-4) using an electronic water-level indicator. The depth-to-groundwater and total depth were measured for each well and recorded on the Hydrologic and Water Sample Field Data Sheets included in Appendix A. The water-level indicator was rinsed with deionized water between the sounding of each well to prevent cross contamination.

Should try no purge method

Prior to sampling, wells were purged of approximately three wellbore volumes of water using a Teflon bailer. During purging, the evacuated groundwater was measured for pH, electrical conductivity, and temperature, and was visually inspected for color and turbidity. Parameter results were recorded on Water Sample Field Data Sheets included in Appendix A. Upon removal of the appropriate purge volume and stabilization of the measured parameters, samples were collected from each well using a disposable PVC bailer. Groundwater samples were decanted into prelabeled laboratory-supplied glassware, placed in an ice-filled cooler, and transported to Superior Analytical Laboratory (Superior) of Martinez, California, a state-certified laboratory under chain-of-custody documentation.

Four samples were submitted for chemical analysis of TPHg, TPHd, and TPHmo by EPA Method 8015, modified, and BTEX and methyl tertiary butyl ether (MTBE) by EPA Method 8020. Laboratory analytical reports and chain-of-custody records are included in Appendix B.

SUMMARY OF RESULTS

Groundwater elevations along with historic data are included in Table 1. Groundwater chemical results along with historic data are included in Table 2.

Monitoring Well Sounding

A groundwater elevation contour map based on the July 31, 1997 groundwater elevation data is presented as Figure 3. During this monitoring event, groundwater was measured at depths between 4.70 feet and 6.02 feet below the top of the PVC casing. These depths translate to groundwater elevations ranging from 3.68 to 5.36 feet above mean sea level (msl). During this monitoring event groundwater elevations have decreased ranging from 0.25 feet to 0.32 feet in wells MW-1, MW-2, and MW-4 and increased 2.88 feet in well MW-3 when compared with the August 1996 data. Interpretation of the groundwater elevation contour map indicates a groundwater flow direction to the north to northwest under an average hydraulic gradient of 0.032 feet per foot (ft/ft) which is consistent with the August 1996 flow direction.

Groundwater Chemical Results

Groundwater samples exhibited pH values ranging from 6.66 to 8.09 pH units; temperatures ranging from 69.9 to 77.5 degrees Fahrenheit; specific conductivities ranging from 2,040 to 6,920 micromhos per centimeter (µmhos/cm); brown color; and high turbidity. Groundwater chemical results for July 1997 are shown on Table 2 and displayed graphically on Figure 4. Laboratory analytical reports and chain-of-custody records are included in Appendix B.

During this monitoring event, groundwater samples collected from wells MW-1, MW-2, and MW-4 were reported to contain TPHg at concentrations of 5,900 micrograms per liter (µg/ℓ), 1,800 µg/ℓ, and 360 µg/ℓ, respectively. Samples collected from wells MW-1 through MW-4 were also reported to contain TPHd and TPHmo at concentrations ranging from 1,600 µg/ℓ to 3,300 µg/ℓ. The maximum BTEX concentrations were reported in the sample collected from well MW-1 at 630 µg/ℓ, 8.0 µg/ℓ, 900 µg/ℓ, and 34 µg/ℓ, respectively. MTBE was detected in well MW-2 at a concentration of 7.0 µg/ℓ. The reported chemical concentrations were similar to the historic data.

SECOR plans to submit a Work Plan to the ACDEH outlining recommended additional investigative activities to be performed at the Site in September 1997. Please do not hesitate to contact us at (415) 882-1548 with any questions or comments regarding this document.

Sincerely,

SECOR International Incorporated

Liping Zhang
Project Manager

David E. Scarbrough for
Bruce E. Scarbrough, R.G.
Principal Geologist

cc: Mr. Christopher Rants, Metz Baking Company

Attachments:

Table 1 - Well Construction Details and Groundwater Elevations
Table 2 - Groundwater Chemical Results

Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3 - Groundwater Elevation Contour Map
Figure 4 - Groundwater Chemical Results

Appendix A - Hydrologic and Water Sample Field Data Sheets
Appendix B - Laboratory Analytical Reports and Chain-of-Custody Records

TABLE 1
WELL CONSTRUCTION DETAILS AND GROUNDWATER ELEVATIONS
580 Julie Ann Way
Oakland, California

WELL NUMBER	TOTAL DEPTH[a]	SCREENED INTERVAL[a]	CASING DIAMETER[b]	TOP OF CASING ELEVATION[c]	DATE	DEPTH TO GROUNDWATER[d]	GROUNDWATER ELEVATION[c]
MW-1	14.5	4.5-14.5	2	10.06	08/16/96 08/22/96 07/31/97	4.41 4.45 4.70	5.65 5.61 5.36
MW-2	15	5-15	2	10.17	08/16/96 08/22/96 07/31/97	4.52 4.54 4.86	5.65 5.63 5.31
MW-3	15	5-15	2	10.12	08/16/96 08/22/96 07/31/97	12.66 7.99 5.11	-2.54 2.13 5.01
MW-4	15	5-15	2	9.70	08/16/96 08/22/96 07/31/97	5.72 5.72 6.02	3.98 3.98 3.68

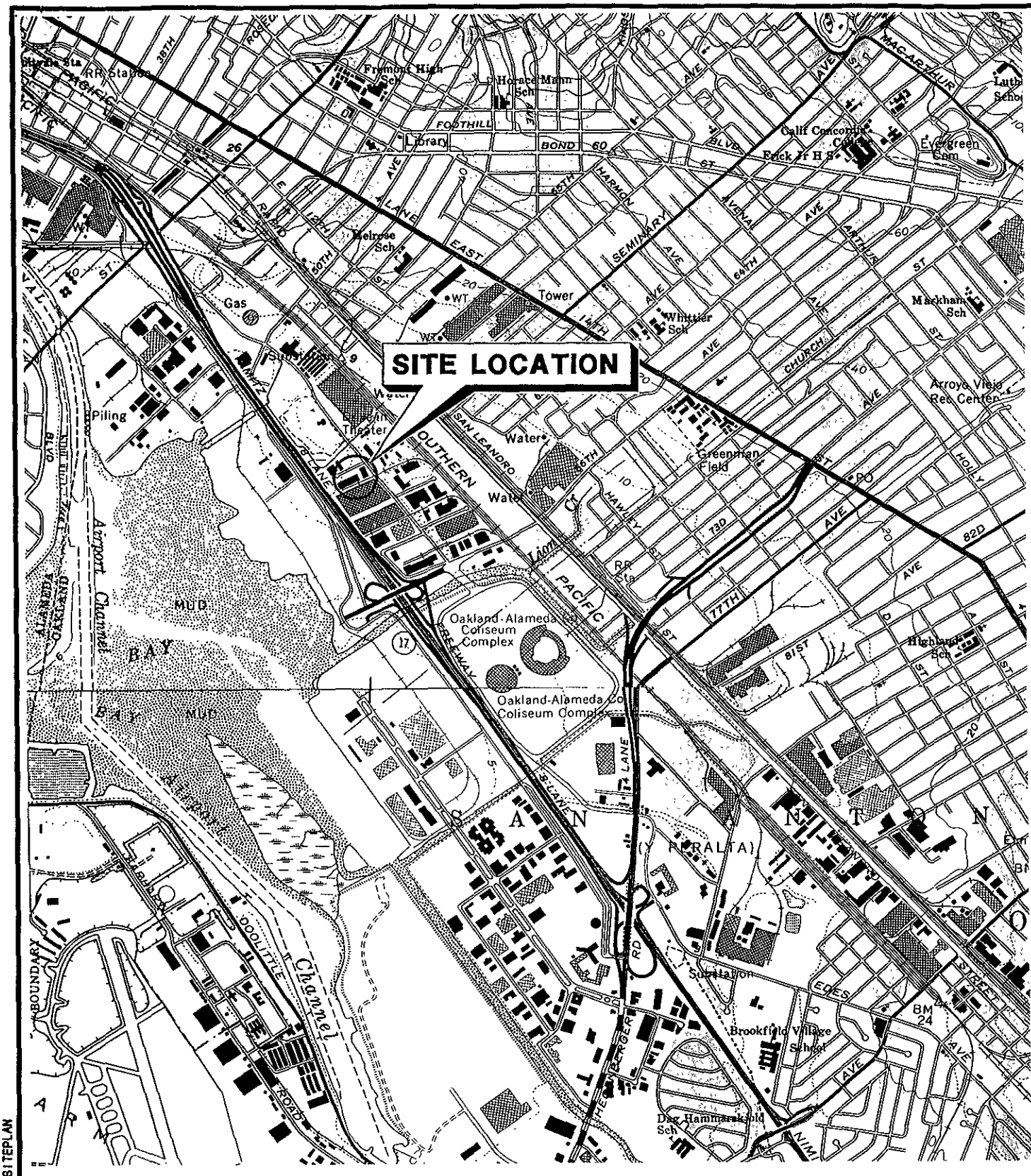
NOTES:
(a) Measured in feet below ground surface.
(b) Measured in inches.
(c) Measured in feet above mean sea level.
(d) Measured in feet below top of PVC casing.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
580 Julie Ann Way
Oakland, California

SAMPLE NUMBER	DATE	TPHg[a] (µg/ℓ)[b]	TPHd[c] (µg/ℓ)	TPHmo[d] (µg/ℓ)	Benzene (µg/ℓ)	Toluene (µg/ℓ)	Ethylbenzene (µg/ℓ)	Xylenes (µg/ℓ)	MTBE[e] (µg/ℓ)	Lead (mg/ℓ)[f]
MW-1	02/28/96	5,900	ND[g]<100	1,700	540	9.0	950	110	NA[h]	NA
	08/16/96	5,600	5,400[i]	4,000	540	7.3	950	110	NA	ND<0.05
	07/31/97	5,900	3,200	1,600	630	8.0	900	34	ND<10	NA
MW-2	08/16/96	2,700	3,000[i]	1,800	63	36	65	100	NA	ND<0.05
	07/31/97	1,800	3,300	1,800	20	1.8	22	4.6	7.0	NA
MW-3	08/16/96	ND<50	730[i]	640	3.1	ND<0.5	ND<0.5	ND<0.5	NA	ND <0.05
	07/31/97	ND<50	1,600	1,500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA
MW-4	08/16/96	460	2,800[i]	3,000	17	1.0	9.1	1.4	NA	ND<0.05
	07/31/97	360	2,000	1,800	1.8	0.6	7.6	0.8	ND<5	NA

NOTES:

(a) Total petroleum hydrocarbons as gasoline.
(b) Micrograms per liter.
(c) Total petroleum hydrocarbons as diesel.
(d) Total petroleum hydrocarbons as motor oil.
(e) Methyl tertiary butyl ether.
(f) Milligrams per liter.
(g) ND: Not detected at specified laboratory reporting limit.
(h) NA: Not Analyzed.
(i) Lighter and heavier hydrocarbons were found in the range of diesel but chromatogram pattern does not resemble a diesel fingerprint.



SOURCE: BASE MAP FROM U.S.G.S. OAKLAND EAST AND SAN LEANDRO CA QUADRANGLES. 7.5 MINUTE SERIES TOPOGRAPHIC MAP, PHOTOREVISED 1980.

SECOR
INTERNATIONAL INCORPORATED

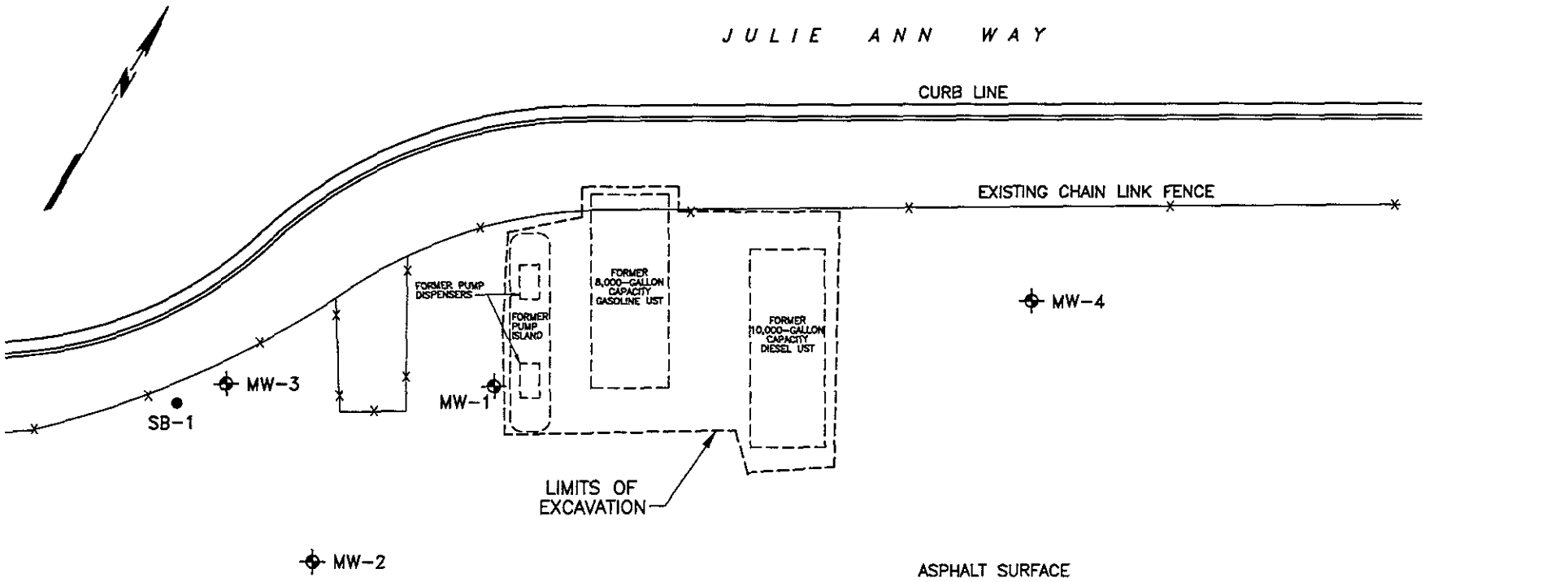
DRAWN	CCR
APPR	DWM
DATE	12OCT95
JOB NO.	70007-001-01

FIGURE 1
SAN FRANCISCO FRENCH BREAD
580 JULIE ANN WAY
OAKLAND, CALIFORNIA

SITE LOCATION MAP

199510.171511 X:\SF-BREAD\JULIE\SITEPLAN

199608.280804 X:\SF-BREAD\JULIE\580JULIE



LEGEND:

- ● SB-1 SOIL BORING LOCATION
- ⌖ MW-1 GROUNDWATER MONITORING WELL

EXISTING BUILDING

REFERENCE: RON ARCHER CIVIL ENGINEER INC., DATED AUGUST 15, 1996.

0 20 40
SCALE FEET

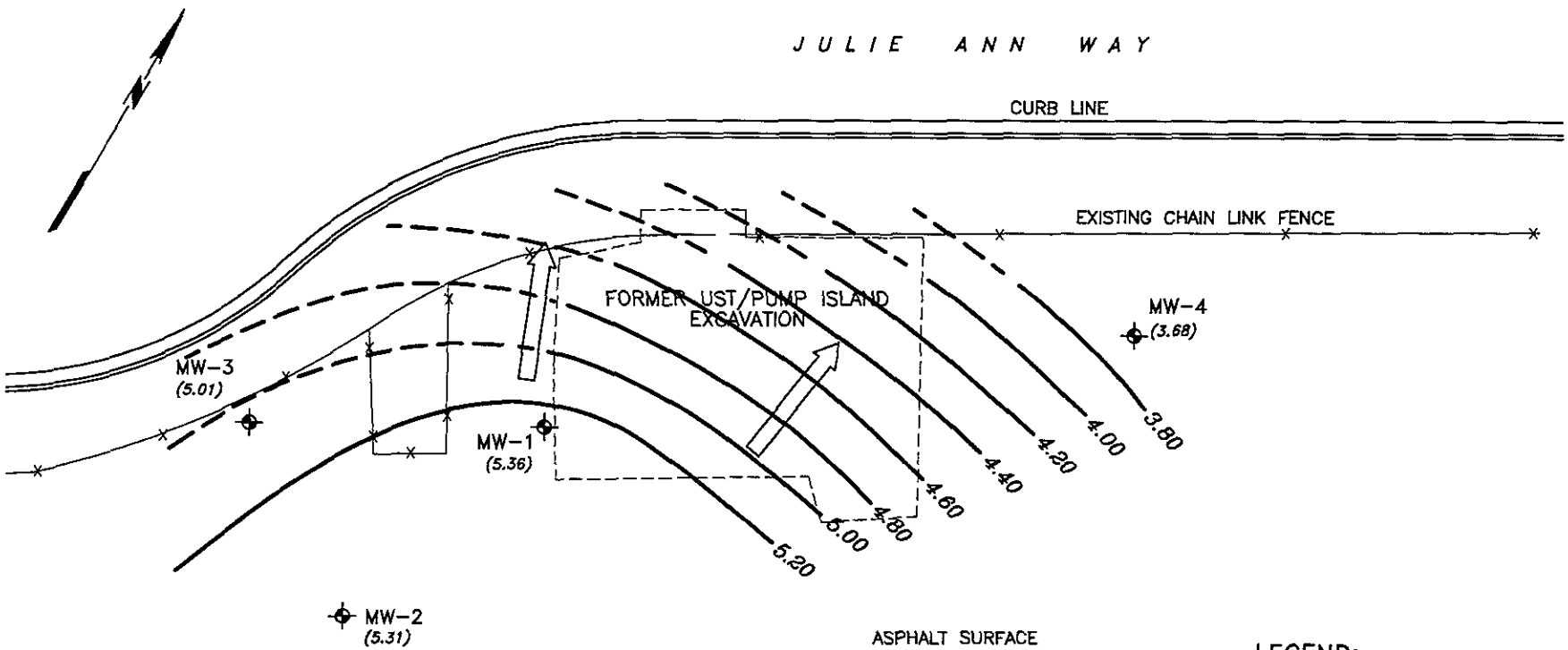
SECOR
INTERNATIONAL INCORPORATED

DRAWN	CCR
APPR	DWM
DATE	28AUG96
JOB NO.	50090-009-03

FIGURE 2
580 JULIE ANN WAY
OAKLAND, CALIFORNIA

SITE PLAN

199708.131453 X:\SF-BREAD\JULIE\JULIE08



LEGEND:

- MW-1 — GROUNDWATER MONITORING WELL
- 3.80 — GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL)
- (3.68) — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION IN FT/FT

REFERENCE: RON ARCHER CIVIL ENGINEER INC., DATED AUGUST 15, 1996.

0 20 40
SCALE FEET

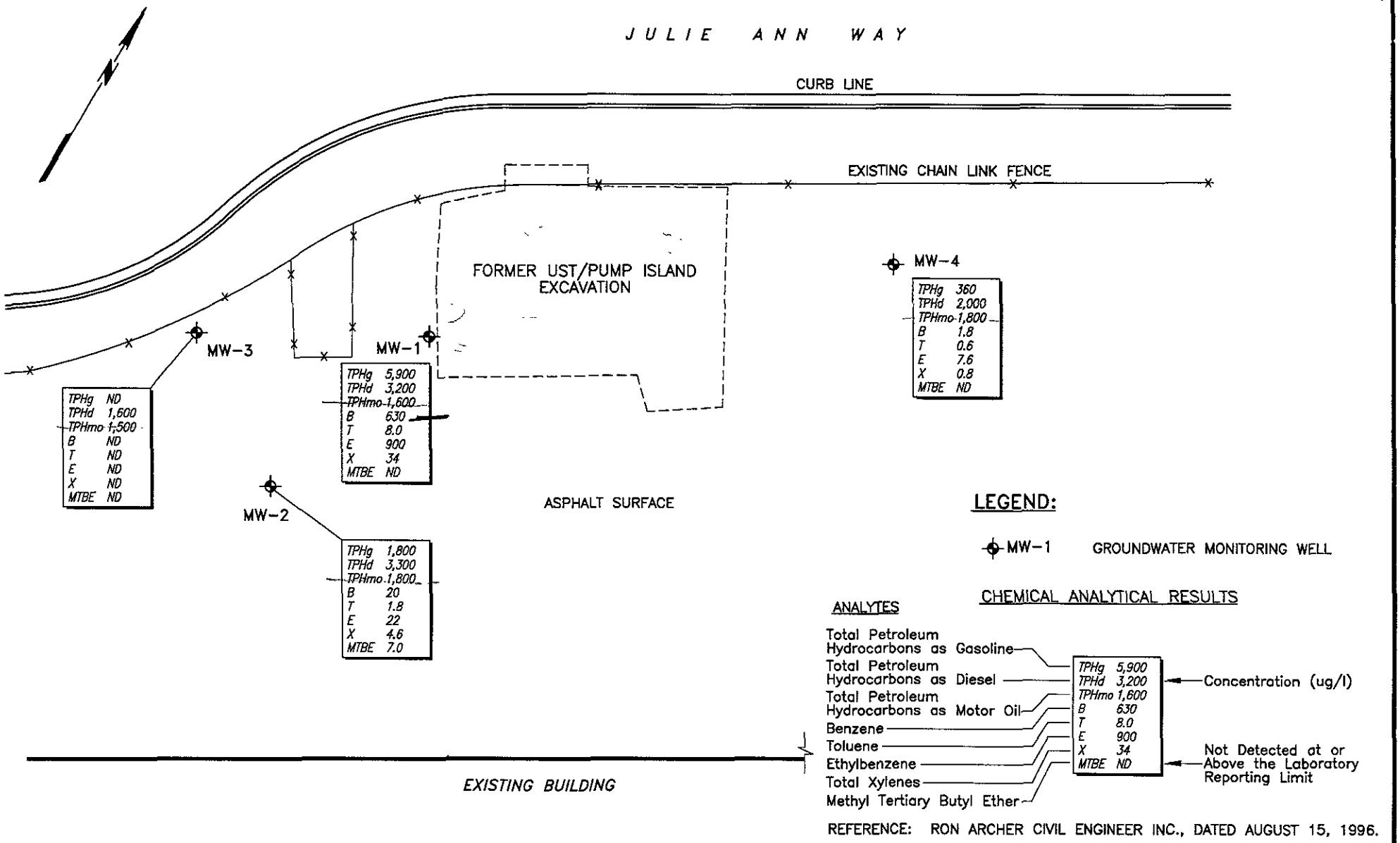
SECOR
INTERNATIONAL INCORPORATED

DRAWN	CCR
APPR	DWM
DATE	28AUG96
JOB NO.	50090-009-03

FIGURE 3
580 JULIE ANN WAY
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP - JULY 31, 1997

199708.131441 X:\SF-BREAD\JULIE\JULIE07



REFERENCE: RON ARCHER CIVIL ENGINEER INC., DATED AUGUST 15, 1996.

0 20 40
SCALE FEET

SECOR
INTERNATIONAL INCORPORATED

DRAWN	CCR
APPR	LZ
DATE	14AUG97
JOB NO.	50090-009-03

FIGURE 4
580 JULIE ANN WAY
OAKLAND, CALIFORNIA

GROUNDWATER CHEMICAL RESULTS - JULY 31, 1997

APPENDIX A

HYDROLOGIC AND WATER SAMPLE FIELD DATA SHEETS

SECOR International Incorporated

HYDROLOGIC DATA SHEET

Date: 7-31-97 Project: S.F. French Bread Project #: 5009-009-03

Sampler: GRC Page 1 of 1

WELL or LOCATION	TIME	MEASUREMENT					COMMENTS
		TOC	DTW	DTB	DIA	ELEV	
MW-1	9:10	10.06	4.70	14.50	2		
MW-2	9:20	10.17	4.86	15.00	2		
MW-3	9:00	10.12	5.11	15.00	2		
MW-4	9:05	9.70	6.02	15.00	2		

TOC = Top of Well Casing Elevation
DTW = Depth to Groundwater Below TOC
DTB = Depth to Bottom of Well Casing Below TOC
DIA = Well Casing Diameter
ELEV = Groundwater Elevation

9 Drums on site See photo

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 50090-009-03 PURGED BY: GRC WELL I.D.: MW-1

CLIENT NAME: S.F. French Bread SAMPLED BY: GRC SAMPLE I.D.: MW-1

LOCATION: Julie Ann Way Oakland QA SAMPLES: None

DATE PURGED 7-31-97 START (2400hr) 11:00 END (2400hr) 11:30

DATE SAMPLED 7-31-97 SAMPLE TIME (2400hr) 11:40

SAMPLE TYPE: Groundwater X Surface Water ____ Treatment Effluent ____ Other ____

CASING DIAMETER:	2"	3"	4"	5"	6"	8"	Other
Casing Volume: (gallons per foot)	X (0.17)	___ (0.38)	___ (0.67)	___ (1.02)	___ (1.50)	___ (2.60)	___ ( )

DEPTH TO BOTTOM (feet) = 14.50 CASING VOLUME (gal) = 1.66

DEPTH TO WATER (feet) = 4.70 CALCULATED PURGE (gal) = 4.99

WATER COLUMN HEIGHT (feet) = 9.80 ACTUAL PURGE (gal) = 5.25

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY ~~(NTU)~~ visual
7-31	11:10	1.75	73.6	2350	7.99	Brn	High
7-31	11:20	3.5	76.2	2070	7.80	Brn	High
7-31	11:30	5.25	75.1	2040	7.69	Brn	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPHG, BTEX, MTBE, TPHD, TPHMO

ODOR: GAS SAMPLE VESSEL / PRESERVATIVE: 3 HCL VOAs, 2 liters

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ Bladder Pump	X Bailer (Teflon)	___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	___ Bailer (PVC)	___ Centrifugal Pump	X Bailer (___ PVC or X disposable)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Submersible Pump	___ Bailer (Stainless Steel)
___ Peristaltic Pump	X Dedicated DISP	___ Peristaltic Pump	___ Dedicated ___
Other: ___		Other: ___	
Pump Depth: ___			

WELL INTEGRITY: Good LOCK#: None

REMARKS: ___

SIGNATURE: GRC

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 56090-009-03 PURGED BY: GRC WELL I.D.: MW-2

CLIENT NAME: S.F. French Bread SAMPLED BY: GRC SAMPLE I.D.: MW-2

LOCATION: Julie Ann Way Oakland QA SAMPLES: None

DATE PURGED 7-31-97 START (2400hr) 11:50 END (2400hr) 12:15

DATE SAMPLED 7-31-97 SAMPLE TIME (2400hr) 12120

SAMPLE TYPE: Groundwater X Surface Water ____ Treatment Effluent ____ Other ____

CASING DIAMETER:	2"	3"	4"	5"	6"	8"	Other
Casing Volume: (gallons per foot)	X (0.17)	___ (0.38)	___ (0.67)	___ (1.02)	___ (1.50)	___ (2.60)	___ ( )

DEPTH TO BOTTOM (feet) = 15.00 CASING VOLUME (gal) = 1.72

DEPTH TO WATER (feet) = 4.86 CALCULATED PURGE (gal) = 5.17

WATER COLUMN HEIGHT (feet) = 10.14 ACTUAL PURGE (gal) = 5.50

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (visual)
7-31	12:00	1.75	73.2	6570	8.08	BRN	High
7-31	12:10	3.5	72.7	6660	8.09	BRN	High
7-31	12:15	5.5	77.5	6840	7.96	BRN	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPHG, BTEX MTBE TPHD, TPH MO

ODOR: Strong Gas SAMPLE VESSEL / PRESERVATIVE: 3 HCL VOAs, 2 liters

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ Bladder Pump	X Bailer (Teflon)	___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	___ Bailer (PVC)	___ Centrifugal Pump	X Bailer (___ PVC or X disposable)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Submersible Pump	___ Bailer (Stainless Steel)
___ Peristaltic Pump	X Dedicated Disp	___ Peristaltic Pump	___ Dedicated ____
Other: ____		Other: ____	
Pump Depth: ____			

WELL INTEGRITY: Good LOCK#: Dolphin

REMARKS: ____

SIGNATURE: GRC

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 500900-009-03 PURGED BY: GRC WELL I.D.: MW-3

CLIENT NAME: S.F. French Bread SAMPLED BY: GRC SAMPLE I.D.: MW-3

LOCATION: Julie Ann WAY Oakland QA SAMPLES: None

DATE PURGED 7-31-97 START (2400hr) 10:40 END (2400hr) 12:30

DATE SAMPLED 7-31-97 SAMPLE TIME (2400hr) 12:40

SAMPLE TYPE: Groundwater X Surface Water ____ Treatment Effluent ____ Other ____

CASING DIAMETER:	2"	3"	4"	5"	6"	8"	Other
Casing Volume: (gallons per foot)	X (0.17)	____ (0.38)	____ (0.67)	____ (1.02)	____ (1.50)	____ (2.60)	____ ( )

DEPTH TO BOTTOM (feet) = 15.00 CASING VOLUME (gal) = 1.69

DEPTH TO WATER (feet) = 5.11 CALCULATED PURGE (gal) = 5.04

WATER COLUMN HEIGHT (feet) = 9.89 ACTUAL PURGE (gal) = 5.25

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (visual)
7-31	10:50	1.5	69.9	9440	8.01	BRN	High
7-31	11:00	3.5	70.2	9600	7.82	BRN	High
7-31	12:30	5.25	70.9	9620	7.77	BRN	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPHG, BTEX, MTBE, TPHD, TPHMO

ODOR: Slight Gas SAMPLE VESSEL / PRESERVATIVE: 3 HCL VOAs 2 liters

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ Bladder Pump	X Bailer (Teflon)	___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	___ Bailer (PVC)	___ Centrifugal Pump	X Bailer (___ PVC or X disposable)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Submersible Pump	___ Bailer (Stainless Steel)
___ Peristaltic Pump	X Dedicated DISP	___ Peristaltic Pump	___ Dedicated ____
Other: ____		Other: ____	
Pump Depth: ____			

WELL INTEGRITY: OK LOCK#: Dolphin

REMARKS: ____

SIGNATURE: GRC

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 50090-009-03 PURGED BY: GRC WELL I.D.: MW-4

CLIENT NAME: S.F. French Bread SAMPLED BY: GRC SAMPLE I.D.: MW-4

LOCATION: Julie Ann Way, Oakland QA SAMPLES: None

DATE PURGED 7-31-97 START (2400hr) 9:40 END (2400hr) 10100

DATE SAMPLED 7-31-97 SAMPLE TIME (2400hr) 10:10

SAMPLE TYPE: Groundwater X Surface Water ____ Treatment Effluent ____ Other ____

CASING DIAMETER:	2"	3"	4"	5"	6"	8"	Other
Casing Volume: (gallons per foot)	X (0.17)	___ (0.38)	___ (0.67)	___ (1.02)	___ (1.50)	___ (2.60)	___ ( )

DEPTH TO BOTTOM (feet) = 15.00 CASING VOLUME (gal) = 1.52

DEPTH TO WATER (feet) = 6.02 CALCULATED PURGE (gal) = 4.57

WATER COLUMN HEIGHT (feet) = 8.98 ACTUAL PURGE (gal) = 5.00

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (visual)
7-31	9:45	1.5	73.6	5000	6.97	BRN	High
7-31	9:50	3.5	72.1	4820	6.66	BRN	High
7-31	9:55	5.0	74.5	5090	7.00	BRN	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPHG, BTEX, MTBE, TPHD, TPHMO

ODOR: GAS SAMPLE VESSEL / PRESERVATIVE: 3 HCL VOAs, 2 liters

PURGING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
X Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
X Dedicated DMP

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
X Bailer (___ PVC or X disposable)
___ Bailer (Stainless Steel)
___ Dedicated ____

Other: ____

WELL INTEGRITY: Good LOCK#: None

REMARKS: Replaced (new CAP) CAP

SIGNATURE: JRC

APPENDIX B

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY RECORDS

Superior Analytical Laboratory

SECOR
1390 WILLOW PASS RD, STE. 360
CONCORD, CA 94520

Date: August 8, 1997

Attn: LIPING ZHANG

Laboratory Number : 23034

Project Number/Name : 50090-009-04 TASK
Facility/Site : SF FRENCH BREAD
580 JULIE ANN WAY
OAKLAND, CA

Dear LIPING ZHANG:

Attached is Superior Analytical Laboratory report for the samples received on August 1, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after August 31, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Sanjay Panda
QA/QC Officer

Superior
Analytical Laboratory

CASE NARRATIVE

SECOR
Project Number/Name: 50090-009-04 TASK 00
Laboratory Number: 23034

Sample Receipt

Four water samples were received by
Superior Analytical Laboratory on August 1, 1997.

Cooler temperature was 4.9°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analyzed for methods 8015M and 8020.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior Analytical Laboratory

SECOR
Attn: LIPING ZHANG

Project 50090-009-04 TASK 00
Reported on August 8, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 23034

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
MW-1	07/31/97	08/01/97	08/06/97	08/06/97	DH062.37	01
MW-2	07/31/97	08/01/97	08/06/97	08/06/97	DH062.37	02
MW-3	07/31/97	08/01/97	08/06/97	08/06/97	DH062.37	03
MW-4	07/31/97	08/01/97	08/05/97	08/05/97	DH052.37	04

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DH052.37-05	Method Blank	MB		Water	08/05/97	08/05/97
DH062.37-01	Method Blank	MB		Water	08/06/97	08/06/97
DH052.37-02	Laboratory Spike	LS		Water	08/05/97	08/05/97
DH052.37-03	MW-8	MS	23035-01	Water	08/05/97	08/05/97
DH052.37-04	MW-8	MSD	23035-01	Water	08/05/97	08/05/97
DH062.37-02	Laboratory Spike	LS		Water	08/06/97	08/06/97
DH062.37-03	EFF-1	MS	23032-01	Water	08/06/97	08/06/97
DH062.37-04	EFF-1	MSD	23032-01	Water	08/06/97	08/06/97

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Attn: LIPING ZHANG

Project 50090-009-04 TASK 00
Reported on August 8, 1997

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23034-01	MW-1	Water	5.0	-
23034-02	MW-2	Water	1.0	-
23034-03	MW-3	Water	1.0	-
23034-04	MW-4	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23034-01 Conc. ug/L	23034-01 RL	23034-02 Conc. ug/L	23034-02 RL	23034-03 Conc. ug/L	23034-03 RL	23034-04 Conc. ug/L	23034-04 RL
Gasoline Range	5900	250	1800	50	ND	50	360	50
Benzene	630	2.5	20	0.5	ND	0.5	1.8P	0.5
Toluene	8.0P	2.5	1.8	0.5	ND	0.5	0.6	0.5
Ethyl Benzene	900	2.5	22	0.5	ND	0.5	7.6	0.5
Total Xylenes	34P	2.5	4.6	0.5	ND	0.5	0.8	0.5
Methyl-t-butyl-ether	ND	10	7.0	5	ND	5	ND	5
>> Surrogate Recoveries (%) <<								
Trifluorotoluene (SS)	100		107		96		103	

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23034
Method Blank(s)

	DH052.37-05		DH062.37-01	
	Conc. ug/L	RL	Conc. ug/L	RL
Gasoline Range	ND	50	ND	50
Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Total Xylenes	ND	0.5	ND	0.5
Methyl-t-butyl-ether	ND	5	ND	5
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	81		100	

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23034

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DH052.37 02 / - Laboratory Control Spikes						
Gasoline Range		2000	2100	105	65-135	
Benzene		20	21	105	65-135	
Toluene		20	21	105	65-135	
Ethyl Benzene		20	22	110	65-135	
Total Xylenes		60	65	108	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				104	50-150	
For Water Matrix (ug/L)						
DH062.37 02 / - Laboratory Control Spikes						
Gasoline Range		2000	2200	110	65-135	
Benzene		20	20	100	65-135	
Toluene		20	21	105	65-135	
Ethyl Benzene		20	21	105	65-135	
Total Xylenes		60	63	105	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				104	50-150	
For Water Matrix (ug/L)						
DH052.37 03 / 04 - Sample Spiked: 23035 - 01						
Gasoline Range	ND	2000	2000/2000	100/100	65-135	0
Benzene	ND	20	21/21	105/105	65-135	0
Toluene	ND	20	22/21	110/105	65-135	5
Ethyl Benzene	ND	20	22/22	110/110	65-135	0
Total Xylenes	ND	60	66/65	110/108	65-135	2

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 23034

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				102/97	50-150	
For Water Matrix (ug/L) DH062.37 03 / 04 - Sample Spiked: 23032 - 01						
Gasoline Range	ND	2000	2300/2300	115/115	65-135	0
Benzene	ND	20	21/21	105/105	65-135	0
Toluene	ND	20	21/22	105/110	65-135	5
Ethyl Benzene	ND	20	22/22	110/110	65-135	0
Total Xylenes	ND	60	65/65	108/108	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				101/93	50-150	

P - There is a greater than 25% difference for detected concentration between the two GC columns.

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Attn: LIPING ZHANG

Project 50090-009-04 TASK 00
Reported on August 6, 1997

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Chronology

Laboratory Number 23034

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
MW-1	07/31/97	08/01/97	08/05/97	08/05/97	DH051.02	01
MW-2	07/31/97	08/01/97	08/05/97	08/06/97	DH051.02	02
MW-3	07/31/97	08/01/97	08/05/97	08/06/97	DH051.02	03
MW-4	07/31/97	08/01/97	08/05/97	08/06/97	DH051.02	04

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DH051.02-01	Method Blank	MB	Water	08/05/97	08/05/97
DH051.02-02	Laboratory Spike	LS	Water	08/05/97	08/05/97
DH051.02-03	Laboratory Spike Duplicate	LSD	Water	08/05/97	08/05/97

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Project 50090-009-04 TASK 00
Reported on August 6, 1997

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23034-01	MW-1	Water	1.0	-
23034-02	MW-2	Water	1.0	-
23034-03	MW-3	Water	1.0	-
23034-04	MW-4	Water	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23034-01 Conc. ug/L	23034-01 RL	23034-02 Conc. ug/L	23034-02 RL	23034-03 Conc. ug/L	23034-03 RL	23034-04 Conc. ug/L	23034-04 RL
Diesel:	3200	50	3300	50	1600	50	2000	50
Motor Oil	1600	500	1800	500	1500	500	1800	500
>> Surrogate Recoveries (%) <<								
Tetracosane	90		93		93		88	

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Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 23034
Method Blank(s)

	DH051.02-01	
	Conc.	RL
	ug/L	
Diesel:	ND	50
Motor Oil	ND	500
>> Surrogate Recoveries (%) <<		
Tetracosane	93	

Superior Analytical Laboratory

Total Extractable Petroleum Hydrocarbons
by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 23034

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DH051.02 02 / 03 - Laboratory Control Spikes						
Diesel:		1000	930/710	93/71	55-150	27
>> Surrogate Recoveries (%) <<						
Tetracosane				96/86	65-130	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

23034

Chain-of Custody Number: 11

SECOR Chain-of Custody Record

Field Office: SECOR

Address: 1390 Willowpass Road Suite 360
Concord, CA 94519

☐ Additional documents are attached, and are a part of this Record.

Job Name: S.F. French Bread

Location: 580 Julie Ann Way
Oakland, CA

Project # 50090-009-05 Task # 00

Project Manager Liping Zhang

Laboratory Superior

Turnaround Time Standard

Sampler's Name Gary Clift

Sampler's Signature [signature]

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	MTBE	TPH MO	Comments/ Instructions	Number of Containers
MW-1	7-31	11:40	H2O		X	X										X	X		5
MW-2	7-31	12:20	H2O		X	X										X	X		5
MW-3	7-31	12:40	H2O		X	X										X	X		5
MW-4	7-31	10:10	H2O		X	X										X	X		5

Please Initial: dz

Samples Stored in ice. ✓ 4.0°C

Appropriate containers ✓

Samples preserved ✓

VOA's without headspace ✓

Comments:

Special Instructions/Comments:

Please Note Sample Project Number is 50090-009-05

TSK 00

Relinquished by: SECOR
Sign [signature]
Print Gary R Clift
Company SECOR
Time 8:00 Date 8-1-97

Relinquished by:
Sign [signature]
Print EUGENE R. ELECHE
Company SCI
Time 12:10PM Date 8/1/97

Received by:
Sign [signature]
Print EUGENE R ELECHE
Company SCI
Time 9:35 Date 8/1/97

Received by: Zoli
Sign
Print
Company SCI
Time 12:10 Date 8/1/97

Sample Receipt

Total no. of containers:	20
Chain of custody seals:	
Rec'd. in good condition/cold:	
Conforms to record:	

Client: SECOR

Client Contact: Liping Zhang

Client Phone: (415) 882-1548

SECOR CUSTREC Rev 1/95

Date: 8/1/97 Page 1 of 1