HOLLIS St.
PROJECT
HSP

March 23, 1995

Ms. Susan Hugo
Alameda County Health Care Services Agency
Environmental Protection Division
1131 Harbor Bay Parkway #250
Alameda, CA. 94502-6577

Re: Groundwater Report

Dear Ms. Hugo,

Enclosed is the sampling report of the monitoring well located at 6050 Hollis Street in Emeryville for your review.

We will continue to monitor this well on a quarterly basis for the next year and send you the reports per your recommendations.

If you have any questions, please contact us.

Sincerely,

Debra S. Baker

Debra S. Baker
Property Manager

Enclosure

6050 Hollis St., Emeryville, CA 94608 ● *telephone:* (510) 653-6871 ● *fax* (510) 653-6988
mailing address: P.O. Box 8685, Emeryville, CA 94662-0685

BASELINE
ENVIRONMENTAL CONSULTING

21 March 1995
S9105-A0

Mr. Francis Collins
Banta Collins
6000 Hollis Street
Emeryville, CA 94608

Subject: Groundwater Monitoring Report, 6050 Hollis Street, Emeryville, California – March 1995

Dear Mr. Collins:

In accordance with the agreement with Alameda County (summarized in a letter from BASELINE to Ms. Susan Hugo of Alameda County Health Care Services Agency, dated 28 February 1995) we have started one year of quarterly monitoring. This report constitutes the first of four quarterly sampling reports.

Groundwater Sampling

Groundwater samples were collected from wells MW-H1, MW-H2, and MW-H3 on 8 March 1995 by a BASELINE geologist (Figure 1). The water levels were measured in each well using a dual interface probe prior to purging; the potential presence of floating product was also checked; no floating product was identified in any of the wells. The probe was decontaminated between wells by washing with a trisodium phosphate solution and rinsing with deionized water. A minimum of three well volumes were slowly removed from each well using a double diaphragm pump and new disposable tubing. The wells were purged until the temperature, pH, and electrical conductivity of the groundwater had stabilized. Water levels were allowed to recharge to in excess of 90 percent of the original levels before the samples were collected. The purged water and decontamination water were placed into a 55-gallon sealed and labeled drum on-site for temporary storage. Groundwater sampling forms are included as Attachment A.

New disposable PVC bailers were used to collect groundwater samples from the monitoring wells. The portions of the samples that were to be analyzed for TPH as gasoline and BTEX were decanted into VOA vials from the bottom of the bailers using volatile organic compound (VOC) attachments to minimize turbulence and volatilization. The filled vials were checked to ensure that bubbles were not trapped in the bottles. The portion of the sample that was to

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Emeryville *Petaluma*

be analyzed for TPH as diesel and kerosene was decanted directly into amber glass from the bottom of the bailer without the use of the VOC attachment. The sample bottles were labeled, placed in a cooler with blue ice, and transported for analysis to Curtis & Tompkins, a California certified laboratory.

Findings

The samples collected from wells MW-H1, MW-H2, and MW-H3 had a clear appearance. Groundwater levels in wells MW-H1, MW-H2, and MW-H3 were the shallowest groundwater levels recorded to date (Table 1). The groundwater flow direction on 8 March 1995 was determined to be in the N22W direction at a gradient of 0.002 feet/feet. This is similar to the direction measured during the May 1994 sampling event. The groundwater flow direction and magnitude were calculated using wells MW-H1, MW-H2, and MW-H3. A summary of groundwater flow directions and magnitude during previous and current sampling events are summarized in Table 2. TPH as gasoline or diesel were identified in the samples from all wells at concentrations above the reporting limit. Benzene, ethylbenzene, and total xylenes were identified in the sample from MW-H1 above the reporting limit.

A summary of analytical results from previous and current sampling events is summarized in Table 3, and the laboratory results are included in Attachment A.

The second 1995 monitoring event will occur in June 1995. Should you have any questions or need additional information, please do not hesitate to contact us at your convenience.

Sincerely,

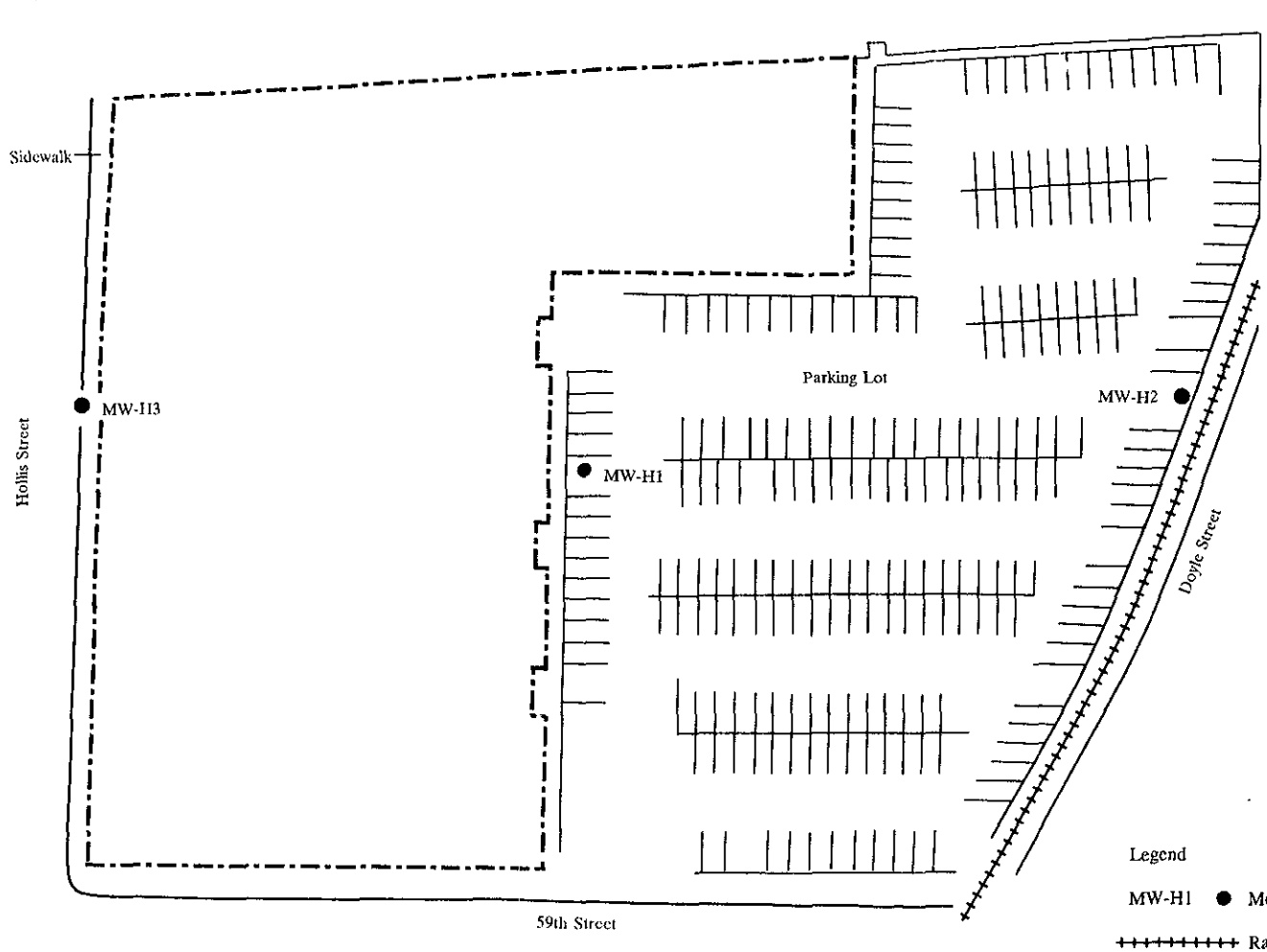
Yane Nordhav
Principal
Reg. Geologist No. 4009

Bill Scott
Geologist

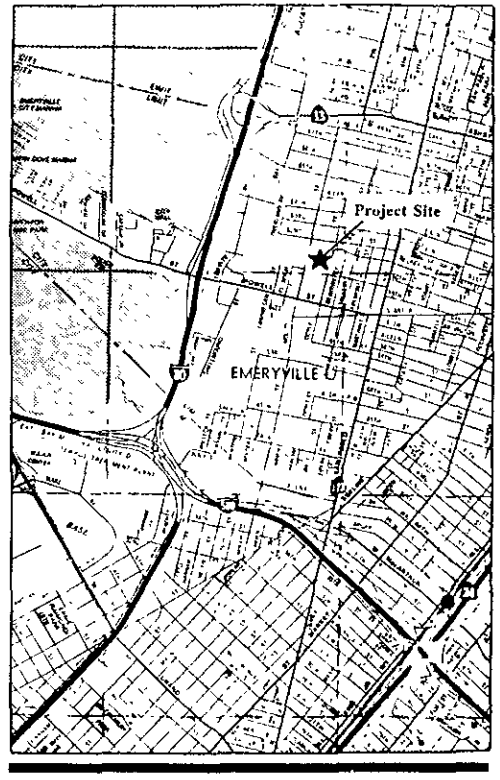
YN/LH/tt
Attachments

SITE PLAN
6050 Hollis Street
Emeryville, California

Figure 1



Regional Location



BASELINE

TABLE 1

GROUNDWATER LEVEL MEASUREMENTS
6050 Hollis Street, Emeryville

Well	Date	Depth to Water from TOC (feet)	Elevation of TOC (feet msl)	Groundwater Elevation (feet msl)
MW-H1	02/08/89	4.85	18.90	14.05
	05/01/89	5.10		13.80
	09/13/89	5.80		13.10
	12/04/89	5.34		13.56
	03/26/90	6.42		12.48
	07/24/90	5.93		12.97
	11/16/90	5.80		13.10
	03/15/91	4.30		14.60
	09/11/91	5.71		13.19
	09/24/91	5.80		13.10
	05/24/94	3.98		14.92
	03/08/95	3.71		15.19
MW-H2	09/11/91	6.84	21.48	14.64
	09/24/91	6.86		14.62
	05/24/94	6.30		15.18
	03/08/95	5.45		16.03
MW-H3	09/11/91	4.84	16.95	12.11
	09/24/91	4.81		12.14
	05/24/94	3.88		13.07
	03/08/95	3.69		13.26

Notes: msl = mean sea level.
Well locations and groundwater flow directions are shown in Figure 1.

TABLE 2

GROUNDWATER FLOW DIRECTIONS AND MAGNITUDE
6050 Hollis Street, Emeryville

Date	Groundwater Flow Direction	Magnitude (feet/feet)
9/11/91	S30W	0.0068
9/24/91	S13W	0.0099
5/24/94	N20W	0.037
3/08/95	N22W	0.002

Note: Groundwater flow direction and magnitude were determined graphically by three-point method using wells MW-H1, MW-H2 and MW-H3.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS, GROUNDWATER
6050 Hollis Street, Emeryville
(mg/L)

Well	Date	TPH as Gasoline[1]	TPH as Diesel[2]	TPH as Kerosene[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Xylenes[3]
MW-H1	02/10/89	<0.05	<0.5	<0.5	<0.001	<0.001	<0.001	<0.001
	05/01/89	<0.05	<0.5	<0.5	<0.001	<0.001	<0.001	<0.001
	09/13/89	**1.3**	<0.5	<0.5	**0.061**	<0.0005	**0.005**	**0.002**
	12/04/89	**0.41/0.37**	<0.5/<0.5	<0.5/<0.5	**0.0072/0.011**	**0.0032/0.0024**	**0.0028/0.0014**	**0.0032/0.0013**
	03/26/90	**0.7**	<0.5	<0.5	**0.093**	**0.001**	**0.0017**	<0.001
	06/14/90[4]	**0.34**[4]	**0.082**[4]	<0.05[4]	**0.016**[4]	<0.001[4]	<0.001[4]	<0.001[4]
	07/24/90	**0.14**	<0.5	<0.5	**0.006**	<0.0005	<0.0005	**0.0009**
	11/16/90	**1.1**	**0.55**	<0.05	**0.016**	**0.0009**	**0.0018**	**0.0015**
	03/15/91	**0.98/1.0**	<0.05/<0.05	<0.05/<0.05	**0.02/0.017**	**0.0006**/<0.0005	**0.0022/0.0019**	**0.0025/0.0022**
	09/11/91	**1.0**	**0.39**	<0.05	**0.015**	**0.0056**	**0.0027**	**0.0029**
	05/24/94	**3.4**	**0.28**	--[6]	**0.021**	<0.0005	**0.010**	**0.0067**
	03/08/95	**3.8**	**0.34**[5]	--[6]	**0.0087**	<0.0005	**0.013**	**0.006**
MW-H2	09/11/91	<0.05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
	05/24/94	<0.05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
	03/08/95	<0.05	**0.08**[5]	<0.05	<0.0005	<0.0005	<0.0005	<0.0005
MW-H3	09/11/91	<0.05/<0.05	**0.12/0.22**	<0.05/<0.05	<0.0005/<0.0005	<0.0005/<0.0005	<0.0005/<0.0005	<0.0005/<0.0005
	05/24/94	**0.110**[5]	**0.110**	--[6]	<0.0005	<0.0005	<0.0005	<0.0005
	03/08/95	**0.085**	**0.110**[5]	--[6]	<0.0005	<0.0005	<0.0005	<0.0005
Field Blanks	06/14/90[4]	<0.05	**0.062**[4]	<0.05	<0.001	<0.001	<0.001	<0.001
	07/24/90	<0.05	<0.5	<0.5	<0.0005	<0.0005	<0.0005	<0.005
	11/16/90	<0.05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.005

Notes: Number(s) shown in bold are concentrations identified above detection limit(s).
Well locations are shown in Figure 1.
Groundwater sampling forms and analytical results for the most recent sampling are in Attachment A.
xx/xx indicates duplicate samples.

1 Analyzed by EPA Methods 5030/8015 Modified (some of the laboratory reports cite the California DHS Luft Manual).

2 Analyzed by EPA Methods 3510 or 3550/8015 Modified (some of the laboratory reports cite the California DHS Luft Manual).

3 Analyzed by EPA Methods 5030/8020.

4 The field blank for 6/14/90 sampling contained diesel at 0.062 mg/L, therefore all analytical results for MW-H1 for that date may be erroneous.

5 Laboratory report indicates that the chromatogram does not resemble gasoline standard.

6 Quantitated as diesel due to overlap of hydrocarbon ranges.

ATTACHMENT A

GROUNDWATER SAMPLING FORMS AND LABORATORY REPORT

GROUNDWATER SAMPLING

Project no.:	S9105-A0	Well no.:	MW-H1	Date:	3/8/95
Project name:	Banta Collins	Depth of well from TOC (feet):	20		
Location:	6050 Hollis Street	Well diameter (inch):	2		
	Emeryville, CA	Screened interval from TOC (feet):	6-20		
Recorded by:	WKS	TOC elevation (feet):	18.90		
Weather:	Overcast	Water level from TOC (feet):	3.71	Time	8:00
Precip in past		Product level from TOC (feet):	None	Time	8:00
5 days (inch):	0.50	Water level (feet msl).	15.19		
		Water level measurement device:	Dual interface probe		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(20 ft) - (3.71 ft)] × (0.083 ft)² × 3.14 × 7.48 =
Well depth Water level Well radius

2.7 gallons in one well volume
14 gallons in 5 well volumes
9 total gallons removed

CALIBRATION:

	Time	Temp (° C)	pH	EC (µmho/cm)
Calibration Standard:	7:15	12.9	7.00-10.01	1,000
Before Purging:	7:16	12.9	7.00-10.01	900
After Purging:	9:20	12.8	7.20-10.03	900

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance
8:11	15.7	6.92	900	1	Very slightly turbid-clear, petroleum odor
8:14	16.0	6.82	900	3	Clear, petroleum odor
8:18	16.0	6.89	900	4	Clear, petroleum odor
8:29	16.3	6.87	900	7	Clear, petroleum odor
8:34	16.6	6.80	900	9	Clear, petroleum odor

Water level after purging prior to sampling (feet):	3.72			Time	10:32
Appearance of sample:	Clear			Time	10:50
Duplicate/blank number:	N.A.			Time	--
Purge method:	Double diaphragm pump				
Sampling equipment:	Disposable PVC bailer	VOC attachment:	Used for VOA		
Sample containers:	40-ml VOAs and 0.5-liter amber glass				
Sample analyses:	TEH-d, TEH-k, TVH-g, BTEX	Laboratory:	Curtis & Tompkins, Ltd.		
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	Drum MW-HW5		

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GROUNDWATER SAMPLING

Project no.:	S9105-A0	Well no.:	MW-H2	Date:	3/8/95
Project name:	Banta Collins	Depth of well from TOC (feet):	20		
Location:	6050 Hollis Street	Well diameter (inch):	2		
	Emeryville, CA	Screened interval from TOC (feet):	4.5-20		
Recorded by:	WKS	TOC elevation (feet):	21.48		
Weather:	Overcast	Water level from TOC (feet):	5.45	Time	7:30
Precip in past		Product level from TOC (feet):	None	Time	7:30
5 days (inch):	0.50	Water level (feet msl):	16.03		
		Water level measurement device:	Dual interface probe		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(20 ft) - (5.45 ft)] × (0.083 ft)² × 3.14 × 7.48 =

Well depth Water level Well radius

2.4 gallons in one well volume
12.0 gallons in 5 well volumes
8.0 total gallons removed

CALIBRATION:

	Time	Temp (° C)	pH	EC (µmho/cm)
Calibration Standard:	7:15	12.9	7.00-10.01	1,000
Before Purging:	7:16	12.9	7.00-10.01	900
After Purging:	9:20	12.8	7.20-10.03	900

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance
7:40	15.5	6.48	350	1	Clear with orange precipitate and rootlets in well
7:46	15.6	6.53	250	3	Clear
7:52	15.6	6.54	250	5	Clear
7:59	15.5	6.52	250	7	Clear
8:02	15.0	6.51	250	8	Clear

Water level after purging prior to sampling (feet):	5.46			Time	10:31
Appearance of sample:	Clear			Time	10:40
Duplicate/blank number:	N.A.			Time	--
Purge method:	Double diaphragm pump				
Sampling equipment:	Disposable PVC bailer	VOC attachment:	N.A.		
Sample containers:	40-ml VOAs and 0.5-liter amber glass				
Sample analyses:	TEH-d, TEH-k, TVH-g, BTEX	Laboratory:	Curtis & Tompkins, Ltd.		
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	Drum MW-HW5		

S9105-A0.XLW (3/20/95)

GROUNDWATER SAMPLING

Project no.:	S9105-A0	Well no.:	MW-H3	Date:	3/8/95
Project name:	Banta Collins	Depth of well from TOC (feet):	15		
Location:	6050 Hollis Street	Well diameter (inch):	2		
	Emeryville, CA	Screened interval from TOC (feet):	3-15		
Recorded by:	WKS	TOC elevation (feet):	16.95		
Weather:	Overcast	Water level from TOC (feet):	3.69	Time	8:28
Precip in past		Product level from TOC (feet):	None	Time	8:28
5 days (inch):	0.50	Water level (feet msl):	13.26		
		Water level measurement device:	Dual interface probe		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

[(15 ft) - (3.69 ft)] × (0.083 ft)² × 3.14 × 7.48 =

Well depth Water level Well radius

1.8 gallons in one well volume
9.0 gallons in 5 well volumes
9.0 total gallons removed
(slight sheen in purged water)

CALIBRATION:

	Time	Temp (° C)	pH	EC (µmho/cm)
Calibration Standard:	7:15	12.9	7.00-10.01	1,000
Before Purging:	7:16	12.9	7.00-10.01	900
After Purging:	9:20	12.8	7.20-10.03	900

FIELD MEASUREMENTS:

Time	Temp (° C)	pH	EC (µmho/cm)	Cumulative Gallons Removed	Appearance
8:50	15.9	6.88	650	1.5	Clear
8:55	16.3	6.93	725	3.0	Clear
9:00	16.4	6.99	800	6.0	Clear
9:04	16.8	6.95	850	8.0	Clear
9:08	16.7	6.97	900	9.0	Clear

NOTE: Slight sheen observed in purge water

Water level after purging prior to sampling (feet):	3.70			Time	10:30
Appearance of sample:	Clear			Time	11:00
Duplicate/blank number:	N.A.			Time	--
Purge method:	Double diaphragm pump				
Sampling equipment:	Disposable PVC bailer	VOC attachment:	Used for VOA sample		
Sample containers:	40-ml VOAs and 0.5-liter amber glass				
Sample analyses:	TEH-d, TEH-k, TVH-g, BTEX	Laboratory:	Curtis & Tompkins, Ltd.		
Decontamination method:	TSP and water, DI water rinse	Rinsate disposal:	Drum MW-HW5		

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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Baseline Environmental
5900 Hollis Street
Suite D
Emeryville, CA 94608

Date: 16-MAR-95
Lab Job Number: 120182
Project ID: S9150-AO
Location: Banta Collins,Hollis St.

JOB #_____/#_____
O/H ACCT #_____
APPVD. BY_____
DATE_____
VENDOR #_____

Reviewed by: Teresa K Morrison

Reviewed by: Kevin Hahn

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120182
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9150-AO
LOCATION: Banta Collins, Hollis St.

DATE SAMPLED: 03/08/95
DATE RECEIVED: 03/08/95
DATE EXTRACTED: 03/12/95
DATE ANALYZED: 03/14/95
DATE REPORTED: 03/16/95
BATCH NO: 19423

Extractable Petroleum Hydrocarbons in Aqueous Solutions
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT (ug/L)
120182-001	MW-H1	**	340 *	50
120182-002	MW-H2	ND	80 *	50
120182-003	MW-H3	**	110 *	50
METHOD BLANK	N/A	ND	ND	50

ND = Not detected at or above reporting limit. Reporting limit applies to all analytes.
** Kerosene not reported due to overlap of hydrocarbon ranges.
* Sample chromatogram does not resemble hydrocarbon standard.

QA/QC SUMMARY: BS/BSD

RPD, %	5
RECOVERY, %	84

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120182
CLIENT: BASELINE ENVIRONMENTAL
PROJECT ID: S9150-AO
LOCATION: Santa Collins, Hollis St.

DATE SAMPLED: 03/08/95
DATE RECEIVED: 03/08/95
DATE ANALYZED: 03/14/95
DATE REPORTED: 03/16/95
BATCH NO: 19423

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
TVH by California DOHS Method/LUFT Manual October 1989
BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
120182-001	MW-H1	3,800 *	8.7	ND(0.5)	13	0.6
120182-002	MW-H2	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
120182-003	MW-H3	85 *	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
METHOD BLANK	N/A	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

* Sample chromatogram does not resemble gasoline standard.

QA/QC SUMMARY: BS/BSD

RPD, %	< 1
RECOVERY, %	92

BASELINE
5900 Hollis Street, Suite D
Emeryville, CA 94608
(510) 420-8686

12 of 2

CHAIN OF CUSTODY RECORD

Turn-around Time: Normal
Lab: Curtis & Tompkins
BASELINE Contact Person: Bill Scott

Project No.	Project Name and Location
59150-A0	Banta Collins, Hollis ST.

Samplers: (Signature) William K Scott

	Sample ID No. Station	Date	Time	Media	Depth	No. of Containers	Analysis: as diesel + Kerosene TEH	GS. Gasoline (TPH with BTX&E)	Oil & Grease	Motor Oil	PNAs	Title 22 Metals	Total Lead	Remarks/ Composite	Detection Limits
1	MW-H1	3-8-95	10:50	water		3	X	X							
2	MW-H2	3-8-95	10:40	Water		3	X	X							
3	MW-H3	3-8-95	11:00	Water		3	X	X							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Conditions of Samples Upon Arrival at Laboratory:
William K Scott	3-8-95 / 12:50		3/8/95 12:50	COT
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks:
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	