EOA, Inc.

Eisenberg, Olivieri, & Associates
Environmental and Public Health Engineering

April 21, 1995

Mr. Bill Cox
232 E. 14th St.
San Leandro, CA 94577

SUBJECT: Second Quarterly Monitoring Report

Dear Mr. Cox:

This letter report summarizes the results of monitoring of wells during the period January through March 1995 (second quarter of monitoring) at the property located at 230 Bay Place, Oakland, California. Monitoring activities during this quarter include measuring depth to groundwater monthly and sampling groundwater for analyses in March. The report was completed according to Task III of the approved *Work Plan for Further Investigation, 230 Bay Place, Oakland, California* (Work Plan), dated March 1994. The Work Plan was approved by the Alameda County Department of Environmental Health, Environmental Protection Division (County) with two exceptions. The County suggested using well TW-2 as an upgradient well, if needed, and the County suggested sampling well TW-6 for groundwater analyses.

Two main tasks were completed for this report; 1) on a monthly basis, wells MW-1, TW-2, TW-6, and TW-7 were checked for free product, then depth to groundwater was measured in them and 2) on March 24, wells MW-1, TW-6, and TW-7 were purged and sampled for groundwater analyses. As subcontractors to EOA, Inc., Subsurface Consultants, Inc. (SCI) performed the field tasks and Curtis and Tompkins Laboratory, a California-Certified Laboratory, performed the groundwater analyses.

Methodology

The January and February groundwater surface contour maps (SCI, January 30, 1995 and SCI, March 1, 1995) are included in this report as Attachments 1 and 2. The field methods used to perform the tasks listed above are described in Attachment 3, "Quarterly Groundwater Monitoring" Report (SCI, April 12, 1995). The depth to groundwater was measured and contoured (see Figures 1-3). For the groundwater surface contour maps, the data points were referenced to an arbitrary datum of 100' for the top of casing (TOC) in MW-1. The wells have not been surveyed to date and this methodology is consistent with that used by PES in a prior report.

In March, wells MW-1, TW-6, and TW-7 were purged and samples were collected for the following analyses: 1) Total Volatile Hydrocarbons as gasoline and Benzene, Toluene, Ethylbenzene, and total Xylenes (TVH/BTEX) (by California DOHS Method and LUFT Manual methodology, and by EPA 5030/8020), 2) 1,1-, and 1,2-dichloroethane (DCA) (by

1410 Jackson Street • Oakland, CA 94612 • (510) 832-2852 • Fax 832-2856

EPA Method 8010) and 3) soluble lead (by EPA 6010A). Locations of the sampled wells with groundwater analyses results are indicated on Figure 4.

Results

Table 1 summarizes the groundwater elevation data for the December 1994 and January, February, and March 1995 monitoring events. Based on data collected on March 24, 1995, the general direction of groundwater flow is in a southwesterly direction, toward Lake Merritt; this result is similar to previous observations at this site. The groundwater level in March is higher than the December levels.

No free product was observed in any of the wells that were monitored. The results of the groundwater analyses are summarized in Table 2, "Summary of Groundwater Analyses". A copy of the original laboratory analytical report is in Attachment 4. Historical groundwater analyses are summarized in Table 3. The concentrations in groundwater of TVH, benzene, toluene, ethyl benzene, and total xylenes have generally decreased in value. The only concentration that did not decrease is ethyl benzene in well MW-1 which is present at 2,200 micrograms per liter versus 2,000 micrograms per liter in December (*Well Conversion and First Quarterly Monitoring Report*, EOA, January 26, 1995). The concentrations in each well relative to each other are similar to those from the December monitoring event. The concentration of 1,2-DCA in MW-1 is unchanged. For this quarter, an additional analysis for soluble lead was performed. Soluble lead is present in well MW-1 at a concentration of .023 ppm (23 ppb) and was not detected in wells TW-6 and TW-7.

Interpretation

This quarterly sampling report is intended as a data report only. A more complete interpretation is planned for inclusion in the annual report, when the full year of monitoring data is available. However, at the County's request, some limited and preliminary interpretation can be provided regarding the limited data collected to date.

Regarding groundwater flow, the data is appears to confirm that, at least during the wet season (in which most existing elevation measurements have been collected), the gradient across the property is consistently towards the southwest. There is some indication from the most recent quarter's measurements that the flow may shift to a more southerly direction near the Bay St. property boundary (near well TW-7). With the available data, it cannot be determined whether this is actually a change of flow direction, or some localized effect, or even a problem with the construction of wells TW-6 or TW-7).

Regarding analytical results, the highest concentrations of TVH and BTEX were found in well TW-7, which is located adjacent to, and downgradient from, the former underground storage tank location. 1,2-DCA and soluble lead was detected only in well MW-1, which is located next to the former waste oil tank location. The TVH and BTEX are consistent with the confirmed release of unleaded gas from the underground fuel tank which was

removed last year. Both dissolved lead and chlorinated solvents are more commonly associated with releases from waste oil tanks than with unleaded gasoline. The detection of soluble lead and 1,2-DCA, and their presence only in MW-1, tend to indicate that their source was more likely the former waste oil tank than the former fuel tank, and that their exent in groundwater is probably relatively limited.

Concentrations of TVH and BTEX have decreased; this apparent decrease in concentration may be due to dilution with increased groundwater flow from infiltration of heavy rainfall this season, or it may represent a combination of degradation and movement during the period since the source was removed.

Please call me or Sherris Ragsdale if you have any questions concerning this report.

Sincerely,
EOA, Inc.

Don Eisenberg, PhD., P.E.
President

Attachments

Limitations

The services performed by EOA, Inc. for this report have been performed using that degree of care and skill ordinarily exercised by reputable professionals practicing under similar circumstances in this or similar localities. No other warranty, expressed or implied, is made by providing these consulting services. This report has been prepared by EOA, Inc. for Mr. Cox for submittal to Alameda County Health Department and other regulatory agencies. This report has not been prepared for use by other parties, and may not contain sufficient information for the purposes of other parties or uses.

It should be recognized that subsurface conditions may vary from those encountered at the location where samples are collected. The data, interpretation and recommendations of EOA, Inc. are based solely on the information available to EOA, Inc. during the project. EOA, Inc. will be responsible for those data, interpretations and recommendations, but shall not be responsible for the interpretation by others of the information developed.

Because of the limitations inherent in sampling, and the variability of natural materials, determining the absence of any chemical except in the immediate vicinity of a sample can rarely be done with complete certainty. The only way to determine that a site is absolutely free of chemicals of concern is to sample and analyze all the soil and groundwater at the site, which is impractical and costly. Balancing the level of confidence required against the budgetary constraints is difficult. The sampling and analysis in this investigation were approved by the Alameda County Health Department and are consistent with State regulations and guidelines.

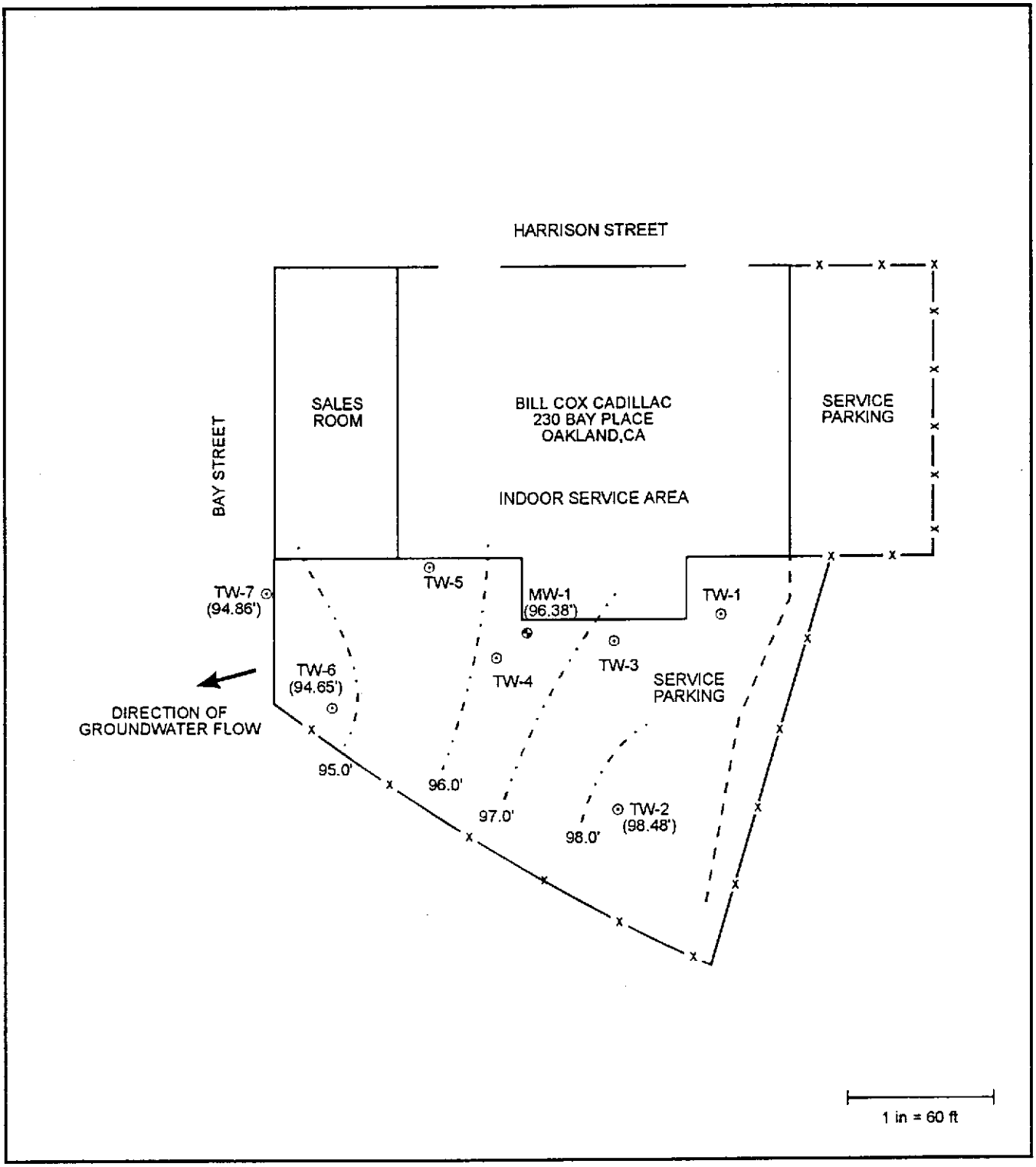

Figure 1: GROUNDWATER GRADIENT JANUARY 1995

ALL ELEVATIONS RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

Sources: SCI (Jan '95)
PES (Nov '93)

Monitoring Well
Temporary Welll Location
Fence
Retaining Wall

EOA, Inc.

April 1995

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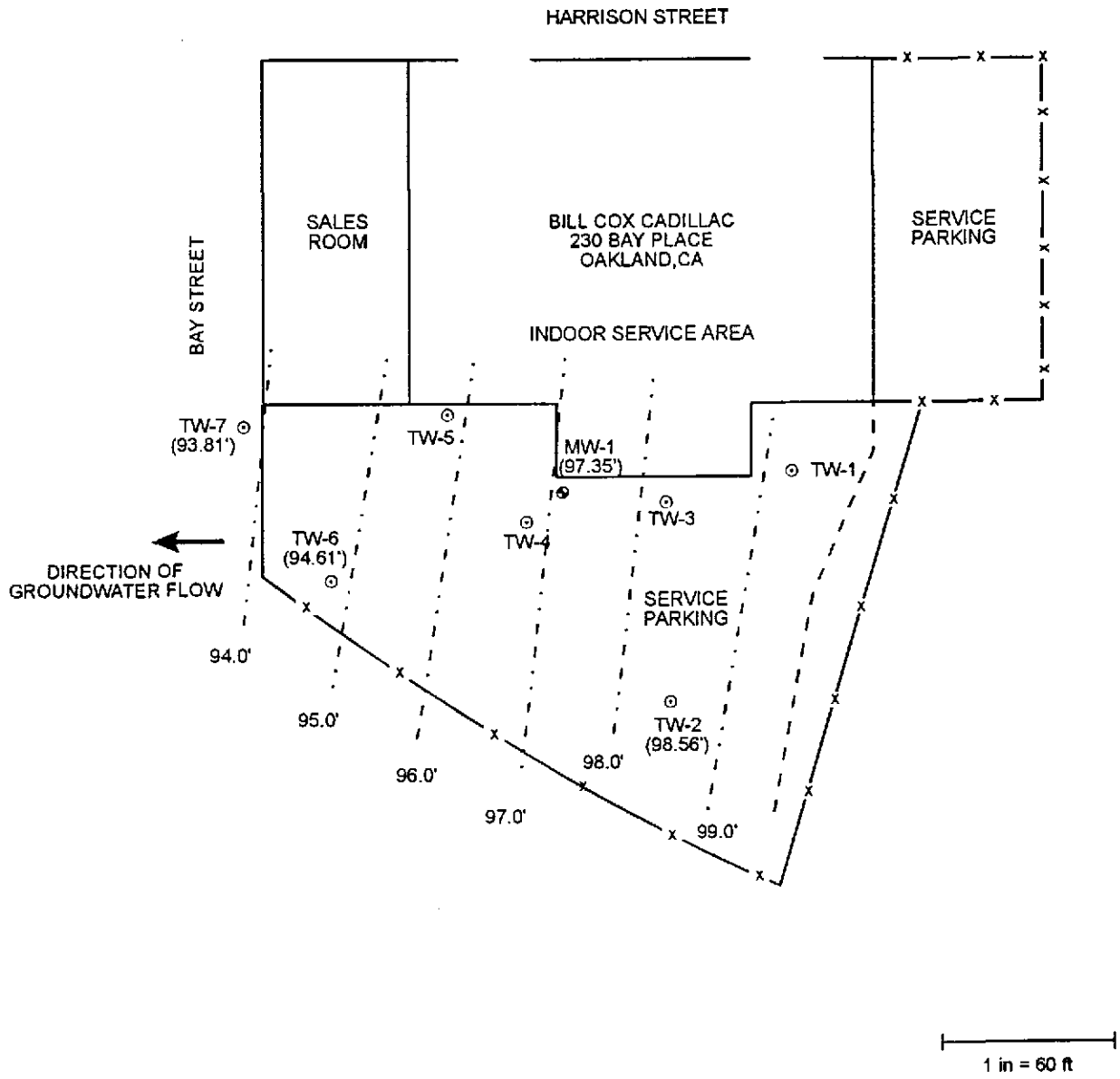

Figure 2: GROUNDWATER GRADIENT FEBRUARY 1995

ALL ELEVATIONS RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

Sources: SCI (Feb '95)
PES (Nov '93)

Monitoring Well
Temporary Well Location
Fence
Retaining Wall

N

EOA, Inc.

April 1995

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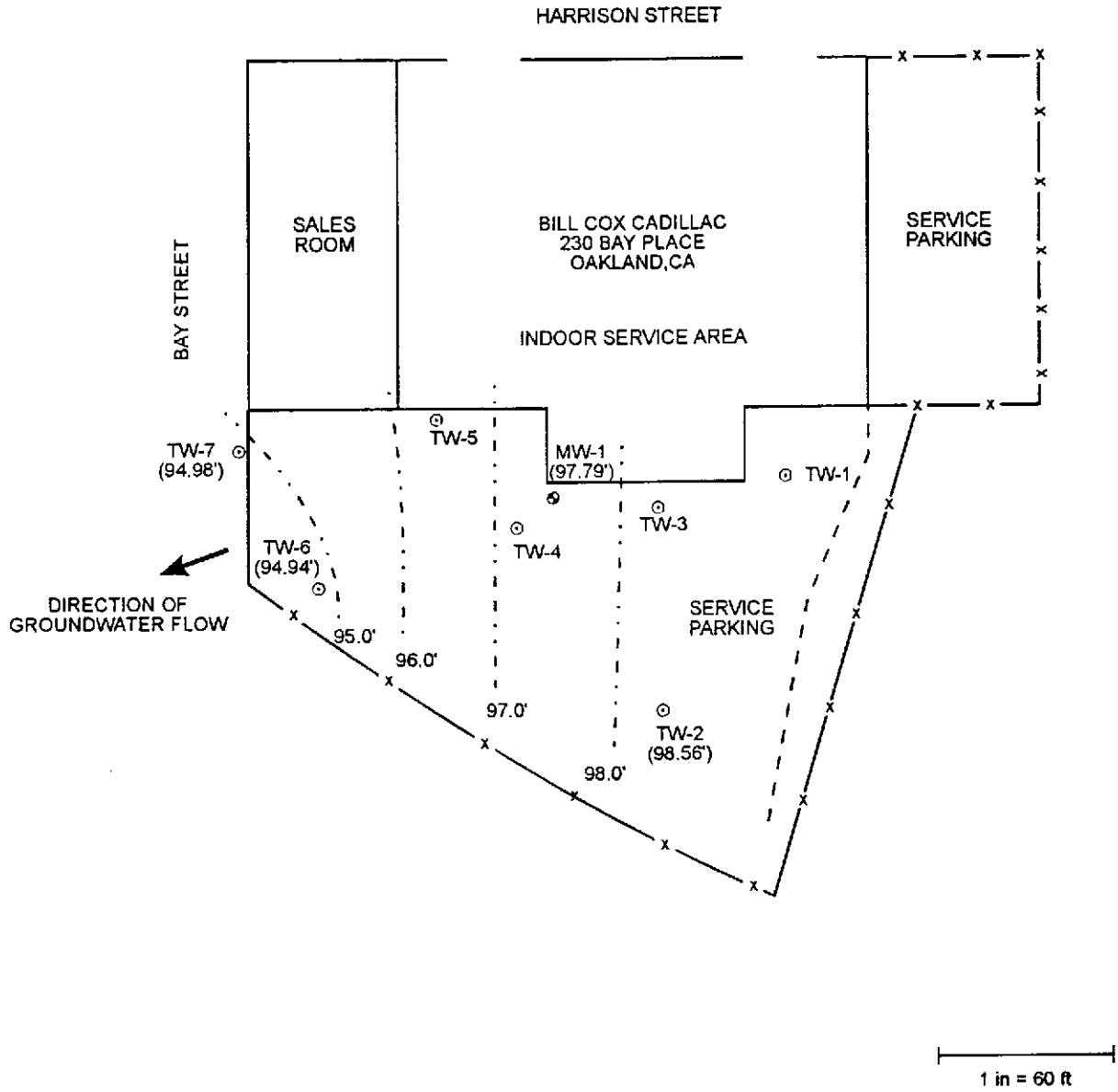


Figure 3: GROUNDWATER GRADIENT MARCH 1995

ALL ELEVATIONS RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

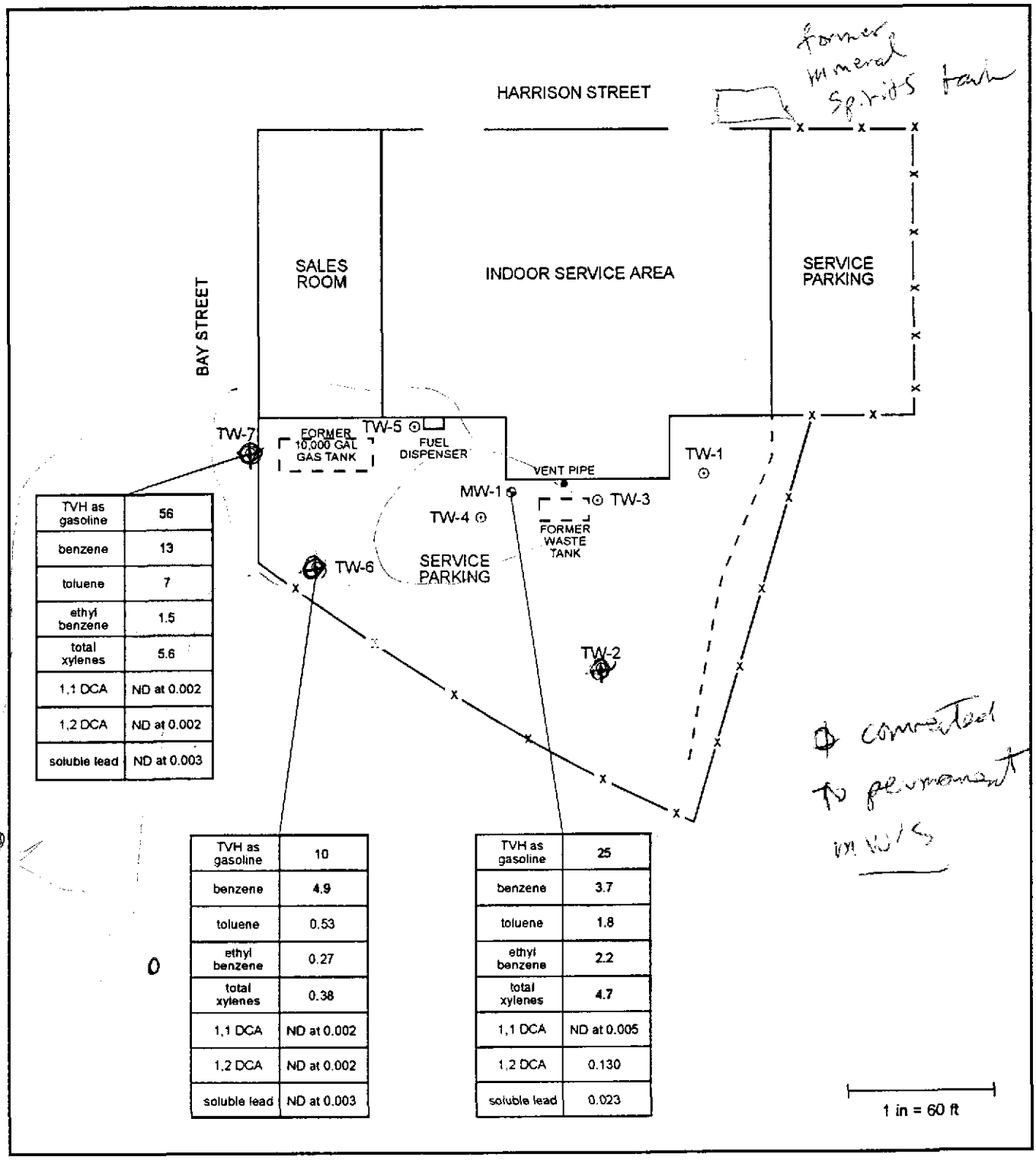
Sources: SCI (Feb '95)
PES (Nov '93)

Monitoring Well
Temporary Welll Location
Fence
Retaining Wall

EOA, Inc.

April 1995

F:\CC03\COX-MAR.CDR



TVH as gasoline	56
benzene	13
toluene	7
ethyl benzene	1.5
total xylenes	5.6
1,1 DCA	ND at 0.002
1,2 DCA	ND at 0.002
soluble lead	ND at 0.003

TVH as gasoline	10
benzene	4.9
toluene	0.53
ethyl benzene	0.27
total xylenes	0.38
1,1 DCA	ND at 0.002
1,2 DCA	ND at 0.002
soluble lead	ND at 0.003

TVH as gasoline	25
benzene	3.7
toluene	1.8
ethyl benzene	2.2
total xylenes	4.7
1,1 DCA	ND at 0.005
1,2 DCA	0.130
soluble lead	0.023

Figure 4: Results of Groundwater Analyses
March 24, 1995

Monitoring Well
Temporary Welll Location
Fence
Retaining Wall

Note: Results in mg/l (ppm)
Source: PES Environmental Inc. 11/93

EOA, Inc.

April 1995

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Table 1
Groundwater Elevation Data
December 1994 through March 1995

Well Number	Date	TOC Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
TW-2	12/22/94 1/24/95 2/22/95 3/24/95	100.43	2.88 1.95 1.87 1.87	97.55 98.48 98.56 98.56
TW-6	12/22/94 1/24/95 2/22/95 3/24/95	98.75	4.66 4.10 4.14 3.81	94.09 94.65 94.61 94.94
TW-7	12/22/94 1/24/95 2/22/95 3/24/95	97.96	4.50 3.10 4.15 2.98	93.46 94.86 93.81 94.98
MW-1	12/22/94 1/24/95 2/22/95 3/24/95	100.00	2.96 3.62 2.65 2.21	97.04 96.38 97.35 97.79

Depths are measured below Top of Casing (TOC)
* Elevations are referenced to the TOC for MW-1, which was assumed (by PES) to have an elevation of 100.00 feet

Table 2
Summary of Groundwater Analyses
Cox Cadillac
March 24, 1995

Well	TVH as gasoline	benzene	toluene	ethyl benzene	total xylenes	1,1 DCA	1,2 DCA	soluble lead
MW-1	25	3.7	1.8	2.2	4.7	ND at .005	.130	.023
TW-6	10	4.9	0.53	0.27	0.38	ND at .002	ND at .002	ND at .003
TW-7	56	13	7	1.5	5.6	ND at .002	ND at .002	ND at .003

All values in milligrams per liter (ppm).

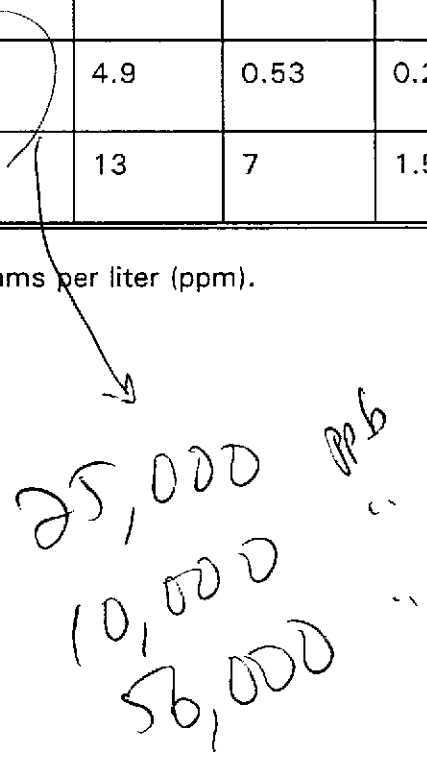

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Table 3
Summary of Historical Groundwater Analytical Results
Cox Cadillac

Well	Date	TVH as gasoline	benzene	toluene	ethyl benzene	total xylenes	1,1-DCA	1,2-DCA	ethylene dibromide	soluble lead
MW-1	3/3/93 10/13/93 12/22/94 3/24/95	110 74 110 25	8.5 6.1 18 3.7	7.5 4.8 11 1.8	4.4 4 2 2.2	15 11 16 4.7	NA NA <.001 <.005	0.35 0.35 0.13 0.13	NA 0.08 NA NA	NA NA NA .023
TW-1	10/13/93	<0.05	<.0005	<.0005	<.0005	<.0005	NA	<.0005	<.0005	NA
TW-2	10/13/93	<.05	<.0005	<.0005	<.0005	<.0005	NA	<.0005	<.0005	NA
TW-3	10/13/93	<.05	<.0005	<.0005	<.0005	<.0005	NA	<.0005	<.0005	NA
TW-4	10/13/93	2	.065	.018	.049	.033	NA	<.005	<.005	NA
TW-5	10/13/93	140	20	25	3.8	23	NA	<.01	<.01	NA
TW-6	10/14/93 12/22/94 3/24/95	4.1 24 10	3.8 5 4.9	1.6 2 0.53	0.11 3 0.27	0.54 6 0.38	NA <.001 <.002	<.001 <.001 <.002	<.001 NA NA	NA NA <.003
TW-7	10/14/93 12/22/94 3/24/95	100 210 56	48 49 13	15 33 7	3.4 7 1.5	16 28 5.6	NA <.001 <.002	<.05 <.001 <.002	<.05 NA NA	NA NA <.003

All values in **milligrams per liter (ppm)**.
NA - Not Analyzed

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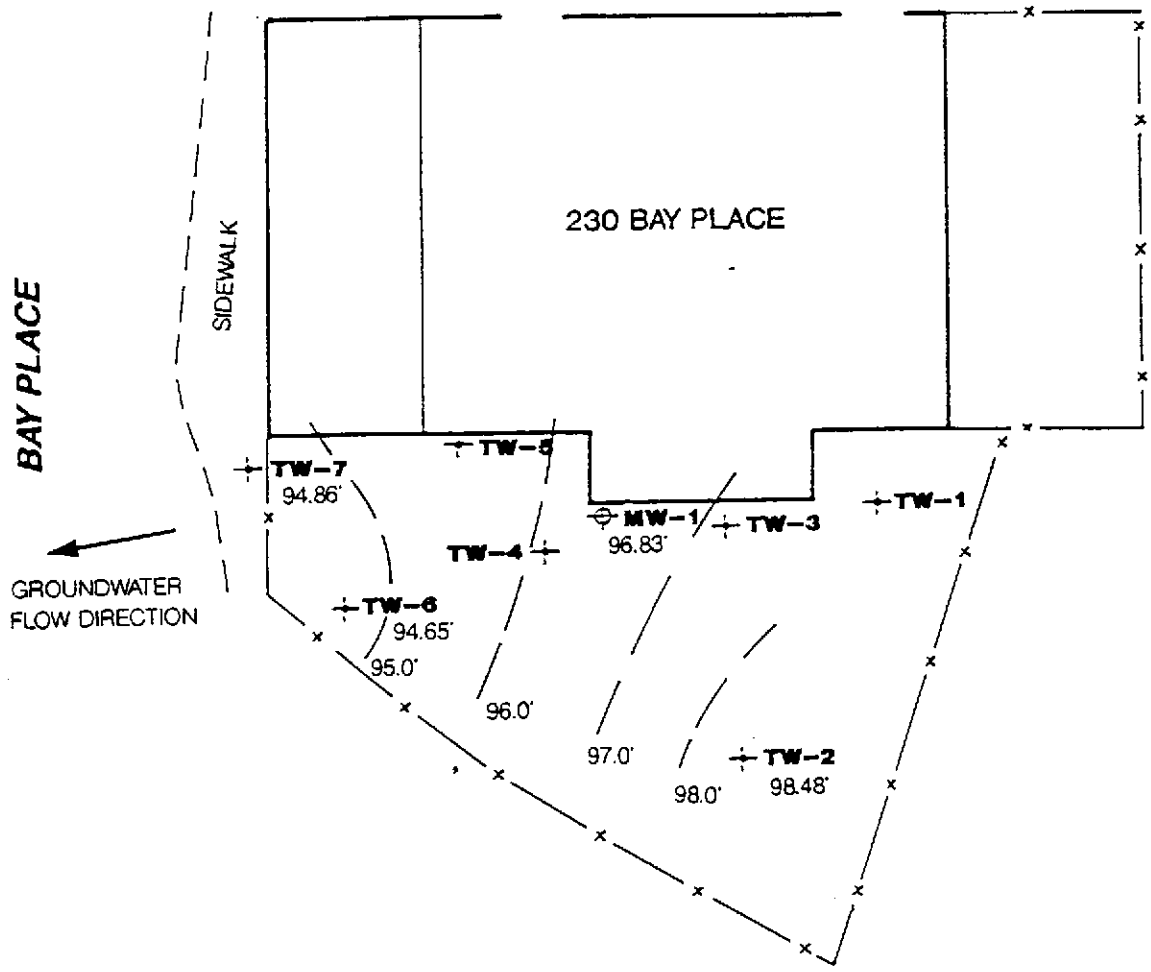
LIST OF ATTACHMENTS

ATTACHMENT 1

SCI, Inc.
JANUARY 1995 GROUNDWATER ELEVATION CONTOUR MAP



+	TEMPORARY WELL BY OTHERS
⊕	MONITORING WELL BY OTHERS
— x —	FENCE
— —	GROUNDWATER CONTOURS
94.86'	GROUNDWATER ELEVATION JANUARY 1995

APPROXIMATE SCALE (feet)

0 60 120

NOTE: ALL ELEVATION RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

SITE PLAN

Subsurface Consultants

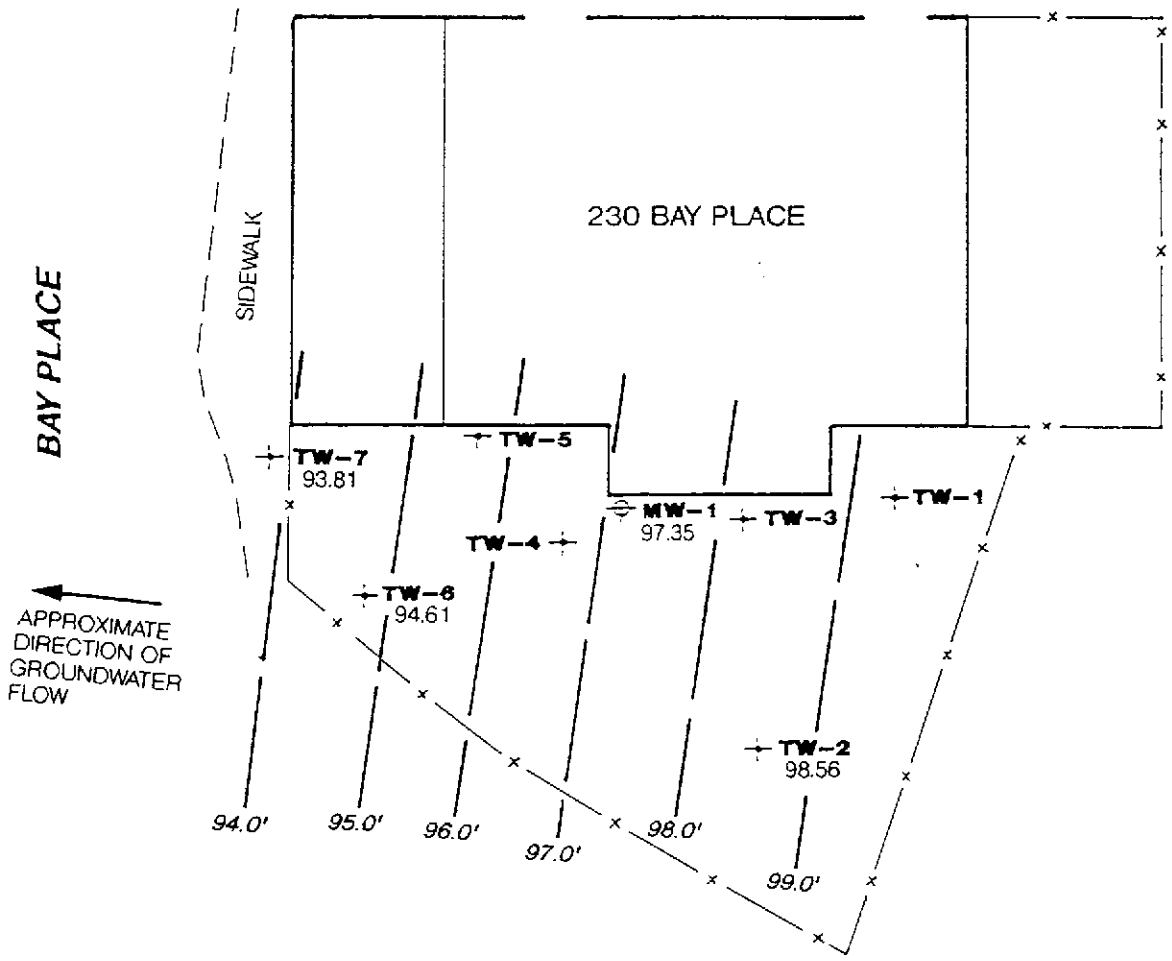
230 BAY PLACE – OAKLAND, CA

JOB NUMBER	DATE	APPROVED
805.007	1/27/95	

PLATE 1

ATTACHMENT 2

SCI, Inc.
FEBRUARY 1995 GROUNDWATER ELEVATION CONTOUR MAP



⊣	TEMPORARY WELL BY OTHERS
⊕	MONITORING WELL BY OTHERS
— x —	FENCE
—— ——	GROUNDWATER CONTOURS
97.35	GROUNDWATER ELEVATION FEBRUARY 1995

APPROXIMATE SCALE (feet)

0 60 120

NOTE: ALL ELEVATION RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

SITE PLAN

Subsurface Consultants

230 BAY PLACE – OAKLAND, CA

JOB NUMBER	DATE	APPROVED
805.007	3/1/95	

PLATE 1

ATTACHMENT 3

SCI, Inc.
QUARTERLY GROUNDWATER MONITORING REPORT
(April 12, 1995)

R. William Rudolph, Jr., PE
Thomas E. Cundey, PE
Jeriann N. Alexander, PE

April 12, 1995
SCI 805.007

Ms. Sherris Ragsdale
Eisenberg, Olivieri, and Associates
1410 Jackson Street
Oakland, California 94612

Quarterly Groundwater Monitoring
March 1995 Event
Cox Cadillac Facility
230 Bay Street
Oakland, California

Dear Ms. Ragsdale:

This letter presents the results of the March 1995 groundwater monitoring event for the referenced site. Subsurface Consultants, Inc. (SCI) performed the event at the request of Eisenberg, Olivieri, and Associates (EOA). In general, SCI's services included:

1. Checking wells TW-2, TW-6, TW-7 and MW-1 for free floating product,
2. Measuring groundwater depths in wells TW-2, TW-6, TW-7 and MW-1, and
3. Purging and sampling wells TW-6, TW-7 and MW-1.

Groundwater Sampling

On March 24, 1995, wells TW-2, TW-6, TW-7 and MW-1 were monitored. Initially, the wells were checked for free product and the depth to groundwater using a steel tape and water and petroleum sensitive pastes. No free product was observed. Groundwater level data is summarized in Table 1. Groundwater surface contours are shown on the Site Plan, Plate 1.

Prior to sampling, the wells were each purged of at least three well volumes of water by using a new disposable bailer. Once the wells had recovered to at least 80 percent of their initial levels, they were sampled with new disposable bailers. Purge water was placed in 55-gallon drums which were labeled and left on-site for later disposal by others.

Samples were retained in glass containers pre-cleaned by the supplier in accordance with EPA protocol. The containers were placed in an ice filled cooler and remained iced until delivered to EOA. Well sampling forms are attached.

On-going Services

Groundwater levels in wells TW-2, TW-6, TW-7 and MW-1 will be measured on a monthly basis and wells TW-6, TW-7 and MW-1 will be sampled on a quarterly basis through December 1995. As a result, the next monthly event will be performed during the week of April 24, 1995 and the next quarterly event will be performed during the week of June 19, 1995.

If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.

Jeriann N. Alexander
Civil Engineer 40469 (expires 3/31/99)

JNA:RWR:sld

Attachments: Table 1. Groundwater Elevation Data
Plate 1. Site Plan
Well Sampling Forms

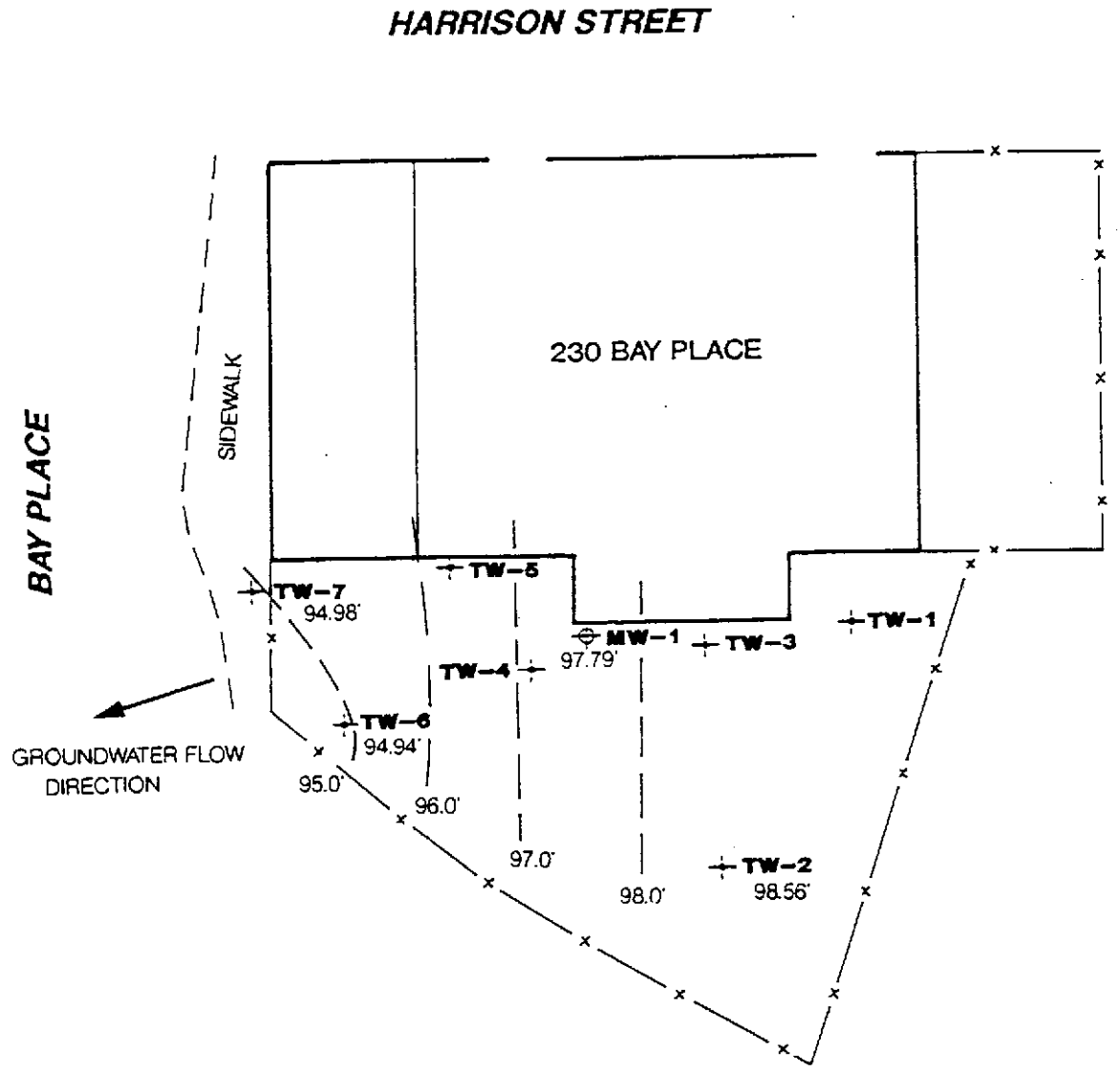
2 copies submitted

Table 1. Groundwater Elevation Data

Well Number	Date	TOC Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
TW-1	10/13/93	100.91	0.06	100.85
TW-2	10/13/93	100.43	2.32	98.11
	12/22/94		2.88	97.55
	3/24/95		1.87	98.56
TW-3	10/13/93	100.46	4.43	96.03
TW-4	10/13/93	99.35	2.73	96.62
TW-5	10/13/93	99.40	4.84	94.56
TW-6	10/13/93	98.75	5.40	93.35
	12/22/94		4.66	94.09
	3/24/95		3.81	94.94
TW-7	10/14/93	97.96	5.40	92.56
	12/22/94		4.50	93.46
	3/24/95		2.98	94.98
MW-1	10/13/93	100.00	3.55	96.45
	12/22/94		2.96	97.04
	3/24/95		2.21	97.79

Depths are measured below Top of Casing (TOC)

* Elevations are referenced to the TOC for MW-1, which was assumed by others to have an elevation 100.00 feet



+	TEMPORARY WELL BY OTHERS
⊕	MONITORING WELL BY OTHERS
— x —	FENCE
—— ——	GROUNDWATER CONTOURS
97.79'	GROUNDWATER ELEVATION MARCH 1995

APPROXIMATE SCALE (feet)

0 60 120

NOTE: ALL ELEVATION RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

SITE PLAN

Subsurface Consultants

230 BAY PLACE – OAKLAND, CA

JOB NUMBER	DATE	APPROVED
805.007	4/12/95	

PLATE 1

GROUNDWATER DEPTHS

Project Name: COX CADILLAC

Job No.: 805.007

Measured by: CDeu

Well	Date	Time	Groundwater Depth (feet)	Comments
MW-1	11/21/95	0	3.62	
TW-2	"	"	1.95	
TW-6	"	"	4.10	
TW-7	"	11:20	3.10	

GROUNDWATER DEPTHS

Project Name: COX CADILLAC

Job No.: 805-007

Measured by: CODen Arrived at site: at 10:05 AM

Departed site: at 11:10 AM

Well	Date	Time	Groundwater Depth (feet)	Comments
TW-2	2/22/95	10:25 AM	1.87	had to bail water down to below casing
TW-6	2/22/95	10:35 AM	4.14	left meter probe in well 5 min. to make sure water had stabilized
TW-7	2/22/95	10:50 AM	4.15	
MW-1	2/22/95	10:20 AM	2.65	
				Opened all wells & waited until water levels had stabilized as I noted percolation of water into casing when caps removed.

GROUNDWATER DEPTHS

Project Name: COX CADILLAC

Job No.: 805.007

Measured by: CDeLa

Well	Date	Time	Groundwater Depth (feet)	Comments TOC ELEV.	GW ELEV.
TW-2	3/21/05		1.87	100.43	98.56
TW-6	"		3.81	98.75	94.94
TW-7	"		2.98	97.96	94.98
MW-1	"		2.21	100.00	97.79
[redacted]					

WELL SAMPLING FORM

Project Name: COX CADILLAC
Well Number: MW-1
Job No.: 805.007
Well Casing Diameter: 2 inch
Sampled By: CDen
Date: 3/24/95
TOC Elevation:
Weather: Clear

Depth to Casing Bottom (below TOC) 10 feet
Depth to Groundwater (below TOC) 2.21 feet
Feet of Water in Well 7.79 feet
Depth to Groundwater When 80% Recovered feet
Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 1.27 gallons
Depth Measurement Method Tape & Paste (Electronic Sounder) Other
Free Product none
Purge Method Teflon Bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
3	6.88	14.5	1800		
4	6.87	16.9	2400		
5	6.90	17.4	8100		

Total Gallons Purged 5 gallons
Depth to Groundwater Before Sampling (below TOC) feet
Sampling Method Teflon Bailer
Containers Used 4 (40 ml) 1 Poly (~~liter~~ 250 mL) pint

Subsurface Consultants

JOB NUMBER DATE APPROVED PLATE

WELL SAMPLING FORM

Project Name: COX CADILLAC
Well Number: TW-7
Job No.: 805.007
Well Casing Diameter: 2 inch
Sampled By: CDE
Date: 3/24/95
TOC Elevation:
Weather: Clear

Depth to Casing Bottom (below TOC) 10 feet
Depth to Groundwater (below TOC) 2.98 feet
Feet of Water in Well 7.02 feet
Depth to Groundwater When 80% Recovered feet
Casing Volume (feet of water x Casing DIA ² x 0.0408) 1.14 gallons
Depth Measurement Method Tape & Paste / Electronic Sounder / Other
Free Product none
Purge Method Teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
3	6.67	16.9	300		
4	6.67	17.2	350		

Total Gallons Purged 4 gallons
Depth to Groundwater Before Sampling (below TOC) feet
Sampling Method Teflon bailer
Containers Used 4 (40 ml) 1 Poly ~~liter~~ 250 mL (pint)

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

WELL SAMPLING FORM

Project Name: COX CADILLAC
Well Number: TW-6
Job No.: 805.007
Well Casing Diameter: 2 inch
Sampled By: CDH
Date: 3/21/95
TOC Elevation: _____
Weather: Clear

Depth to Casing Bottom (below TOC) 10 feet
Depth to Groundwater (below TOC) 3.81 feet
Feet of Water in Well 6.19 feet
Depth to Groundwater When 80% Recovered _____ feet
Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 1.0 gallons
Depth Measurement Method Tape & Paste / Electronic Sounder / Other
Free Product none
Purge Method teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
2	6.80	16.4	1000		
3	6.80	16.4	1450		

Total Gallons Purged 3 gallons
Depth to Groundwater Before Sampling (below TOC) _____ feet
Sampling Method teflon bailer
Containers Used 4 (40 ml) 1 Poly ~~liter~~ 250mL (pint)

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

ATTACHMENT 4

CURTIS AND TOMPKINS LABORATORY ANALYTICAL REPORT

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

EOA, Inc.
1410 Jackson Street
Oakland, CA 94612

Date: 07-APR-95
Lab Job Number: 120404
Project ID: CC03
Location: Cox Cadillac

Reviewed by: _____

Reviewed by: _____

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120404
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC

DATE SAMPLED: 03/24/95
DATE RECEIVED: 03/24/95
DATE ANALYZED: 03/30/95
DATE REPORTED: 04/07/95
BATCH NO.: 19734

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)
120404-001	MW-1	25,000	3,700	1,800	2,200	4,700
120404-003	TW-7	56,000	13,000	7,000	1,500	5,600
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.

QA/QC SUMMARY: BS/BSD

RPD, %	2
RECOVERY, %	98

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120404
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC

DATE SAMPLED: 03/24/95
DATE RECEIVED: 03/24/95
DATE ANALYZED: 03/30/95
DATE REPORTED: 04/07/95
BATCH NO.: 19523

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)
120404-002	TW-6	10,000	4,900*	530	270	380
METHOD BLANK	N/A	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

* Results obtained from a 1:50 dilution (Batch No: 19734).

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

QA/QC SUMMARY: MS/MSD of 120405-004

RPD, %	1
RECOVERY, %	112

CLIENT: EOA, Inc.
PROJECT ID: CC03
LOCATION: Cox Cadillac
MATRIX: Filtrate

DATE REPORTED: 04/07/95

Metals Analytical Report

Lead

Sample ID	Lab ID	Sample Date	Receive Date	Result (ug/L)	Reporting Limit (ug/L)	QC Batch	Method	Analysis Date
MW-1	120404-001	03/24/95	03/24/95	23	3.0	19826	EPA 6010A	04/05/95
TW-6	120404-002	03/24/95	03/24/95	ND	3.0	19826	EPA 6010A	04/05/95
TW-7	120404-003	03/24/95	03/24/95	ND	3.0	19826	EPA 6010A	04/05/95

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

CLIENT: EOA, Inc.
JOB NUMBER: 120404

DATE REPORTED: 04/07/95

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Lead	500	484	484	ug/L	97	97	97	0	19826	EPA 6010A	04/05/95

Curtis & Tompkins, Ltd.

CLIENT: EOA, Inc.
JOB NUMBER: 120404

DATE REPORTED: 04/07/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Lead	ND	3	ug/L	19826	EPA 6010A	04/05/95

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120404-001
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC
SAMPLE ID: MW-1

DATE SAMPLED: 03/24/95
DATE RECEIVED: 03/24/95
DATE ANALYZED: 04/03/95
DATE REPORTED: 04/07/95
DATE REVISED: 04/11/95
BATCH NO: 19765

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
1,1-Dichloroethane	ND	5.0
1,2-Dichloroethane	130	5.0

ND = Not detected at or above reporting limit.

Surrogate Recovery	
Bromobenzene	106 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120404-002
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC
SAMPLE ID: TW-6

DATE SAMPLED: 03/24/95
DATE RECEIVED: 03/24/95
DATE ANALYZED: 04/03/95
DATE REPORTED: 04/07/95
DATE REVISED: 04/11/95
BATCH NO: 19765

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
1,1-Dichloroethane	ND	2.0
1,2-Dichloroethane	ND	2.0

ND = Not detected at or above reporting limit.

Surrogate Recovery	
Bromobenzene	108 %

Curtis & Tompkins, Ltd

LABORATORY NUMBER: 120404-003
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC
SAMPLE ID: TW-7

DATE SAMPLED: 03/24/95
DATE RECEIVED: 03/24/95
DATE ANALYZED: 04/03/95
DATE REPORTED: 04/07/95
DATE REVISED: 04/11/95
BATCH NO: 19765

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
1,1-Dichloroethane	ND	2.0
1,2-Dichloroethane	ND	2.0

ND = Not detected at or above reporting limit.

Surrogate Recovery	
Bromobenzene	107 %

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 120404-METHOD BLANK
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC
SAMPLE ID: MB

DATE ANALYZED: 04/03/95
DATE REPORTED: 04/07/95
DATE REVISED: 04/11/95
BATCH NO: 19765

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
1,1-Dichloroethane	ND	1.0
1,2-Dichloroethane	ND	1.0

ND = Not detected at or above reporting limit.

Surrogate Recovery	
Bromobenzene	104 %

120404

CHAIN OF CUSTODY FORM

Page 1 of 1

Curtis & Tompkins, Ltd.
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900 Phone
(510) 486-0532 Fax

Sampler: SCI

Report to: Sherris Ragsdale

Project No: CCO3

Company: EDA

Project Name: Cox Cadillac

Telephone: 832-2852

Turnaround Time: 2 week

Fax:

Laboratory Number	Sample ID.	Sampling Date	Sampling Time	Matrix: Soil	Matrix: Water	Matrix: Waste	Matrix: Other	# of Containers	Preservative: HCl	Preservative: H_2SO_4	Preservative: HNO3	Preservative: ICE	Preservative: Other	Field Notes
1	MW-1	3/24	11:15		✓			2 VOA						
2					✓			2 VOA						
3					✓			1 poly						
4	TW-6	3/24	11:30		✓			2 VOA						
5					✓			2 VOA						
6					✓			1 poly						
7	TW-7	3/24	11:45		✓			2 VOA						
8					✓			2 VOA						
9					✓			1 poly						
10														
11														
12														

Analyses

TPH-gas/BTEX	1,1-1,2-DCA	Soluble lead
✓	✓	✓
	✓	
	✓	
✓		✓
	✓	
	✓	
✓		✓
	✓	
	✓	
	✓	

NOTES:

RELINQUISHED BY:

Sherris Ragsdale 3/24/95 4:17 DATE/TIME

_____ DATE/TIME

_____ DATE/TIME

RECEIVED BY:

Kevin Hoch 3/24/95 DATE/TIME

_____ DATE/TIME

_____ DATE/TIME