

July 25, 1995

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

SUBJECT: Third Quarterly Monitoring Report

Dear Mr. Cox:

This letter report summarizes the results of monitoring of wells during the period April through June 1995 (third 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 June. 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 June 29, 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 April and May groundwater surface contour maps (SCI, May 2, 1995 and SCI, June 7, 1995) are included in this report in Attachments 1 and 2. The June groundwater surface contour map and the field methods used to perform the tasks listed above are included in Attachment 3, "Quarterly Groundwater Monitoring" Report (SCI, July 20, 1995). The depth to groundwater was measured and contoured for April, May, and June (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 June, 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

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Mr. Bill Cox
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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 1A summarizes the quarterly groundwater elevation data for December 1994, March 1995, and June 1995. Table 1B summarizes the monthly groundwater elevation data for the April, May, and June 1995 monitoring events. Based on data collected during this quarter, 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 June is lower than the March 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 over time; however, for the June monitoring event, the concentrations increased slightly. The concentration of 1,2-DCA in MW-1 decreased slightly. Soluble lead in well MW-1 decreased slightly, and was detected at concentrations near the detection limits in wells TW-6 and TW-7 for the first time.

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 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 two 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 was detected only in well MW-1, and soluble lead was detected in well MW-1. Lower concentrations of soluble lead were also detected in wells TW-6 and TW-7. MW-1 is located next to the former waste oil tank location. The presence of TVH and BTEX is consistent with the confirmed release of unleaded gas from the underground fuel tank which was removed last year. Both dissolved lead and

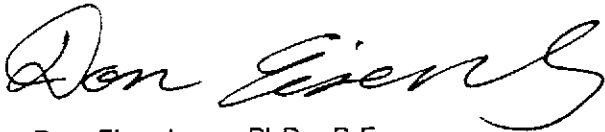
Mr. Bill Cox
July 25, 1995
Page 3

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 primarily in MW-1, tend to indicate that their source was more likely the former waste oil tank than the former fuel tank. Their extent in groundwater is probably relatively limited, but soluble lead was detected over a larger area in this quarter's sampling than in previous quarters. The relatively low concentrations of soluble lead in wells TW-6 and TW-7 are consistent with a source near well MW-1.

Concentrations of TVH and BTEX have increased slightly since the last quarterly monitoring event; this apparent increase in concentrations may be due to the accompanying fluctuation in groundwater levels.

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

Sincerely,
EOA, Inc.



Don Eisenberg, PhD., P.E.
President

Attachments

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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.

Table 1A
Quarterly Groundwater Elevation Data
December 1994, March 1995, and June 1995

Well Number	Date	TOC Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
TW-2	12/22/94	100.43	2.88	97.55
	3/24/95		1.87	98.56
	6/29/95		2.10	98.33
TW-6	12/22/94	98.75	4.66	94.09
	3/24/95		3.81	94.94
	6/29/95		5.25	93.50
TW-7	12/22/94	97.96	4.50	93.46
	3/24/95		2.98	94.98
	6/29/95		4.30	93.66
MW-1	12/22/94	100.00	2.96	97.04
	3/24/95		2.21	97.79
	6/29/95		2.44	97.56

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 1B
Monthly Groundwater Elevation Data
April, May, and June 1995

Well Number	Date	TOC Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
TW-2	4/25/95	100.43	2.86	97.57
	5/26/95		1.90	98.53
	6/29/95		2.10	98.33
TW-6	4/25/95	98.75	6.03	92.72
	5/26/95		5.07	93.68
	6/29/95		5.25	93.50
TW-7	4/25/95	97.96	5.23	92.73
	5/26/95		3.93	94.03
	6/29/95		4.30	93.66
MW-1	4/25/95	100.00	3.69	96.31
	5/26/95		2.32	97.68
	6/29/95		2.44	97.56

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
June 29, 1995

Well	TVH as gasoline	benzene	toluene	ethyl benzene	total xylenes	1,1 DCA	1,2 DCA	soluble lead
MW-1	28	5.3	2.1	3.2	7.5	ND at .002	.110	.014
TW-6	28	12	6.6	1	3	ND at .001	ND at .001	.0042
TW-7	100	39	8.1	3	8.3	ND at .001	ND at .001	.0035

All values in milligrams per liter (ppm).

100,000 39,000

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	110	8.5	7.5	4.4	15	NA	0.35	NA	NA
	10/13/93	74	6.1	4.8	4	11	NA	0.35	0.08	NA
	12/22/94	110	18	11	2	16	<.001	0.13	NA	NA
	3/24/95	25	3.7	1.8	2.2	4.7	<.005	0.13	NA	.023
	6/29/95	28	5.3	2.1	3.2	7.5	<.002	0.110	NA	.014
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	4.1	3.8	1.6	0.11	0.54	NA	<.001	<.001	NA
	12/22/94	24	5	2	3	6	<.001	<.001	NA	NA
	3/24/95	10	4.9	0.53	0.27	0.38	<.002	<.002	NA	<.003
	6/29/95	28	12	6.6	1	3	<.001	<.001	NA	.0042
TW-7	10/14/93	100	48	15	3.4	16	NA	<.05	<.05	NA
	12/22/94	210	49	33	7	28	<.001	<.001	NA	NA
	3/24/95	56	13	7	1.5	5.6	<.002	<.002	NA	<.003
	6/29/95	100	39	8.1	3	8.3	<.001	<.001	NA	.0035

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

Moderate → high

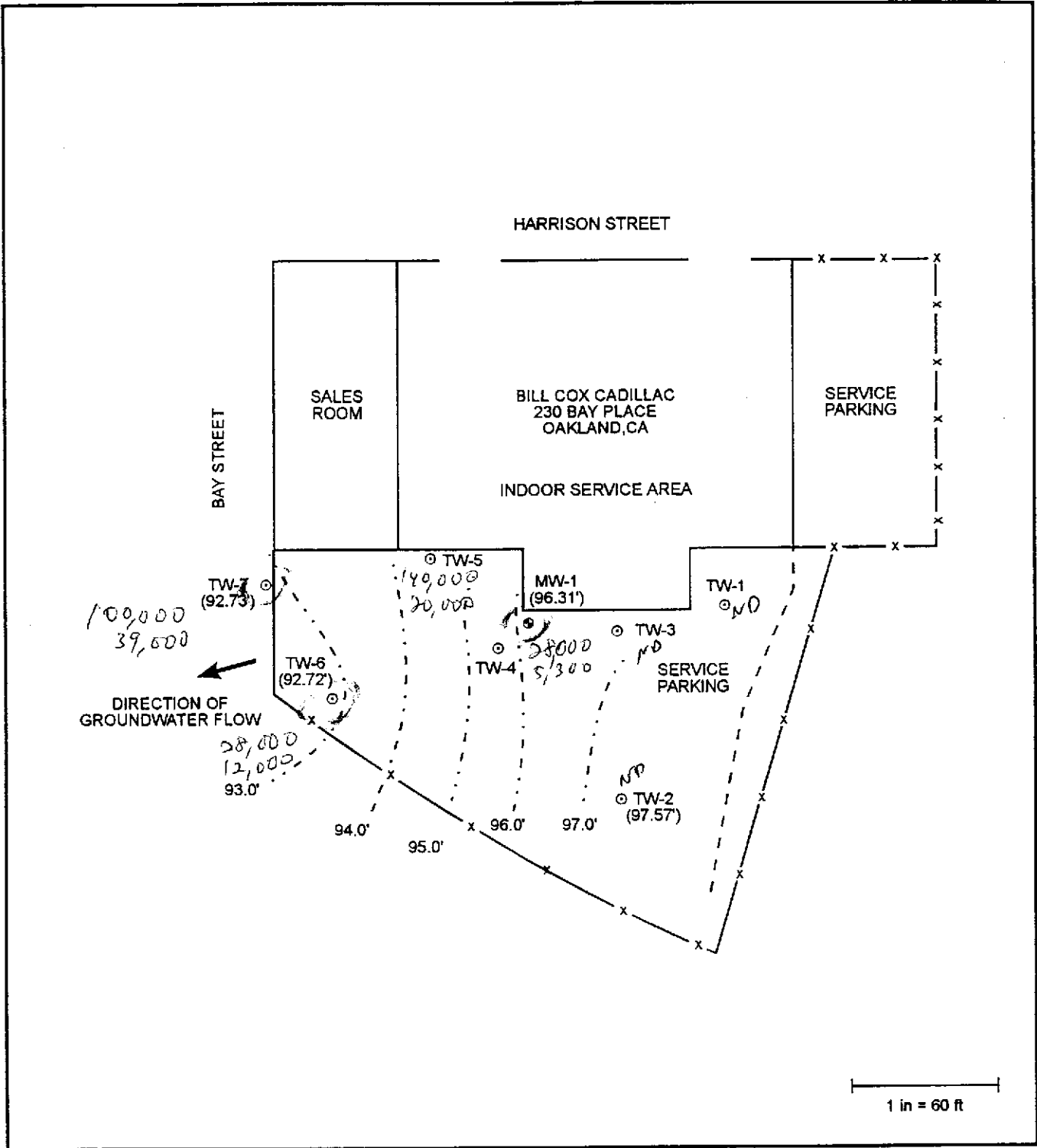


Figure 1: GROUNDWATER GRADIENT APRIL 1995

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 Well Location
- x-x-x- Fence
- - - - Retaining Wall



EOA, Inc.

July 1995

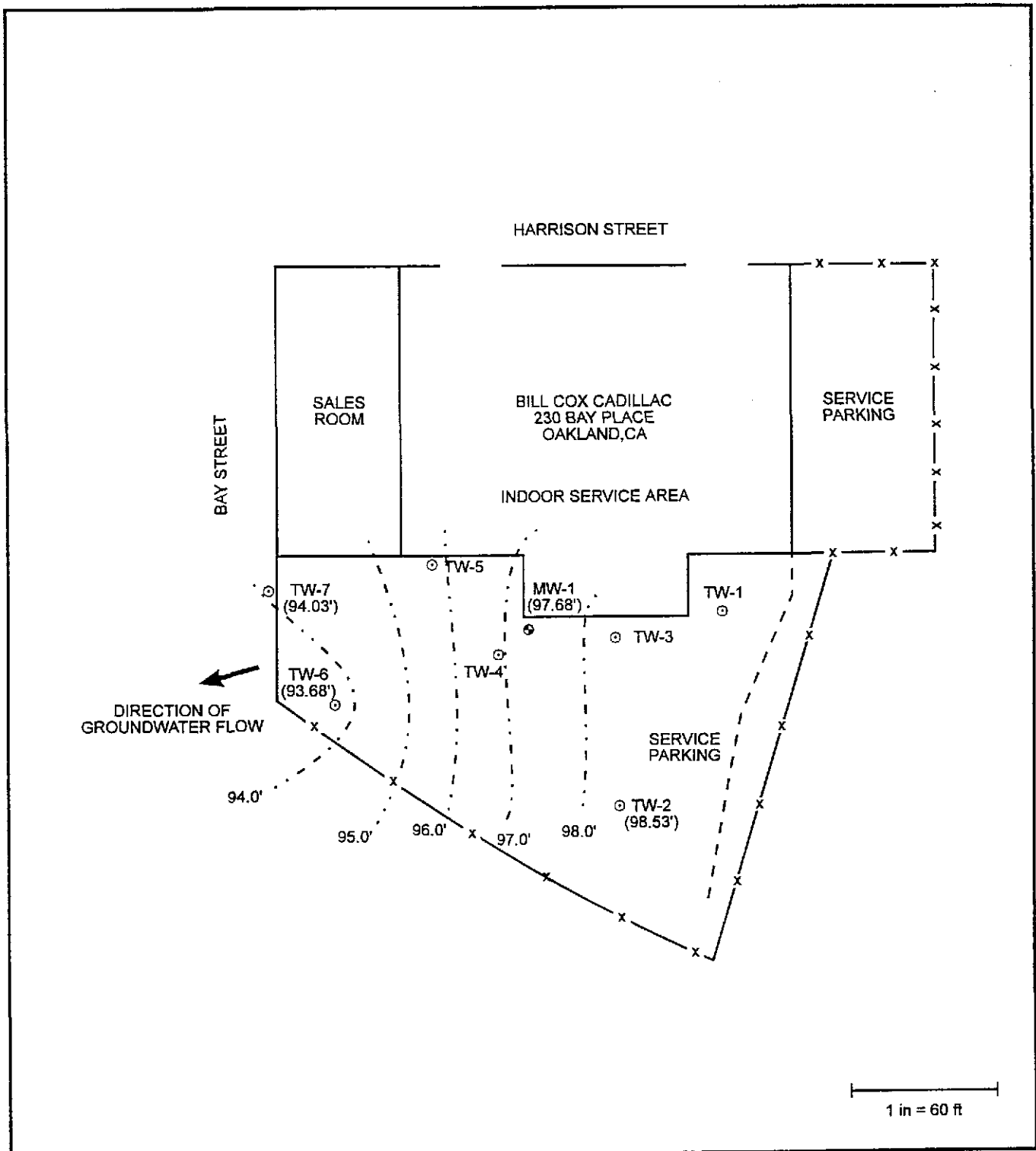


Figure 2: GROUNDWATER GRADIENT MAY 1995

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 Well Location
- x-x- Fence
- - - Retaining Wall



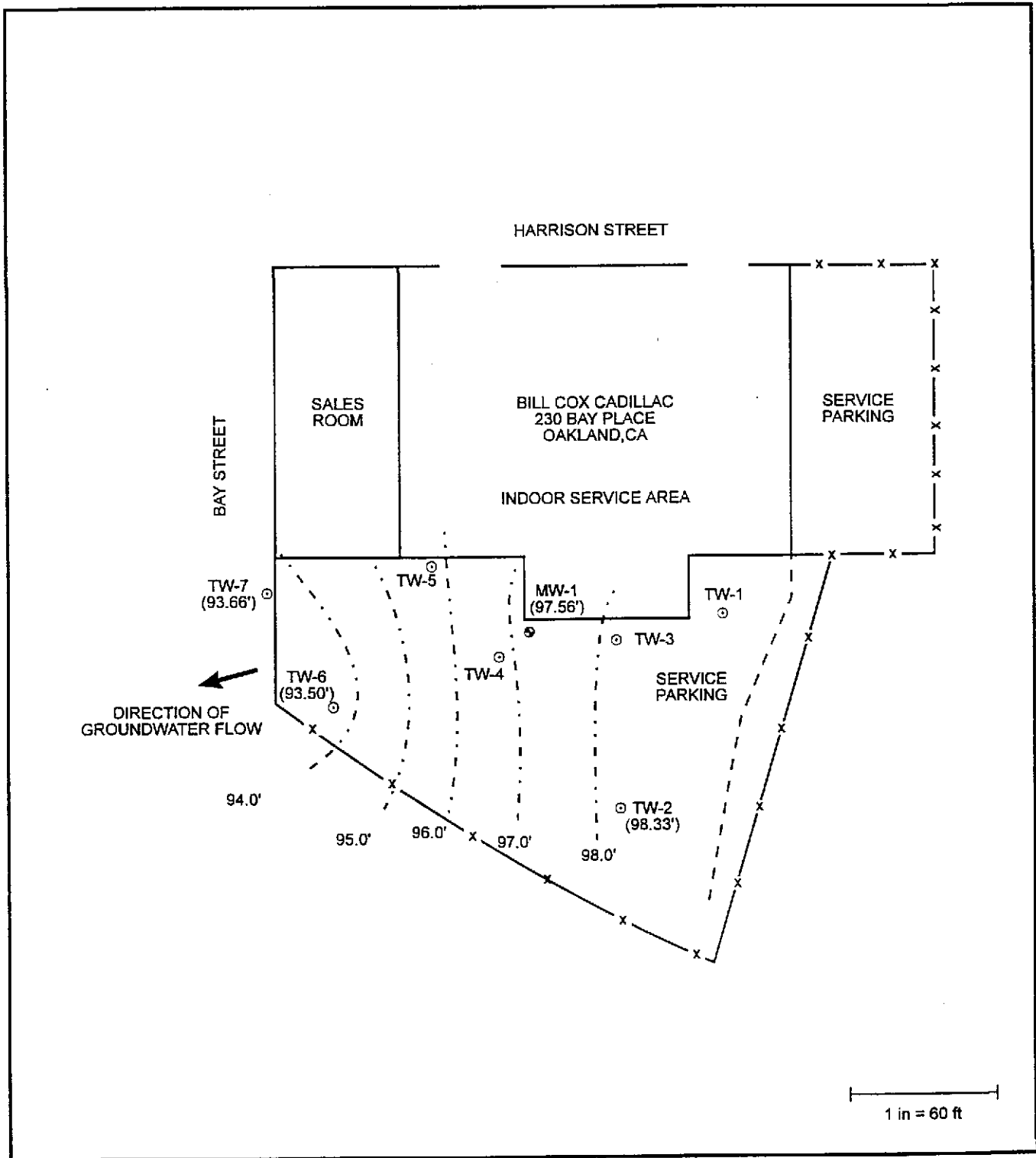


Figure 3: GROUNDWATER GRADIENT JUNE 1995

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 Well Location
- x-x- Fence
- - - Retaining Wall



EOA, Inc.

July 1995

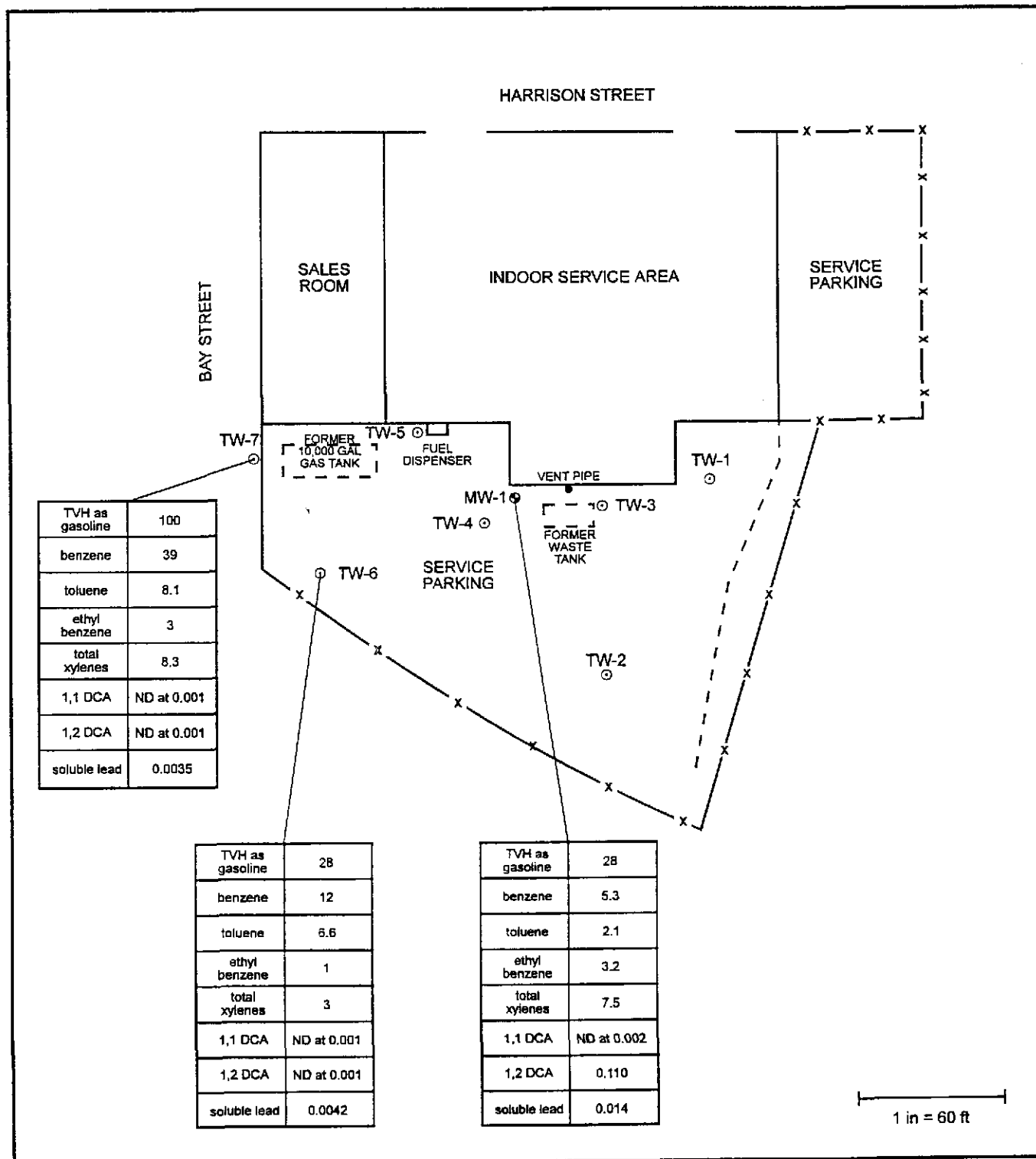


Figure 4: Results of Groundwater Analyses
June 29, 1995

Note: Results in mg/l (ppm)

Source: PES Environmental Inc. 11/93

- ⊙ Monitoring Well
- Temporary Well Location
- x-x-x- Fence
- - - - - Retaining Wall



EOA, Inc.

June 1995

LIST OF ATTACHMENTS

- Attachment 1. SCI, Inc. Data from April 1995 Water Level Measurement Event
- Attachment 2. SCI, Inc. Data from May 1995 Water Level Measurement Event
- Attachment 3. SCI, Inc. Quarterly Groundwater Monitoring Report (July 20, 1995)
- Attachment 4. Curtis and Tompkins Laboratory Analytical Report

LETTER OF TRANSMITTAL

TO:

Ms. Sherris Ragsdale
E O A
1410 Jackson Street
Oakland, CA 94612

DATE: May 2, 1995
PROJECT 230 Bay Place, Oakland
SCI JOB NUMBER: 805.007

WE ARE SENDING YOU:

- 1 copies
- of our final report
- a draft of our report
- a Service Agreement
- a proposed scope of services
- specifications
- grading/foundation plans
- soil samples/groundwater samples
- an executed contract
- Data from April Water Level Measurement event

- if you have any questions, please call
- for your review and comment
- please return an executed copy
- for geotechnical services
- with our comments
- with Chain of Custody documents
- for your use
- _____
- _____

REMARKS:

COPIES TO:

BY: Jeriana Alexander
Jerian N. Alexander (AEP)

Subsurface Consultants, Inc.

Table 1. Groundwater Elevation Data

<u>Well Number</u>	<u>Date</u>	<u>TOC Elevation* (feet)</u>	<u>Depth to Water (feet)</u>	<u>Groundwater Elevation (feet)</u>
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
	1/24/95		1.95	98.48
	2/22/95		1.87	98.56
	3/24/95		1.87	98.56
	4/25/95		2.86	97.57
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
	1/24/95		4.10	94.65
	2/22/95		4.14	94.61
	3/24/95		3.81	94.94
	4/25/95		6.03	92.72
TW-7	10/14/93	97.96	5.40	92.56
	12/22/94		4.50	93.46
	1/24/95		3.10	94.86
	2/22/95		4.15	93.81
	3/24/95		2.98	94.98
	4/25/95		5.23	92.73
MW-1	10/13/93	100.00	3.55	96.45
	12/22/94		2.96	97.04
	1/24/95		3.62	96.38
	2/22/95		2.65	97.35
	3/24/95		2.21	97.79
	4/25/95		3.69	96.31

Depths are measured below Top of Casing (TOC)

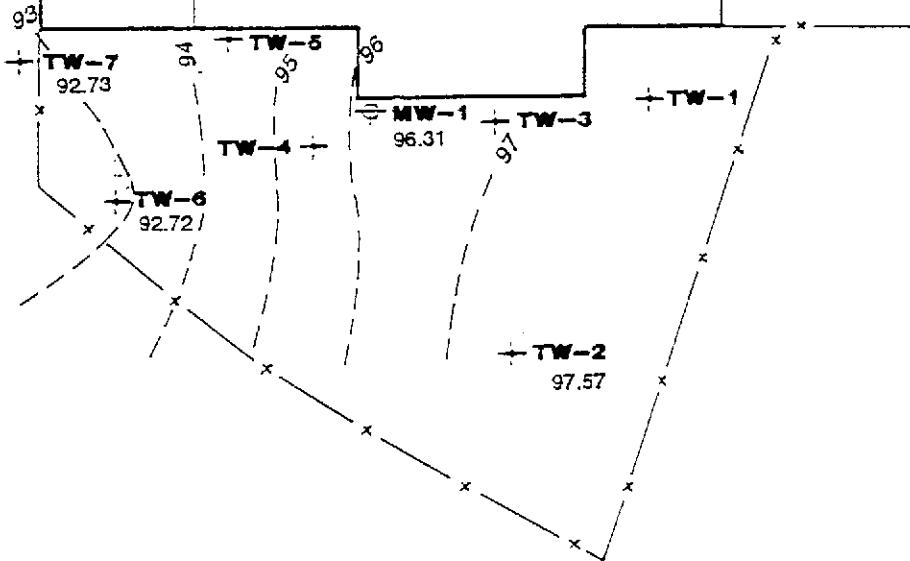
* Elevations are referenced to the TOC for MW-1, which was assumed by others to have an elevation 100.00 feet

HARRISON STREET

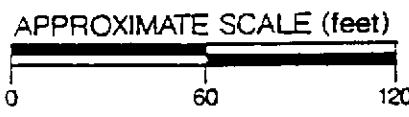
BAY PLACE

SIDEWALK

230 BAY PLACE



+	TEMPORARY WELL BY OTHERS
⊕	MONITORING WELL BY OTHERS
— x —	FENCE
- - -	GROUNDWATER CONTOURS
92.72	GROUNDWATER ELEVATION APRIL 25, 1995



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

SITE PLAN

230 BAY PLACE - OAKLAND, CA

Subsurface Consultants

JOB NUMBER	DATE	APPROVED
805.007	5/2/95	

PLATE
1

Subsurface Consultants

FIELD REPORT

Sheet ___ of ___

REPORT NO.

PROJECT: Coxe Audubon JOB NO: 805.107

PERSONNEL PRESENT: SCT DATE: 4/25/95

HOURS - From: ___ To: ___ From: ___ To: ___ TOTAL HRS: 20

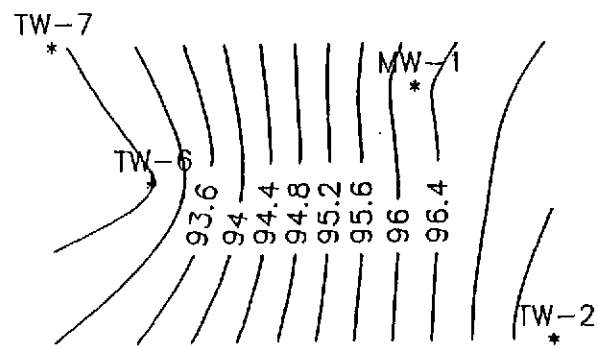
EQUIPMENT IN USE: _____

- TYPE OF SERVICES PROVIDED:
- Exploration
 - Field Density Testing
 - Site Meeting
 - Construction Observation
 - _____

After removing caps from wells, pressure released & water levels began to rise. Allowed water levels to stabilize (approx 40 mins) then measured water levels. Had to remove water from above top of gas & sand in wells TW-1a and TW-2. Replaced well covers & bolts & re-locked units. Called EPA earlier in day to inform Sherry's Ragsdale of our intention to measure water levels left a message at 5:00 PM.

Prepared by:  Reviewed by: _____

COX 4/25/95



LETTER OF TRANSMITTAL

TO: Ms. Sherris Ragsdale
EOA
1410 Jackson Street
Oakland, California 94612

DATE: June 7, 1995
PROJECT: 230 Bay Place, Oakland
SCI JOB NUMBER: 805.007

WE ARE SENDING YOU:

1 copies

of our final report
 a draft of our report
 a Service Agreement
 a proposed scope of services
 specifications
 grading/foundation plans
 soil samples/groundwater samples
 an executed contract

if you have any questions, please call
 for your review and comment
 please return an executed copy
 for geotechnical services
 with our comments
 with Chain of Custody documents
 for your use
 Data from May Water Level Measurement Event

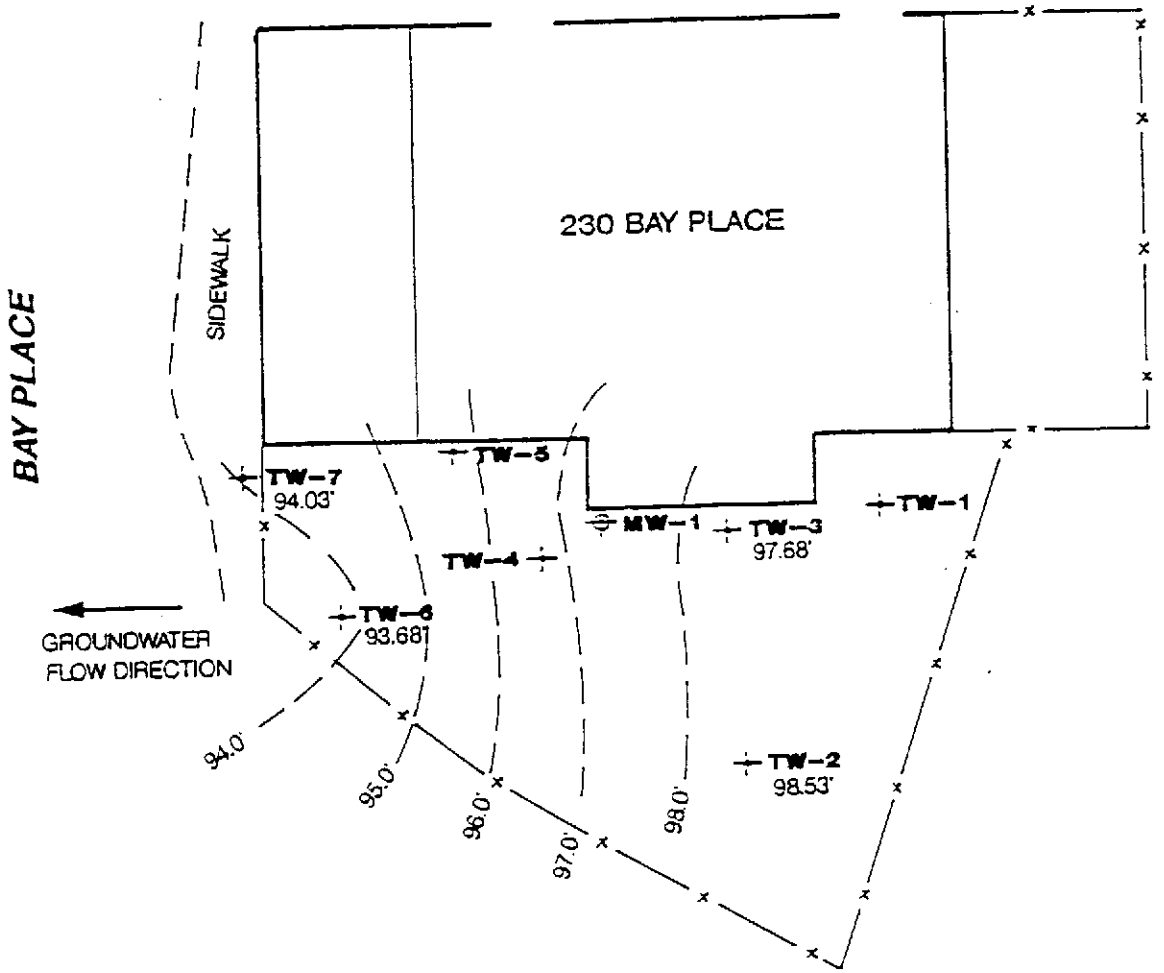
REMARKS:

COPIES TO:

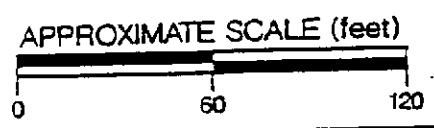
BY: 
Teriam N. Alexander

Subsurface Consultants, Inc.
171 12th Street - Suite 201 - Oakland, California 94607 - 510-268-0461 - Fax 510-268-0137

HARRISON STREET



+	TEMPORARY WELL BY OTHERS
⊕	MONITORING WELL BY OTHERS
- x -	FENCE
- - -	GROUNDWATER CONTOURS
94.03'	GROUNDWATER ELEVATION MAY 26, 1995



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 805.007	DATE 6/7/95	APPROVED

PLATE
1

Table 1. Groundwater Elevation Data

<u>Well Number</u>	<u>Date</u>	<u>TOC Elevation* (feet)</u>	<u>Depth to Water (feet)</u>	<u>Groundwater Elevation (feet)</u>
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
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	3/24/95		1.87	98.56
	4/25/95		2.86	97.57
	5/26/95		1.90	98.53
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
	1/24/95		4.10	94.65
	2/22/95		4.14	94.61
	3/24/95		3.81	94.94
	4/25/95		6.03	92.72
	5/26/95		5.07	93.68
TW-7	10/14/93	97.96	5.40	92.56
	12/22/94		4.50	93.46
	1/24/95		3.10	94.86
	2/22/95		4.15	93.81
	3/24/95		2.98	94.98
	4/25/95		5.23	92.73
	5/26/95		3.93	94.03
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	12/22/94		2.96	97.04
	1/24/95		3.62	96.38
	2/22/95		2.65	97.35
	3/24/95		2.21	97.79
	4/25/95		3.69	96.31
	5/26/95		2.32	97.68

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

Subsurface Consultants FIELD REPORT

Sheet ___ of ___

PROJECT: Cox Cadillac JOB NO: 805.007 REPORT NO.

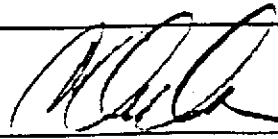
PERSONNEL PRESENT: _____ DATE: 5/26/95

HOURS - From: _____ To: _____ From: _____ To: _____ TOTAL HRS: 20

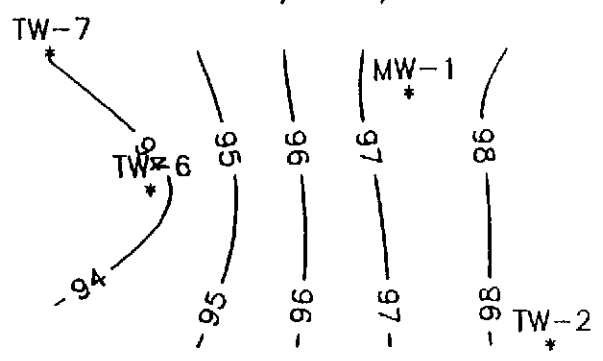
EQUIPMENT IN USE: _____

TYPE OF SERVICES PROVIDED: Exploration Field Density Testing
 Site Meeting Construction Observation _____

Arrived site & open the wells
& let water stabilize. Measured
water levels & recorded. Then
measured distances in street &
sidewalk areas for future work
plan

Prepared by:  Reviewed by: _____

COX 5/26/95



July 20, 1995
SCI 805.007

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

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

Dear Ms. Ragsdale:

This letter presents the results of the June 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 June 29, 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.

Subsurface Consultants, Inc.

171 12th Street • Suite 201 • Oakland, California 94607 • Telephone 510-268-0461 • FAX 510-268-0137

Ms. Sherris Ragsdale
Eisenberg, Olivieri, and Associates
July 20, 1995
SCI 805.007
Page 2

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 July 24, 1995 and the next quarterly event will be performed during the week of September 25, 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

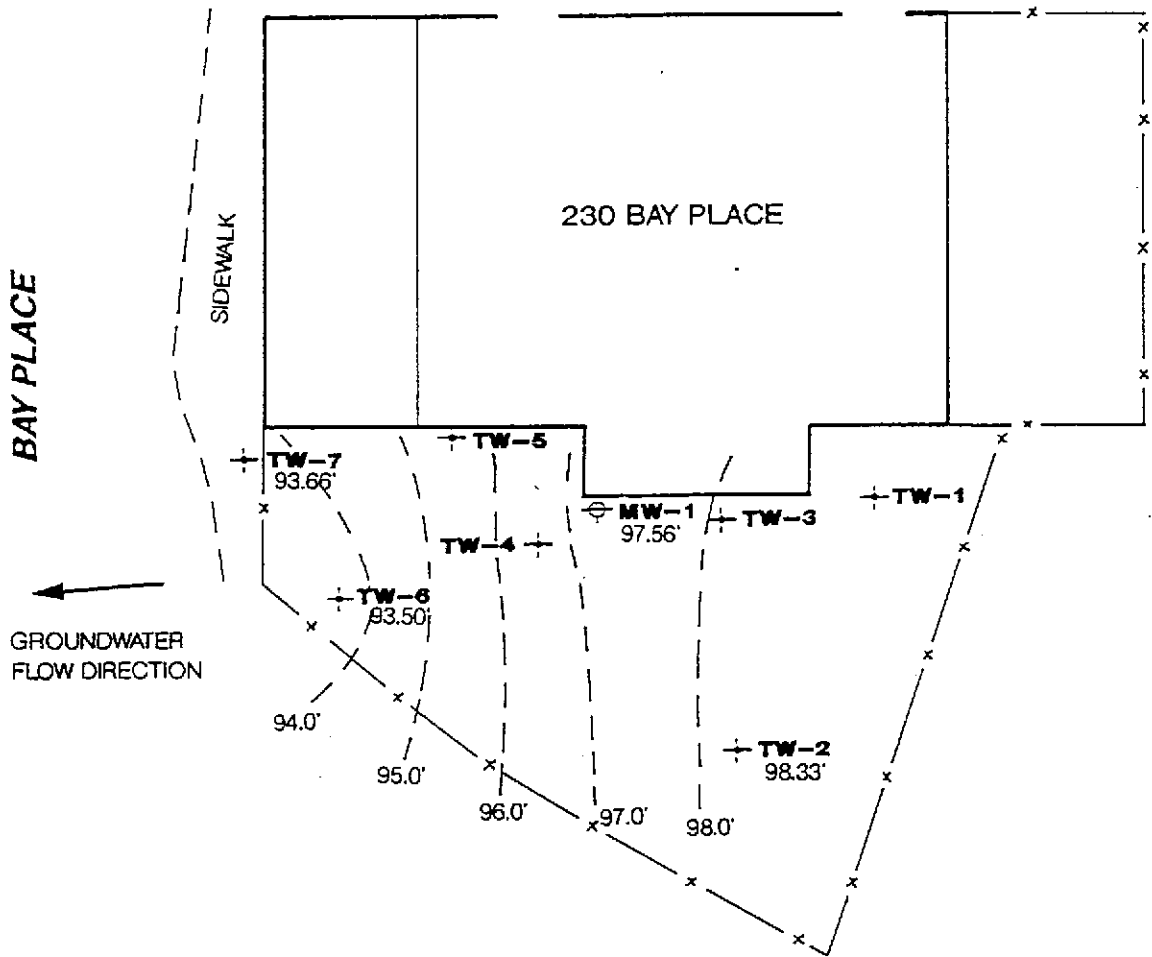
Table 1. Groundwater Elevation Data

<u>Well Number</u>	<u>Date</u>	<u>TOC Elevation* (feet)</u>	<u>Depth to Water (feet)</u>	<u>Groundwater Elevation (feet)</u>
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
	1/24/95		1.95	98.48
	2/22/95		1.87	98.56
	3/24/95		1.87	98.56
	4/25/95		2.86	97.57
	5/26/95		1.90	98.53
	6/29/95		2.10	98.33
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
	1/24/95		4.10	94.65
	2/22/95		4.14	94.61
	3/24/95		3.81	94.94
	4/25/95		6.03	92.72
	5/26/95		5.07	93.68
	6/29/95		5.25	93.50
TW-7	10/14/93	97.96	5.40	92.56
	12/22/94		4.50	93.46
	1/24/95		3.10	94.86
	2/22/95		4.15	93.81
	3/24/95		2.98	94.98
	4/25/95		5.23	92.73
	5/26/95		3.93	94.03
	6/29/95		4.30	93.66
MW-1	10/13/93	100.00	3.55	96.45
	12/22/94		2.96	97.04
	1/24/95		3.62	96.38
	2/22/95		2.65	97.35
	3/24/95		2.21	97.79
	4/25/95		3.69	96.31
	5/26/95		2.32	97.68
	6/29/95		2.44	97.56

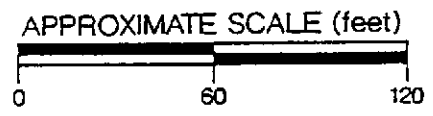
Depths are measured below Top of Casing (TOC)

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

HARRISON STREET



+	TEMPORARY WELL BY OTHERS
⊕	MONITORING WELL BY OTHERS
- x -	FENCE
- - -	GROUNDWATER CONTOURS
97.56'	GROUNDWATER ELEVATION JUNE 1995



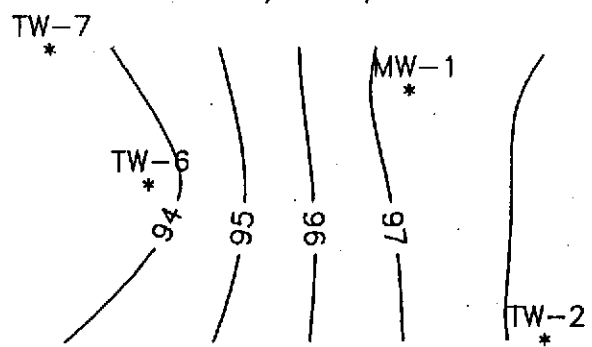
NOTE: ALL ELEVATION RELATIVE TO AN ARBITRARY REFERENCE DATUM OF 100.00 FEET AT MW-1 TOC.

SITE PLAN

Subsurface Consultants

230 BAY PLACE - OAKLAND, CA			PLATE
JOB NUMBER	DATE	APPROVED	1
805.007	7/20/95		

cox 6/29/95



WELL SAMPLING FORM

Project Name: Cox Cadillac Well Number: MW-1
 Job No.: 805.007 Well Casing Diameter: 2 inch
 Sampled By: DWA Date: 6/29/95
 TOC Elevation: _____ Weather: Sunny

Depth to Casing Bottom (below TOC) 20.00 feet
 Depth to Groundwater (below TOC) 2.44 feet
 Feet of Water in Well 17.56 feet
 Depth to Groundwater When 80% Recovered 5.90 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) 2.94 gallons
 Depth Measurement Method Tape & Paste Electronic Sounder / Other
 Free Product _____
 Purge Method disposable bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°F)	Conductivity (micromhos/cm)	Salinity S%	Comments
<u>1</u>	<u>7.19</u>	<u>73.7</u>	<u>1640</u>	_____	<u>clear/mod. odor</u>
<u>3</u>	<u>7.37</u>	<u>71.9</u>	<u>1765</u>	_____	<u>Semi-clear</u>
<u>5</u>	<u>7.33</u>	<u>70.7</u>	<u>1925</u>	_____	
<u>7</u>	<u>7.07</u>	<u>70.9</u>	<u>2100</u>	_____	↓
<u>9</u>	<u>6.98</u>	<u>69.5</u>	<u>2300</u>	_____	↓

Total Gallons Purged 9 gallons
 Depth to Groundwater Before Sampling (below TOC) 11.50 feet
 Sampling Method disposable bailer
 Containers Used 4 40 ml 1-250 ml pint

<h1 style="margin: 0;">Subsurface Consultants</h1>	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: DWA Date: 6/29/95
 TOC Elevation: _____ Weather: Sunny

Depth to Casing Bottom (below TOC) 8.00 feet
 Depth to Groundwater (below TOC) 5.25 feet
 Feet of Water in Well 2.75 feet
 Depth to Groundwater When 80% Recovered 5.80 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) .5 gallons
 Depth Measurement Method Tape & Paste / Electronic Sounder / Other
 Free Product none
 Purge Method disposable bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°F)	Conductivity (micromhos/cm)	Salinity ‰	Comments
1	7.68	75.2	1420	_____	Semi-clear/mod. odor
1.5	7.48	71.7	1270	_____	murky
2	7.22	70.0	1250	_____	dru @ 2 gallons

Total Gallons Purged 2 gallons
 Depth to Groundwater Before Sampling (below TOC) 6.50 feet
 Sampling Method disposable bailer
 Containers Used 4 40 ml 1-250 ml poly liter pint

<h1 style="margin: 0;">Subsurface Consultants</h1>	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: DWA Date: 6/29/95
 TOC Elevation: _____ Weather: Sunny

Depth to Casing Bottom (below TOC) 10.00 feet
 Depth to Groundwater (below TOC) 4.30 feet
 Feet of Water in Well 5.70 feet
 Depth to Groundwater When 80% Recovered 5.44 feet
 Casing Volume (feet of water x Casing DIA² x 0.0408) 1.0 gallons
 Depth Measurement Method Electronic Sounder / Tape & Paste / Other
 Free Product none
 Purge Method disposable bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°F)	Conductivity (micromhos/cm)	Salinity S%	Comments
1	7.48	74.4	590		semi-clear / med. odor
2	7.01	71.2	620		
3	6.92	73.0	650		murky

Total Gallons Purged 3 gallons
 Depth to Groundwater Before Sampling (below TOC) 6.00 feet
 Sampling Method disposable bailer
 Containers Used 4 40 ml 1 liter 250 ml pint

Subsurface Consultants

JOB NUMBER

DATE

APPROVED

PLATE



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 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: 13-JUL-95
Lab Job Number: 121595
Project ID: CC03
Location: Cox Cadillac

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.



LABORATORY NUMBER: 121595
CLIENT: EOA, INC.
PROJECT ID: CCO3
LOCATION: COX CADILLAC

DATE SAMPLED: 06/29/95
DATE RECEIVED: 06/29/95
DATE ANALYZED: 07/07,08/95
DATE REPORTED: 07/13/95
BATCH NO.: 21734

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)
121595-001	MW-1	28,000	5,300	2,100	3,200	7,500
121595-002	TW-6	28,000	12,000*	6,600	1,000	3,000
121595-003	TW-7	100,000	39,000+	8,100**	3,000**	8,300**
METHOD BLANK	N/A	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

* Result obtained from a 1:200 dilution (Batch No: 21772).
** Result obtained from a 1:300 dilution (Batch No: 21772).
+ Result obtained from a 1:600 dilution (Batch No: 21772).

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

QA/QC SUMMARY: MS/MSD of 121561-003

RPD, %	15
RECOVERY, %	94



LABORATORY NUMBER: 121595-001
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC
SAMPLE ID: MW-1

DATE SAMPLED: 06/29/95
DATE RECEIVED: 06/29/95
DATE ANALYZED: 07/04/95
DATE REPORTED: 07/13/95
BATCH NO: 21643

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	4.0
Bromomethane	ND	4.0
Vinyl chloride	ND	4.0
Chloroethane	ND	4.0
Methylene chloride	ND	20
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Freon 113	ND	2.0
1,2-Dichloroethane	110	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
cis-1,3-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
1,1,2-Trichloroethane	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
Dibromochloromethane	ND	2.0
Bromoform	ND	4.0
Tetrachloroethene	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Chlorobenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0

ND = Not detected at or above reporting limit.

Surrogate Recovery

Bromobenzene	104 %
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Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 121595-002
CLIENT: EOA, INC.
PROJECT ID: CC03
LOCATION: COX CADILLAC
SAMPLE ID: TW-6

DATE SAMPLED: 06/29/95
DATE RECEIVED: 06/29/95
DATE ANALYZED: 07/04/95
DATE REPORTED: 07/13/95
BATCH NO: 21643

EPA 8010
Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl chloride	ND	2.0
Chloroethane	ND	2.0
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

ND = Not detected at or above reporting limit.

Surrogate Recovery

Bromobenzene	103 %
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LABORATORY NUMBER: 121595-003
 CLIENT: EOA, INC.
 PROJECT ID: CC03
 LOCATION: COX CADILLAC
 SAMPLE ID: TW-7

DATE SAMPLED: 06/29/95
 DATE RECEIVED: 06/29/95
 DATE ANALYZED: 07/04/95
 DATE REPORTED: 07/13/95
 BATCH NO: 21643

EPA 8010
 Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl chloride	ND	2.0
Chloroethane	ND	2.0
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

ND = Not detected at or above reporting limit.

Surrogate Recovery

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Bromobenzene

=====

104 %

LABORATORY NUMBER: 121595-METHOD BLANK
 CLIENT: EOA, INC.
 PROJECT ID: CC03
 LOCATION: COX CADILLAC
 SAMPLE ID: MB

DATE ANALYZED: 07/03/95
 DATE REPORTED: 07/13/95
 BATCH NO: 21643

EPA 8010
 Purgeable Halocarbons in Water

Compound	Result ug/L	Reporting Limit ug/L
Chloromethane	ND	2.0
Bromomethane	ND	2.0
Vinyl chloride	ND	2.0
Chloroethane	ND	2.0
Methylene chloride	ND	20
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
Freon 113	ND	1.0
1,2-Dichloroethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon tetrachloride	ND	1.0
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Bromoform	ND	2.0
Tetrachloroethene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Chlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

ND = Not detected at or above reporting limit.

Surrogate Recovery

=====

Bromobenzene

=====

102 %



8010 BS/BSD Report

Matrix: WATER

Batch No: 21643 325184093004 325184102005 Analyst: LW

Date Analyzed: 03-JUL-95

Spike File: 184W004

Spike Dup File: 184W005

	Instrdg	SpikeAmt	% Rec	Limits
<u>BS RESULTS</u>				
1,1-Dichloroethene	20.7	20	103 %	68-134%
Trichloroethene	22.9	20	115 %	85-141%
Chlorobenzene	21.0	20	105 %	69-135%
Surrogate Recoveries				
Bromobenzene	101.3	100	101 %	85-119%
<u>BSD RESULTS</u>				
1,1-Dichloroethene	20.6	20	103 %	68-134%
Trichloroethene	23.1	20	115 %	85-141%
Chlorobenzene	21.0	20	105 %	69-135%
Surrogate Recoveries				
Bromobenzene	100.7	100	101 %	85-119%
<u>RPD DATA</u>				
1,1-Dichloroethene	1 %			< 14%
Trichloroethene	0 %			< 14%
Chlorobenzene	0 %			< 13%

Column: Rtx 502.2

Water Limits based on LCS Data Generated 5/95

Soil Limits based on 3/90 SOW

Results within Specifications - PASS



Curtis & Tompkins, Ltd.

SAMPLE ID: MW-1
LAB ID: 121595-001
CLIENT: EOA, Inc.
PROJECT ID: CC03
LOCATION: Cox Cadillac
MATRIX: Filtrate

DATE SAMPLED: 06/29/95
DATE RECEIVED: 06/29/95
DATE REPORTED: 07/13/95

Metals Analytical Report

Compound	Result (ug/L)	Reporting Limit (ug/L)	QC Batch	Method	Analysis Date
Lead	14	3.0	21755	EPA 6010A	07/07/95



Curtis & Tompkins, Ltd.

DATE REPORTED: 07/13/95

CLIENT: EOA, Inc.
JOB NUMBER: 121595

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	463	480	ug/L	93	96	95	4	21755	EPA 6010A	07/07/95



Curtis & Tompkins, Ltd.

CLIENT: EOA, Inc.
JOB NUMBER: 121595

DATE REPORTED: 07/13/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Lead	ND	3	ug/L	21755	EPA 6010A	07/07/95

ND = Not Detected at or above reporting limit

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

DATE REPORTED: 07/20/95

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	121595-001	06/29/95	06/29/95	14	3.0	21755	EPA 6010A	07/07/95
TW-6	121595-002	06/29/95	06/29/95	4.2	3.0	21755	EPA 6010A	07/07/95
TW-7	121595-003	06/29/95	06/29/95	3.5	3.0	21755	EPA 6010A	07/07/95



Curtis & Tompkins, Ltd.

EOA, Inc.

Eisenberg, Oliveri, & Associates
 Environmental and Public Health Engineers
 1410 Jackson Street, Oakland, CA 94612 (415) 832-2852

Project ID: 1003 Sampled By: SCJ
 Sampling Date: 6/29/95 Laboratory Name: EOA

NOTES TO LAB

- a) Specify analytic method and detection limit.
- b) Notify us if there are any anomalous peaks on GC or other scans.
- c) Duplicates are listed in parentheses.
- d) ANY QUESTIONS/CALIFICATIONS: CALL US

Sample ID	Sampling Date	Sample/ Container Type (1)	Analyze/ Hold (2)	Turn-around (3)	Analyze For:	Analytic Method/ Detection Limit	Comments
1 MW-1	6/29/95	2 VOA	A	2wk	TPH - RTEX		2:30
		2 VOA			1-1, 1, 2-DBA	8010	
		1 poly			soluble lead		
2 TW-6		2 VOA					3:00
		2 VOA					
		1 poly					
3 TW-7		2 VOA					2:45
		2 VOA					
		1 poly					

[Signature] 4:05

A. Released By (Signature), Date, Time

B. Released By (Signature), Date, Time

[Signature] 16:05

A. Received By (Signature), Date, Time

B. Received By (Signature), Date, Time

Received By Lab Personnel, Date, Time

Lab Telephone

Shipping Carrier, Method, Date

- (1) - Sample Type Codes: W = Water, S = Soil, O = Other (specify).
 Container Type Codes: V = VOA Bottle, P = Plastic Bottle, G = Glass Bottle, T = Brass Tube, O = Other (specify)
- (2) - Analyze/Hold: A = Analyze, HOLD (spill out) = Do not analyze unless necessary or requested.
- (3) - Turnaround: N = Normal turnaround, F = 1 week turnaround, R = 24 hour turnaround.