July 22, 1994

Mark Zemelman, Esq.
Kaiser Foundation Health Plan, Inc.
Regional Legal Department
One Kaiser Plaza, 21st Floor
Oakland, California 94612

Re: Transmittal of Information to
Inter-Agency Review Panel
Planned Kaiser Permanente Emeryville Medical Center
ENVIRON Contract Number 03-3118Q

Dear Mark:

This report summarizes the information presented by ENVIRON to an inter-agency Review Panel on May 19, 1994. The Review Panel was convened by Alameda County District Attorney Gil Jensen to obtain information about chemical releases at certain properties in Emeryville. The Review Panel consisted of representatives of the Regional Water Quality Control Board (RWQCB), Alameda County Department of Environmental Health (ACDEH), and the City of Berkeley. Representatives of the following Emeryville properties attended: Charles Lowe/Chromex, Electro-Coating, Inc., and Del Monte. According to Mr. Jensen, Kaiser was requested to attend the meeting because the Review Panel was interested in potential impacts that pollutants at these properties might have on Kaiser's planned medical center in Emeryville.

David Harnish of ENVIRON presented information to the panel regarding 1) the environmental assessment activities completed for Kaiser, and 2) ENVIRON's current conclusions regarding the potential impact of the neighboring subsurface contamination pollutants on occupants of Kaiser's planned medical center. District Attorney Gil Jensen requested that a summary of the information be provided to him, as well as documentation supporting ENVIRON's conclusions. This letter transmits the requested information.

ENVIRON's presentation covered the following topics:

- Description of the Kaiser Project Area
- Site Assessment Activities

- Border Zone Determination
- Status of Del Monte Property
- Status of the Charles Lowe/Chromex Metals Release
- Status of the Electro-Coatings Ground Water Contamination
- Preliminary Exposure Pathway Summary

Copies of the overheads from the presentation are presented in Attachment A.

1.0 ON-SITE ASSESSMENT ACTIVITIES

1.1 On-Site Use Research

The location of Kaiser's planned medical center ("the redevelopment area") is shown on Figure 1 and a site plan is shown on Figure 2. As shown on Figure 2, the project area and vicinity are composed of commercial, residential and light industrial businesses. As part of the environmental assessment activities for the purchases, ENVIRON conducted detailed reviews of agency files to evaluate if chemical releases on or near the redevelopment area would be of concern during redevelopment. Files were reviewed at the City of Emeryville (Building Department and Fire Department), ACDEH, RWQCB, and the California Department of Toxic Substance Control (DTSC). ENVIRON reviewed available historical Sanborn maps, aerial photographs, chain-of-title reports and topographic maps which document past property uses on the Site. ENVIRON personnel inspected the properties in the redevelopment area, conducted interviews with owners at selected properties, and reviewed documents regarding chemical use provided by the owners. A contractor was retained to search state and federal regulatory databases to identify properties within one mile of the redevelopment area with chemical or contamination issues. The databases searched are listed in the November 5, 1993 application for a Border Zone Property Determination presented in Attachment B.

During ENVIRON's review, several existing or former fuel underground storage tanks (USTs) were identified in the redevelopment area; all are inactive and in various stages of closure. Kaiser intends to work with the current property owners to address the USTs which are not yet formally closed; this work is planned to be completed by the property owners prior to construction of the medical center and with concurrence of the Emeryville Fire Department, ACDEH, and the RWQCB (as applicable). During the review, ENVIRON also identified areas with potential bulk solvent use, and Kaiser is working with the property owners to test soil and ground water in these areas.

1.2 On-Site Investigations

Subsurface investigations have been conducted, or are planned, as part of each property transaction in the redevelopment area where potential for releases was identified. Kaiser

has asked ENVIRON to provide technical review of investigation and remediation activities conducted by the property owners. Extensive site investigations have been completed at the Del Monte property and results are on file at the ACDEH and RWQCB. (See Appendix C for list of reports submitted by Del Monte). Investigations also have been completed elsewhere in the redevelopment area by the property owners and Kaiser. Kaiser and ENVIRON are currently bound by confidentiality agreements with the property owners and the results of these investigations are therefore not described here. As a condition of purchase, Kaiser is requesting that each property owner obtain approval from the applicable regulatory agencies of remediation plans.

2.0 BORDER ZONE/HAZARDOUS WASTE PROPERTY DETERMINATIONS BY DTSC

Kaiser submitted information to the DTSC to make a Border Zone Property Determination and Hazardous Waste Property Determination for the medical center. A copy of Kaiser's transmittal is presented in Attachment B. The Border Zone Property Determination is an assessment by DTSC of potential hazards to future occupants of Kaiser's medical center from significant hazardous waste disposals within 2,000 feet of the medical center site. The Hazardous Waste Property Determination involves an assessment by DTSC of potential hazards to future occupants of Kaiser's medical center from significant disposals of hazardous waste (if any) at the project site. The status of the DTSC's determinations was summarized in a recent letter to Kaiser dated June 16, 1994, which is also provided in Appendix B. The status is briefly described below.

2.1 Border Zone Property Determination

The Border Zone regulations require the developer of a new hospital site to evaluate if there are "significant disposals of hazardous" waste within 2,000 feet which pose a significant hazard to the future occupants of the hospital. During the site assessment, regulatory agency databases were reviewed to identify neighboring sites that would be considered to have "significant disposals of hazardous waste." The information in the databases was compared to the criteria in the DTSC's *Questionnaire for Evaluating Whether a Request for a Border Zone Determination is Required.* ENVIRON identified four sites within 2,000 feet of the planned medical center which appeared to meet the criteria in the *Questionnaire*: Pacific Gas & Electric, Electro-Coatings, Myers Drum, and Barbary Coast Steel. After reviewing the files for these sites, in ENVIRON's opinion, none appears to have potential to impact the Kaiser site.

DTSC has completed an independent review and also concluded that no surrounding properties are likely to pose a significant risk to future occupants of Kaiser's medical center (see June 16, 1994 letter in Appendix B). However, DTSC is withholding their formal determination until the potential for fugitive dust from Charles Lowe/Chromex is addressed to the satisfaction of local agencies.

2.2 Hazardous Waste Property Determination

The DTSC expects to make a Hazardous Waste Property Determination approving the Site for redevelopment once local agencies' cleanup requirements are met (June 16, 1993 letter included in Attachment B).

3.0 STATUS OF THE DEL MONTE PROPERTY

The vacant Del Monte cannery is on the largest property in the redevelopment area. Del Monte has conducted soil and ground water testing at the vacant cannery for a number of years to close former fueling facilities and to screen the property for the potential presence of hazardous substances. Del Monte also has remediated portions of the site. Local areas of the property have petroleum hydrocarbons and solvents in soil and ground water. Del Monte recently submitted a *Draft Remedial Action Plan, Del Monte Plant 35* (CH2M Hill April 1994) which outlines the approach to remediating all the areas of the Del Monte site. The scope of activities was approved by ACDEH and RWQCB with some comments and the condition that three areas be addressed in more detail before the remediation plan is considered complete (RWQCB letter to Del Monte, May 26, 1994). We understand that Del Monte is working with the RWQCB and ACDEH to fulfill their requirements. A list of the agency correspondences and reports prepared by Del Monte is presented in Attachment C.

4.0 STATUS OF THE LOWE/CHROMEX PROPERTY

During the presentation, ENVIRON briefly summarized the status of the Lowe/Chromex property from review of the following reports on file with the ACDEH: *Final Closure Report of the Chromex Plating Facility* (Excel Trans, Inc. November 1, 1992) and *Summary of Subsurface Investigation and Immediate Mitigation Proposal, Chromex/Charles Lowe Company* (Excel Trans, Inc. November 4, 1992). The Lowe/Chromex property is one block downgradient of the western edge of Kaiser's redevelopment area. From the reports, it appears that elevated metals concentrations may be present in subsurface soil adjacent to a former subsurface vault, and also in shallow soil beneath a paved equipment storage area. The elevated metals include chromium, copper, lead and zinc. Low concentrations of solvents were reported in ground water, but Excel Trans concluded that the solvents reported in ground water beneath the property originated upgradient. The entire site is covered by a building or is paved, with the exception of the area of the recently excavated vault. The area of the former vault is currently unpaved and will remain so until remediation is completed.

5.0 STATUS OF THE ELECTRO-COATINGS PROPERTY

During the presentation, ENVIRON briefly summarized the status of the Electro-Coatings property from review of the following reports on file with the ACDEH and RWQCB: *Groundwater Monitoring Report* (American Environmental Management Corporation January 28, 1992), *Progress Report* (Kleinfelder & Associates November 1983), and *Report on Phase I Groundwater Investigations* (Woodward-Clyde Consultants March 30, 1981). The Electro-Coatings Property is one block west of the redevelopment area and has the pollutants trichloroethylene and chromium in subsurface soil and ground water. The ground water contamination extends off-site and to the west from the Electro-Coatings property. The property is one block downgradient of the western edge of Kaiser's redevelopment area, and the entire property is either covered by a building or paved.

6.0 PRELIMINARY EXPOSURE PATHWAY SUMMARY FOR USERS OF THE KAISER CENTER TO THE ABOVE THREE PROPERTIES

As discussed in the presentation, ENVIRON has preliminarily evaluated the potential for adverse health effects from exposure to subsurface pollutants at the three above properties by identifying who may be exposed to the pollutants (the potentially exposed populations or "receptors") and how exposures may occur (the exposure pathways). Guidelines for identifying potentially exposed populations and exposure pathways are provided by the U.S. Environmental Protection Agency in the *Risk Assessment Guidance for Superfund (RAGS)* (USEPA 1989) and the California Environmental Protection Agency in *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities* (CalEPA 1992). The remainder of this section summarizes ENVIRON's evaluation performed in accordance with these guidance documents.

6.1 Identification of Potentially Exposed Populations

The principal groups of people that will be present at Kaiser's medical center are the following:

- Hospital workers (e.g., doctors, nurses, and maintenance personnel); and
- Patients (i.e., both in- and out-patients).

These two groups of people are considered the receptor populations.

6.2 Identification of Exposure Pathways

Exposure is defined as "the contact of an organism (humans in the case of health risk assessment) with a chemical or physical agent" (USEPA 1989). An exposure pathway describes "the course a chemical or physical agent takes from the source to the exposed individual" (USEPA 1989). According to USEPA guidance (Section 6.3), a complete exposure pathway requires the presence of all of the following four elements:

- Source and mechanism of release;
- Migration route (i.e., environmental transport medium);
- Point of potential human contact with a contaminated medium (the exposure point); and
- Human exposure route at the point of contact (i.e., oral, dermal, inhalation) (USEPA 1989).

For this evaluation, the *chemical source* is present in subsurface soil and ground water at the Electro-Coatings, Lowe/Chromex, and Del Monte properties. The *migration route* was considered to potentially have several forms. Contaminated soil, if not remediated, may provide a continuing source of chemical release to ground water via infiltration and percolation of rain water. Where volatile organic compounds (VOCs) are present in the subsurface, they may migrate from soil or ground water into the air above. For this evaluation, the potential *exposure point* is the project site. The *human exposure route* is "the way a chemical or pollutant enters an organism after contact" and may occur by ingestion, skin contact, or inhalation (USEPA 1988).

Figure 4 presents the four elements necessary to form a complete human exposure pathway. Exposure does not occur unless all four elements are present. If a potential exposure pathway is interrupted at any point, then the pathway is incomplete and human exposure does not occur. Figure 4 also gives examples of situations which may make a pathway incomplete. For example, human exposure will not occur if chemical release is stopped by containing, removing, or treating the chemical source. Similarly, the exposure pathway would not be complete if the receptor population has no contact with media containing the chemicals.

6.3 Preliminary Evaluation of Potential Exposure Pathways

The media evaluated as potential exposure pathways for Kaiser Center users are soil, ground water, and air from the Del Monte, Electro-Coatings, and Lowe/Chromex properties. There are no surface water bodies in the redevelopment area that have exposure points for Kaiser medical center users. Therefore, the surface water pathway is considered to be incomplete and is not further discussed.

6.3.1 Potential Exposure Pathways from the Del Monte Property

There is no complete exposure pathway by which human exposure to chemicals in soil may occur via ingestion, direct skin contact, and inhalation of dusts due to the following:

- Prior to redevelopment by Kaiser, soil remediation is planned to satisfy ACDEH and RWQCB requirements; and

- Following redevelopment, the ground surface will be paved, covered with buildings, or landscaped. Because there will be no uncovered native soil present, there is no exposure point for direct soil contact or contaminated dust generation.

Del Monte is currently remediating ground water beneath the site which contains dissolved VOCs. Since ground water in the vicinity of the redevelopment area is not used for water supply, exposure to ground water via ingestion or direct dermal contact will not occur. In the event that health-risk based cleanup goals for ground water can not be feasibly achieved prior to facility construction, an evaluation will be performed to determine whether a vapor barrier will be necessary to prevent volatilized VOCs from migrating into buildings. Thus, the only potentially complete exposure pathway can be eliminated through the use of standard control technologies.

6.3.2 Potential Exposure Pathways from the Electro-Coatings Property

Human exposure to soil and ground water is not likely to occur via ingestion, skin contact, or inhalation of dust or vapors due to the following:

- Ground water is not used as a water source and any migration of pollutants in ground water is away from the project site;

- The site is completely paved or covered with buildings, preventing a release of dust and minimizing potential emissions of vapors or the percolation and infiltration of pollutants in soil to ground water.

Therefore, all potential exposure pathways for contamination at the Electro-Coatings property are considered incomplete or would provide minimal opportunity for exposure.

6.3.3 Potential Exposure Pathways from the Lowe/Chromex Property

Human exposure to soil and ground water is not likely to occur via ingestion, skin contact, or inhalation of dust or vapors due to the following:

- Ground water is not used as a water source;

- The majority of the site is paved, preventing release of dust and minimizing percolation and infiltration of pollutants in soil to ground water; and

- The unpaved vault area is small and under remediation. Exposed soils at the property are planned to be remediated and covered prior to completion of the Kaiser Center. We understand this will be documented by the owners of the Lowe/Chromex property in the near future.

Thus, all potential exposure pathways for contamination from the Lowe/Chromex property are considered incomplete.

6.4 Summary of Complete Exposure Pathways

As described above, the only potentially complete exposure pathway for Kaiser Center users appears to be inhalation of volatile organic compounds from ground water beneath the Del Monte property, and this pathway is only theoretical. Such an exposure, if present, could be mitigated using standard vapor barriers in the hospital design. No other potential exposure pathways to Kaiser Center users appear to be complete or present significant exposure from Del Monte, Electro-Coatings or Lowe/Chromex properties.

We appreciate this opportunity to serve Kaiser on this project. Please feel free to call if you have any questions.

Very truly yours,

David Harnish, R.G.
Manager, Geosciences

FOC Winifred H. Curley, Ph.D.
Senior Manager, Health Sciences

Phillip L. Fitzwater
Principal

DEH:WHC:PLF:lgq
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Enclosures:

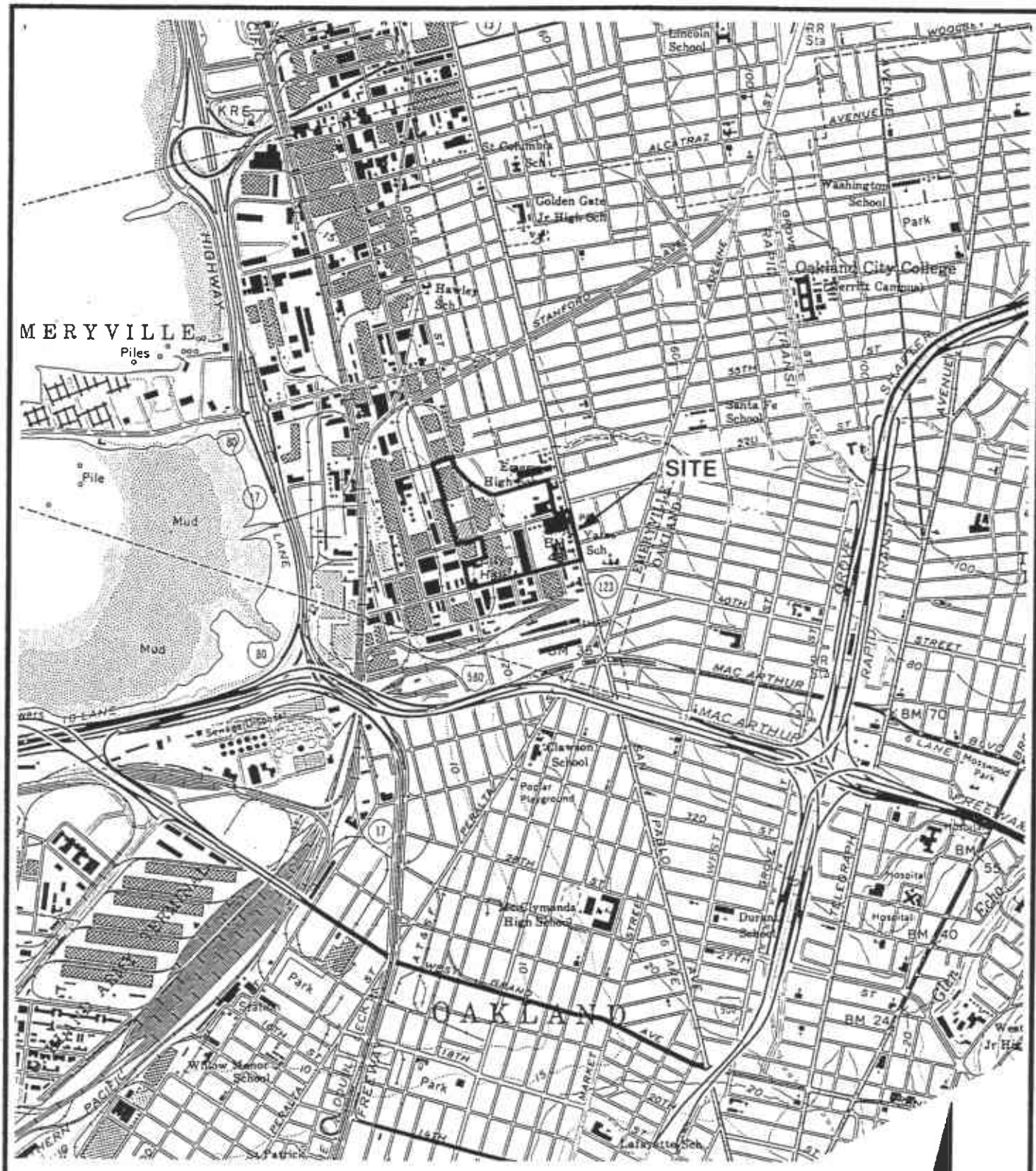
Figure 1	Location of Kaiser Redevelopment Area
Figure 2	Redevelopment Area Site Plan
Figure 3	Location of Lowe-Chromex and Electro-Coatings
Figure 4	Exposure Pathway Elements
Attachment A	Overheads From ENVIRON Presentation to Review Panel
Attachment B	Border Zone Property Determination Documents
Attachment C	List of Reports Prepared by Del Monte

References

California Environmental Protection Agency (CalEPA). 1992. *Supplemental guidance for human health multimedia risk assessments of hazardous waste sites and permitted facilities.* Department of Toxic Substances Control, October.

U.S. Environmental Protection Agency (USEPA). 1988. *Proposed Guidelines for Exposure-Related Measurements.* Fed Reg. 53:48830.

U.S. Environmental Protection Agency (USEPA). Office of Emergency and Remedial Response. 1989. *Risk assessment guidance for Superfund.* Vol. I, *Human health evaluation manual (Part A).* Interim final. EPA 540/1-89/002. December.



Source: USGS map, Oakland West Quad, California

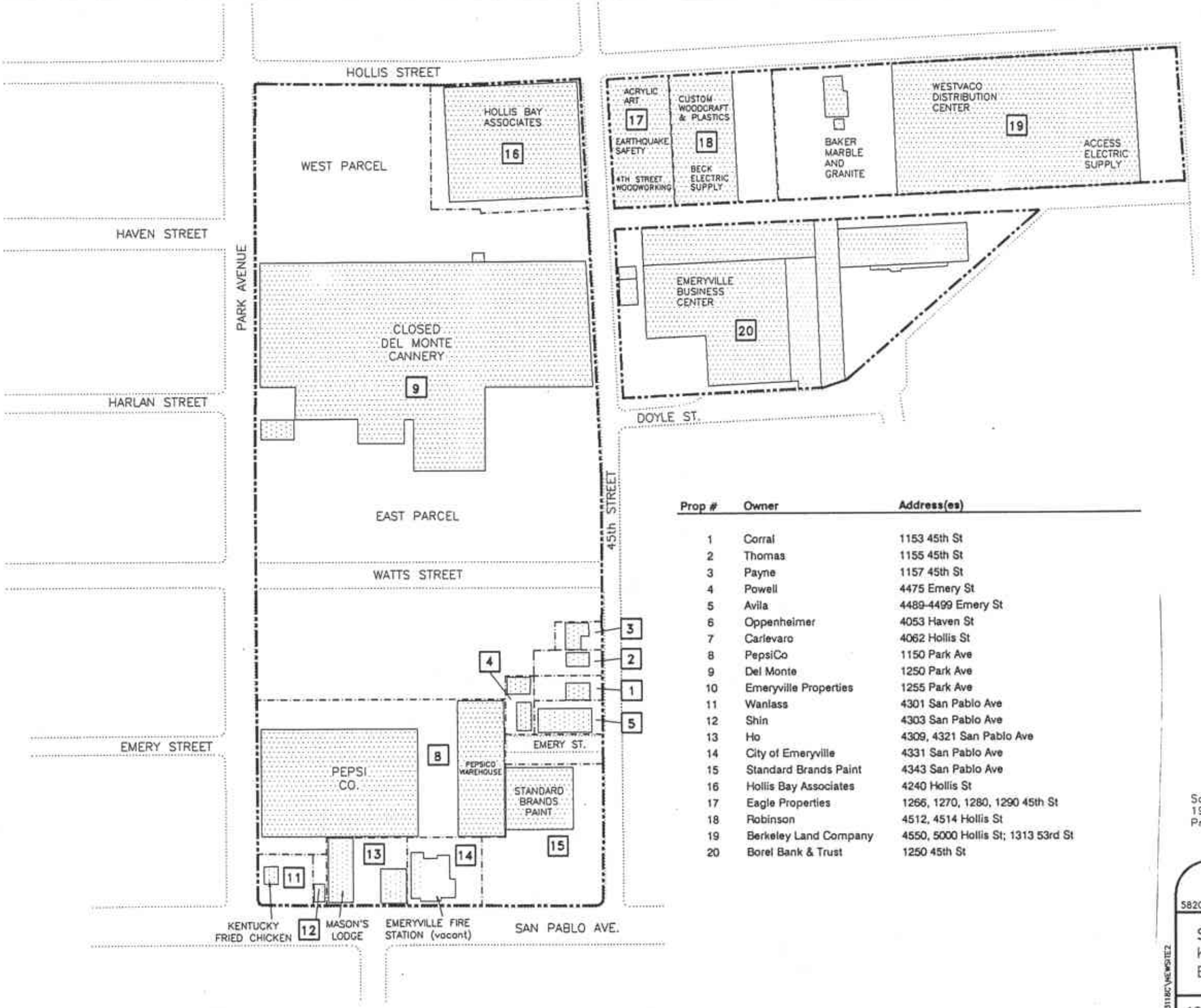
ENVIRON

5820 Shellmound St., Suite 700, Emeryville, CA 94608

Site Location
Kaiser Emeryville Site
Emeryville, California

Figure 1

Drafter: DC | Date: 4/94 | Contract Number: 03-3118L | Approved: | Revised:



Prop #	Owner	Address(es)
1	Corral	1153 45th St
2	Thomas	1155 45th St
3	Payne	1157 45th St
4	Powell	4475 Emery St
5	Avila	4489-4499 Emery St
6	Oppenheimer	4053 Haven St
7	Carlevaro	4062 Hollis St
8	PepsiCo	1150 Park Ave
9	Del Monte	1250 Park Ave
10	Emeryville Properties	1255 Park Ave
11	Wanlass	4301 San Pablo Ave
12	Shin	4303 San Pablo Ave
13	Ho	4309, 4321 San Pablo Ave
14	City of Emeryville	4331 San Pablo Ave
15	Standard Brands Paint	4343 San Pablo Ave
16	Hollis Bay Associates	4240 Hollis St
17	Eagle Properties	1266, 1270, 1280, 1290 45th St
18	Robinson	4512, 4514 Hollis St
19	Berkeley Land Company	4550, 5000 Hollis St; 1313 53rd St
20	Borel Bank & Trust	1250 45th St

EXPLANATION

- Site Boundaries
- Property Boundary
- 9 Property Number
- Building

N

0 200 400

SCALE IN FEET

Sources:
1990, 1992 Aerial Photographs for base map
Preliminary Title Reports

ENVIRON
Counsel in Health and Environmental Science
5820 Shellmound Street, Suite 700, Emeryville, California 94608

Site Plan and Property Boundaries
Kaiser/Emeryville Site
Emeryville, California

DATE:	CONTRACT NUMBER:		FIGURE
10/12/93	03-3118C		2
DRAFTER: RS	APPROVED:	REVISED:	

G:\03118C\WEBSITE2

EXPLANATION

Site Boundary

Building

N

0 200 400

SCALE IN FEET

Sources:
1990 Aerial Photograph for base map
CH2M Hill, June, 1993.

ENVIRON
Counsel in Health and Environmental Science
5820 Shellmound Street, Suite 700, Emeryville, California 94608

Locations of Electro–Coatings and Charles Lowe/Chromex
Kaiser Medical Center
Emeryville, California

DATE:	CONTRACT NUMBER:		FIGURE
6/16/94	03–3118Q		3
DRAFTER: RS	APPROVED:	REVISED:	

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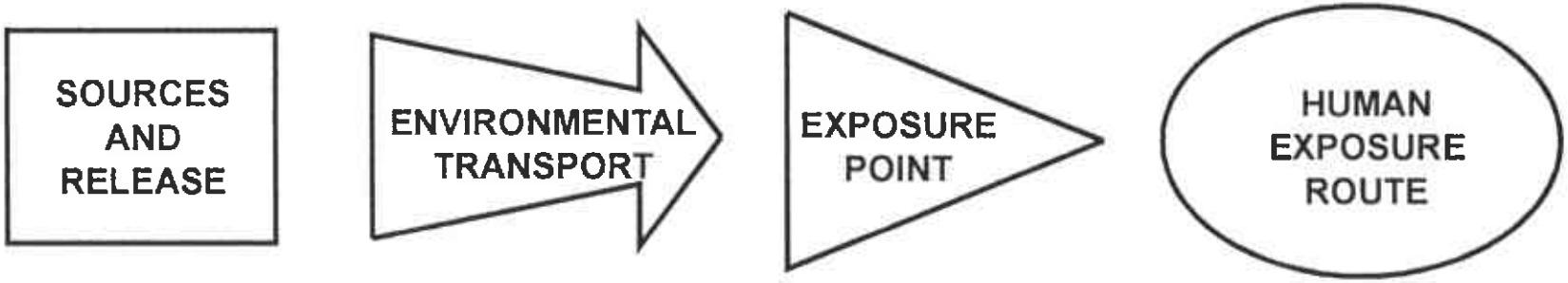
EXPOSURE PATHWAY ELEMENTS

PATHWAY ELEMENTS



REASONS FOR INCOMPLETE PATHWAY

- SOURCE IS CONTAINED
- SOURCE IS REMOVED AND DISPOSED
- SOURCE IS TREATED
- RELEASE IS PREVENTED
- MOVEMENT IS INTERRUPTED
- MOVEMENT IS ELIMINATED
- BROAD DISPERSION SO IMPACT IS MINIMIZED
- NO ACCESS TO CONTAMINATED MEDIA
- DISTANCE OR DIRECTION FROM SOURCE MINIMIZES IMPACT
- RECEPTOR IS NOT IMPACTED BY MIGRATION OF CONTAMINANTS
- INSTITUTIONAL CONTROLS ARE APPLIED
- RECEPTOR DOES NOT CONTACT CONTAMINANTS

ENVIRON
Counsel in Health and Environmental Science

Exposure Pathway Elements
Kaiser Emeryville Site
Emeryville, California

Figure **4**

Drafter: RS Date: 6/29/94 Contract Number: 03-3118Q Approved: Revised:

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ATTACHMENT A

OVERHEADS FROM ENVIRON PRESENTATION TO REVIEW PANEL

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Properties within Development Area

Site Use Research

Site History
Regulatory Agency Files
Site Visits
Ground Water Usage
Testing Recommended

Soil and Ground Water Testing

Site-wide soil and ground water testing has been completed by the property owners, and more testing is in progress to delineate individual areas of contamination.

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Properties Within Development Area

Findings

- Areas with Petroleum Residues
- Small Areas with Solvents

Ongoing Activities

- Property owners to Cleanup as Necessary
- ENVIRON to oversee investigation and cleanup activities

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Properties Outside of Development Area

Site Use Research

- Regulatory Agency Database
- Reviewed Agency Files for Selected Sites
- External Inspection

Findings

- Areas with Petroleum Residues
- Four Sites Could Trigger Border Zone Considerations

BORDER ZONE DETERMINATION
Kaiser Emeryville Site

How Border Zone Determination Works

Kaiser Files Questionnaire and Application (filed November 1993)

Initial feedback, Preliminary Endangerment Assessment not necessary

Border Zone Determination from DTSC

ACTIVITIES CONDUCTED TO ASSESS POTENTIAL CONTAMINATION
Kaiser Emeryville Site

Del Monte Property

Status

Del Monte has extensively tested soil and ground water.

Del Monte's investigations largely complete.

Remediation plans for several areas approved by ACDEH and RWQCB.

Overall plant closure plan submitted to agencies, approval pending.

Del Monte intends to cleanup to satisfy agency requirements.

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Del Monte Property - continued

Preliminary exposure pathway summary for occupants of Kaiser Center:

Contact or ingestion of contaminated soil: none once remediated

Contact or ingestion of contaminated ground water: none

Inhalation of dust from contaminated soil: none once remediated

Inhalation of vapors from soil and ground water: possible but can be mitigated by routine technology.

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Electro-Coatings, Inc.

Findings (American Environmental Management Corp., January 28, 1992)

TCE and Chromium contamination of aquifer water table

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Electro-Coatings, Inc. - continued

Preliminary Exposure Pathway Summary for Occupants of Kaiser Center:

Contact or ingestion of contaminated soil: none

Contact or ingestion of contaminated ground water: none

Inhalation of dust from contaminated soil: none (site paved and sufficiently distant)

Inhalation of vapors from soil and ground water: none (site paved and sufficiently distant)

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Charles Lowe - Chromex Site

Findings (Excel Trans, Inc. report dated November 4, 1992)

Cu, Pb, Zn elevated in shallow soil near former tank vault

Low concentrations of solvents in ground water originating upgradient

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

Charles Lowe - Chromex Site continued

Preliminary Exposure Pathway Summary for Occupants of Kaiser Center:

Contact or ingestion of contaminated soil: none

Contact or ingestion of contaminated ground water: none

Inhalation of dust from contaminated soil: none (site paved and sufficiently distant)

Inhalation of vapors from soil and ground water: none (site paved and sufficiently distant, no VOC source)

SITE ASSESSMENT ACTIVITIES
Kaiser Emeryville Site

CONCLUSIONS

Chemicals in subsurface highly unlikely to pose a significant risk to future [illegible] occupants.

[illegible] detailed analysis of exposure to occupants of Kaiser site.

If necessary, standard mitigation measures (i.e. vapor barrier) will be added to the hospital.

Other sites with much higher solvent concentrations are routinely redeveloped with full agency concurrence. The concentrations at this site are relatively low.

Subsurface contamination should not impede hospital development.

ATTACHMENT B

BORDER ZONE PROPERTY DETERMINATION DOCUMENTS

STATE OF CALIFORNIA—ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, Governor

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
400 P Street, 4th Floor
P.O. Box 806
Sacramento, CA 95812-0806

(916) 255-2028

June 16, 1994

Mr. Mark Zemelman
Kaiser Foundation Health Plan, Inc.
Regional Legal Department
One Kaiser Plaza, 21st Floor
Oakland, California 94612

Re: Status Report
Border Zone Property Determination
and Hazardous Waste Property Determination
Kaiser Emeryville Medical Center
Emeryville, California

Dear Mark:

This letter presents a summary of the status of the Cal-EPA Department of Toxic Substance Control's (DTSC) review of information regarding Kaiser's planned medical center in Emeryville, California. DTSC staff are nearly complete with a Hazardous Waste Property/Border Zone Property Determination (pursuant to California Health and Safety Code 25220, et seq.). Assessment of hazardous substance releases and the need for site remediation is being overseen by local agencies.

DTSC staff began work on the Kaiser project in late 1993. Sandra Karinen and Frances Anderson of the DTSC met with you and David Harnish of ENVIRON to discuss the project on October 13, 1993; Kaiser submitted a written application to DTSC staff during November 1993. Kaiser's November 1993 Hazardous Waste Property/Border Zone Property Determination application identified four sites within 2,000 feet of the planned medical center which appeared to have potential to trigger Border Zone considerations (Pacific Gas & Electric on Hollis Street, Electro-Coatings on 1421 Park Street, Myers Drum at 4500 Shellmound Street, Barbary Coast Steel on Shellmound Street). For the Hazardous Waste Property Determination, information was provided regarding non-petroleum chemicals detected in the subsurface at the Del Monte property. DTSC's progress with the Border Zone and Hazardous Waste Property Determination is described below.

Border Zone Determination

DTSC independently checked site listing databases and DTSC files, and consulted with the local oversight agencies to evaluate the four sites identified by Kaiser. DTSC also evaluated if other sites could trigger Border Zone considerations for the Kaiser medical center. DTSC staff consulted with the following regulatory agency staff to discuss the area surrounding the Kaiser site: Brian Oliva of Alameda County Department of Environmental Health (ACDEH), Ravi Arulanantham and Rich Hiett of the Regional Water Quality Control Board (RWQCB), and Ted Park of the DTSC. Additionally, DTSC independently obtained and reviewed files at ACDEH. In addition to the four sites identified in Kaiser's November 1994 application, the Lowe/Chromex site was identified as potentially triggering Border Zone consideration because of concerns raised by Brian Oliva of the ACDEH (see below).

Based on the information obtained, DTSC staff analyzed the potential exposures that future occupants of the Kaiser medical center could have from chemical releases at the five contaminated sites. DTSC staff findings are described below.

- There are no significant exposure pathways between the five sites and future occupants of the Kaiser medical center (because ground water will not be used for water supply), with the exception of Lowe/Chromex as described below.

- We understand that the Lowe/Chromex site has a small area with soil containing elevated levels of chromium, zinc, lead and copper. This area has been partially remediated and soil containing elevated metals may currently be present at the surface, leaving the potential for fugitive dust emissions which could be blown by prevailing winds to the Kaiser site. Although we have no indication that this pathway will result in a significant risk, it is currently considered a potential exposure pathway. We understand that the exposed contaminated soil appears to be a temporary condition, and Lowe/Chromex is planning to remediate and repave the area.

- Once the potential for fugitive dust from Lowe/Chromex is mitigated, DTSC will issue a Border Zone Determination approving the Kaiser project from the standpoint of nearby properties.

- DTSC staff feels it is not necessary to assess exposures to future occupants of the Kaiser Medical Center by a Border Zone Property Preliminary Endangerment Assessment, pursuant to Section 25221 of the Health and Safety Code.

Hazardous Waste Property Determination

The second portion of Kaiser's application was for a Hazardous Waste Property Determination. Local regulatory agencies (RWQCB and ACDEH) are providing oversight to investigation and remediation activities within Kaiser's project area. Once the ACDEH and RWQCB requirements are met, it is DTSC's intention to issue a Hazardous Waste Property Determination of no expected impact.

Please feel free to call if you have any questions regarding this letter.

Very truly yours,

Frances Anderson, Chief
Environmental Science and
Support Unit
Program Development and
Technical support

cc: Gil Jensen, Alameda County District Attorney
Ravi Arulanantham, RWQCB
Kevin Graves, RWQCB
Sum Arigala, RWQCB
Brian Oliva, ACDEH
Susan Hugo, ACDEH
David Harnish, ENVIRON

ENVIRON

November 5, 1993

Mark Zemelman, Esq.
Kaiser Foundation Health Plan, Inc.
Regional Legal Department
One Kaiser Plaza, 21st Floor
Oakland, California 94612

Re: **Transmittal of Information**
Hazardous Property and Border Zone Determinations
Kaiser Permanente - Planned Emeryville Medical Center
ENVIRON Contract Number 03-3118H

Dear Mark:

This letter presents information regarding environmental conditions in the vicinity of Kaiser's planned medical center in Emeryville, California (the Site). The nature and extent of information provided is based on general communications with Cal-EPA Department of Toxic Substance Control (DTSC) regarding DTSC's screening level review for potential hazardous waste and border zone properties.

Background

The location of Kaiser's planned Emeryville medical center is illustrated on Figure 1. The area of the planned Site is composed of multiple properties with mixed uses. As shown on Figure 2, the Site and vicinity are composed of commercial, residential and light industrial businesses. As part of the environmental assessment activities for the purchases, ENVIRON has conducted detailed reviews of agency files to evaluate if chemical releases on or near the Site would be of concern during redevelopment. Files were reviewed at the City of Emeryville (Building Department and Fire Department), Alameda County Health Care Services Agency (ACHCSA), Regional Water Quality Control Board (RWQCB), and the DTSC. ENVIRON reviewed available historical Sanborn maps, aerial photographs, chain-of-title reports and topographic maps which document past Site uses. ENVIRON personnel inspected the properties and conducted interviews with owners at selected properties. ENVIRON also retained VISTA Environmental Services, Inc. to search state and federal regulatory databases to identify properties within one mile with chemical or contamination issues. The list of databases searched by VISTA is presented in Table 1.

During ENVIRON's review of information, several existing or former fuel underground storage tanks (USTs) were identified on the planned hospital site; all are inactive and in various stages of closure. We found no records that indicate that any on-site USTs have contamination which is being addressed under agency supervision. Kaiser intends to work with the current property owners to address the USTs which are not yet formally closed; this work is planned to be completed prior to construction of the medical center and with concurrence of the Emeryville Fire Department and ACHCSA.

One area of the planned hospital site was identified during our review to have non-petroleum contamination. This area is in the southwestern corner of the Del Monte cannery, and has low levels of solvent contamination in ground water. Information regarding the current levels of halogenated volatile organic compounds (VOCs) in soil and ground water, and the soil types in the affected area is presented below. Additionally, four neighboring sites were identified which have non-fuel contamination that are within 2000 feet of the Site. Although none of the sites appears likely to present significant exposures to occupants of the planned hospital, these sites also are addressed below.

Information Relevant to Hazardous Waste Site Determination

A small area of the Del Monte property contains low levels of halogenated VOCs in ground water. The source area and affected soils have been removed, and ground water is currently being remediated by CH2M Hill (Del Monte's consultant) under ACHCSA and RWQCB supervision. Figure 3 illustrates the affected area of the Del Monte site which is undergoing remediation, and presents the monitoring well locations (from a CH2M Hill report in ACHCSA files). Figure 4 presents a plan and section view of the excavation and ground water extraction sump, from CH2M Hill. Attachment A contains copies of CH2M Hill's boring logs for the wells in the area: MW7, MW8 (now abandoned), MW9, MW10, and MW11. Attachment B presents the analytical test results of CH2M Hill verification samples collected from the sidewalls and base of the excavation. Attachment C presents the most recent test results from the surrounding monitoring wells.

The soil excavated at the Del Monte property is stockpiled on-site (Figure 3) and is planned to be treated to non-detectable concentrations of VOCs prior to backfilling. However, if the treated soil can not be sufficiently re-compacted, it may be shipped off-site and the excavation will be closed with clean engineered fill. The only residual contamination therefore will be in ground water, which is approximately 10 feet deep in this area. In our experience, the relatively low concentrations of VOCs observed in ground water in this area are unlikely to pose a significant risk to personnel in a future building in this area.

Information Relevant to Border Zone Determination

The Border Zone regulations require the developer of a new hospital site evaluate if there are "significant disposals of hazardous" waste within 2,000 feet which pose significant risks to the future occupants of the hospital. Although many sites were identified in the databases listed in Table 1, nearly all were UST cases which are excluded from the Border Zone restrictions. It appears that only four sites within 2,000 feet of the planned medical center have characteristics relevant to border zone considerations: Pacific Gas & Electric, Electro-Coatings, Myers Drum, and Barbary Coast Steel. The locations of these sites are shown on Figure 1. The lead agency and the case worker for each site are listed below.

Pacific Gas & Electric, 4525 Hollis Street

Lead Agency:	RWQCB
Contact:	Richard Hiett
Phone:	286-4359

Electro-Coatings, 1421 Park Avenue

Lead Agencies:	ACHCSA, RWQCB
Contact:	Brian Oliva, Richard Hiett
Phone:	271-4320, 286-4359

Myers Drum, 4500 Shellmound Street

Lead Agency:	Cal-EPA DTSC
Contacts:	Ted Park
Phone:	540-3845

Barbary Coast Steel, Shellmound Street

Lead Agency:	Cal-EPA DTSC
Contact:	Ted Park
Phone:	540-3845

We appreciate this opportunity to serve Kaiser on this project. Please feel free to call if you have any questions.

Very truly yours,

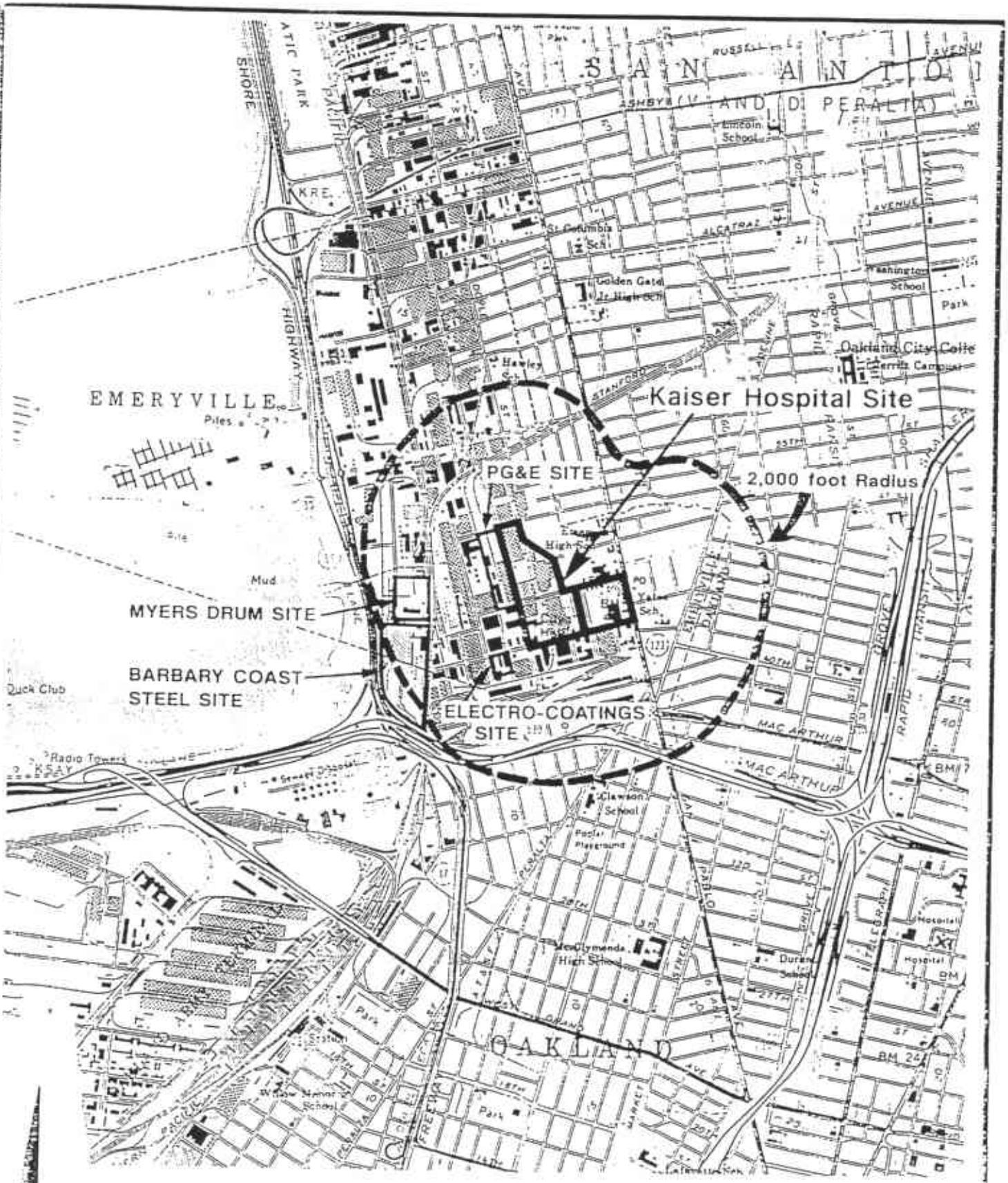
David Harnish, R.G.
Manager

Phillip L. Fitzwater
Principal

DEH:PLF:lgq
k:\deh\kaiser\pea\dtscl.ltr

Enclosures:

Figure 1	Selected Nearby Contaminated Properties
Figure 2	Site Plan and Property Boundaries
Figure 3	Del Monte Plant 35 and Area of Low-Level Solvent Contamination
Figure 4	Del Monte Dewatering Pit
Table 1	List of Records Searched (VISTA)
Attachment A	Soil Boring Logs Del Monte Cannery
Attachment B	Excavation Soil Sampling Laboratory Report, Del Monte Cannery
Attachment C	Ground Water Laboratory Report, Del Monte Cannery

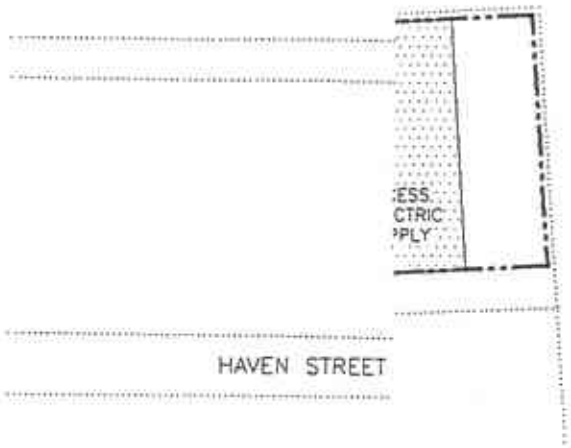


ENVIRON
Counsel in Health and Environmental Science

Selected Nearby Contaminated Properties
Kaiser Emeryville Hospital Site
Emeryville, California

FIGURE
1

DRAWN BY	CONTRACT NUMBER	DATE	APPROVED	REVISED
RS	03-3118A	10/93		



HAVEN STREET

HARLAN STREET

EMERY STREET

EXPLANATION

Site Boundaries

Property Boundary

9 Property Number

Building

N

0 200 400

SCALE IN FEET

Sources:
1990, 1992 Aerial Photographs for base map
Preliminary Title Reports

ENVIRON
Counsel in Health and Environmental Science
5820 Shellmound Street, Suite 700, Emeryville, California 94608

Site Plan and Property Boundaries
Kaiser/Emeryville Site
Emeryville, California

DATE: 10/12/93	CONTRACT NUMBER: 03-3118C		FIGURE 2
DRAFTER: RS	APPROVED:	REVISED:	

G:\03311BC\NEWSITE2

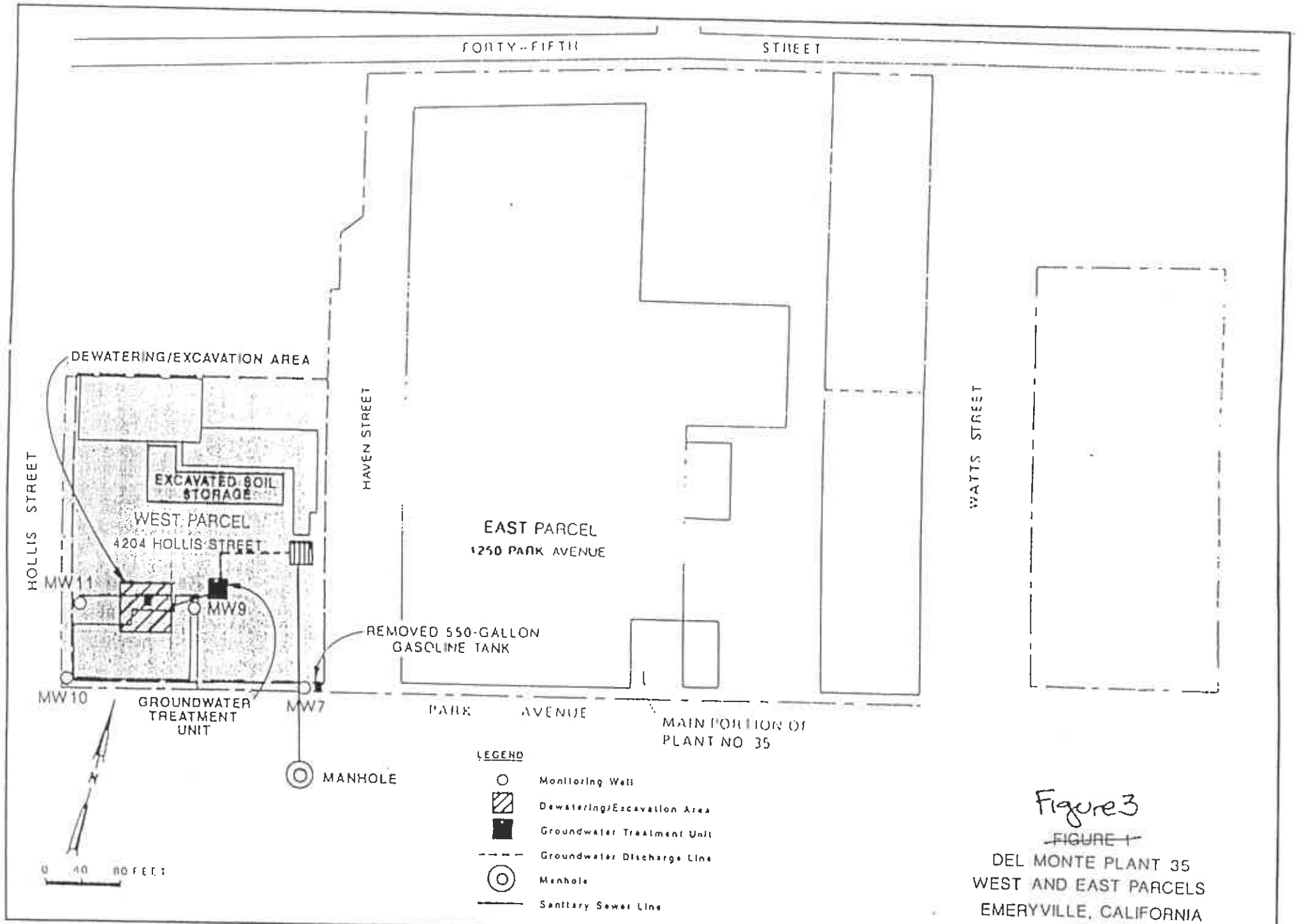


Figure 3

~~FIGURE 1~~

DEL MONTE PLANT 35
WEST AND EAST PARCELS
EMERYVILLE, CALIFORNIA

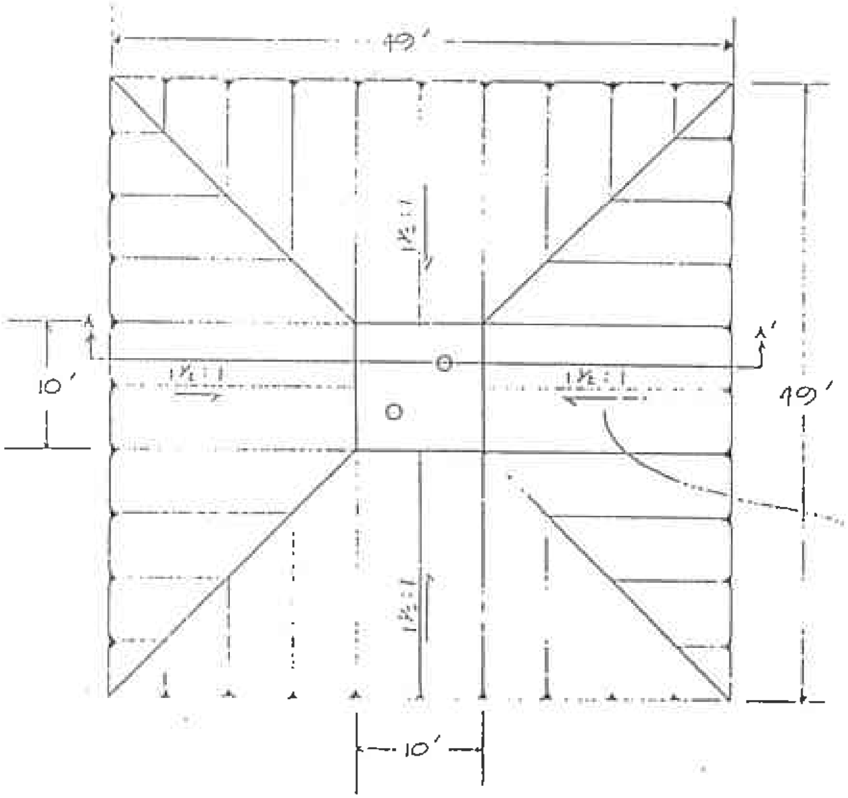
SFO28830.A1

CH2M HILL

SUBJECT DEL MONTE DEWATERING PIT PROJECT NO. SFO 28930. BB BY M. Hamolka DATE 9/.. SHEET NO. ___ OF ___

NOTES

1. Fabric shall Completely Encapsulate Drain Gravel with a minimum 2-foot overlap for individual sheets
2. Spread Thin Layer of Gravel on Exposed Fabric Surface
3. The excavation shown on this drawing shall be the minimum quantity of material removed by the contractor. The actual configuration shall be determined by the contractor as described in the Excavation Section of Technical Specificatio



PLAN
1" = 10'
0 5 10 ft

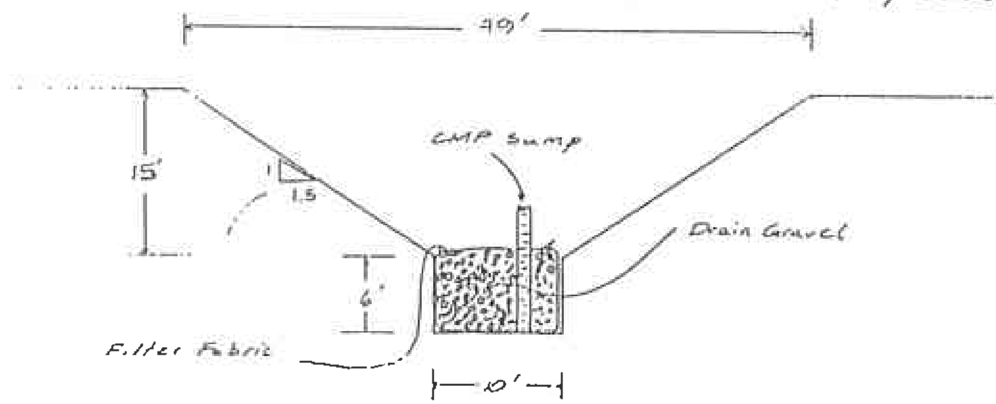


Figure 4

SECTION A-A'
1" = 10'
0 5 10 ft

TABLE 1

LIST OF RECORDS SEARCHED

This report represents a search of the following government database sources:

DATABASE	TYPE OF RECORDS	AGENCY
CERCLIS	Contaminated Sites Under CERCLA (1980)	U.S. EPA
NPL	Federal Superfund Sites	U.S. EPA
LIENS	Filed Notices of Superfund Liens	U.S. EPA
CORTESE	Hazardous Waste & Substances Site List	California Governor's Office of Planning & Research
CAL-SITES/ AWP	Contaminated sites listed on the Annual Work Plan, and cleanup sites under the Bond Expenditure Plan	California EPA
BZP	Sites designated as Border Zone Properties (Deed Restrictions)	California EPA
CAL-SITES/ ASPIS	Actually or potentially contaminated sites under the Abandoned Site Program	California EPA
HWIS	Hazardous Waste Generators, Treatment, Storage & Disposal Facilities	California EPA
SWIS	Active & Inactive Sanitary Landfills and Disposal Facilities	California Waste Management Board
LUST	Leaking Underground Storage Tanks	California Regional Water Resources Control Boards

Due to the scale of the map, red and green squares on the map may represent more than one agency listing or location. For a detailed description of each source, please refer to the legends on the following pages.
For more information please call your VISTA account representative at (619) 450-6100.

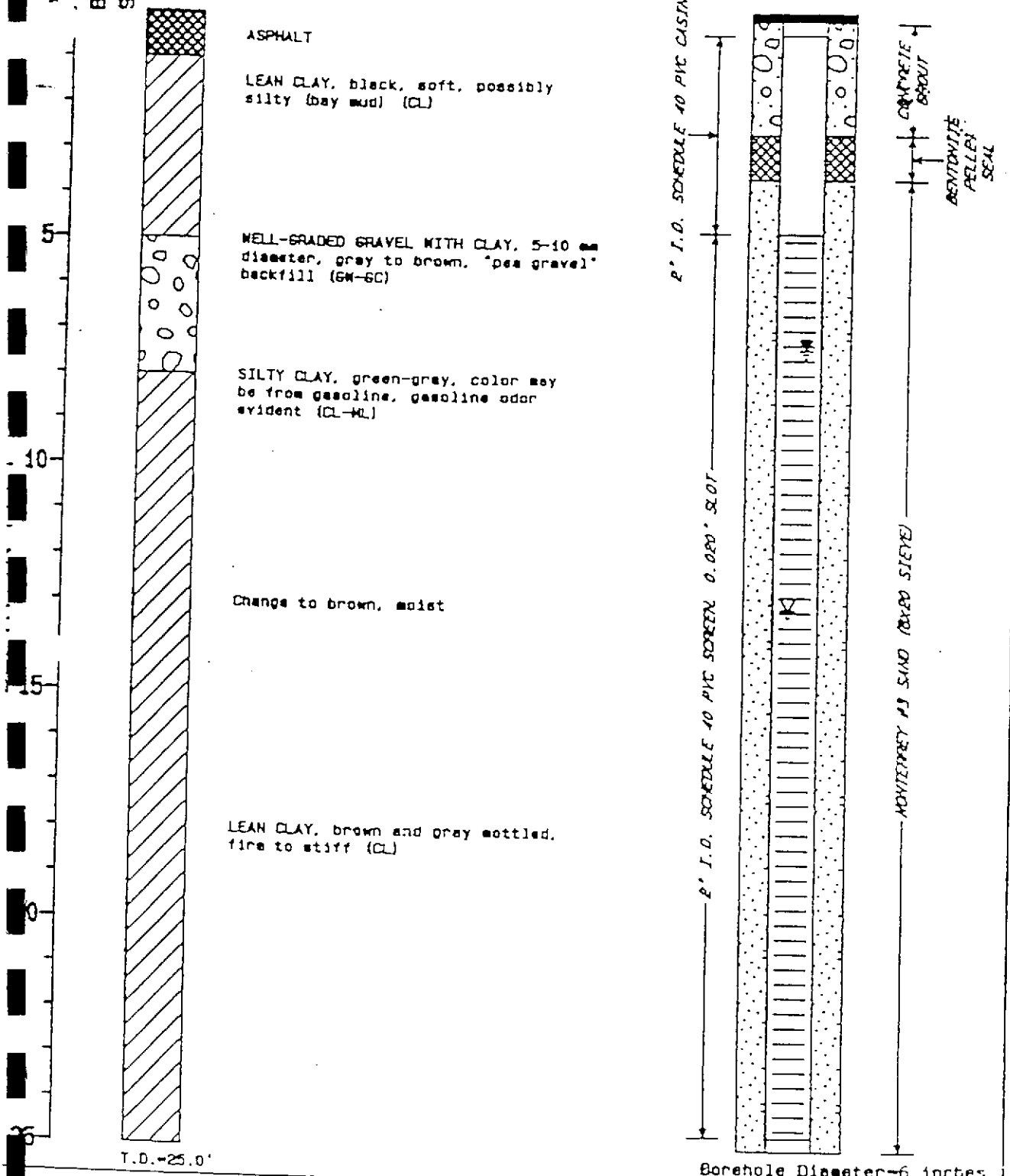
ATTACHMENT A

SOIL BORING LOGS
DEL MONTE CANNERY

BLOW COUNT SAMPLES

DESCRIPTION

WELL COMPLETION DETAIL



Water level first encountered

Water level after development

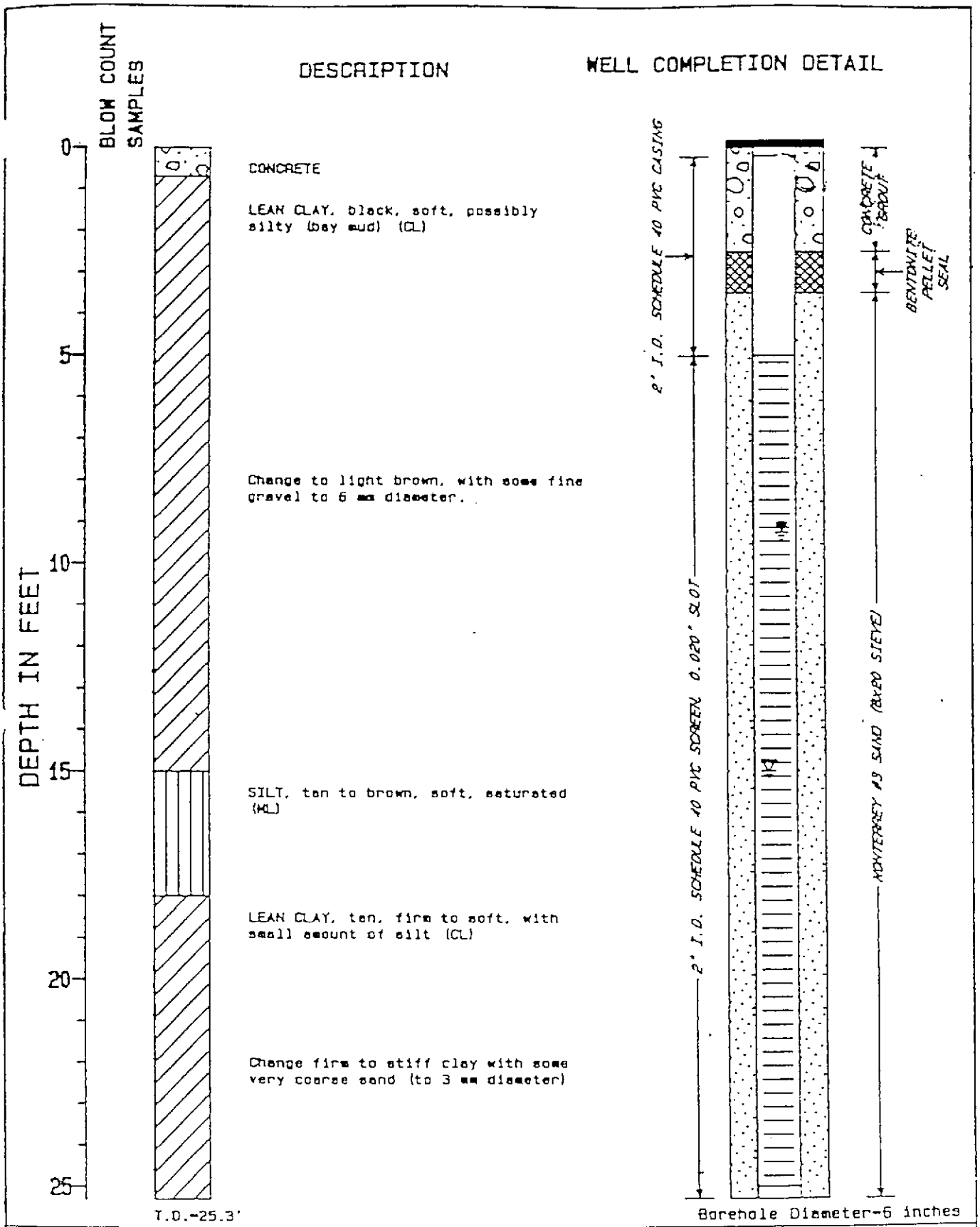
MW7

Del Monte Emeryville Plant No. 35

Date Completed: 05/03/89

Top of casing elevation (MSL)=22.38

SF027289.A0.GW



▽ - Water level first encountered

▼ - Water level after development

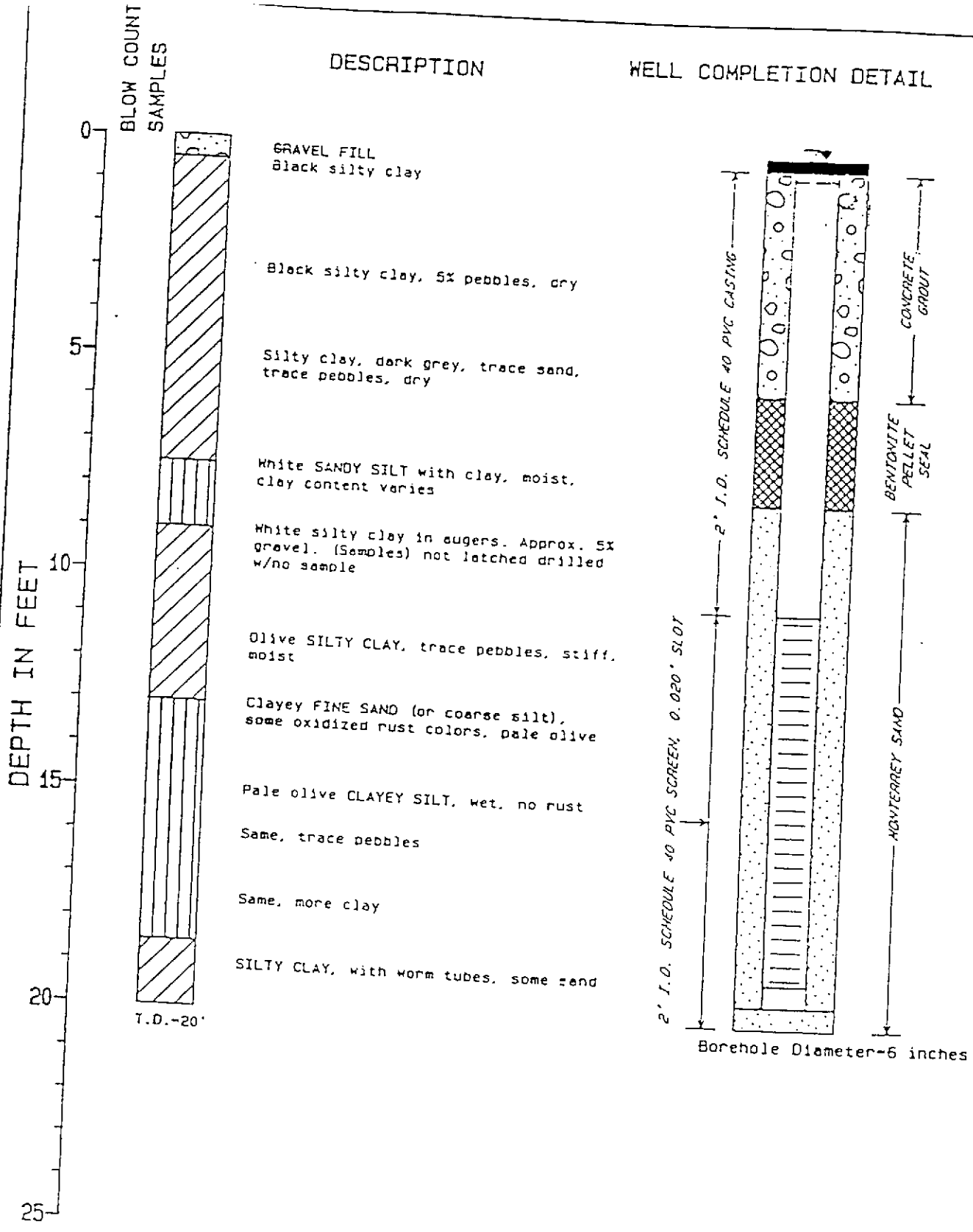
MW8

Del Monte Emeryville Plant No. 35

Date Completed: 05/03/89

Top of casing elevation (MSL)=21.72

SF027289.A0.6M



▽ = Water level first encountered

▼ = Water level after development

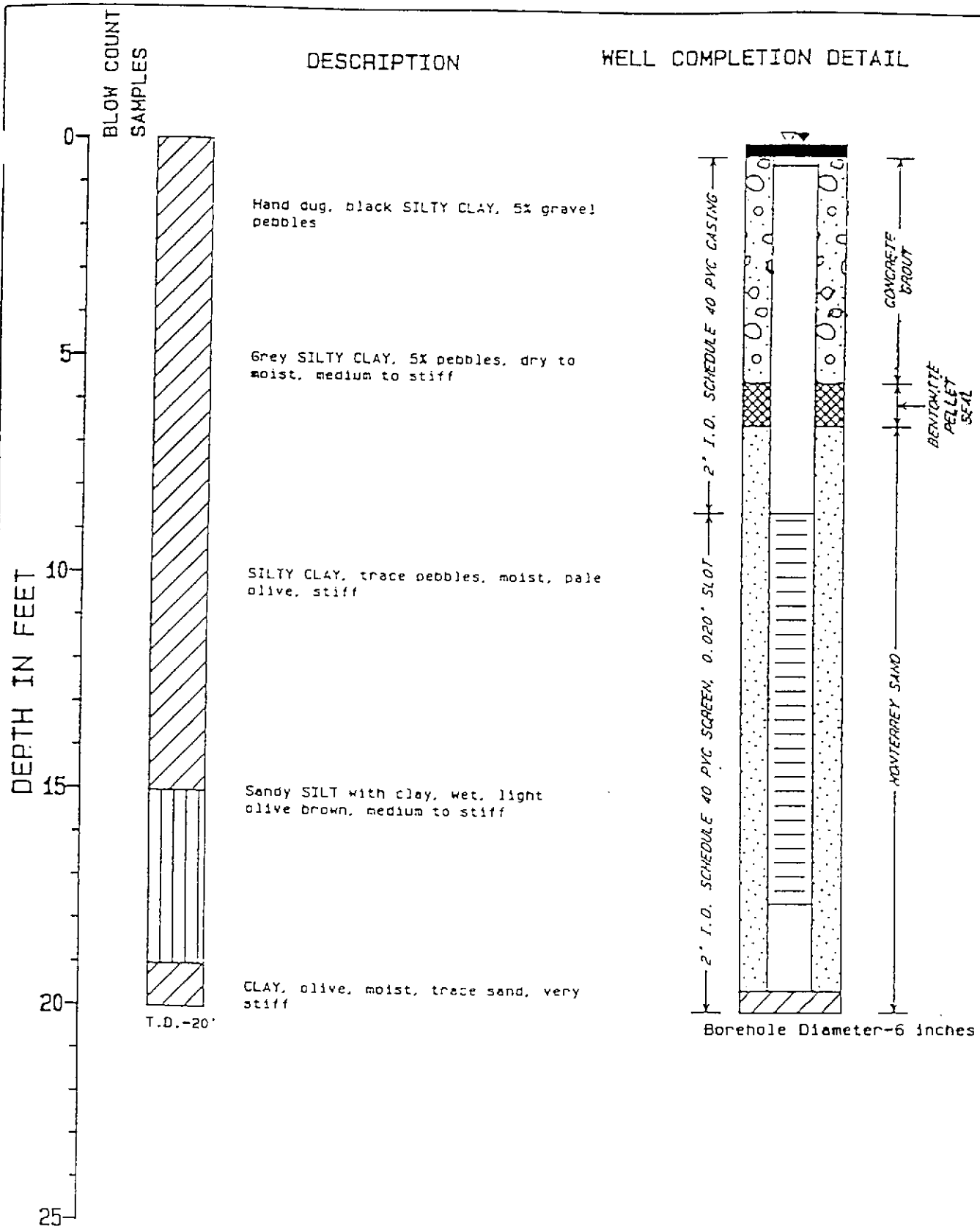
MW-9

Del Monte Emeryville Plant No. 35

Date Completed: 07/05/89

Top of casing elevation (MSL) =0

SF027289.A0.GW



▽ = Water level first encountered

▼ = Water level after development

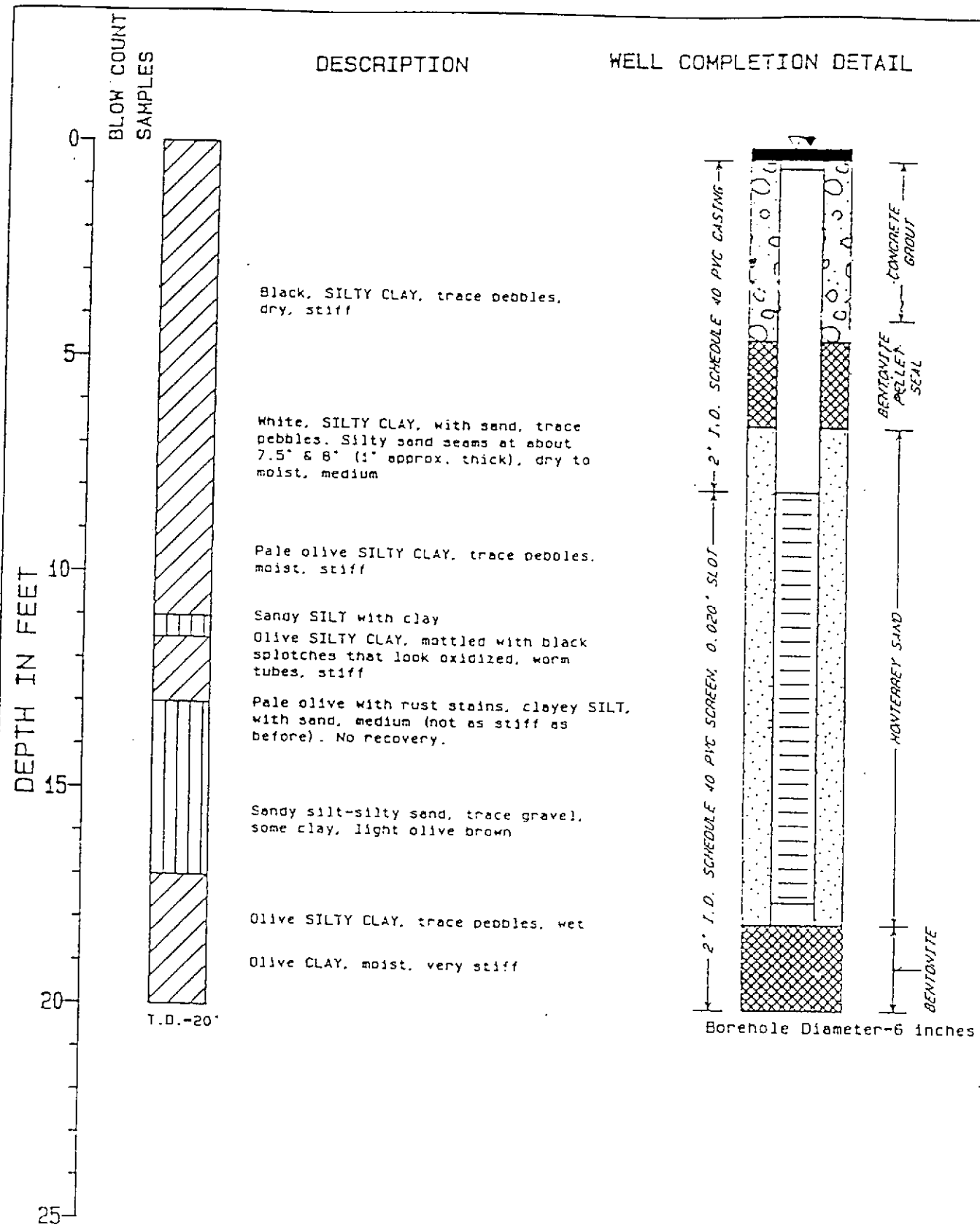
MW-10

Del Monte Emeryville Plant No. 35

Date Completed: 07/06/89

Top of casing elevation (MSL) =0

SF027289.A0.6H



▽ = Water level first encountered

▼ = Water level after development

MW-11

Del Monte Emeryville Plant No. 35

Date Completed: 07/06/89

Top of casing elevation (MSL) =0

SF027289.A0.6W

ATTACHMENT B

EXCAVATION SOIL SAMPLING LABORATORY REPORT, DEL MONTE CANNERY

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

January 5, 1993

ChromaLab File # 01S-004

CH2M HILL

Attn: Bern Baumgartner

Project Name: WEST PARCEL EXCAV
Date Sampled: Jan. 4, 1993
Date Submitted: Jan. 4, 1993
Date of Analysis: Jan. 5, 1993
Sample I.D.: ES-SW-S

Project No: SFO28830.BB.T1
Method of Analysis: EPA 8010
Matrix: Soil
Detection Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	---
1,1-DICHLOROETHENE	N.D.	90% 109%
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	---
TRICHLOROETHENE	N.D.	64% 71%
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	---
TETRACHLOROETHENE	N.D.	65% 72%
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	---
1,1,2,2-TETRACHLOROETHANE	N.D.	74% 82%
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

ChromaLab, Inc.

Charles Woolley
Analytical Chemist

Eric Tam
Lab Director

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

January 5, 1993

ChromaLab File # 0193094

CH2M HILL

Attn: Bern Baumgartner

Project Name: WEST PARCEL EXCAV
Date Sampled: Jan. 4, 1993
Date Submitted: Jan. 4, 1993
Date of Analysis: Jan. 5, 1993
Sample I.D.: ES-BOT-S-OUT

Project No: SFO28830.BB.T1
Method of Analysis: EPA 8010
Matrix: Soil
Detection Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	---
1,1-DICHLOROETHENE	N.D.	90% 109%
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	---
TRICHLOROETHENE	11	64% 71%
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	---
TETRACHLOROETHENE	N.D.	65% 72%
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	---
1,1,2,2-TETRACHLOROETHANE	N.D.	74% 82%
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

ChromaLab, Inc.

Charles Woolley
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Eric Tam
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(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

January 5, 1993

ChromaLab File # 019300A

CH2M HILL

Attn: Bern Baumgartner

Project Name: WEST PARCEL EXCAV
Date Sampled: Jan. 4, 1993
Date Submitted: Jan. 4, 1993
Date of Analysis: Jan. 5, 1993
Sample I.D.: ES-SW-E

Project No: SFO28830.BB.T1
Method of Analysis: EPA 8010
Matrix: Soil
Detection Limit: 5.0 µg/Kg
Dilution Factor: None

COMPOUND NAME	µg/Kg	Spike Recovery
CHLOROMETHANE	N.D.	---
VINYL CHLORIDE	N.D.	---
BROMOMETHANE	N.D.	---
CHLOROETHANE	N.D.	---
TRICHLOROFLUOROMETHANE	N.D.	---
1,1-DICHLOROETHENE	N.D.	90% 109%
METHYLENE CHLORIDE	N.D.	---
1,2-DICHLOROETHENE (TRANS)	N.D.	---
1,2-DICHLOROETHENE (CIS)	N.D.	---
1,1-DICHLOROETHANE	N.D.	---
CHLOROFORM	N.D.	---
1,1,1-TRICHLOROETHANE	N.D.	---
CARBON TETRACHLORIDE	N.D.	---
1,2-DICHLOROETHANE	N.D.	---
TRICHLOROETHENE	N.D.	64% 71%
1,2-DICHLOROPROPANE	N.D.	---
BROMODICHLOROMETHANE	N.D.	---
2-CHLOROETHYLVINYLETHER	N.D.	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---
CIS-1,3-DICHLOROPROPENE	N.D.	---
1,1,2-TRICHLOROETHANE	N.D.	---
TETRACHLOROETHENE	N.D.	65% 72%
DIBROMOCHLOROMETHANE	N.D.	---
CHLOROBENZENE	N.D.	---
BROMOFORM	N.D.	---
1,1,2,2-TETRACHLOROETHANE	N.D.	74% 82%
1,3-DICHLOROBENZENE	N.D.	---
1,4-DICHLOROBENZENE	N.D.	---
1,2-DICHLOROBENZENE	N.D.	---

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Eric Tam
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(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

223

CHROMALAB FILE # 193004
ORDER # 10005

DOHS 1094

Chain of Custody

DATE 1/4/93 PAGE 1 OF 1

PROJ. MGR. BERN BAUMGARTNER
COMPANY CH2M HILL
ADDRESS 111 BROADWAY
OAKLAND

SAMPLERS (SIGNATURE) Bern Baumgartner (PHONE NO.) 251-2888 (X2118)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
ES-SW-S	1/4/93	4 PM	SOIL						X																1
ES-SW-E	↓	↓	↓						↓																1
ES-BOT-S-OUT	↓	↓	↓						↓																1
DEL MONTE PL. 35 (WEST PARCEL EXCAVATION)																									

PROJECT INFORMATION

PROJECT NAME: WEST PARCEL EXCAV
PROJECT NUMBER: SF028830.BB.T1
P.O. #

TAT: STANDARD 5-DAY | (OVER NITE) | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
FAX CofC TO BERN BAUMGARTNER 893-8205

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	3
HEAD SPACE	—
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Bern Baumgartner (TIME) 4PM	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) BERNIE BAUMGARTNER (DATE) 1/4/93	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) CH2M HILL	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	

ATTACHMENT C

GROUND WATER LABORATORY REPORT, DEL MONTE CANNERY

TABLE 1

DEL MONTE PLANT NO. 36, WEST PARCEL

4204 HOLLIS STREET, EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESULTS

Monitoring Well	Sampling Date	Concentration (ug/l) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW7	17-Apr-91	85.0	<0.5	<0.5	23.0	14.0	5.1	<0.5
MW7	31-Jul-91	100.0	<0.5	<0.5	29.0	19.0	5.1	<0.5
MW7	22-Oct-91	130.0	<1.0	<1.0	30.0	20.0	3.0	<1.0
MW7	23-Jan-92	100.0	<0.5	<0.5	29.0	17.0	3.1	<0.5
MW7	23-Apr-92	92.0	<0.5	<0.5	46.0	28.0	<0.5	<0.5
MW7	17-Jul-92	93.0	<0.5	<0.5	51.0	30.0	1.8	<0.5
MW7	12-Oct-92	71.0	<0.5	<0.5	39.0	28.0	2.8	<0.5
MW7	13-Jan-93	54.0	<0.5	<0.5	25.0	16.0	2.1	<0.5
MW7	30-Mar-93	65.0	<0.5	<0.5	31.0	22.0	2.5	<0.5
MW8	12-May-89	290.0	<10.0	<10.0	1400.0	20.0	78.0	<10.0
MW8	10-Jul-89	140.0	<2.5	<2.5	330.0	14.0	17.0	<2.5
MW8-dup	10-Jul-89	130.0	<2.5	<2.5	310.0	12.0	16.0	<2.5
MW8	24-Oct-89	100.0	<2.0	<2.0	330.0	24.0	4.0	<2.0
MW8	07-Feb-90	100.0	<2.0	<2.0	520.0	18.0	12.0	<2.0
MW8	10-Jul-90	5.0	<0.2	<0.5	91.0	36.0	3.0	<0.5
MW8	17-Oct-90	59.0	<1.0	<1.0	160.0	21.0	2.0	<1.0
MW8	24-Jan-91	160.0	<2.0	<5.0	450.0	13.0	9.0	27.0
MW8	17-Apr-91	210.0	<5.0	<5.0	830.0	16.0	<5.0	<5.0
MW8	31-Jul-91	85.0	<2.0	<2.0	350.0	30.0	<2.0	<2.0
MW8	22-Oct-91	40.0	<5.0	<5.0	630.0	20.0	<5.0	<5.0
MW8	23-Jan-92	160.0	<5.0	<5.0	690.0	29.0	<5.0	<5.0
MW8	23-Apr-92	130.0	<10.0	<10.0	1600.0	30.0	<10.0	<10.0
MW8	17-Jul-92	35.0	<2.0	<2.0	490.0	11.0	<2.0	<2.0
MW8	12-Oct-92	22.0	<1.0	<1.0	110.0	24.0	1.3	<1.0

TABLE 1

DEL MONTE PLANT NO. 36, WEST PARCEL

4204 HOLLIS STREET, EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESULTS

Monitoring Well	Sampling Date	Concentration (ug/l) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW8 (SP-D)	19-Jan-93	37.0	<0.5	<0.5	620.0	4.9	3.0	<0.5
MW8 (SP-D)	26-Feb-93	50.0	<0.5	<0.5	350.0	14.0	<0.5	<0.5
MW8 (SP-D)	11-Mar-93	44.9	<0.5	<0.5	130.0	25.0	<0.5	<0.5
MW8 (SP-D)	06-Apr-93	48.0	<1.0	<1.0	160.0	21.0	<1.0	<1.0
MW9	10-Jul-89	63.0	<0.5	<0.5	13.0	38.0	16.0	<0.5
MW9	24-Oct-89	6.4	<0.5	<0.5	29.0	48.0	23.0	<0.5
MW9	07-Feb-90	55.0	<0.5	<0.5	15.0	30.0	7.1	<0.5
MW9	10-Jul-90	3.0	<0.2	<0.5	9.0	43.0	10.0	<0.5
MW9	17-Oct-90	70.0	<0.5	<0.5	14.0	32.0	4.6	<0.5
MW9	24-Jan-91	70.0	<2.0	<2.0	220.0	23.0	<2.0	<2.0
MW9	17-Apr-91	44.0	<0.5	<0.5	12.0	26.0	<0.5	<0.5
MW9	31-Jul-91	55.0	<0.5	<0.5	14.0	32.0	2.3	<0.5
MW9	22-Oct-91	71.0	<0.5	<0.5	15.0	33.0	2.8	<0.5
MW9	23-Jan-92	64.0	<0.5	<0.5	10.0	27.0	2.1	<0.5
MW9	23-Apr-92	22.0	<0.5	<0.5	11.0	29.0	<0.5	<0.5
MW9	17-Jul-92	26.0	<0.5	<0.5	13.0	32.0	<0.5	<0.5
MW9	12-Oct-92	41.0	<0.5	<0.5	17.0	36.0	3.0	<0.5
MW9	13-Jan-93	22.0	<0.5	<0.5	7.9	17.0	1.4	<0.5
MW9	30-Mar-93	26.0	<0.5	<0.5	9.6	22.0	2.1	<0.5

TABLE 1

DEL MONTE PLANT NO. 36, WEST PARCEL

4204 HOLLIS STREET, EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESULTS

Monitoring Well	Sampling Date	Concentration (ug/l) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW10	10-Jul-89	85.0	0.8	<0.5	27.0	42.0	28.0	<0.5
MW10	24-Oct-89	104.8	<0.5	<0.5	37.0	28.0	6.9	<0.5
MW10	07-Feb-90	50.0	<0.5	<0.5	11.0	8.0	5.3	<0.5
MW10	10-Jul-90	9.0	<0.2	<0.5	30.0	76.0	54.0	<0.5
MW10-dup	10-Jul-90	10.0	5.0	<0.5	28.0	69.0	17.0	<0.5
MW10	17-Oct-90	140.0	<0.5	<0.5	35.0	37.0	13.0	<0.5
MW10	24-Jan-91	65.0	<0.5	<0.5	14.0	31.0	3.3	<0.5
MW10	17-Apr-91	210.0	<2.0	<2.0	48.0	52.0	10.0	<2.0
MW10	31-Jul-91	280.0	<2.0	<2.0	66.0	14.0	2.0	<2.0
MW10	22-Oct-91	160.0	<1.0	<1.0	40.0	40.0	5.0	<1.0
MW10	23-Jan-92	240.0	<2.0	<2.0	46.0	54.0	10.0	<2.0
MW10	23-Apr-92	210.0	<2.0	<2.0	89.0	110.0	<2.0	<2.0
MW10	17-Jul-92	180.0	<1.0	<1.0	78.0	82.0	15.0	<1.0
MW10	12-Oct-92	110.0	<1.0	<1.0	45.0	46.0	11.0	<1.0
MW10	13-Jan-93	190.0	<1.0	<1.0	78.0	110.0	19.0	<1.0
MW10	30-Mar-93	26.0	<0.5	<0.5	15.0	18.0	0.7	<0.5

TABLE 1

DEL MONTE PLANT NO. 38, WEST PARCEL

4204 HOLLIS STREET, EMERYVILLE, CA

QUARTERLY GROUNDWATER MONITORING RESULTS

Monitoring Well	Sampling Date	Concentration (ug/l) 1,2-DCE(a)	1,1-DCE(b)	1,2-DCA(c)	TCE(d)	PCE(e)	VC(f)	1,2-DP(g)
MW11	10-Jul-89	73.0	<1.0	4.0	160.0	12.0	16.0	5.7
MW11	24-Oct-89	188.0	<2.0	10.0	410.0	15.0	22.0	20.0
MW11	07-Feb-90	105.0	<2.0	2.0	270.0	8.0	11.0	13.0
MW11	10-Jul-90	4.0	<2.0	23.0	46.0	18.0	15.0	<0.5
MW11	17-Oct-90	150.0	<2.0	11.0	300.0	8.0	<2.0	31.0
MW11	24-Jan-91	120.0	<1.0	<1.0	29.0	29.0	3.0	<1.0
MW11	17-Apr-91	100.0	<1.0	14.0	160.0	12.0	5.0	29.0
MW11	31-Jul-91	250.0	<2.0	<2.0	61.0	65.0	12.0	2.0
MW11	22-Oct-91	180.0	<2.0	5.0	560.0	20.0	5.0	30.0
MW11	23-Jan-92	160.0	<2.0	13.0	290.0	19.0	<2.0	21.0
MW11	23-Apr-92	30.0	<1.0	9.0	120.0	13.0	<1.0	14.0
MW11	17-Jul-92	26.0	<0.5	1.4	81.0	<0.5	<0.5	3.5
MW11	12-Oct-92	63.0	<3.0	4.4	450.0	16.0	5.2	17.0
MW11	13-Jan-93	29.0	<1.0	2.2	140.0	13.0	3.2	6.4
MW11	30-Mar-93	17.0	<0.5	<0.5	55.0	10.0	1.6	5.1
WATER QUALITY STANDARDS								
	Primary MCL	---	6	0.5	5	5	0.5	5
	Cancer Risk	---	0.033	0.94	2.7	0.8	2	---
	AATC (Freshwater)	23200	11600	118000	45000	5280	---	23000

a. total 1,2-Dichloroethene
b. 1,1-Dichloroethene
c. 1,2-Dichloroethane
d. Trichloroethene
e. Tetrachloroethene
f. Vinyl chloride
g. 1,2-Dichloropropane
* Sum of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

ATTACHMENT C

LIST OF REPORTS PREPARED BY DEL MONTE

AGENCY CORRESPONDENCE AND REPORTS
PROVIDED BY DEL MONTE TO ENVIRON

DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

ACHCSA. October 30, 1992. *Remedial Action Completion Certificate, 3,500-gallon UST, East Parcel.*

ACHCSA. October 30, 1992. *Remedial Action Completion Certificate, 550-gallon UST, East Parcel.*

ACHCSA. October 29, 1992. *Remedial Action Completion Certificate, 550-gallon UST, West Parcel.*

ACHCSA. August 20, 1992. *Remediation Activities Plan.*

BAAQMD. February 9, 1993. *Letter from BAAQMD to CH2M Hill re: Groundwater Extraction and Treatment System.*

CH2M Hill. May 25, 1994. *Response to ACDEH Comments on Draft Remediation Plan for Del Monte Plant 35.*

CH2M Hill. May 1994. *Supplemental Onsite Investigation Report for Del Monte Plan 35.*

CH2M Hill. April 25, 1994. *Draft Remediation Plan for Del Monte Plant 35.*

CH2M Hill. April 25, 1994. *Supplemental Offsite Investigation Report for Del Monte Plant 35.*

CH2M Hill. February 16, 1994. *Workplan for Groundwater Treatment System Expansion and Additional Investigation Activities.*

CH2M Hill. January 31 1994. *Summary of Del Monte Plant 35/Kaiser Hospital Meeting on January 11, 1994*

CH2M Hill. January 31 1994. *Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report - West Parcel.*

CH2M Hill. December 1993. *Investigation Report.*

CH2M Hill. October 28 1993. *Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report - West Parcel.*

CH2M Hill. October 4 1993. *Phase I Investigation Plan.*

AGENCY CORRESPONDENCE AND REPORTS
PROVIDED BY DEL MONTE TO ENVIRON

DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

CH2M Hill. July 31 1993. *Quarterly Monitoring and Groundwater Extraction and Treatment System Status Report - West Parcel.*

CH2M Hill. April 30 1993. *Quarterly Monitoring and Groundwater Extraction and Treatment System Status Report - West Parcel.*

CH2M Hill. February 4 1993. *Groundwater Extraction and Treatment System.*

CH2M Hill. January 30 1993. *Quarterly Monitoring and Groundwater Extraction and Treatment System Status Report.*

CH2M Hill. November 2 1992. *Quarterly Report - West Parcel* (Including Plant building floor gutter soil sample data).

CH2M Hill. October 23 1992. *Closure of Former 3,500-gallon UST at East Parcel.*

CH2M Hill. October 5 1992. *Closure of Former 550-gallon UST at East Parcel.*

CH2M Hill. September 11 1992. *Update of Remediation Activities Plan - East Parcel*

CH2M Hill. September 11 1992. *Update of Remediation Activities Plan - West Parcel.*

CH2M Hill. August 18 1992. *Soil and Groundwater Investigations.*

CH2M Hill. August 13 1992. *Quarterly Monitoring Data - West Parcel.*

CH2M Hill. August 12 1992. *Addendum to June 26, 1992 Remediation Activities Plan.*

CH2M Hill. June 26 1992. *Revised Remediation Activities Plan.*

CH2M Hill. June 15 1992. *West Parcel Quarterly Monitoring Data for Del Monte's Plant 35; Removed Fuel Oil and Gasoline Tank Areas.*

CH2M Hill. May 5 1992. *Subsurface Conditions at Del Monte Plant 35.*

CH2M Hill. March 1992. *Phase I/II/III Compilation Report, Volumes 1 and 2.* (Appendices incomplete)

EBMUD. December 1 1992. *Wastewater Discharge Permit.*

AGENCY CORRESPONDENCE AND REPORTS PROVIDED BY DEL MONTE TO ENVIRON

DEL MONTE PLANT 35
EMERYVILLE, CALIFORNIA

Exceltech. August 31 1987. *Well Sampling.* (MW6)

Exceltech. February 25 1986. *Soil Borings and Laboratory Results.* (550-gallon UST on East Parcel)